An evaluation of a person-centred approach to care of older people with cognitive impairment and disturbed behaviour in the acute care setting using action research.

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CERTIFICATE OF AUTHORSHIP ORIGINALITY

I certify that the work in this thesis has not been previously submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that this thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition I certify that all the information sources and literature used are indicated in the thesis.

Signature of candidate

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LIST OF ABBREVIATIONS

ACF	Aged Care Facility
ACR	Aged Care & Rehabilitation
AR-DRG	Australian Refined - Diagnosis Related Group
CAM	Confusion Assessment Method
CCC	Communication and Care Cues
DRAT	Delirium Risk Assessment Tool
GMCT	Greater Metropolitan Clinical Taskforce
ICD –10AM	International Classification of Diseases V10 Australian Modification
IPS	Independent Patient Special
NG1	Nurse Group 1 = before-intervention group
NG2	Nurse Group 2 = after-intervention group
PCC	Person-Centred Care
PCCRG	Person-Centred Care Research Group
PG1	Patient Group 1 = before-intervention group
PG2	Patient Group 2 = after-intervention group

ABSTRACT

Increasing numbers of older patients with cognitive impairment and disturbed behaviour are likely to present to acute care hospitals in the future. Nurses are not well disposed towards care due to safety and morale issues caused by knowledge deficits, job stress, oppressed group behaviours and ageist attitudes. Patient outcomes are often poor with multiple adverse events, long lengths of stay and levels of mortality. Disturbed behaviour may be caused by delirium, depression or other mental disorders and dementia or all.

The research question addressed was “Can the instigation of a person-centred approach to care of patients with cognitive impairment and disturbed behaviour result in decreased nursing stress, improved patient care practices, outcomes and relatives’ satisfaction?” A conceptual framework incorporating the constructs of Person-Centred Care, the Integrated Structural Model of Human Behaviour and Practice Development informed the action research methods utilised.

The processes of facilitation were used to undertake four action research cycles incorporating plans, actions, observations and reflections in one 25-bed acute aged care ward in a large tertiary referral hospital The first cycle involved setting up the study, recruitment of nurses and patients, gathering of baseline data and application of non-participant observational studies of the quality of nurse-patient interactions which served to inform the plan for interventions. The following three cycles demonstrated efforts to undertake those interventions through strategies to increase nursing empowerment and knowledge in the context of constant staff turnover and diversions that compromised support and participation.

During the study there were few apparent adverse patient outcomes with significant improvements in patient analgesic administration, relatives’ satisfaction with care, nursing care practices involving the completion of a Communication and Care Cues form and nurses’ interactions with the patients. New care planning tools were developed that will enable ongoing activities for practice improvement. Conversely, there was a significant increase in the nurses’ stress levels when caring for hypoactive delirious patients, a trend towards more emotional exhaustion, high nursing turnover and increased sick leave rates. Nursing care practices were unchanged and the new care planning tools were not well utilised.

Reflection on the implications and limitations of action research methods supported by practice development strategies in the dynamic, often chaotic environment experienced during the study, suggested that if there is an absence of hierarchical managerial sponsorship for such activities, then sustainable change is difficult. Therefore, it was shown that a person-centred approach to care of patients with cognitive impairment and disturbed behaviour using action research methods in this environment, can result in some enhanced nurse-patient interactions, patient care practices, outcomes and relatives' satisfaction. However, progress is likely to be slow and time consuming. Further improvements require attention to the well-being status of the nurses through actions that generate feelings of empowerment through individual recognition, knowledge enhancement, adequate access to patient information and sufficient time to undertake their duties as equal members of the multidisciplinary team.

CHAPTER 1: INTRODUCTION AND BACKGROUND

> “*Your stress levels go up because they* [agitated and confused older patients] *are incontinent, so you are constantly looking after them and it’s like a nursing home sort of job and that’s frustrating, because why are they in the system* [acute care]? *You know it shouldn’t be happening, but it does.”* (Nurse's statement in Poole & Mott, 2003, p. 309).

1.1. INTRODUCTION

The care old older people with cognitive impairment and disturbed behaviour has been shown to be demanding (Inouye, 2001; Milisen et al., 2004; Schofield, 2008). In fact various terms have been coined to particularly reflect the connotations of behavioural disturbances such as, ‘challenging behaviours’, ‘behaviours of concern’ or ‘behaviours of unmet need’. For the purposes of this study, any behaviour which caused concern or stress for the person or other people (Bird, Llewelyn-Jones, Smithers, & Korten, 2001) was termed ‘disturbed behaviour’. Therefore, the definition ‘behaviour interfering with care of the patient or that of other patients or behaviour that placed the patient or staff or others at risk’ was considered appropriate (Kannabiran et al., 2008, p. 428). The most common disturbances related to cognitive impairment included confusion, memory disorders and abnormalities in thinking and reasoning. Particular attention has traditionally been focussed on behaviour which is considered challenging, such as aggression, agitation or inappropriate sexual acts. However, withdrawal, apathy and somnolence are also important behavioural signs with clinical implications (Melbourne Health, 2006)

Many nurses’ feel that they are stressed and their attitudes towards the care of older people in the acute hospital care sector has sometimes been shown to be negative (Courtney, Tong, & Walsh, 2000; Higgins, Van Der Riet, Slater, & Peek, 2007). This is exemplified by the statement above, which portrays a wish to restrict access to acute care for older patients on the basis of their age. The acute hospital sector presents care environments with high levels of activity and staff changes which create stressful situations for patients, their families and the staff. There are high numbers of older patients presenting to hospital with increased acuity levels. These are often complicated by symptoms of cognitive impairment (usually acute confusion), causing behavioural disturbances (Inouye, 2006). Nurses are expected to provide optimum care for these patients with the best possible outcomes, despite the lack of suitable ward environments, appropriate staffing or educational preparation (Zangaroo & Soeken, 2007). The high staffing turnover in aged care wards (Hallberg & Norberg, 1995) may be both caused and complicated by the nurses' stress levels and negative attitudes. This unstable and stressed workforce (Hallberg, 1999) may then negatively impact on the complexities of patient care (Farrell, Bobrowski, & Bobrowski, 2006).

This study is a continuation of an overall program aimed at the improvement of care for older people with disturbed behaviour caused by cognitive impairment related to delirium, depression or other mental disorders and/or dementia, in a range of environments. Following several years of developing and evaluating a special education program (Poole, 2000a, , 2000b; Poole, 2001; Poole, 2003; Poole & McMahon, 2004; Poole & Mott, 2003), it was found that facilitating care enhancement, particularly in the acute hospital care sector, was challenging.

The background work leading to this study is described in this chapter. Thereafter follows a review of the pertinent literature in Chapter 2. Chapter 3 gives explanations of the guiding conceptual framework and chosen action research methods involving connected cycles of plans, actions, observations and reflections. Chapter 4 provides accounts of the negotiation, recruitment, baseline measurements and feedback information that occurred during Cycle 1. Chapter 5 details descriptions of the initial intervention plan that was activated during Cycle 2. Chapter 6 examined the obstacles which were encountered during Cycle 3 in the workplace or 'swamp', a term coined to described complex, hard to control environments (Schon, 1987). Chapter 7 provides descriptions of the Clinical Redesign project activities, which were undertaken during the study, and the final measurements carried out during Cycle 4. The discussion, conclusions and final recommendations for action and future research are then provided in Chapter 8.

1.2 BACKGROUND

1.2.1 The 'Agitation' Study

Caring for older people with cognitive impairment who exhibit disturbed behaviour can be difficult, particularly if they become agitated and/or aggressive. In a study to investigate the factors involved in the care of agitated older patients in acute hospital care wards, Poole and Mott (2003) conducted six audiotaped focus groups with a total of 36 nurses in a large metropolitan hospital. The nurses were asked to *"Think about when you have looked after an agitated older patient - tell us about it?"*. Analysis of the feedback showed that whilst some nurses understood their patients' needs for accurate medical assessment, treatment and care, many did not. It was obvious that some nurses did not understand the causes, course or treatment of agitation, particularly in relation to the fluctuating nature of delirium. There was also evidence of a lack of awareness of the recommended careful use of antipsychotic medication and the deleterious effects of mechanical restraint. In addition, the nurses portrayed ageist attitudes. The pressure on the staff caused by the lack of time was evident and the nurses expressed concern about the safety needs of their patients and for themselves. Recommendations were made for the instigation of education programs about the causes and management of disturbed behaviour, particularly agitation and aggression, in older people.

1.2.2 Poole's Algorithm Project.

Three education programs were developed based on a specific algorithm (see Figure 1.1) which detailed care for older people with cognitive impairment who displayed disturbed behaviours (Poole, 2000a, , 2000b; Poole, 2001). These explained the complexity of the connection between delirium, depression or other mental disorders and dementia, and specified the personal care needs for older people in three environments – residential aged care facilities (ACFs), acute hospital care and the community. The programs provided definitions, descriptions of overall approaches, common clinical signs and causes, as well as nursing assessment and management strategies. These causes were placed in order of priority, starting with aggression management and outlined ways to develop consistent plans for care and support. The overall care approach was documented under the heading of 'Supportive Communication and Care' and recommended that health care personnel should 'show respect and empathy to reinforce and reinstate the person's sense of dignity and identity' (Poole, 2000a, p. 12), thus showing guidance for person-centred care. Each program consisted of a Lecture Notes and Resource Booklet with a matching colour-coded large sized poster which provided a summary of the information to facilitate easy reinforcement and referral. Further explanations of the elements of the algorithm will be given in the literature review in Chapter 3.

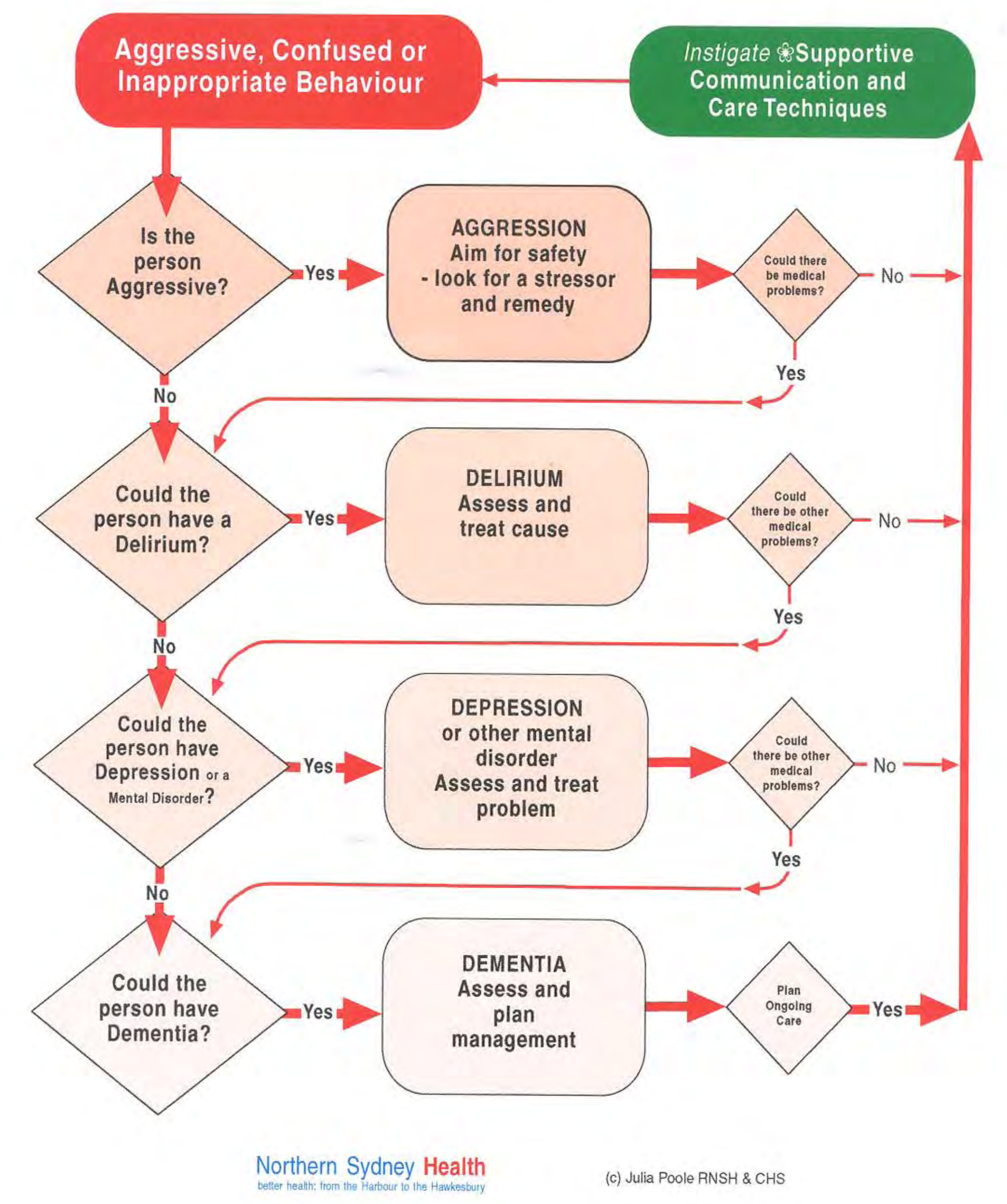


Figure 1.1: Poole’s Algorithm for nursing management of disturbed behaviour in older people depicting assessment and management priorities.

1.2.3 The Evaluation of Poole's Algorithm

To evaluate the response of ACF staff to the Algorithm education program, a before and after-intervention descriptive study was instigated to seek evidence of changes in knowledge and care practices (Poole & McMahon, 2004). A standardised half-day train-the-trainer session, was developed and offered to two key education personnel from each ACF in a large Area Health Service. Following participation in the education session, the ‘Trainers’ were asked to provide training for their staff in a similar way within the following three months. Collation of the before and after-education knowledge questionnaires showed that despite issues with varied staff educational preparation and ethnic backgrounds, there was a significant improvement in all the participants’ knowledge and attitudes towards their cognitively impaired residents. Focus group comments reported that in caring for these residents staff were ‘more ordered, less panicky, more peaceful, more tolerant, more forgiving, less judgemental’, as well as considering themselves to be *“empowered”* (Poole & McMahon, 2004, p. 20). It appeared that, with ongoing reinforcement and practice, further enhancement of knowledge and attitudes might be possible. It was therefore decided that initiatives replicating these actions in the acute hospital care sector should be undertaken.

1.2.4 Introduction of Poole’s Algorithm to the Acute Hospital Care Sector

Following discussions with the managers of the nursing education departments of two metropolitan hospitals, it was agreed that a quality project could be undertaken to provide nurses with education about delirium, depression, other mental disorders and dementia. Clinical Nurse Educators (CNEs) from selected medical wards were invited to participate in train-the-trainer education sessions similar to those provided for the ACF staff, described above. Eight CNEs attended the sessions and agreed to use the Algorithm education program to educate the nurses on their wards. Evaluations of the nurses’ knowledge were undertaken through questionnaires before and after the education sessions. The CNEs found that they were unable to allocate sufficient time to ensure that their staff attended enough in-service education sessions to cover the material, or the staff left the ward before the completion of the education program. Overall, it was not possible to trigger sufficient staff attendance in order to ensure an adequate level of knowledge to embed the principles of care. Hence efforts to replicate the original study in the acute care hospital sector were unsuccessful (Field notes 7/5/04).

In recognition of the different care environment in the acute care sector, it appeared that a different approach was necessary. Residents in the ACF sector are frail and often have multiple co-morbidities, but they are mostly stable. In addition, the ACF sector staff endeavour to provide a home like environment with a fairly stable staff complement who aim to meet their residents' social and psychological needs in addition to their functional and medical requirements. This involves a routine recognition and documentation of individual social information about the residents, in addition to care practices that support the residents’ residual skills (Commonwealth Department of Health and Family Services, 1998). Overall, the aim of care in ACFs was to provide a home with personal support in order to maximize the residents’ independence and well-being.

In contrast, the acute care environment is constantly changing and the overarching aim is to treat acute ailments as quickly and expeditiously as possible. This creates unique stressors, such as noise, unpleasant treatments, unfamiliar people, undignified environments and sleep disturbances, which are hard for older people with cognitive impairment to understand. These stressors can cause delirium, leading to disturbed behaviour, quite apart from the effects of the initial admission diagnosis (Inouye, 2006). Delirium may also lead to ongoing accelerated cognitive degeneration as well as other adverse outcomes, such as falls, decreased functional status and increased morbidity, as well as staff stress (Milisen et al., 2004).

With the realisation that a new flexible approach to change would be needed, it was decided that action research methods which incorporated investigations of the barriers to change, might be useful in order to enable a trial and error approach for practitioner led intervention activity. Therefore, the literature was reviewed for evidence regarding the causes of disturbed behaviour in older people, the factors that influence their care and possible ways to enhance that care, and are described in Chapter 2.

CHAPTER 2: LITERATURE REVIEW

The previous chapter provided an introduction to the difficulties described by nurses in the acute care sector during care for older patients who were agitated and confused. Recommendations were made for the implementation of strategies to enhance nurses' knowledge and understanding of older patients with cognitive impairment which resulted in disturbed behaviour (Poole & Mott, 2003). Improvements in nurses' care practices, attitudes and feelings were described following participation in a specific education program in ACFs (Poole & McMahon, 2004). As the replication of the ACF study was then not successful in the acute hospital care sector, activities to discover other ways to assist the nurses, patients and relatives were deemed necessary. A literature review has therefore been undertaken to seek the latest evidence-based information about the causes of cognitive impairment and disturbed behaviour in older people, the factors that might influence the nursing care of people who exhibit disturbed behaviour and ways to approach enhancement of nursing care practices. The findings are described below.

2.1 STRATEGIES FOR THE LITERATURE SEARCH

In searching the literature for the latest evidence for the causes of disturbed behaviour in older people and the confounders to the instigation of best practice care in the acute sector, it was necessary to understand how care decisions are made. Gray (2001) claimed that health care decisions are affected by the enormity of the number of patients, different health care problems and the costs involved in the provision of that care. Therefore, care decisions needed to be made which took into consideration the best evidence available, the value that this evidence could provide and the resources which were available. The ability to ask the right questions to lead to appropriate information was imperative. In a critical pathway of questions to consider when seeking to understand if the evidence presented was worthwhile, it was recommended that the following elements should be considered: research method, quality, size of effect, generalisability, local application and relevance (Gray, 2001).

Therefore, in considering the apparent problems of caring for older patients with cognitive impairment and disturbed behaviour in the acute care sector, it was necessary to maintain consideration for all aspects of the rights of the patients, their families, the health care staff, as well as the financial and resource implications. As it will be shown in Chapter 3 that an action research method was chosen, the literature search continued throughout the study period to respond to the ‘reflexive and unpredictable nature of a problem solving approach’ (Morton-Cooper, 2000, p. 37). A major impetus for expanded searches was through information provided by regular perusal of relevant journal articles and the accompanying reference lists. The databases of PubMed, MEDLINE (OVID) , CINAHL (EBSCO), PsycINFO (OVID), MIMS Online, Cochrane multifile full text EBM reviews (OVID), as well as the Australian Digital Thesis Program, were regularly perused. Conference presentations were inspected and participation in appropriate workshops and seminars provided further sources of inspiration and information. Those of particular note were the Action Learning, Action Research & Process Management (ALARPM) conference (2005), a Practice Development Workshop (Northern Sydney Central Coast Health Service, 2007), a Dementia Care Mapping workshop (Bradford Dementia Group 2006), the National Dementia Research Forum (DCRC 2007), and an Accelerating Implementation Methodology Workshop in 2007 (IMA, 2007). The information gathered indicated the topics of relevance and these are presented as a narrative review below.

2.2 DEMOGRAPHY

It is well known that the average life span is increasing. Studies in political, economic and health fields have highlighted the approaching expansion in numbers of older people, that is those over 65 years, and debated the resource implications. This group made up 8.5% of the population of Australia in 1967, and increased to 13.4% in 2007 with a further expected expansion to 25.3% of the population by 2047 (Access Economics, 2009). McLennan (1999) found that in Australia in 1995, 90% of older people had experienced a recent illness and 99% reported at least one long-term health condition. Kane et al. (1999) reported that 5-10% of community-dwelling older people over 65 also exhibited some degree of cognitive impairment (not necessarily dementia) and that this rose to approximately 20% in those over 75 years. Specifically, in 2003 1.9% of people between 65 and 74 years had dementia, which is characterised by cognitive impairment and that rose to 22.4% of people 85 years and over (Access Economics, 2009, p. 52). Therefore, it is stated that ‘dementia will overtake depression as Australia’s single largest source of disability burden around 2016’ (Access

Economics, 2009, p. 3). Cognition impairment and illness increase the predisposition for disturbed behaviour in older people (Maher & Almeida, 2002). Therefore, the increasing numbers of older people with age-associated increases in disease and cognitive impairment means that there are likely to be older people in acute care hospitals exhibiting some form of behavioural disturbance.

2.3 CAUSES OF DISTURBED BEHAVIOUR:

Disturbed behaviour is a common symptom of cognitive impairment caused by delirium, depression or other mental disorders and/or dementia (Poole, 2003), which are described in the following pages.

2.3.1 Delirium

Diagnosis and Types

Delirium is sometimes called acute confusion and its diagnosis relies on the presence of four criteria described in the Diagnostic and Statistical Manual of Mental Disorders (DSM4) (American Psychiatric Association, 2003, p. 143) which are listed below:

A – Disturbance of consciousness (that is, reduced clarity of awareness of the environment) with reduced ability to focus, sustain or shift attention.

B – A change in cognition (such as memory deficit, disorientation, language disturbance) or the development of a perceptual disturbance that is not better accounted for by a pre-existing, established or evolving dementia.

C – The disturbance develops over a short time (usually hours or days) and tends to fluctuate during the course of the day.

D – There is evidence from the history, examination or laboratory findings that

- the disturbance is caused by the direct physiological consequences of a general medical condition or
- the symptoms of Criteria A or B developed during substance intoxication or
- medication use is aetiologically related to the disturbance or
- the symptoms of Criteria A and B developed during, or shortly after, a withdrawal syndrome or
- the delirium has more than one aetiology (for example, more that one aetiological general medical condition, a general medical condition plus medication side effects) or

  - a clinical presentation of delirium which is suspected to be due to a general medical condition or substance use but for which there is insufficient evidence to establish a specific aetiology or
  - the delirium is due to causes not listed in this section (for example, sensory deprivation).

Inouye summarised delirium as ‘an acute decline in attention and cognition’ (Inouye, 2006, p. 1157). Gelder et al. (1996, p. 311) described the clinical features of delirium and categorised them into three subtypes according to patients’ behaviour:

- Hyperalert/hyperactive activity - restlessness, agitation, irritability, noisiness, being oversensitive to stimuli, tactile and auditory hallucinations, persecutory delusions, misinterpretations and disorientation.
- Hypoalert/hypoactive periods - lethargy, reduced speech, slowness, perseveration, somnolence or even loss of consciousness.
- Fluctuating symptoms - alternating periods of either of the previous two sub-types.

Subsyndromal Delirium

In a study of delirium severity in 122 older patients who had surgery following hip fractures, it was found that some patients, who did not meet all the four criteria for delirium diagnosis, nevertheless had poor outcomes similar to patients with delirium diagnosis. This was called ‘subsyndromal’ delirium and careful assessment and monitoring of all patients with any symptoms of delirium was recommended (Marcantino, Ta, Duthie, & Resnick, 2002, p. 853).

Risk - Predisposing and Precipitating Factors

Increasing concern and recognition regarding the resource and outcome implications of delirium have led to the publication of guidelines for prevention, diagnosis and management (such as, British Geriatrics Society and Royal College of Physicians, 2006; Melbourne Health, 2006; Rigney, 2006). All recommended the assessment for patient risk factors to enable strategies to be implemented to avoid the development of delirium. If delirium developed resolution then required early diagnosis and treatment of the cause/s plus the instigation of a supportive environment.

The Clinical Practice Guidelines for the Management of Delirium in Older People instigated by the Health Care of Older Australians Standing Committee (Melbourne Health, 2006) showed that there is high-level evidence supporting the presence of the predisposing (risk or vulnerability) and precipitating (insults) factors related to a the development of delirium, particularly in hospital. Inouye, Viscotti, Horwitz, Hurst and Tinetti (1993) examined 107 general medical patients over 70 years of age in hospital for signs of developing delirium. From the 27 patients who developed delirium they were able to isolate four risk, or predisposing, factors: vision impairment, severe illness, cognitive impairment and high blood urea nitrogen/creatinine ratio (that is, dehydration). Severe illness was assessed using a scoring system called the APACHE score (Knaus, Draper, Wagern, & Zimermann, 1985) which was developed in intensive care units and took into consideration the cumulative effect of multiple co-morbidities. Using this information, the application of a risk stratification points ratio was tested using the 'most important outcomes associated with delirium', that is death or nursing home placement (Inouye, Viscotti, Horwitz, Hurst, & Tinetti, 1993, p. 476). This enabled the designation of low, medium and high-risk stratification.

Inouye and Charpentier (1996) examined precipitating factors for delirium in hospital and narrowed them down to: the use of physical restraints, malnutrition, more than three medications added in 24 hours, use of a bladder catheter and any hospitalisation-related event (such as falls, infection, procedure). These authors posed a 'multifactorial model' depicting the complex interrelationship between the predisposing and precipitating events. The idea was that the higher the number of predisposing factors which were present, the lesser number of precipitating factors that would be needed to develop delirium (Inouye & Charpentier, 1996, p. 853).

Prevention and Management

Whilst it is well-accepted practice to instigate pressure area and fall risk assessments which aim to identify particular risk factors, this is not usual practice for the avoidance of delirium. However, various authors have studied ways to prevent, recognise and reduce the duration of delirium (such as, Caplan & Harper, 2007; Inouye et al., 1999; Lundstrom et al., 2005). Inouye et al. (1999) in particular, developed a program comprising of five components which were claimed to help prevent the development of delirium. This involved the instigation of supporting strategies for cognitive impairment, sleep deprivation, immobility, visual and hearing impairment and dehydration. Whilst later developed as the Hospital Elder Life Program (Inouye, Bogardus, Leo-Summers, & Cooney, 2000), it required the services of a specialist multidisciplinary team comprising of a geriatric nurse specialist, trained volunteers and specialist medical staff, that is Geriatricians.

Subsequent literature described the challenges of embedding the prevention program into hospital practice (Bradley, Schlesinger, Webster, Baker, & Inouye, 2004; Bradley, Webster, Baker, Schlesinger, & Inouye, 2005) with education described as a key component (Inouye, Baker, Fugal, & Bradley, 2006). In addition, a study that examined the factors associated with delirium found that nurses had an important role in preventing and reducing delirium severity (Voyer, McCusker, Cole, St-Jacques, & Khomenko, 2007). This randomised-controlled trial of patients with delirium admitted to a large teaching hospital in Canada, undertook a secondary analysis of 104 patients which showed that those diagnosed with dementia before admission were more likely to develop delirium in hospital. Patients with dementia were also noted to need more nursing support for pain control and the maintenance of functional skills. However, it was recognised that nurses have difficulty in detecting pain in patients with cognitive impairment (Herr et al., 2004; Horgas, Nichols, Schapson, & Vietes, 2007) and that this can reduce functional recovery and increased delirium severity. Recommendations were made for nurses to prevent severe delirium by focussing plans of care on the predisposing risk factors such as pain, as well as sleep patterns, nutrition, hydration and stimulation (Voyer, McCusker, Cole, St-Jacques, & Khomenko, 2007, p. 829). It was concluded that even in older patients admitted to hospital who did not have pre-existing cognitive impairments, the precipitating factors such as, physical restraint and or medications given as required, should be viewed with extreme caution.

Finally, a systematic review titled *'Interventions for preventing delirium in hospitalised patients'* (Siddiqi, Holt, Britton, & Holmes, 2007), found little firm evidence for effective interventions apart from proactive geriatric consultation and the possibility that the prophylactic use of low dose haloperidol (a psychptropic drug) might reduce delirium severity and duration in patients following hip surgery. Further reviews undertaken in 2009 have shown no further evidence for effective interventions and still recommend that more studies be undertaken.

The Experience of Delirium

Studies aimed at describing the experiences of patients who have had delirium showed that, apart from those with a pre-existing memory deficit, most remembered what had happened and could describe their feelings in terms of fear. Andersson et al. (2002, p. 659) interpreted the experience of delirium as 'being trapped in incomprehensible experiences and a turmoil of past and present and here and there'. Duppils and Wikblad (2007, p. 815) provided illuminating quotes from patients who had experienced delirium such as

> 'It was intense agony while it lasted, there was chaos or panic, and I was afraid'; and 'I was so afraid, so afraid, and I cried and shouted … and every time I got that injection I thought I got worse, and I was convinced that they were going to kill me. I was very angry with the cleaner, doctor, everybody'.

These authors concluded that 'good nursing' aimed at supporting unfulfilled needs, such as pain relief, activities of daily living and orientation, might reduce or prevent delirium. In particular, the reduction of fear, which probably further exacerbates the level of delirium, could be provided by careful listening and interaction with the patient (Duppils & Wikblad, 2007).

Strain of Care

The care of patients with delirium has been shown to cause sensations of stress and strain for nurses (Milisen et al., 2004; Poole & Mott, 2003). Hallberg (1999) found that there was little research focussing on the 'impact of delirium on professionals' and so reviewed the literature which pertained to the causes and symptoms of delirium with the aim to seek perceptions with regard to what this might mean for staff. It was found that the nurses' tasks involved the recognition of delirium in the first place and then the protection of the patient whilst looking for causes and treatment interventions. Knowledge about the patients' previous experiences and life events and then a search for meaning in their actions to enable support and reassurance was recommended. It was concluded that

> In my opinion the most important step to take is to support staff in this demanding situation to develop knowledge … what I primarily want to see in practice is support systems including systematic methods for patient assessment

> and nursing care planning as well as room for reflection, systematically implemented in these types of care' (Hallberg, 1999).

Milisen et al. (2004) recognised the dearth of information regarding the needs of nurses in the provision of care for delirious patients. The lack of formal measures to quantify the possible strain experienced by nurses had meant that recommendations for enhancements in education and nursing care practices, including supervision and increased staffing, were hard to support. Therefore, a 'Strain in Care of Delirium Index' instrument was developed and is described in Chapter 3, Section 3.2.5.

Outcomes

Delirium is known to cause adverse events including functional decline, increased length of stay (LOS) in hospital, increased likelihood of admission to an aged care facility (ACF) and death. Siddiqi, House and Holmes (2006) carried out a systematic literature review including prospective cohort, cross sectional, case controlled studies and controlled trials, in order to seek evidence of the occurrence and outcomes of delirium in medical in-patients. Data from electronic databases and the Consultation-Liaison Literature Data Base, reference lists and bibliographies were reviewed. The initial search produced 1,052 papers which were narrowed down to 50 papers which met the review criteria for case definition as well as preset outcomes such as reversibility, duration, complications, mortality, length of stay, cost, discharge destination, carer stress and the impact on the staff. It was found that the prevalence of delirium on admission to acute care ranged from 10-31% of patients whilst the incidence of new delirium after admission ranged from 3-29% of patients. Ninety-three full text articles were examined for the outcomes of delirium and 14 met the criteria for general medical in-patients. Death rates at discharge were found to be 14.5-37% of patients. Comparisons with controls found that there were conflicting results, though it was noted that these studies might have had both Type 1 and Type 11 errors due to the small numbers of cases. However the study that was deemed to have the highest quality found that there was a two-fold independent increase in mortality at 12 months (McCusker, Cole, Dendukuri, Belzile, & Primeau, 2001). The data for LOS and ACF admission was found to be difficult to summarise due to episode coding variations. The LOS data varied from 9-32 days but some studies showed no increase. The rates of ACF admission were also varied from no difference to an increased odds ratio of 2.8 (C.I.

1.3-6.1). Functional decline was found to be increased in two studies. Whilst the literature pertaining to the course of delirium was varied it was nevertheless found that 'a large proportion of patients with delirium were discharged from hospital with ongoing symptoms' (Siddiqi, House, & Holmes, 2006, p. 357).

Education Programs

A study to develop multidisciplinary guidelines for the management of delirium and then to assess their effectiveness in the improvement of outcomes and processes of care was undertaken by Young and George (2003). Acute medical wards in five hospitals in the UK were randomised to three groups according to the intensity of intended interventions: high (feedback of baseline data, distribution of the guidelines and teaching sessions), medium (feedback of baseline data and distribution of the guidelines) and low (feedback of baseline data). It was expected that the teaching sessions would reinforce the application of the guidelines. However, it was found that there was no statistical difference, except for the improved recording of hearing tests in the high intervention group. Although the summary of the guidelines published was necessarily brief and included the major elements of other guidelines, it did not give any indication of recommendations for supports for cognitive impairment which were described in the Hospital Elder Life Program (Inouye, Bogardus, Leo-Summers, & Cooney, 2000) and included the use of volunteers to provide reassuring and orienting activities.

Other programs for the prevention and management delirium, which all included educational components, have claimed moderate successes but none have addressed the issue of sustainability (Bergmann, Murphy, Kiely, Jones, & Marcantino, 2005; Caplan, Williams, Daly, & Abraham, 2004; Inouye, Baker, Fugal, & Bradley, 2006; Inouye, Bogardus, Leo-Summers, & Cooney, 2000; Lundstrom et al., 2005; Rubin et al., 2006; Tabet et al., 2005)..

Summary

In summary, delirium has been to shown to be a complex, life threatening illness that is under recognised and often poorly managed. Research has enabled the establishment of risk assessment, prevention and management strategies but these have not been well embedded in practice. In particular, the role of nurses in preventing and reducing delirium has been recognised but there has been little attention paid to enabling nurses to sustain those interventions without added resources. The recognition and application of specific methods to overcome obstacles to sustainable practice change have not been investigated in this particular body of evidence as most activities have centred on education or the use of specialist staff for whom ongoing extra funds were not necessarily available. Therefore recent change methods are investigated further on in this chapter in Section 2.6.

2.3.2 Depression and Other Mental Disorders

Diagnosis

Disturbed behaviour can also be a symptom of depression. Despite the increase in loss events during ageing, such as bereavement, change in social status, income and physical health, depression is not a normal consequence of ageing. The normal healthy older person living independently in the community has a lower prevalence of depression in relation to the adult population (Blazer, Kessler, McGonagle, & Swartz, 1994). However, depression is likely to occur in relation to social isolation, loss of a partner, co-morbid medical conditions, such as, myocardial infarction or cancer, as well as functional and cognitive impairment (Espinoza & Unutzer, 2009). The criteria for the diagnosis of depression (American Psychiatric Association, 2003, p. 356) require the presence of five or more of the following symptoms: depressed mood most of the day, marked diminished interest or pleasure, significant weight loss, insomnia or hypersomnia, psychomotor retardation or agitation, fatigue or loss of energy, feelings of worthlessness, diminished ability to think or concentrate, recurrent thoughts of death. For diagnosis the symptoms need to be present most of the time and most days for at least the preceding two weeks.

However, symptoms of depression in old age may differ in presentation from those in younger people. In older people it is more likely that there will be an overlap of physical and somatic psychiatric symptoms, such as disproportionate complaints associated with a physical disorder, neurotic symptoms of recent onset, deliberate self harm, depression superimposed on dementia, conduct disorder, accentuation of abnormal personality traits, late onset alcohol dependency (American Psychiatric Association, 2003).

Of particular interest to the present study is the presentation of ‘agitated depression’ which was found in 19% of 314 people with a major depressive disorder assessed by Olgiati, Serretti and Colombo (2006). In addition, Benazzi (2004) surveyed 245 patients with bipolar disorder and 189 patients with a major depressive disorder and found that 34.7% presented with an agitated depression. He described the symptoms as racing or crowded thoughts, irritability, talkativeness and the evidence of risky behaviour. When combined with a medical co-morbidity, this ‘disturbed behaviour’ may be mistaken for delirium and cause disruption in an acute care ward.

Assessment

Assessment, treatment and prognosis for depression and other mental disorders in older people is said to be similar to patients in middle age (Anderson, 2001; Mitchell & Subramaniam, 2005). Two commonly used depression screening tools that have been developed specifically for older people are the Geriatric Depression Scale (Yesavage, 1988) and the Cornell Scale for Depression in Dementia (Alexopoulos, Abrams, Young, & Shamoian, 1988). Both scales take at least 10-15 minutes to complete and require some training or an informed approach, as well as an engaging approach.

Suicide

In 1998 the NSW Department of Health issued a circular (No. 98/31) which mandated the development of protocols to prevent and to manage suicide risk. This was followed by the publication of a specific program for educating staff about the prevention of suicide in older people (NSW Department of Health, 2003). The ratio of suicide attempts to deaths for younger people are reported to be 300:1 but in older people it is 4:1 (Baume & Snowden, 1999). The behavioural warnings of suicidal risk in older people may include expressions of loneliness and isolation; poor sleep and appetite; lack of interest in activities; and giving away possessions.

Management

The treatment data base UpToDate (Espinoza & Unutzer, 2009) recommends the following aspects for the management of depression

- Treatment of co-morbid conditions.

- Medication regimes involving a range of drugs, most commonly the selective serotonin reuptake inhibiters (SSRIs) such as, paroxetine hydrochloride, sertraline hydrochloride, fluoxetine hydrochloride.
- Psychotherapy including cognitive–behaviour therapy (CBT), interpersonal therapy (IPT) or problem-solving therapy (PST). All involve intense one-to-one interactive sessions between the depressed older person and a trained therapist which aim for personally induced behaviour change. For lonely and isolated older people this might also include the provision of ‘pleasant events’, such as day centre attendance or community visitors (Espinoza & Unutzer, 2009, p. 7) .
- Electroconvulsive Therapy (ECT) which is a form of controlled electric shock treatment which aims to cause physiological and biochemical changes in the brain. This has been shown to be effective in older people who have been resistant to other treatment, despite their possible fragility (Espinoza & Unutzer, 2009; Gelder, Mayou, & Geddes, 1999).

Other Mental Disorders

Other less common mental disorders which may cause disturbed behaviour in older people in acute care wards include schizophrenia, delusion disorder, bipolar disorder, panic disorder, anxiety disorder and hypochondriasis (Alexopoulos, Streim, Carpenter, & Docherty, 2004). The most common mental disorders present in nursing homes other than depression, and arguably dementia, were listed as schizophrenia and anxiety disorders by Draper, Brodaty and Low (2006). A study of the prevalence of mental disorders in Europe, which may reflect the Australian situation, also included alcohol disorders as a separate group (Alonso et al., 2004). Older people with these disorders may require acute hospital care for their co-morbid condition/s so that generalist nurses need to have some ‘working knowledge’ of assessment, referral and management practices.

Therefore, it is useful for non-mental health trained nurses to have some understanding of the elements of a mental state examination, as they may be the first staff to suspect that a patient might have a mental health problem and often this will be because of reports of disturbed behaviour. The elements for examination and descriptive reporting include behaviour, speech, mood, depersonalisation, derealisation, obsessional phenomena, delusions, hallucinations and illusions, orientation, attention and concentration, memory and insight (Gelder, Gath, Mayou, & Cowen, 1996, p. 33).

Summary

The sinister and often unrecognised encroachment of cognitive decline in older people may mask or exacerbate other mental disorders so that all nurses need a some knowledge of the dimensions of not only delirium, but also depression, other mental disorders and dementia.

2.3.3 Dementia

Diagnosis and Types

Dementia is a term used to describe a cluster of signs and symptoms including a decline in memory and intellect, plus changes in emotional control and social behaviour, without clouding of consciousness (Burns & Hope, 1997). There are many causes of dementia, but the most common are Alzheimer’s disease (about 60% of cases), vascular disease (20%), Lewy Body Disease (10-15%) and fronto-temporal dementia, which may be as common as Alzheimer’s Disease in people under 60 years of age (Woodward et al., 2007). The incidence of dementia in Australia is thought to double every five years after the age of 60, so that by the age of 85 years approximately 25-30% of people will exhibit signs of a dementing illness (Access Economics Pty Ltd, 2005)**.** A later report claimed that there is a dementia epidemic and estimated that the prevalence of dementia will rise from 230,000 cases in 2008 to 730,000 cases by 2050 in Australia.(Access Economics, 2009)

Differential diagnosis of types of dementia are described in the American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders (2003). Diagnosis of dementia involves assessment of the person’s past history, particularly of cognitive and behavioural changes in collaboration with close family members or friends; medication history; a full physical, including neurological, examination; laboratory and imaging studies. The aim is to exclude other possible causes of cognitive impairment such as a brain tumours or hypothyroidism (Burns & Hope, 1997). The usual baseline cognitive test performed is the Mini Mental State Exam (MMSE) (Folstein, Folstein, & McHugh, 1975), in which a score of 24 or less out of total of 30 is thought to indicate dementia.

This should be supplemented by more in-depth testing, such as the ADAS-Cog (Rosen, Mohs, & Davis, 1984).

Risk

Woodward et al. (2007, pp. 5, 6) state that four risk factors for the development of Alzheimer's disease are now well established. These are old age (as described above), genetic mutations which are uncommon, genetic factors such as the presence of apolipoprotein E, and family history, where the diagnosis of dementia in a primary relative, such as parents or siblings, increases a person's risk. Other 'likely factors' not as well established include, head injury, small head size, vascular risk factors (such as smoking or fatty diet), hypertension, diabetes, atrial fibrillation, hypothyroidism, low birth weight and low education. 'Less likely factors' include, depression, low B_{12} or folate levels, elevated homocysteines, hormone replacement therapy, sleep disorders, female gender, exposure to strong electromagnetic fields and exposure to aluminium. Risk factors for vascular dementia are thought to be old age, male gender, hypertension, stroke, family history of vascular disease and Type 2 diabetes. General dementia risk reduction recommendations include the control of: the body (exercise aerobically, have health checks, do not smoke), the diet (reduce saturated fats, eat protective foods, include sufficient vitamins and drink water) and the brain (exercise the mind, protect the head, participate in social activities). The authors state that there are 'no known amenable risk factors' for dementia with Lewy bodies or fronto-temporal dementia (Woodward et al., 2007, p. 7).

Symptoms

The morbid effects of dementia may include gradual memory loss; decline in ability to perform routine tasks; disorientation to time and place; impaired judgement, abstract thinking and physical co-ordination; difficulty in learning and concentration; loss of language and communication skills; changes in personality, behaviour and mood; hallucinations, delusions and paranoia; loss of initiative; altered sleep patterns; and eating disorders (Access Economics Pty Ltd, 2006, p. 3). The types of disturbed behaviour which might eventuate are described as Behavioural and Psychological Symptoms of Dementia (BPSD). These may include wandering, agitation, aggression, disinhibition, intrusiveness, negativism and depressed mood (International Psychiatric

Association, 1998). During the middle and later stages of dementia at least 50% of people will experience agitation (Zal, 1999).

Care

Care of people with dementia requires careful assessment of their health, remaining abilities and support systems. The public organisation, Alzheimer's Australia, provides information including research updates, about and for people with dementia and related disorders, their carers and professional staff. In general, care is focussed on supporting the person's remaining abilities and filling in or providing services for those that are deficient. Medications are available that may help memory function in some cases, such as, donepezil, but many adverse side effects are reported and treatment effects are varied and small (Ballard & Cream, 2005). Antipsychotic medications such as haloperidol, risperidone, olanzapine or quetiapine, are sometimes prescribed if behavioural difficulties, particularly agitation and aggression, are resistant to environmental and behavioural strategies and there is severe distress or risk of harm to those caring for the person (Ballard, Waite, & Birks, 2006). However, this is not recommended due to the reported increase in mortality due to serious adverse cardiovascular events and extrapyramidal symptoms from all the medications but particularly the typical antipsychotics, such as haloperidol (Alexopoulos, Streim, Carpenter, & Docherty, 2004).

Caring for a person with dementia presents risks and stressors for all concerned, particularly in acute care. Apart from the high risk of developing delirium, which has already been described, the day-to-day care of a person with cognitive impairment is time consuming and requires special personal knowledge of that person. A case example which illustrates this is described by Bradley (2008) who went above and beyond the 'call of duty' to care for a community client with dementia who required a sudden acute care admission due to haematemesis. Whilst this nurse, who was well known to the client, was present at the bedside, there were no particular patient problems. However, when she went home the patient became inconsolable and frightened – pulling out her intravenous line, calling out and climbing out of bed. The ward staff were unable to reassure her and the planned endoscopy had to be cancelled. When the community nurse then volunteered to stay overnight with the patient, care was provided without further adverse incidents.

Summary

In summary, disturbed behaviour in older people is caused by a complex mixture of disorders, which cause cognitive impairment, such as of delirium, depression, other mental disorders and dementia. The literature to be further investigated then involves the particular issues which arise in relation to these diagnoses and influence the care of older people in the acute care sector, in addition to literature which might show what could be done to help the staff provide optimum care.

2.4 FACTORS WHCH INFLUENCE PATIENT CARE

2.4.1 Patient Agitation and Aggression

Agitated behaviour is common in patients with cognitive impairment, such as dementia or delirium (Gelder, Gath, Mayou, & Cowen, 1996). Poole and Mott (2003) described the burden placed on staff in the care of agitated patients (see above Chapter 1, Section 1.2.1). The frequency of agitated behaviour was the focus of a small study of patients in an acute care community hospital in Canada (Sourial, McCusker, Cole, & Abrahamowicz, 2001), which found that of the 56 patients observed, 95% exhibited at least one type of agitated behaviour. Six of those patients displayed 17 or more agitated disruptive behaviours. Using a modified version of the Zarit Burden Inventory (Zarit, Todd, & Zarit, 1986), it was shown that the staff experienced a significant burden. As it was shown by Poole and Mott (2003), staff tended to resort to the use of antipsychotic medications and restraint procedures in order to enable them to care for their other patients and to keep the agitated patients safe from harm, such as from falls. Unfortunately restraint and antipsychotic drugs are known to cause negative outcomes, such as delirium (Melbourne Health, 2006).

Aggression is a most distressing form of disturbed behaviour because it presents the possibility of serious outcomes for the perpetrator, who may be an older person, other patients nearby and for their nurses. In a random sample survey of 400 nurses' experiences of aggression in one Australian hospital, nine out of ten nurses on each ward surveyed had experienced some form of aggression in the last 12 months (O'Connell, Young, Brooks, Hutchings, & Lofthouse, 2000). A study comparing the results from a survey of nurses' reports of workplace violence in 2001 and 2004 in Queensland, found that the nurses' experiences of violence had increased (Hegney, Eley, Plank, Buikstra, & Parker, 2006). Two hundred and thirty-four nurses from the public sector responded to the survey representing a 45% response rate. Of those 74.8% said that the major source of violence was the patients. Whilst it is not known from these studies, if the violence and aggression came from older patients it stands to reason that with an ageing society and increased numbers of older people in hospital, that older people probably accounted for a proportion of those involved.

A questionnaire survey regarding the incidence of violence and aggression towards staff, was sent to 287 staff in 'elderly care wards' in the UK resulting in a 34% response rate (Badger, 2007). Of these responses, 50% were nurses, with the rest made up of allied health staff. Fifty-one percent of the staff had experienced violence or aggression from their patients and most of these staff were nurses (65%). Common reasons given for the causes of the behaviours were the presence of confusion and pain. Recommendations were made for the provision of training in relation to the management of these behaviours to encourage the staff to be more understanding and tolerant. In addition, it was suggested that there needed to be 'greater debate regarding the precursors to aggression and violence among older patients' (Badger, 2007, p. 38).

Nurses in the study conducted by O'Connell et al. (2000) were found to have experienced anger, anxiety, helplessness, fear, resentment and feelings of inadequacy. In a study conducted by the Badger (2007) nurses reported feelings of a lack of confidence and powerlessness. With the current nursing shortage, these are very likely to be factors affecting levels of job satisfaction.

A study aimed at the identification of the occurrence of workplace aggression for nurses in Tasmania, which used mailed questionnaires had similar findings (Farrell, Bobrowski, & Bobrowski, 2006). With a response rate of 38% from 6,326 questionnaires, 63.5% or 2,426 nurses reported experiencing verbal or physical abuse within the past four weeks with the majority coming from the patients or their visitors. A significant proportion of those nurses were aged below 40 years of age. Four hundred and ninety-two respondents of the original respondents were from aged care or dementia settings and 59% of those nurses had experienced abuse. However, a greater cause of distress, or low morale for the nurses in this study, was reported to be their workload - ‘not enough time to complete work/support patients’(2006, p. 585)**.** These authors concluded that

> Many nurses are working in environments in which they cannot provide the care they think best for patients and at the same time experiencing high levels of verbal and physical abuse. It is not surprising that some nurse have left the profession altogether (Farrell, Bobrowski, & Bobrowski, 2006, p. 787).

2.4.2 Nurses’ Morale

Definition

Nurse morale, or the way nurses feel about their jobs, has been the subject of increasing attention due to worldwide recruitment and retention problems (for example, Day, Minichiello, & Madison, 2006; Hegney, Plank, & Parker, 2003; Ruggiero, 2005; Unruh, 2008; Zangaroo & Soeken, 2007). A systematic review of the literature in relation to morale and the factors involved found that there was no definitive definition of morale to which previous studies could be anchored. Therefore, the view was adopted that positive morale ‘… is seen as an attitude of confidence in the mind of the individual where they identify with a group, accept the group goals and work towards achieving them collectively’ (Day, Minichiello, & Madison, 2006, p. 517). An important point for consideration in the present study was that one of the factors claimed to affect nurses’ morale was their ability to adopt new practices and to learn new skills. The intrinsic factors claimed to decrease nurses’ morale involved their ‘sense of professional worth’, ‘being respected’ and their ability to provide optimum care (Day, Minichiello, & Madison, 2006, p. 518). This was restrained when services were restricted, quality of care was reduced and when agency staff, who earned higher wages but provided less care, worked alongside ward nurses. Extrinsic factors involved organisational structures which included staff relationships and sense of recognition, particularly in relation to symptoms of anxiety and powerlessness. The negative impact of low staffing and high workloads in addition to unstructured teams, were said to lead to poor patient, nurse and financial outcomes. Recommendations were made for strategies to improve morale involving leadership with ‘shared vision of what both groups [organisational and ward staff] are trying to accomplish together, as well as an understanding of the problems’ (Day, Minichiello, & Madison, 2006, p. 520).

Job Stress or Satisfaction

Job stress was said to occur when a work situation is very complicated and the nursing staff needed to deal effectively with situations that were not clear and were often insoluble (Stordeur, D'hoore, & Vandenberghe, 2001). A meta-analysis of studies examining nurses' senses of job satisfaction found that autonomy, job stress and nurse-physician collaboration were the most commonly noted variables which impaired satisfaction (Zangaroo & Soeken, 2007). Job stress had the strongest negative correlation and was said to involve new technology, staff shortages, unpredictable workload and poor workflow. It was noted that, despite the high number of studies examining the reasons for job dissatisfaction and ways to recruit new nurses, there was little available evidence regarding ways to improve the work environment. Recommendations were made for research studies that enabled nurse leaders 'to be more proactive in developing ways to revitalize the work environment and make it more satisfying for nurses' (Zangaroo & Soeken, 2007, p. 455).

Burnout

The results of job stress may be burnout, which was defined by Maslach, Jackson and Leiter (1996, p. 4) as a 'syndrome of emotional exhaustion, depersonalisation and reduced personal accomplishment that can occur in individuals who work with people in some capacity' (described in more detail in Chapter 3, Section 3.2.5). It was noted that finding solutions to problems that might arise during interpersonal interactions could be difficult leading to an 'effort-reward imbalance' (ERI). This meant that there was a lack of reciprocity or mutual gain, so that one party was required to give more, without a balancing feeling of satisfaction or worth (Bakker, Killmer, Siegrist, & Schaufeli, 2000, p. 885).

A questionnaire survey investigation of the effects of leadership practices by head nurses plus other work stress factors, on the levels of emotional exhaustion for ward nurses was undertaken with 1,593 nurses in a Belgium university hospital (Stordeur, D'hoore, & Vandenberghe, 2001). There was a 39.2% return rate or 625 responses. Whilst this was comparatively low rate compared to other similar studies that cited 58-77% return rates, the demographic data appeared to reflect the hospital nursing population without any systematic bias. The mean age of the mostly female nurses

(91%) was 35.4 years and their mean hospital tenure was 10.8 years. Using a combination of research instruments measuring leadership behaviours, work stress factors and the emotional exhaustion questions from the Maslach Burnout Inventory (MBI) (Maslach, Jackson, & Leiter, 1996), it was found that work stressors explained more variance in emotional exhaustion than pure leadership dimensions. Specific work stress factors that predicted emotional exhaustion were a high workload; conflict with physicians and other nurses; and lack of clarity regarding work tasks and goals (Stordeur, D'hoore, & Vandenberghe, 2001, p. 540). However, having a leader who closely monitored staff for mistakes without the provision of supportive actions such as the encouragement for staff participation in decision-making, individualised encouragement, reward and the display of visible positive values was found to increase emotional exhaustion.

Kanste, Kyngas and Nikila (2007) also used the dimensions of the MBI to examine the self report questionnaire responses from 601 Finnish nurses (46% of whom worked in inpatient medical wards) in relation to the effects of leadership style on their feelings of burnout. It was found that older nurses who were equal to or more than 40 years, reported less depersonalisation than younger nurses. Leaders who were transformational and rewarding seemed to protect all staff from depersonalisation and emotional exhaustion in the way that they monitored work to foresee problems and then stepped in to avoid them in a supportive way, as well as providing positive reinforcement. This also increased the nurses’ sense of personal accomplishment. Temporary staff were found to be more vulnerable to burnout. The study was limited by the use of self-reported information which could be vulnerable to the halo effect of ‘social response desirability’, the absence of job stress variables and the conduct of the study in one country (Finland). Nevertheless, the authors were still felt confident that ‘leadership-oriented interventions’ needed to be investigated and encouraged. In particular, it was recommended that the study and development of programs regarding leadership skills which led to enhanced staff well-being through ‘empowerment and work engagement’ should be pursued (Kanste, Kyngas, & Nikkila, 2007, p. 738).

Dignity

Nurses’ morale may be intrinsically linked with their own personal sense of value or dignity. Dignity may be defined as ‘a state of being excellent worthy or honourable

(Dodge, 1962). Using the ‘Dignity at Work’ model (Hodson, 2001), Lawless and Moss (2007) explored the concepts related to nursing morale and burnout. Whilst paying heed to a patient’s sense of dignity is an indisputable human right and ‘core value of practice’ it was found that there was very little attention to the same concept for nurses. However, it was recognised that nurse and patient dignity is a mutually benefiting state – one ought to be present to enable the other to exist. Workplaces that are oppressive through ‘rigid, controlling and poorly managed’ practices led to ‘resistance behaviour’, whilst the ’cornerstones’ to worker dignity were said to be ‘a coherent workplace, autonomy, freedom from abuse and reasonable workloads’ (Lawless & Moss, 2007, p. 229). Autonomy was found to be of absolute importance through an environment and application of work practices which supported participation and trust.

Oppression and Power

The implications of Freire’s model of oppression (Freire, 1968), which explained the behaviour of the Brazilian people who were dominated by the Europeans, was the basis for a literature review for investigation into behaviours observed in nursing (2007). Concepts, which indicated oppression, were lack of assimilation, marginalisation, self-hatred and low self-esteem, submissive-aggressive syndrome as well as evidence of horizontal violence. Oppression was claimed to arise when a dominant group, whose views were considered as the right ones, had the ability to control a lower submissive group whose views were not valued (Wolfe & McCaffrey, 2007). This may be evident in males versus females, white versus black people or, arguably, doctors or managers versus nurses - each of the former being the dominant group. It was claimed that when the oppressed group tried to take on the dominant groups’ values, they developed low self-esteem and self-hatred. This may be demonstrated in nursing, when the administrative necessity is patient throughput and budgetary considerations, whilst the bedside nurse is expected to provide optimum care with shrinking resources.

As there were few studies explicitly examining oppression, Matheson and Bobay (2007) searched for studies which involved power and empowerment, marginalisation, burnout and horizontal violence. The theories of Kanter (1993) were mentioned and are further described in Chapter 3, Section 3.1.2. Obstructions to empowerment were said to be ‘authoritarian leadership, poor information access and short working periods’. Although implicit marginalisation studies were also not evident, it was stated that marginalised leaders may become ‘controlling, forceful and inflexible’ (Matheson & Bobay, 2007, p. 230). Whilst burnout was not found to be directly associated with oppressed group behaviour, horizontal violence, including bullying, was thought to be associated with differences in knowledge, values, gender, education and power, which are all related to organisational and dominant group relationships. In a recommendation for further studies of oppressed group behaviours, Mathieson and Bobay (2007) concluded that nurses themselves needed to find solutions to the problems described, otherwise others would find solutions which might not be in the best interests of the nurses or their patients.

Bullying

The need for oppressed people to find their own solutions was supported by Hutchinson, Vickers, Jackson and Wilkes (2006) in their examination of the literature regarding workplace bullying. However, instead of characterising bullying as solely a nursing behaviour related to oppression, these authors described it as inherent to any organisation, related to the overall wielding of power. Bullying was described as a constellation of repeated behaviours, which might be quite subtle, which involved such things as harassment, intimidation, domination, assault, ignoring, obstructing, belittling, denying and demeaning a person. An example was given of an experienced nurse, who might stand out because she or he had undertaken advanced education and in seeking to make a change, was denigrated and humiliated by those who were attempting to prevent the discomfort of change. Organisational practices might then perpetuate that bullying when reports were ‘ignored, denied and minimised’ (Hutchinson, Vickers, Jackson, & Wilkes, 2006, p. 122).

Nursing Turnover and Sick Leave

It is well recognised that there is a worldwide shortage of registered nurses available in health workplaces (Duffield & O'Brien-Pallas, 2003). Workplace stressors have been reported to contribute to high levels of absenteeism through sick leave and resignations (Hansson, Vingard, Arnetz, & Anderzen, 2008; Rauhala et al., 2007; Toppinen-Tanner, Ojajarvi, Vaananen, Kalimo, & Jappinen, 2005). Increasing sick leave rates were found to be related to measurements of increasing nursing workloads (Rauhala et al., 2007). In another study, nursing burnout as measured by the Maslach Burnout Inventory was found to be related to increased sick leave absence and future illness (2005) Hansson et al. (2008) recommended being aware of the effects of organisational change which might lead to absenteeism through the monitoring of stress recovery biological markers which indicated levels of staff well-being.

The causes of nursing shortages have been shown to include a complex interplay of factors including life style preferences, workforce composition, quality of work life, workload in addition to the results of organisational change because of shifting managerial practices (2003). Recommendations were made for managers to consider these factors when they sought solutions to workforce problems. Therein a study was commissioned by the NSW Department of Health in 2003 (Duffield et al., 2007) which was designed to improve the understanding of nurses' workloads and the changes in patient needs, so that policies could be developed appropriately in the future. It was found that there was little uniformity of staffing ratios across the nursing environments and all were affected by high complexity and increasing demand. This empirical research gave ten key findings, including, recommendations for the improvement of patient safety by attention to leadership, nursing education, adequate resources and nurse autonomy, supported by stable staff (Duffield et al., 2007).

Resilience

The application of the characteristic of psychological resilience, in other words 'the capacity to move on in a positive way from negative, traumatic or stressful situations', was investigated through a review of literature in the belief that it might assist nurses to deal with their workplace problems (Jackson, Firtko, & Edenborough, 2007, p. 2). It was acknowledged that resilience was developed though experience, personal qualities, environment and a balance of risk and protective factors. However the accompanying trait of 'hardiness' was said to be the most protective. This was described as

> … being committed to finding meaningful purpose in life, the belief that one can influence one's surroundings and the outcomes of events, and the belief that one can learn and grow from both positive and negative life experiences (Bonanno et al., 2002, p. 25).

Summary

The literature showed that attention had been paid to the problems of nurses' stress in general and in relation to caring for people with dementia and delirium (Brodarty, Draper, & Low, 2003; Hallberg, 1999; Hallberg & Norberg, 1995). Many noted that the difficulties were due to the likelihood of agitation, aggression and high risk of adverse events. Nurses were faced with complex care decisions to keep these patients safe and might not feel that they had been able to provide beneficial care. If this could lead to a loss of satisfaction and burnout then the added possibility of negative attitudes towards older people might affect their care.

2.4.3 Attitudes and Ageism

The term ‘ageism’ was defined as

> A process of systematic stereotyping of and discrimination against people because they are old, just as racism and sexism accomplish this with skin colour and gender. Old people are categorised as senile, rigid in thought and manner, old fashioned in morality and skills… Ageism allows the younger generation to see older people as different from themselves; thus they subtly cease to identify with their elders as human beings (Butler, 1975, p. 12).

This statement seemed to reflect the attitude expressed in the opening statement of this thesis (see Chapter 1). The nurse who provided the quotation did not appear to consider that sick older people had a right to be given care in an acute hospital setting - *“… you know it shouldn’t be happening, but it does”* (Poole & Mott, 2003, p. 309).

Such an attitude is depicted in the statement that ‘old age is synonymous with frailty, decrepitude and senility … [older people] inevitably develop degenerative disease for which little can be done’ (2000, p. 19). Terminology commonly heard in news reports, such as ‘the coffin-shaped demography’ and ‘the waves of grey hordes’, perpetuates negative attitudes towards older people (Field notes). This may contribute to reinforcing nursing students’ perceptions that old age equates with illness and that all older people are frail and in declining health (Moyle, 2003).

Ageism can lead to erroneous assumptions that illness is just due to age, and is thus not a treatable pathology, therefore precluding the speedy reversal of a possible delirium and likely to cause a descending spiral of decline. Tappen and Beckerman (1992, p. 151) claimed that there was a ‘subtle’ form of age discrimination, which was related to behavioural changes in older patients. Through case studies, they described what appeared to be a ‘cascade of indifference’. This term was coined by a family member who observed the labelling and acceptance of common behavioural symptoms, such as confusion and incontinence, as being inevitable for older people and therefore not worthy of active investigation. This phenomenon may lead to further deterioration and eventual dependence or death (McCusker, Cole, Dendukuri, & Belzile, 1999).

In a literature review of the attitudes of acute care nurses towards older patients, Courtney, Tong and Walsh (2000) found that, whilst acute care nurses generally held a slightly or moderately positive attitude towards older patients and that these attitudes greatly influenced the care the patients received, their knowledge about the special needs of older people was not consistently evident. The literature reported that nurses were in danger of emotionally rejecting and stereotyping older patients because the nurses were constantly exposed to very ill, complex older patients and were either too busy or too unaware of the their patients’ needs to attempt to individualise their care.

In an investigation into the needs of older people in acute hospital care in Australia, whilst it excluded those with cognitive impairment, found that ‘carrying out the doctors orders, physical care, psychosocial care and discharge planning’ where the most important aspects (Hancock et al., 2003). This would appear to be little different from the needs of all patients. However, it was reinforced that the explanation of decisions and activities as well as taking extra care to make sure that the patient and their families understood and participated in decision-making, was imperative. Older people were found to be as interactive and informed as younger people.

A further Australian study (Borbasi, Jones, Lockwood, & Emden, 2006) reflected the findings of the Poole and Mott ‘agitation’ study (2003) in relation to the fact that staff found the care of patients with disturbed behaviour difficult. However, this study recognised and further highlighted the inability of the patients to seek help or to give information, and the central role of their families for the provision of that information and connection. Care was claimed to be impeded by organisational systems under pressure that not only provided inappropriate environments but forced a focus on very short lengths of stay at the expense of quality care for older complex, time-consuming patients. Careful comparisons with the comparatively high profile, environmentally enhanced specialty of paediatric care might be worth utilising in arguments for improvements in care of older people with cognitive impairment.

The purposive inclusion of nursing education in undergraduate programs which focuses on the reduction these misconceptions about older people has been recommended (2003). The action theory study involved the participation of nine final year nursing students at the University of Queensland in focus groups and reflection over a six-month period whilst undertaking clinical practica. Specific recommendations were made for the inclusion of clinical experiences in aged care facilities, the completion of an assignment to collect the life history of a healthy older person and the completion of appropriate competencies.

2.4.4 Nurses' Knowledge

Liaschenko and Fisher (1999) endeavoured to understand the type of knowledge necessary for nurses' to undertake their work. In particular, they highlighted that some nursing work is either invisible or taken for granted and therefore not acknowledged or rewarded. Examination of the literature showed that nurses were expected to 'make judgements, act wisely and get work done' based on the biomedical information available with no clear vision of the informal, practical knowledge which was essential to make it actually possible to provide total care of the patient. These authors therefore proposed a model aimed at bringing all the elements together and the legitimisation of the invisible but essential components. This three part model of 'case', 'patient' and 'person' was linked by 'social knowledge' (Liaschenko & Fisher, 1999, p. 34). As well as understanding the patient's biomedical factors, problems, responses and the ways to get things done in the health care arena, plus how to interact with other providers, it was deemed essential to know the patient's personal biography, in other words who the person was, what were their desires and intentions. This was the extra knowledge needed to deliver care that took into consideration the whole person. The link between each element was said to be the nurses' knowledge of the organisational systems and how they worked.

Therefore, in the consideration of nurses' knowledge of biomedical information in relation to patients with disturbed behaviour, there seemed to be a lack of appreciation of the importance of recognising behavioural problems as symptoms of possibly treatable illnesses (Inouye, Foreman, Mion, Katz, & Cooney, 2001). This was particularly problematic if the patient was hypoactive, older than 80, had vision impairment or had dementia. In a survey of nurses' ability to use a delirium diagnostic tool correctly, that is the Confusion Assessment Method (Inouye, Foreman, Mion, Katz, & Cooney, 2001), it was found that, although nurses were able to diagnose when patients did not have delirium symptoms 90% of the time, they were able to recognise actual delirium symptoms less than 45% of the time (2006). In a case study by Eden and Foreman (1996), the death of a 69 year old patient with undiagnosed delirium who had an extended stay in the intensive care unit following with a straightforward surgical procedure, illustrated the need for improved delirium recognition and treatment.

Fessey (2007) explored nurses' knowledge and understanding of dementia and the application of person-centred care, as described by Kitwood (1997) and further explained in Chapter 3, Section 3.1.1. A questionnaire based around the positive and negative components of the person-centred theory was developed, using short case vignettes and multiple-choice answers which required an understanding of the person-centred approach. Some negative aspects, highlighted in Kitwood's Person-Centred Care theory (1997) and described by the Bradford Dementia Group (1997, p. 55) as 'malignant social psychology', were included. Seventeen staff behaviours were documented, including treachery, disempowerment, infantilisation, intimidation, labelling, stigmatisation, ignoring, withholding, disrupting. The distribution to 87 nurses in an acute care ward in Coventry in the UK, resulted in a 56% return rate. It was found that although the nurses were managing the more obvious aspects of dementia care, more education was required in other areas. The most prominent of these areas were concerned with the avoidance of

- Disempowerment – not allowing a person to use the abilities that they had or not helping them to finalise actions which they had initiated.
- Infantilisation – treating patients in a patronising way or as a child.
- Withholding – not giving attention when asked or meeting an obvious need.
- Disruption – not using polite requests when interruption was necessary with regard for the patient's dignity.

Parahoo (2000) studied the barriers and facilitators of knowledge distribution through research utilisation in nurses in Northern Ireland using a validated tool called the Barriers Scale (Funk, Tornquist, & Champagne, 1995). A convenience sample of 2,600 nurses provided a 52.6% response rate (71% of which were from ward based Registered Nurses). The results showed that the top of 10 reported barriers included, that nurses did not feel that they had the authority to change practice, that they could not understand the statistical analyses and that they did not have enough time to read the journal articles. The most common factors that were said to support research utilisation included the availability of support from managers and colleagues, the provision of time at work to review the research evidence and the provision of research training and education.

In the United Kingdom, a study examining the impact of research education on nurses' attitudes and research use found similar results (Veeramah, 2004). Following the completion of expanded education units for undergraduate nursing students, a modified version of the Barriers questionnaire was distributed to 340 graduate nurses and midwives with a response rate of 51%. It was found that whilst a majority indicated positive attitudes to research findings for practice, a significant number also expressed difficulties in understanding the statistics. In addition, not only was there not enough time to read research publications during work hours, they did not have easy access to such research publications or their findings in their workplaces.

How nurses make patient care decisions, particularly in times of uncertainty, was the subject of a PhD study in two Intensive Care Units in Australia (Marshall, 2008). Using case studies with observation, concurrent 'think aloud' probing, reflection and focus groups, information was categorised in order to examine the accessibility and the usefulness of clinical information. The three major findings were that nurses preferred to ask a colleague about how to do things rather than seek the information from formal publications; the use of documents with organisational guidelines, although recognised as a 'quality' requirement, were considered to get in the way of timely personal enquiry; and when formal clinical information was sought, the print media was valued over other forms such as on-line computer documents. The recommendation was made for the development of strategies to enable those who provide evidence-based information to communicate that via their roles as clinicians. So, whilst nurses wanted access to knowledgeable clinical peers, the way to develop and to sustain those informed staff was not clear, particularly when considered in relation to the barriers just discussed.

Therefore, since it had been established that the educational preparation and support for nurses in caring for patients with cognitive impairment was lacking, it was timely to investigate what was being done to keep those patients safe from harm. Conflicting pressures appeared to be opposing the application of evidence-based practice (Talsma, Grady, Feethan, Heinrich, & Steinwachs, 2008).

2.4.5 Maintenance of Safety

When older patients exhibit disturbed behaviours, particularly agitation and aggression or both, the safety of that patient, other patients and the staff becomes a priority whilst investigations are carried out to determine and treat the cause or causes of the behaviour. Restraint procedures using chemical (medication) or physical (sometimes known as mechanical restraint through the application of restriction devices) or both methods are sometimes instigated.

Chemical Restraint

The administration of antipsychotic medication which may be considered a chemical restraint is often a first line response to aggressive behaviour and has raised a debate about it's appropriateness. It is claimed that over 50% of people with dementia will exhibit behavioural problems at some time during their illness and that the use of antipsychotic medication raises issues about safety due to the possibility of side effects, such as hypotension, respiratory depression, sudden cardiac death, stroke, dystonic reactions and falls (Ballard, Waite, & Birks, 2006). It was recommended that antipsychotic medications should not be used routinely except where serious injury to the patients, carers or others, was likely. In a review of the literature concerning pharmacological treatments specifically for psychosis and agitation in elderly patients with dementia, it was found that antipsychotic medication was generally effective with a 61% improvement for these types of disturbed behaviours compared with placebo which gave a 35% improvement (Kindermann, Dolder, Bailey, Katz, & Jeste, 2002). However, it was recognised that there were few well-designed trials and that the newer atypical antipsychotic drugs, such as risperidone, olanzepine and quetiapine had fewer side effects, such as extrapyramidal symptoms and tardive dyskinesia, than the older conventional antipsychotic drugs, such as haliperdol. The instigation of further well-designed research studies was recommended.

In a retrospective cohort study in Canada using information from four linkable administrative healthcare data bases, 20,682 older adults with dementia living in the community and 20,559 matched residents living in nursing homes were surveyed in relation to the outcomes of their short term use of atypical or conventional antipsychotic drugs (Rochon et al., 2008). The results showed that there was an increased likelihood of admission to hospital or death with odds ratios of 3.2 and 3.8 respectively, within the 30 days following antipsychotic use. Warnings were issued regarding the danger of these medications. However, the authors neglected to comment on the reasons for the administration of these drugs in the first place, and thus did not take into account the effects of the initiating event, which may well have been a delirium caused by a serious health problem.

Whilst recommending research into strategies to reduce the usage of such medication, Ballard and Crean (2005, p. 5) noted that the 'best interests' of patients are probably served by the advocacy actions of their carers:

> The common view, to varying degrees, has been that my father has been difficult and that drug therapy is the solution. My torment and frustration has been immense. To me it has been obvious that what he has needed is kindness, sympathetic handling and an understanding of his condition. Unfortunately staff in care homes and hospitals seem to find it easier to cope if all their patients are docile and bed-or-chair bound. Training for care workers to treat these patients as individuals, to respond to their individual needs and to listen to their relatives and carers cannot come soon enough.

In summing up the arguments for and against the usage of antipsychotic medications in people with disturbed behaviour that is often called Behavioural and Psychological Symptoms of Dementia or BPSD, McKeith (2005, p. 25) noted that 'negative attitudes, insensitive approaches and ill-considered responses' also need enlightened attention. Challenging extreme views and aiming for a balanced approach to care of older people with behavioural disturbances were recommended.

Mechanical Restraint

The use of mechanical restraint devices has been the subject of great concern for some time. These restraints may be in the form of jackets, wrist or ankle ties or envelope style bed sheets. Bed side-rails may also be regarded as restraint devices in certain circumstances. In a systematic review of patient injury as a result of restraint practices (Evans, Wood, & Lambert, 2003), eleven papers which reported observational data were reviewed and the findings were augmented by data from other studies about reduction of restraint and injury. It was concluded that although the information was scarce and variable, there was a possible increase in deaths, falls and serious injury related to the use of restraints.

However, the intention and the strategies necessary to keep patients with cognitive impairment and disturbed behaviour safe from harm in hospital are complex. In a cluster randomised trial of multifactorial interventions to prevent falls among older people in 24 acute and subacute hospital wards in Sydney, no difference was found in fall rates between the intervention and the control wards (Cumming et al., 2008). It was noted that one of the established risk factors was agitated confusion. Since it has already been noted that people with dementia are at risk of developing delirium in hospital and that delirium may be both treated with, and caused by antipsychotic drugs, we have an increasingly complex cause-and-effect situation in relation to the care of patients with disturbed behaviour. These insights stimulated investigations into new approaches for care enhancement.

2.5 METHODS FOR CHANGING CARE PRACTICES

Many authors have noted that changing practice can be complex and demanding (for example, Badger, 2000; Davis, 2003; Doumit, Gattellari, Grimshaw, & O'Brien, 2007; Greenwood & Levin, 2007; IMA, 2007; Kanter, 2004; MacPhee, 2007; Ross, O'Tuathail, & Stuberfield, 2005). Various authors (for example, Bezzant, 2008; Eve, 2004; Fitzgerald, 2003; Thompson, Watson, Quinn, Worral-Carter, & O'Connell, 2008) have argued for a ‘bottom-up’ persuasive and facilitative approach such as has been described in the practice development literature of McCormack, Manley and Garbett (2004), which will be described in more depth in Chapter 3, Section 3.1.3. To this end, during the period of this study, several two-day Practice Development Workshop

Courses were offered twice per year to employees of the Area Health Service in order to encourage improvements in health care practice (NSW Department of Health, 2008). However, other authors have recommended top-down managerial-lead activities for change such as have been described in the Accelerating Improvement Methodology (AIM) manual (IMA, 2007) described in this chapter in Section 2.6.2. Simpson and Doig (2007) surveyed common barriers to change in relation to a range of change strategies and recommended activities which incorporated an awareness of locally available resources, site specific barriers, specific combinations of strategies and the likelihood that the chosen strategies might reduce workload.

Nevertheless, MacPhee (2007, p. 408) stated that one of the most important elements necessary for changing care, no matter what method was employed, was to start with a clear vision of what that change might be. To this end, a distinct component of the acute version of the Poole's Algorithm program (Poole, 2000a) focused on the personalised care of the patient. The booklet containing the lecture notes included a template to enable documentation of the patient's personal social information (the *Communication and Care Cues* form), which could be completed by the family. This information was intended to facilitate patient and staff communication which aimed at the reinforcement of the patient's personhood by improving orientation, protecting their dignity and relieving anxiety. The form also provided a brief description of the causes of confusion, an overview of intended care practices, as well as requests for families to provide orienting and reassuring bedside mementos, such as photographs and familiar objects (Poole, 2000a).

Therefore, the question was, what methods might be employed to encourage nurses to consider changing their care practices in order to incorporate the person-centred aspects of care for older people with cognitive impairment that could be recorded on such a form? Several components of change facilitation related to person-centred care were reported in the literature and are described below.

2.5.1 Observational Practice Change Methods

Dementia Care Mapping

The work of British social psychologist Tom Kitwood emphasised the importance of changing the focus of care from the disorder to the person. He coined the term 'person-centred’ care (Kitwood, 1997) and pioneered the development of a method for the improvement of the care of people with dementia in aged care facilities (ACFs) called Dementia Care Mapping (DCM) (Bradford Dementia Group, 1997). His aim was to highlight the requirement for the recognition of a resident’s individuality through a respect for their dignity and personal rights, enabled by knowledge of that person’s life history, so that the quality of care and communications could be improved.

The elements of DCM described by the Bradford Dementia Group (1997, pp. 4-5) are based on the construct that all people function, at any point in time, along a continuum from ‘well-being’ to ‘ill-being’ depending on the effects of their social psychology, health, personality, environment and biography. Assuming that a person’s desired state was ‘well-being’, it was surmised that this was dependent upon their feelings, actions, sense of belonging, attachments to other persons and sense of identity at the time. A list of 12 indicators of ‘well-being’ included actions, such as assertiveness, bodily relaxation, initiating social contact, self-respect and the expression of a range of emotions. The indicators of ‘ill-being’ were said to include sustained anger, anxiety, apathy and despair.

The process of Dementia Care Mapping had been used for some time in Australian ACFs as a quality improvement, care-evaluation tool (Wylie, Madja, & Walton, 2002). Staff were trained in the process of observation and coding of resident behaviours and staff interactions which were documented every five minutes for varying periods of time, usually blocks of two hours. This involved noting a point on a ‘well-being to ill-being’ axis, so that nurses could gain personal insights into the effects of their care practices, with the aim to stimulate improvement (Bradford Dementia Group, 2003)

The observational coding method was made up of three parts. The first involved the recording of 24 descriptive behaviour category codes, using the alphabet letters (Bradford Dementia Group, 2003, p. 23). This included such codes as, A – Articulation (interacting with others), D – Distress (unattended distress), G – Games (participating in a game) and O – Own care (independently engaging in self care).

The second part involved the notation, when necessary, for certain types of communications used by staff called ‘Personal Detractor Coding’ (PDC). This included possible comments such as, “Oh you’re not wet again” or “She’s aggressive today, you’d better look out” (Field notes 2006). These types of negative and rude comments created a milieu termed ‘malignant social psychology’, because they caused feelings of disempowerment and infantilisation through labeling and disempowerment. These comments were recorded in conjunction with the behaviour coding (Bradford Dementia Group, 2003, p. 55).

The third part involved the notation of ‘Positive Events’, such as ‘a staff member showed remarkable skill or talent’ or ‘a deteriorating situation was turned around’ (Bradford Dementia Group, 2003, p. 61). The data was processed into individual and group score graphs which were then explained to the staff, with protection of their identities, in order to encourage and stimulate the formulation of improved care plans.

Whilst the method was specifically developed for use in long-term facilities with older people who were relatively stable, there were elements which seemed to that lend themselves to an application in the acute sector. In a pilot project in the John Hunter Hospital, Newcastle, NSW (Wylie, Penning, & Surr, 2004), nurses from two acute care wards attended DCM training sessions and then spent time observing the interactions of their patients’ and other staff. These nurses (called ‘mappers’) then attended focus groups where they discussed the feelings and the actions which they had observed. The collation of these responses allowed them to discover enlightening and thought provoking clues to care deficits including: ‘knowing the patient’ (the mappers’ were frustrated with the lack of personal patient knowledge), ‘feeling abandoned’ (patients spent long periods alone), ‘being confined’ (patients were restrained, immobile and unable to break the monotony) and ‘barren spaces’ (patients had nothing comforting to look at) (Wylie, Penning, & Surr, 2004, pp. 38-45).

Limitations of Dementia Care Mapping

Despite these insightful results, it was acknowledged that there were difficulties in applying this methodology in the acute care hospital sector due to the costs and the constant change of patients and staff. Due to the acute illness of the patients in this sector, it was expected that there would be a high degree of ‘ill-being’ negative codes and only those which involved actual staff interactions would allow positive coding as an indicator of actions aimed at the restoration of ‘well-being’. The current DCM method of coding was aimed at observation of the same patient before and after-intervention, not different cohorts, as would be the case in the acute care sector due to the short stay of patients. Nevertheless, the staff interactions, the ‘Personal Detractor’ coding and the ‘Positive Event’ recording did provide helpful insights. The DCM methodology was, however, expensive in the costs of training mappers (approximately $1,000 for three days training in 2005), the mappers salaries for those three training days and then their salaries owed during the mapping periods when they needed to be rostered as supernumerary staff (Field notes 6/8/04).

Other Observational Approaches

The use of direct, non-participant observation as a way of gathering data about peoples’ activities and interactions was not new and had been used in a variety of settings. Some examples include child and mother interactions (Jones, 2002; Weinfeld, Ogawa, & Egeland, 2002); physicians hand washing activities (Salemi, Canola, & Eck, 2002); and staff documentation practices (Berenson & Pollack, 2003). In addition, Caris-Verhalle, Kerkstra and Bensing (1999) successfully investigated communications between staff and older people through an analysis of videotaped interactions, using the Rotor’s Interaction Analysis System. Bowie and Mountain (1993) sought to assess the behaviour of long-stay patients with dementia using observational methods but found that most of the tools available were specifically aimed at particular resident behaviours, such as aggression or behaviour rating scales. These investigators viewed the behaviour in a vacuum and failed to portray the importance of interactions with others, particularly the staff.

Quality of Interaction Schedule Observations

A shorter and less expensive observational tool was found to be the Quality of Interactions Schedule (QUIS) (Dean, Proudfoot, & Lindesay, 1993). This time sampling method was developed as an observational tool of social and care interactions between staff and patients in order to allow the comparison of two new long-term aged care psychiatric facilities. It was not specifically developed for use in the acute care sector.

Staff, or researchers, could be trained in the QUIS methodology within hours, not days, because there were only five main observational categories for interactions - Positive Social (PS), Positive Care (PC), Neutral (NE), Negative Protective (NP), and Negative Restrictive (NR). Presently being tested by Lynn Chenoweth, additional categories have been added to explain absences in interactions that, in acute care, may be quite justifiable. This could be due to the need for the patients to leave the ward for tests or to interact with other staff or visitors, as well as the need to spend long periods resting. The two extra categories were Interaction with Others (IO) and No Staff Interactions (NS). In a similar manner to the DCM methodology, the QUIS data were de-identified and collated, then presented in the form of a graph to enable feedback to the staff in order to encourage awareness, insights and problem solving.

In the study by Dean, Proudfoot and Lindesay (1993), twelve residents in each of two facilities were observed over four time periods – baseline (before transfer to the new facilities), then at three, six and twelve months. An average of 266 individual observations were coded in each time period. Changes were reported using comparative frequencies of the total number of observations. It was especially noted that staff did not object to being observed and thought that they did not alter their behaviour during observational periods.

A number of other researchers have used the QUIS methodology in varying ways (for example, Jenkins & Allen, 1998; Lindesay & Skea, 1997; Olusina, Ohoeri, & Olatawura, 2003; Tyson, Lambert, & Beattie, 1995). In one study, the QUIS methodology was used to evaluate the effectiveness of a special support program for staff in aged care facilities (Proctor et al., 1998). Fifty-one staff and twelve patients were observed over blocks of three hours which gave 108 hours of observation overall. They were able to demonstrate an improvement in the number and the quality of staff and of patient interactions after the program. This seemed to demonstrate that the QUIS method of the observation and the coding of nurse-patient interactions could be applicable for use in the dynamic environment of an acute hospital care system.

2.5.2 Other Practice Change Methods

Whilst there are said to be many different ways to stimulate or manage change, MacPhee (2007) claimed that in addition to starting with a vision or mission statement, other important elements necessary for success were team brainstorming and preplanning, stakeholder analysis, effective teamwork, a project plan and regular reports, social network support and transition monitoring. Ross, O'Tuathail and

Stubberfield (2005, p. 519) summarised and explored change processes and found them complex but with interlinked factors similar to those identified by MacPhee. However, an added element was the requirement that change needed to be led by key people.

An example of a change management method which incorporated such recognition of leadership was the Accelerating Implementation Methodology (AIM) (IMA, 2007). This corporate tool listed the elements required to effect change which included: define the change, build agent capacity, assess the climate, generate sponsorship, determine change approach, develop target readiness, build communication plan, develop reinforcement strategy, create cultural fit and prioritize action. It was claimed that the element most critical to successful change was leadership, which is sometimes called sponsorship. Sponsors were intended to ‘authorise, legitimise and demonstrate ownership’ for change and needed to have sufficient organisational power or influence to enable the availability of resources and to reinforce the activities of change (IMA, 2007, p. 23). Sponsors needed to be informed and in total agreement about the project and then fully briefed regarding their role. This involved being able to ‘express, model and reinforce’ the desired behaviours of change (Asher, 2008). Three day corporate training workshops were available.

Therefore, it was clear that there were a number of methods available to stimulate change which might be used to enable enhanced care of older people with cognitive impairment. A brief summary of the problems and the resulting research question follows below.

2.6 PROBLEM SUMMARY – Research Question

The literature review showed that there were likely to be more older and complex patients with cognitive impairment who exhibited symptoms of disturbed behaviour in the acute hospital care sector in the future. These patients required special skills for care with a respect for the whole person rather than just the presenting disorder. Nurses were reported to feel stressed and neither well-prepared nor motivated to look after these patients due to workforce issues, morale and knowledge deficits as well as ageist ideas. Change management was shown to be complex but the facilitation of staff understanding of the issues through reports of direct observations of their care practices was claimed to be helpful.

Therefore, **the research question** which was formulated was

> Can the instigation of a person-centred approach to care for older patients with cognitive impairment and disturbed behaviour result in decreased nursing stress, enhanced patient care practices as well as improved patient outcomes and family satisfaction?

An examination of the concepts which then guided the study framework and the choice of the action research method are described in Chapter 3. Several researchers, referred to below, have already addressed the question of person-centred care and have described it conceptually by the use of capital letters on account of it's relative novelty. This study aims to show that it is a mainstream concept in geriatric nursing, and thus will employ small letters in the use of the term, except when the work of others is being referred to and the capitalisation is thus appropriate (see Acknowledgements p. iii, Nicholas Hardwick, 2009).

CHAPTER 3: METHODOLOGY

It is expected in the future that there will be increasing numbers of older patients with cognitive impairments and disturbed behaviours in the acute hospital care sector. It has been shown that despite education program initiatives which led to improved nurses' attitudes and knowledge in some Aged Care Facilities, replication of these initiatives and results had not been possible in the acute hospital care sector where there was evidence of nursing stress and negative attitudes towards older patients (Chapter 1). The literature review reported in Chapter 2 incorporated descriptions of the causes of disturbed behaviour in older people, the factors that influenced patient care and techniques for practice change. Caring for older people with cognitive impairment was shown to be stressful and complicated often resulting in adverse outcomes. Therefore, ways to conduct a study which might result in decreased nursing stress, enhanced patient care practices with improved patient outcomes and family satisfaction were investigated. An examination of the theoretical and conceptual frameworks intended to guide the choice of methods is described below.

3.1 CONCEPTUAL FRAMEWORK

The difficulties experienced in the enhancement of staff attitudes and care practices in the acute hospital care sector had indicated the need for a different approach. Given the complex interrelationship between the stress which nurses experienced when caring for people with cognitive impairment who were affected by multiple co-morbidities, as well as the complicated social and psychological factors affecting them in environments of resource scarcity, the guidance of conceptual frameworks literature was considered necessary. The approach this situation required '… an enlightening story … that gives new insights and broadens understanding of the phenomena' (Anfara & Mertz, 2006, p. xvii).

The development of the framework was informed by the definition: 'a theory is a set of interrelated constructs, definitions and propositions that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting phenomena' (Kerlinger, 1986, p. 9). Accordingly, the issues which were considered to be implicated in the phenomena of caring these people evolved into three basic concepts:

- What was considered best practice care for vulnerable older patients with cognitive impairment?
- What affects the motivation of nurses to provide that best practice care?
- How could the nurses be enabled to provide that best practice care?

These three concepts led to the consideration of the constructs described in three conceptual models related to the study question:

- Person-Centred Care (Kitwood & Bredin, 1992);
- The Integrated Structural Model of Human Behaviour (Kanter, 1993);
- Practice Development (McCormack, Manley, & Garbett, 2004).

Thus combining these models into a conceptual framework developed a proposition which is described below.

3.1.1 Person-Centred Care

‘Person-centred care’ is an approach which involves recognition and respect for the integration of the personality of a patient and the carer with symptoms and care needs. The person-centred approach was first formally developed by Carl Rogers in the 1940-1960s, firstly through his exploration of ‘Client-centred Therapy’(Rogers, 1951) and then through focusing on the whole person or ‘to be that self which one truly is’ (Rogers, 1967, p. 163). Before that time, therapeutic psychology aimed to explore and interpret problems with the direction of activities for improvements which were considered important by the therapist, but not necessarily considered as important by the patient. Rogers (1951, p. 489) explored the concepts of ‘self perception’ and ‘self acceptance’ as part of the need for ‘self actualisation’ in which it was fundamental for human beings to be driven to move forward by growth that is, striving to be more than the present self. The provision of a safe, supportive environment, a major facet considered essential for the assistance of a person to achieve growth, was created by the therapist’s attitude of ‘unconditional, positive regard’ (Rogers, 1967, p. 47).

A quotation applicable to the behaviour observed in people with cognitive impairment was ‘Behaviour is basically the goal-directed attempts of the organism to satisfy it’s needs as experienced, in the field as perceived’ (Rogers, 1951, p. 491). For people with cognitive deficits which occur in dementia and delirium, the challenge to continue selfactualised growth to meet their basic human needs must be great and creates challenges for the provision of optimum care.

Whilst traditional care has mostly focused on a person's deficits rather than their strengths, it was recognised that 'there is no coherent theory of the process of care for those who have a dementing illness' (Kitwood & Bredin, 1992, p. 269) with little direction for the realities of nursing care. A possible reason why this type of care was dominant was to 'to keep stress at bay' (Kitwood & Bredin, 1992, p. 270). Therefore, the medical or technical approach was seen as a possibly covert protective mechanism for those whose identity was bound up in the support of medical treatment and physical care. In fact, Kitwood and Bredin (1992, p. 20) claimed that many staff 'don't know what they are doing' when caring for people with dementia.

This was of concern because some behaviours are a result of interactions with other people and/or the surrounding environment, not just the effects of the cognitive deficits (Kitwood & Bredin, 1992). This has been supported by a study of the relationship between caregivers' characteristics and the neuropsychiatric symptoms (NPS) of dementia (Sink, Covinsky, Barnes, Newcomer, & Yaffe, 2006). After examining 12 specific NPS symptoms reported by carers, such as, restlessness, hallucinations, anger and combativeness plus the characteristics of carers, such as age, education and the relationship to the person with dementia, it was found that particular caregiver characteristics were associated with a higher level of neuropsychiatric symptoms in the person with dementia. This was found to be independent of the individual characteristics or level of dementia in the person for whom they were caring. Characteristics which resulted in more reports of NPS were from carers who were younger than most others in the group that were studied, less educated, more depressed, more burdened or spent more hours giving care.

Kitwood and Bredin (1992, p. 271) coined the term 'malignant social psychology' as a description of the milieu which could surround a person with dementia despite the best intentions of health care staff. Unless the staff understood the vital role which they played in a patient's well-being, the person with dementia could be cast as the 'problem' who needed to be 'managed' (rather like the 'old' view of psychotherapy), whilst the carers were 'normal and well adjusted' and therefore capable of doing the ‘managing’. The person with dementia was subject to rules and regimentation to suit the needs of the carers. For example, they might be told when and how to eat, sleep or bathe despite life-long personal preferences. Kitwood and Bredin (1992, p. 271) claimed that practitioners of the most intense problem solving fields of psychotherapy and counselling recognised that they were always part of therapeutic relationships and needed to be personally ‘solved’ before attempting to help anyone else. So gaps occurred between the technical/medical approaches to care of people with dementia, which concentrated on the patients’ brain pathology or the co-morbidities, if the complex reality of who that person was with their many years of knowledge, experience, personal characteristics and needs were ignored. Unfortunately a method of care commonly observed in acute hospital wards could be termed ‘infantalisation’ or treating people with dementia as if they were children. For example, a comment by a nurse about an older patient overheard by the Investigator of this study was “*Mary is being very naughty today*” (recorded in the Investigator Field notes, 6/3/05). Strategies to overcome this type of inappropriate care based on the Person-Centred Care concepts were explained in the Dementia Care Mapping program (Bradford Dementia Group, 1997) (see Chapter 2 Section 2.5.4) .

The constellation of individual personal associations and reactions to surrounding events are known to be maintained to some degree through brain cell neuronal plasticity, despite disease processes (Greenfield, 2000). Therefore, it is imperative that an application of knowledge and respect for individuality is included in the care processes for people with cognitive impairment, such as dementia or delirium.

Through the ‘Psychological Theory of Person-Centred Care’, Kitwood and Bredin (1992) presented evidence of the process of ‘rementing’ in people with dementia who appeared to stabilise or improve when surrounded by highly positive and interactive social environments and good health care organised to support and enhance their feelings of well-being. Through several ethnographic studies, 12 indicators of well-being were developed, including the assertion of desire or will, the ability to express a range of emotions, the initiation of social contact and humour. It was noted that the basic constructs of Person-Centred Care involved the establishment of four ‘global sentient states’ of well-being:

1. A sense of personal worth or self-esteem.
2. A sense of agency or the ability to produce, achieve, make a mark upon others and the world.
3. A state of social confidence … being at ease with others.
4. A state of hope … a sense that the future will be, in some way, good (Kitwood & Bredin, 1992, p. 280).

The key concepts to enable the implementation of Person-Centred Care were described as ‘holding’ and ‘facilitation’ (Kitwood, 1993, p. 56). ‘Holding’ meant the provision of concentrated attention and response to communications with the person with dementia, whilst ‘facilitation’ referred to assisting or empowering the person to fulfil their own needs. Overall, Kitwood and Bredin (1992) emphasised the normality of the concept of essential human interdependence which was increasingly essential for a person with dementia to retain their essence of humanity.

Therefore, the operational definitions of Person-Centred Care (see Figure 3.1) provided by Loveday and Kitwood (2000, pp. 10-20) that are applicable to the acute care system are identified as follows

1. ‘Attend to the whole person’. This means that when a person with dementia exhibits symptoms of illness we do not just diagnose and treat that illness without recognition of the impact those symptoms might have on the person’s sense of well-being. An older person with an acute illness can have non-specific symptoms which require expanded assessment skills and lateral thinking. For a person with dementia, the added stressors related to their perceptions of the illness, the new environment they find themselves in and their reduced ability to express their needs, such as pain or required assistance with toilet functions, are likely to produce behavioural responses. Holistic support is needed to provide an understanding of the person’s deficits and might include reassurance about family members or pets or the provision of care that fits the person’s preferences. If this is not provided other health problems may develop, such as delirium, falls, dehydration whilst symptoms of constipation or pneumonia may be masked, (Inouye & Charpentier, 1996).

2. ‘See each individual as special and unique’. Patients with normal cognition are likely to be able to fend for themselves to a certain extent by making requests when in hospital care. For a patient who is unable to communicate because of dementia, special personal needs, such as personal ways of managing eating, sleeping, washing, toileting and dressing, must be documented in advance. For older people in particular, some of their habits may have been developed in response to age-related disabilities. For example, a patient who has degenerative spinal disease may only be comfortable sleeping on their back with legs raised on pillows. If that patient is then nursed on their side they may experience sciatic pain that they cannot explain (Horgas, Nichols, Schapson, & Vietes, 2007). This may lead to restlessness with the patient continually endeavouring to get out of bed. Thus, it is essential to pay heed to the individuality of each patient and seek information about their unique needs and preferences.

3. ‘Give respect to the past’. People with dementia retain their long-term memory longer that their short-term memory. By understanding and an acceptance of who the person is and what has happened in their lives, staff will have a better opportunity to provide reassurance and support. For example, patients who have experienced war atrocities may carry memories which pertain to hospitals, uniforms and showers, so that they become fearful and agitated when confronted by what are normal activities for the staff. It is essential that staff routinely seek information about past events which may impact on the care of their patients (Bradley, 2008), including pleasant events which can be utilised as reassuring and therapeutic communications.

4. ‘Focus on the positives’. By assessing and documenting the activities which a person with dementia can still do, it is possible to enhance rehabilitation activities and to provide a sense of integrity or hope for recovery (International Psychiatric Association, 1998).

5. ‘Stay in communication’. The way in which a person with dementia communicates may change due to the disease processes. Staff need to find ways which are appropriate to that person in order to maintain a reassuring and informing environment. Non-verbal communication is the most powerful way of

conveying positive regard and concern (International Psychiatric Association, 1998).

6. ‘Nourish attachments’. The most effective and direct way for the provision of a reassuring and informing environment is to encourage and support the patient’s family and friends to be present as often as possible. Sometimes patients with dementia may form an attachment to a particular staff member. It is important to recognise this as a valid therapeutic activity (Bradley, 2008).

7. ‘Create community’. Recognition of the innate human need for interdependence can help staff in acute care to understand the importance of establishing a sense of belonging for the patient with dementia. This may include staff frequently introducing themselves, as well as introducing other neighbouring patients (International Psychiatric Association, 1998). It may also mean making efforts to minimise bed location changes, which are a frequent cause of disorientation.

8. ‘Maximize freedom; minimize control’. In the acute care sector, the aim is to treat effectively the patient’s symptoms of illness as quickly as possible and to keep the patient safe. This may be difficult because of the co-location of frail, sick patients with staffing levels which only enable physical care, such as medical treatments, medication administration, feeding, bathing and toileting (Duffield et al., 2007). Reassuring activity programs which are helpful for patients with dementia are rarely offered (International Psychiatric Association, 1998). Consequently patients may look for things to do or ways to explain what is going on which do not ‘fit’ into the traditional view of acute patient care. Understanding the reasons behind this behaviour can justify care responses. For example if a patient with dementia thinks that they are at work, it may be helpful create a place in the staff workstation with papers for the patient to write on or to sort out. Enabling patients to tidy their lockers or bedclothes, if so desired, might also assist them to engage in meaningful, reassuring activity.

9. ‘Staff don’t just give, they receive as well’. The idea of reciprocity, or giving and receiving, is reinforced in the concepts of Person-Centre Care. It has long been accepted that the encouragement of professional detachment in health care

staff in the acute care sector, was a way of protecting staff from the stressors of the many personal losses they witness in their patients (Bakker, Killmer, Siegrist, & Schaufeli, 2000). However, a person with dementia may be unable to understand or to rationalise their position as a ‘patient’. They may seek to maintain their appreciation of self by expressing their sense of ‘worth’, ‘agency’ and ‘hope’ in offering their wisdom and skills through empathy and connection. The appropriate acceptance of this ‘gift’ by staff can meet that patient’s need for integrity and provide support for the nurse as well. The Facilitator remembers the feeling of relief experienced when a patient with dementia said *“You look tired nurse, why don’t you come and sit down next to me for a while”* (Field notes, 8/10/05). Although it was difficult to take time out to do so, it was comforting for the fatigue to be recognised. Renewed energy was experienced simply because the fatigue had been identified and named.

10. ‘Maintain a moral world’. The essence of humankind is the recognition that all people are of equal value and equally responsible for the protection of the less able from injury and abuse, whether it is physical or psychological. People who have intact cognition are more able to understand and correct imbalances than those without, such as those with dementia. These vulnerable people are dependent on the moral values and actions of others for protection against deceit and abandonment (Loveday & Kitwood, 2000). This includes the protection from inadequate nursing care which neglects the special needs of people with cognitive impairment, such as dementia.

In summary, the theory of Person-Centred Care aimed to provide care which met all the unique physical, psychological, spiritual and social needs through taking into account personal histories in order to optimise the sense of well-being (Kitwood & Bredin, 1992). The challenge was to seek ways of gathering the patients’ personal information in order to plan care which could meet the holistic needs of patients who were unable to communicate easily due to cognitive impairment.

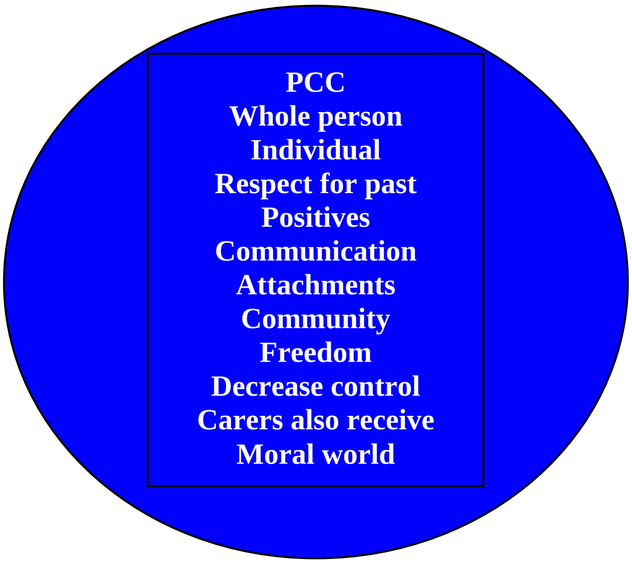


Figure 3.1: The major concepts of the construct for the provision of Person-Centred Care (PCC), as proposed by Kitwood and Bredin (1992) presented as the central pillar of an integrated conceptual framework for the study.

The delivery of person-centred care requires an effort from all staff. This effort can be a factor in the motivation to act. The factors which may either motivate or hinder nurses in the provision of Person-Centred care for people with impaired cognition may be explained by Kanter's theory of the Integrated Structural Model of Human Behaviour, which is explained below.

3.1.2 Integrated Structural Model of Human Behaviour

In the seminal work titled 'Men and Women of the Corporation', Kanter (1993, p. 249) explained employees motivation to act with the recognition that they could become trapped in cycles of 'position and response'. Conditioning to organisational structure meant that 'power begets power' and those who lacked perceived power entered descending spirals of discontent and inertia. This work depicted the connection between careers and self-images in relation to the distribution of power and powerlessness of workers within corporations. Particular attention was paid to the position of women and the obstacles which they faced in career development. This theoretical model contained pertinent directions for the current study when we consider the high numbers of women with varying levels of power within the nursing profession and health care organisations (Farrell, 2001).

The underlying assumptions that supported Kanter's theory (1993, pp. 250, 251) are explained as follows

1. 'Work is not an isolated entity between actor and activity'. What happens to people at work is determined by the larger setting, such as the organisation. For example, the possibility of a nurse accomplishing all the duties required in a shift depends on the nurse-patient ratio as well as the moment-by-moment acuity and demands of individual patients and their families, plus the impact of the skills of other members of team. The level of knowledge of the individual nurse also influences work allocation and completion.

2. 'Behaviour in organisations is adaptive'. People's choices reflect a strategic approach to the management of a situation. The manner in which nurses manage their workloads is a response to multiple competing demands, whilst they attempt to gain a sense of competence and dignity, which supports a sense of value or worthiness. For example, the prioritisation of multiple competing demands depends on the individual value nurses place on each task. The nurse may need to decide whether it is more important to give out essential medications at the required time to a number of very ill patients than to spend time trying to reassure and orientate an agitated, delirious patient who is at risk of a fall. Informed choice for keeping that patient safe might involve a consideration of the time consuming task of finding a relative or another staff member to sit with the patient, the negative effects of restraint procedures against the deleterious effects of the provision of late medications for a number of other patients. This creates a difficult choice of approaches and often needs consideration in acute aged care wards (Investigator's Field notes, 3.3.05).

3. 'If behaviour reflects a reasonable response to an organisational position, it is not thereby seen as mechanically inevitable'. If nurses ought to make a reasonable

response to dynamic, complex, competing demands in their workplaces, then they ought to be able to employ their own inner resources based on knowledge and personal capacity.

4. ‘Behaviour is directly connected with the formal tasks set forth in a job’s location in the division of organisation of labour’. The constraints put upon nurses’ duties, directly relate to the way they manage their jobs. These constraints may involve nurse-patient ratios, nurse skills mix, hospital bed allocation, patient length of stay demands, discharge resource availability and, importantly, colleagial respect and appreciation.

5. ‘An interest in the relationship of formal task, formal location, to behavioural responses also leads to an emphasis on competence … ability to do the job … more often than it is stressed in social psychological analyses’. The Investigator’s experience within the hospital setting has shown that cognitive impairment or confusion in older people is often accepted as a normal part of ageing**.** Caring for confused older people is not seen as requiring highly complex nursing skills so that specific competence in the care of older people is undervalued and underdeveloped (Poole & Mott, 2003).

Three interrelating concepts are contained within the Integrated Structural Model of Human Behaviour (ISMHB) (Kanter, 1993, pp. 132-134) and consist of the structure of opportunity, power and distribution:

Opportunity

‘Opportunity’ referred to the manner in which people perceived their ability to manage, change or improve their situations. This could imply that nurses who are supported and given the opportunity to investigate and/or improve their care of patients, might be more likely to feel valued and engage in change activities.

Power

The ability of a person to autonomously effect change within the structure of their job description demonstrated a level of ‘power’. Nurses are educated at various levels to assess and treat patients, however their autonomy is historically constrained by multiple competing, interdisciplinary expectations, as well as organisational resource pressures. The Investigator's observations were that Registered Nurses were mostly engaged with patient care duties, maintaining organisational protocols and supporting or supervising less experienced staff. This meant that they had little time or energy left to investigate strategies to bring about practice enhancement as most days were characterised by feelings of 'rush' to just get the duties completed..

Distribution

The 'proportional distribution of people of different kinds' refers to the number of different types of workers occupying various jobs classifications across an organization. Consideration of the comparative percentage of each classification, led to the theory that people whose job type was of a high proportion of the organisation, would have some evidence of automatic gain. In effect, Kanter (1993) assumed that there should be inherent gain for identity, status and credibility in groups of high proportions. Nurses, whilst belonging to the highest proportional group in any acute health service, face the confounding effects of their mostly female status. It may be that the effects of the era when nurses were considered the handmaidens for the doctors (Wawn, 1936), still allows the structure of paternalistic power to obstruct the nursing workforce from opportunity and personal power. In fact, Kanter (1993, p. 314) noted that 'the powerlessness of people in service jobs is often reflected in the treatment they receive from the organisation'.

In seeking answers to these problems Laschinger, Finegan, Shamian, & Wilk (2001) carried out a study which aimed to test an expanded model of Kanter's theories. Questionnaires measuring conditions of work effectiveness, psychological empowerment, job content and satisfaction were distributed to 404 Canadian nurses in different Ontario city tertiary care hospitals. Although it was not possible to totally rule out the effects of inbuilt individual personality attributes, such as optimism or pessimism, they thought that the large sample size which resulted from data spread across Ontario, could minimize bias. Structural fit equations were used to analyse the data in order to help overcome errors. It was found that the provision of structural empowerment, or the ability of a nurse to access information and autonomously make a difference at work, resulted in psychological empowerment which subsequently reduced the strain of the job and increased work satisfaction.

The need for nurses to have structural empowerment was supported by a later study by Sarmieno, Laschinger and Iwasiw (2004) in which 89 nurse educators were surveyed in a similar way but with the use of the Maslach Burnout Inventory (MBI) (Maslach, Jackson, & Leiter, 1996). It was found that the level of empowerment in relation to job satisfaction, specifically through access to information and undertaking autonomous work, balanced the subscale of emotional exhaustion. This reinforced the placement of the responsibility for job satisfaction on those who directed the work conditions, such as the administrators or managers. Therefore, Kanter (1993) would contend that job satisfaction relies on the allocation of work roles or tasks and the establishment of work conditions to support achievement.

Kanter's theory was further reinforced through a search for a model of team empowerment by Mathieu and Gilsen (2006). Recognising that nurses worked in teams, ward-based, shift-based and based on patient allocation processes, it was theorised that the basis for work effectiveness could be depicted as input – process – output (IPO). In a survey of the literature regarding empowerment and models of teams, theories of effectiveness and elements of psychological empowerment were examined. This led to the structuring of seven hypotheses which involved team members' perceptions of autonomy, organisational communication and support, training and feedback mechanisms, customer satisfaction and quantitative performances. Overall, 452 staff members of 121 different technician teams in the office equipment industry were surveyed using validated tools centred on perceptions of work design, organisational support, external leadership, team processes and empowerment. They found that team empowerment was '… significantly influenced by the embedding organizational environment' (Mathieu & Gilsen, 2006, p. 105). To be powerful it was said that there ought to be organisational support with access to the information which would support autonomous actions**.** Thus, Kanter's theory (depicted in Figure 3.2) was supported with an expansion of understanding of the elements of power.

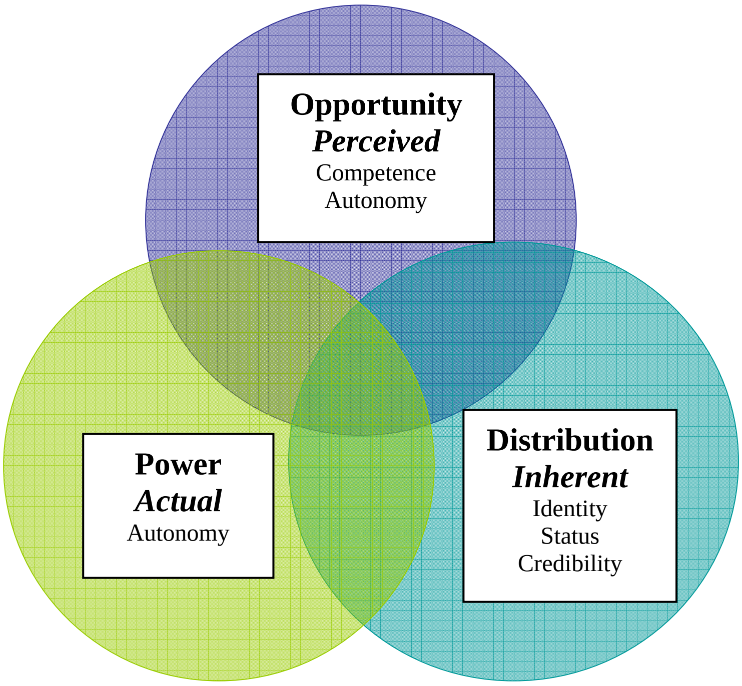


Figure 3.2: The major concepts within the construct of the Integrated Structural Model of Human Behaviour (ISMHB) (Kanter, 1993) depicted as part of the integrated conceptual framework.

The ISMHB explained the obstacles related to power and opportunities that might influence activities to initiate the concepts of person-centred care in the acute care sector. Therefore, it was clear that special approaches would be needed to motivate and enable nurses to provide person-centred care for patients with cognitive impairment and disturbed behaviour. The concepts of Practice Development based on person-centred care described by McCormack, Manley and Garbett (2004) may be a useful approach and are explained below.

3.1.3 Practice Development

The Critical Social Science approach to research aims to '… involve and inform people, especially marginalised or oppressed populations, about actions necessary to promote their emancipation' (Fontana, 2004, p. 93). 'Practice Development', as described by McCormack, Manley and Garbett (2004) involves care which includes analysis of issues as well as actions for change . To increase clarity and enable the development of continuous improvement in patient-centred care, Garbett and McCormack (2002, p. 88) proposed a definition:

> Practice development is a continuous process of improvement towards increased effectiveness in patient centred care. This is brought about by helping healthcare teams to develop their knowledge and skills and to transform the culture and context of care. It is enabled and supported by facilitators committed to systematic, rigorous, continuous processes of emancipatory change that reflects the perspectives of the service users.

The term 'emancipatory change' was used to reflect the involvement of the service users and was the main principle (Garbett & McCormack, 2004, p. 88). Practice development was intended to assist and to free staff to help themselves in order to enable them to view a concern and then be motivated to want to address it - rather than to impose improvements or change. This involved giving nursing staff the resources to examine and discover the negative and positive aspects of their work practices, so that they could lead a cultural transformation if needed. Just what those resources were and who should or could provide them, was not explained by the framework

The art of practice development as it was recommended by McCormack, Garbett and Manley (2004, p. 322) and is depicted in Figure 3.3 involved

- Clarifying beliefs and values about the purposes of practice development work and processes
- Assessment of the needs and perspectives of key stakeholders as precursors to change
- Planning
- Action
- Evaluation of the impact of practice development activity.

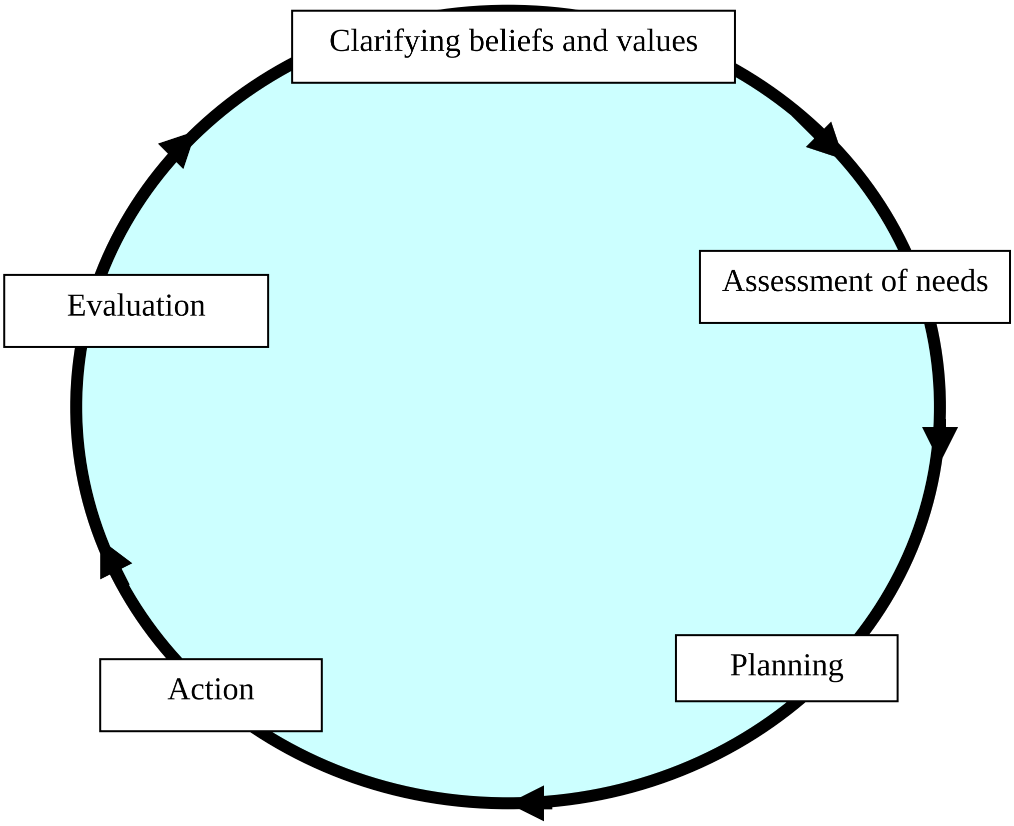


Figure 3.3: The major concepts of the construct of Practice Development (McCormack, Manley, & Garbett, 2004) depicted as part of the developing study integrated conceptual framework.

Practice development is however, a concept often used in varying ways. Unsworth (2000) set out to advance a framework for the development of practice development roles for relevant projects. Four attributes were claimed to be necessary to justify the title of Practice Development:

- New ways of working which led to direct measurable improvement in the care or service to a client.
- Changes which occurred as a response to a specific client need or problem.
- Changes which led to the development of effective services.
- The maintenance or expansion of work already undertaken (Unsworth, 2000, p. 323).

Practice development is said to be necessary in order to embed research findings in clinical practice. However, practice development also mimics the practical application of action research, where the aspect of desired practice change was understood and the emphasis was on the facilitation or enablement of that change (Unsworth, 2000, p. 320).

Carradice and Round (2004) examined the ‘reality’ of the application of practice development in a mental health inpatient unit in which embedded culture and resistance to change was likely to have been entrenched. They made two particular observations of note:

- The organisational development in this service focused on the provision of positive managerial interventions, such as management supervision, appraisal and accountability, balanced with practice development. The balance of these elements was said to be essential for effective change.
- The literature suggested that the role of the practice development nurse was stressful and required significant personal resources (Carradice & Round, 2004, p. 736)

Therefore, it was stated that Practice Development nurses needed '… support from senior managers' and that '… doing practice development in spare time … was untenable' (Carradice & Round, 2004, p. 733). The reality of the competing demands of day-to-day patient care could create obstacles for practice development so that possible change became obstructed and inadequate. Thus Practice Development nurses needed to involve and inform their managers to maintain their support and backing (Carradice & Round, 2004, p. 734).

The act of *facilitation* is a key element of practice development (McCormack, Manley, & Garbett, 2004, p. 24). A critical review of literature undertaken to establish guidance for practice development practitioners (2002, p. 582), showed that the characteristics most useful for facilitation could be described as incorporating actions on a continuum from 'doing' to 'enabling'. A facilitator was expected to maintain a focus for 'assisting' others so that they had the opportunity to experience personally the acquisition of knowledge and experience. For facilitation to be effective, practitioners needed to have flexible skills and insights which moved along the continuum whenever necessary.

Another reported key element of practice development was *action learning,* in which facilitation was an important skill (McGill & Beaty, 2001). A link was drawn between the nature of professional practice and the application of adult learning techniques, that included action learning (Edmonstone & MacKenzie, 2005). Professional practice required individualised responses to complex situations which may have had no obvious standard answers and so required interpretation, creativity, flexibility and intuitive judgement based on previous knowledge and experience. Adult learning was said to be an active process where learning was self directed, self imposed, intentional, purposeful, episodic, problem based and involved assimilation of prior knowledge (Edmonstone & MacKenzie, 2005, p. 28). Action learning was described as the equation L = P + Q, meaning that learning (L) is made up of programmed knowledge (P) plus questioning insight (Q) (Edmonstone & MacKenzie, 2005, p. 28). Thus practice development concepts were similar to concepts of action learning because they focused on staff participation and facilitation leading to change even though there might be a risk of failure if the supporting conditions were absent.

A further concept of practice development identified by Carradice and Round (2004, p. 735) was 'winning hearts and minds versus forcing change'; which thus pointed out that the facilitation of change could be slow, as staff were enabled to reach their own conclusions at their own pace. The overwhelming desire might be to 'force change' due to resource pressures even though the aim was collaboration not force, or 'working where people are at versus where you wish they were'(Carradice & Round, 2004, p. 735). It was accepted that staff might reach different stages of change at different times and exhibit resistance such as 'actively undermining the work or passively not engaging by being silent or absent' (Carradice & Round, 2004, p. 736).

Fitzgerald (2003, p. 12) reported on practice development activities in an Area Health Service and claimed that a bottom-up and a top-down approach was required. Senior managers needed to be closely involved plus the facilitator should seek out and expose tension and dissention within a team in order to assist team members to find solutions. This was supported by later work from McCormack and McCance (2006) which showed not only the progression of practice development initiatives from patient centred to person-centred care but also the development of a framework for care provision. The model recognised the imperative for prerequisites for nurse professional and interpersonal skills as well as care environments that provided supportive organisational systems plus person-centred processes with distinct patient care practices and expected outcomes involving satisfaction and well-being.

With such work underway it was therefore momentous that the statement by a nurse working in an acute hospital care sector quoted at the opening of Chapter 1 demonstrated such undervaluing of the highly specialised nursing skills needed to care for very ill older people, and depicted nurses as providing care of less importance

(Borbasi, Jones, Lockwood, & Emden, 2006; Courtney, Tong, & Walsh, 2000; Poole & Mott, 2003). Using the Critical Science approach through practice development, the aim of this present study was therefore to help the nurses to alter their perceptions and attempt to address ageist attitudes towards care of the older patients with cognitive impairment. Employing practice development activities as part of a framework for change was intended to motivate and to enable the nurses to strive for a sustainable culture of person-centred care. Thus they might experience a reduction in stress through a greater satisfaction and pride in their work.

3.1.4 Integrated Conceptual Framework

The combination of these constructs provided a framework for the study to assist in the interpretation of the findings. Figure 3.4 illustrates the integrated conceptual framework for the care of older people with cognitive impairment in the acute care sector. This included the central construct of Person Centred Care (Kitwood & Bredin, 1992), informed by the constructs of the Integrated Structural Model of Human Behaviour (Kanter, 1993) and enabled by the processes of Practice Development (McCormack, Manley, & Garbett, 2004)

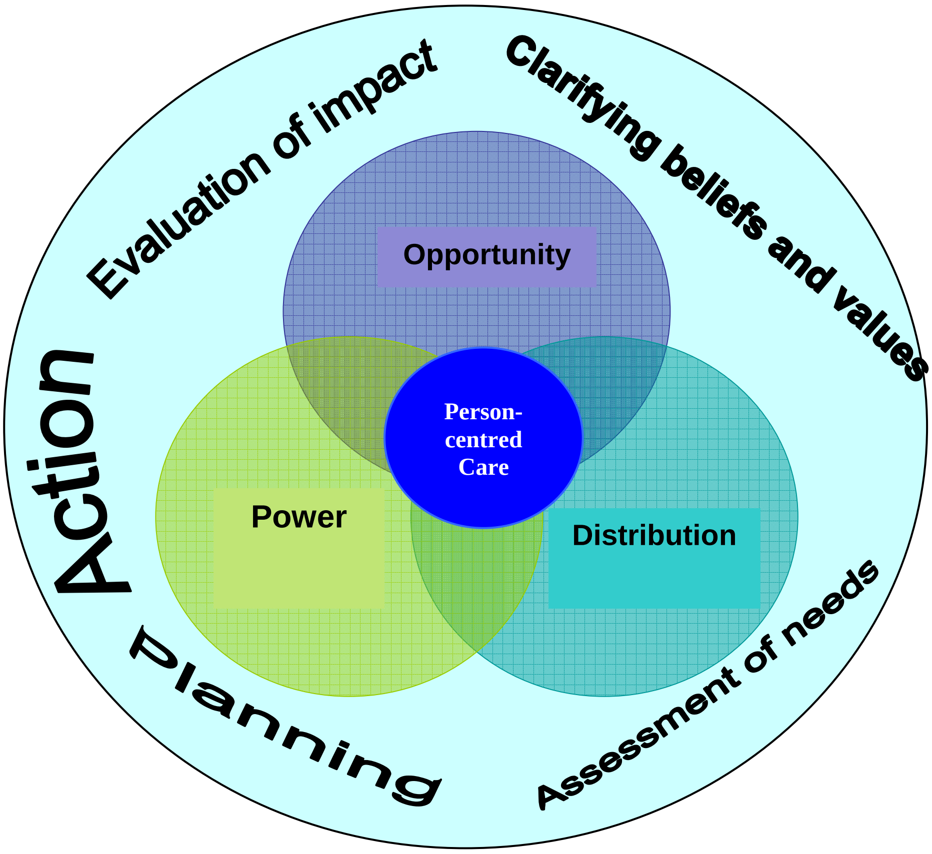


Figure 3.4: Integrated conceptual framework for care of people with cognitive impairment in the acute care sector.

3.2 RESEARCH METHOD – Action Research

The literature had shown that improvements needed to be made in the care of patients with cognitive impairments and disturbed behaviours, both for the sake of the patients and their relatives (Ballard & Cream, 2005) and also for the nurses (Jackson, Clare, & Mannix, 2002; Poole & Mott, 2003). The challenge was to discover what the nature of those actual improvements might be and then how to implement them. The literature had guided the 'what', but the 'how' had also been shown to be difficult (Eriksson & Saveman, 2002; Goff, 2000; Hallberg, 1999; Hallberg & Norberg, 1993, , 1995).

The principles of adult learning, action learning and practice development are closely linked with those of the research method called a*ction research.* Greenwood and Levin (2007, p. 3) stated that '… action research is carried out by a team … who are seeking to improve the participants' situation … leading to a more just, sustainable or satisfying situation for the stakeholders'. Greenwood and Levin (2007, p. 5) claimed that the major elements were 'action, research and participation' which aimed for social change that supported the participants in the improvement of their own lot. These authors instructed that the first step was to collaboratively define a problem, then gather information regarding the problem which then led to reflective, creative and practical action.

Collaborative participation as a basic premise of action research methods was espouced by many authors (including, Carr & Kemmis, 1983, , 1986; Kemmis & McTaggart, 1988). Morton-Cooper (2000, p. 19) extended Greenwood's list of key principles for action research in the health industry to include activities which were

- practitioner generated
- workplace oriented
- seeking to improve practice
- starting with a problem shared and experienced by colleagues or patients
- examining key assumptions … and challenge their validity
- adopting a flexible trial and error approach
- accepting that there are no final answers
- aimed to validate any claims made by processes of rigorous justification.

Thus, action research was described as occurring in spirals or a series of cycles consisting of reflection, planning, action, observation, then further reflection, revised planning, action and so on (McNiff & Whitehead, 2006). It was recognised that there were likely to be many smaller cycles within these cycles as every day actions were evaluated and reflections led to modification of the plans (Dick, 1997b). The overall number of cycles depended on the goals, the progress and the time frames (see Figure 3.5).

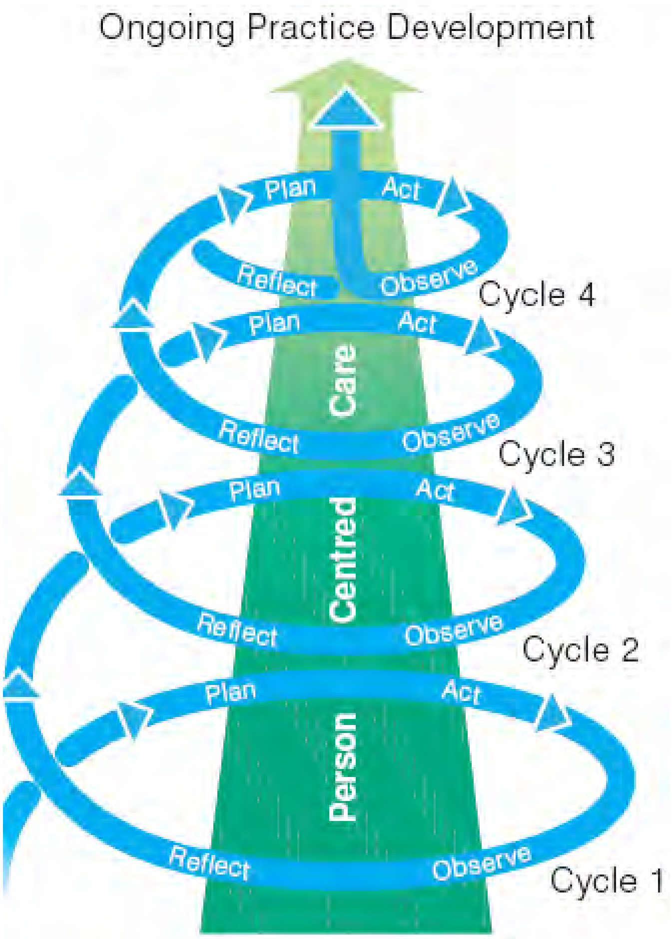


Figure 3.5: Representation of four action research cycles for the instigation of the functions of plan, act, observe, reflect (based on a drawing by Chuaprapaisilp, 1989).

Action research is a relatively young research methodology which came from the social sciences (Greenwood & Levin, 2007; Habermas, 1984) and may be referred to under specific titles, such as 'participatory action research', 'action science', soft system methodology and evaluation' (Dick, 1997b). Street (2003, p. 221) noted that the term action research referred to a style of research rather than a single method and offered various process headings such as ‘experimental’, ‘organisational’, ‘professional’ and ‘empowering’. Furthermore it was pointed out that these were all situation specific and ‘most projects moved between typologies’ when appropriate.

Greenwood and Levin (2007) attempted to draw a consistent picture with scientific justification for the broad function of action research that took into account the foundations, tools and applications. To this end they claimed that the salient feature of action research was the ‘… a complex knowledge generating process’ (p.51) … ‘offering’ the tools for democratic change rather than ‘leading’ the change (p.9). They noted that action research was not ‘just’ qualitative research but a mixed-method technique involving many kinds of measurement as the necessity arose, such as counting and sampling as well as ethnographic approaches. This took into account the ‘evaluation’ method described by Dick (1997b, pp. 21-23).

Thus the methods of Participatory Action Research as described by Dick (1997b), were adopted in this study to develop person-centred care initiatives for people with cognitive impairment and disturbed behaviours in an acute hospital care setting The imperatives for collaboration, participation and the freeing of participants from the constraints of old ideas and practices are included in both Participatory Action Research and Practice Development which involved experiential and action learning techniques as described by McCormack, Manley and Garbett (2004, p. 88).

Many authors have examined the applicability of action research methods in practice change (for example, Badger, 2000; Coghlan & Casey, 2001; Hope & Waterman, 2003; Turnock & Gibson, 2001; Williamson & Prosser, 2002) and several issues have been raised. In an examination of the validity of action research methods, Badger (2000, p. 204) noted that in attempting to meet rigid theoretical controls, practitioners needed to recognise that ‘critical validity involved analysing the process of change’ as much as the actual results of that change. Turnock and Gibson (2001) came to the conclusion that the validity could be supported by the strength of the arguments for the decisions made during the cycles. Hope and Waterman (2003) however, decided that the ‘multifaceted’ nature of nursing practice needed a change in how validity was judged. They stated that the actual ‘practice’ or the ‘act’ in the action research cycle was the most important concern in relation to the uncertain environments of nursing, followed by the ‘practical wisdom’ employed in reflecting and adapting the act.

Another issue raised was that of ethical control in action research. Williamson and Prosser (2002) and Badger (2000) warned that confidentiality and anonymity might be difficult to maintain, particularly if the facilitator was an ‘insider’, that is working in a dual role of researcher and that of organisational employee. Rather than exploring and meeting the needs of participants there was a danger of ‘exploitation’. These authors examined the particular ethical problems:

1. *Political dimensions* – if the researcher was also an employee of the organisation then they might have ‘privileged’ access to documents and staff relationships that were not normally available to outside researchers. This could cause conflict due to the possibility of a misuse of power. For example, the participants might feel that they had no choice in taking part in a study because the researcher had a position of seniority over them.
2. *Anonymity* – it is hard to guarantee confidentiality of participants even when unnamed, because in small studies some positions apply to only one person (for example, the Nursing Unit Manager or the Clinical Nurse Educator). This meant that disguising data in reports which pertained to those positions would be impossible.
3. *Informed consent* – ethical approaches required participants to provide informed consent. However, in action research, the need for reflection, planning and renewed action in the face of uncertainty made it difficult to adhere to the requirement to give participants new choices when new information came to light. The whole point of the present study was to encourage the participants to lead the way into unforseen activities. This created the possibility that participants might wish to withdraw in the middle of activities that could not have been totally foreseen at the beginning of the study, thus possibly undermining or compromising the work already done.

Street (2003, p. 229) pointed out that action research findings were focussed on practice specific issues and therefore were not necessarily ‘generalisable’ between settings. However, it was also noted that these findings were at least ‘transferable’ or able to be tried out in other settings with the possibility for ongoing actions and development.

Given these concerns, Badger (2000) was of the opinion that action research was not suitable for in-house change management due to the difficulty in achieving rigour and integrity and suggested that quality improvement or problem solving cycles were more suitable in practice areas due to the reduced ethical constraints. However, Williamson and Prosser (2002) recommended proceeding with action research (if this was the best way of achieving desired change) whilst maintaining as much transparency as possible. This should involve scrutiny via steering groups and the provision of all data and materials to all stakeholders.

Whilst not exploring the ethical dimensions of action research to the same degree as these authors, Morton-Cooper (2000, p. 77) claimed that the 'democratic processes' of action research involving the facilitation of participants' ideas and opinions and the requirement for 'transparency', served to protect participants. Morton-Cooper (2000, p. 78) also reinforced the necessity for the researcher to examine his or her own biases or judgments through the application of reflexivity through 'critical thinking' and 'rational justification' of the effects that they may have had on the processes, and to declare whatever these might have been.

The personal and participant reflective stages of action research cycles have been claimed to be the most complex, stimulating and potentially painful. In an action research study aimed at examining a facilitators' own practice, Roberts (1997) critically evaluated the literature pertaining to the 'reflection' stage. He found agreement that the application of critical reflection was bound to the attainment of higher level learning through the questioning of personal assumptions. This could possibly make facilitators vulnerable to possibly traumatic experiences as they examined and admitted to their part in problematic situations. A facilitator's level of ability to undertake reflection was said to be related to their stage of cognitive development. This was finely balanced between 'an individual's own expectations', their understandings of right from wrong as well as punishment and reward, their desires to avoid punishment beyond meeting the needs of others and the application of 'authentic information', or evidence based information in the case of the present study. It was noted that the possible 'traumatic impact' of critical reflection might be a reason that behaviour is often difficult to change and why it is avoided by many people (Roberts, 1997, pp. 22, 23)**.**

Apart from the negative possibilities described above, Dick (1997b, pp. 82-83), listed other reasons to be wary of action research for practice change. These were that action research was more difficult to do than conventional research because: it involved finding suitable actions to effect desired changes that might not be obvious at the beginning of the study, encouraging but not forcing change and applying rigorous research evaluation techniques as well. In addition, action research did not necessarily match the usual research processes, required a constant revisiting of the literature as actions and outcomes changed and might take much longer than a 'conventional' thesis to complete. The action research thesis might also be longer than a conventional thesis. However, the 'virtue' of action research was said to be in the 'responsiveness' with a flexibility to change the actions if evaluation and reflection showed that what had been done was not effective (Dick, 1997b, p. 9).

An action research thesis was also noted to be likely to attract unfavourable comments due the likelihood that more questions than results might be offered (Herr & Anderson, 2005). However, action research could lead to an in-depth understanding of issues by providing a map of the processes of change so that 'more sophisticated questions were posed' (Herr & Anderson, 2005, p. 86). In the provision of 'final thoughts' about action research, these authors noted that

> One caveat we offer here is regarding the final write-up … is that it does not automatically mean that there was a "successful" change effort to document a happy ending – although it might. Rather, our goal as researchers is the documentation of working to understand and initiate in the contexts being studied. Part of this documentation could include how the change process was obstructed or not seen as viable despite persistent efforts. These "failed" attempts are important to document in terms of increasing our understanding of the complexity of the change process (Herr & Anderson, 2005, pp. 127-128)

Therefore, action research was adopted for this study in order to plan, act, observe and reflect on ways to facilitate changes in nurses' stress levels and care practices for older patients with cognitive impairment and disturbed behaviours. Descriptions of the study aims, design, setting, sample, measurements, possible interventions, data analysis and ethical issues follow below**.**

3.2.1 Study Aim

The aim of this study was to determine the effectiveness of a person-centred approach to care for older patients with cognitive impairment and disturbed behaviour in terms of

- decreased nursing stress,
- enhanced patient care practices,
- improved patient outcomes and family satisfaction.

The aims of the study were achieved through examinations of

- The nurses' stress, knowledge and turnover levels.
- The nurses' care practices.
- The observed quality of the nurse and patient interactions.
- Designated nurses' insights following observations of nurse-patient interactions.
- The ward nurses' responses following feedback sessions about observations of nurse-patient interactions.
- The selected patients' levels of agitation, function, presence of delirium, adverse events during admission, length of stay, discharge destinations and use of psychotropic, analgesic and sedative medication.
- The relatives' opinions of satisfaction with patient care.
- The Investigator's field notes and minutes or notes taken at meetings of the research team

3.2.2 Study Design

This was an exploratory before and after-intervention study, which employed mixed methods, in one 25-bed acute aged care hospital ward over a 24-month period**.**

3.2.3 Study Setting

The study was conducted in one specialist 25-bed acute aged care ward in a Sydney tertiary teaching hospital in which the Facilitator worked. The ward was serviced by multidisciplinary staff made up of specialist physicians, medical officers, nurses, occupational therapists, physiotherapists, social workers, a pharmacist, a speech pathologist and a dietician supported by patient service assistants and a ward clerk..

The ward had a planned 31.74 full-time equivalent nurse compliment made up of Registered Nurses (RNs), Endorsed Enrolled Nurses (EENs), Trainee Enrolled Nurses (TENs) and Assistants in Nursing (AINs) plus a Clinical Nurse Educator (CNE), all led by a Nursing Unit Manager (NUM). Approximately 25% of the nurses were AINs. One Clinical Nurse Consultant (CNC) position carried responsibility for care in the ward as well as that of older patients across the study hospital and the community. Due to the breadth of this task the CNC's main role was to advise on the care of older people with cognitive impairment and disturbed behaviours, as well as those at risk of falls. The CNC is the Investigator in this study, that is, the author of this thesis.

The nursing staff mostly worked a rotating roster involving day, evening and night shifts, apart from some part-time staff who worked set shifts to accommodate other responsibilities. Therefore, the nurses in the 'shift-team' changed for each shift, each day. Within the shift-team the nurses were allocated a number of patients, creating a 'sub-team' of two nurses, usually an RN (or EEN) and an AIN. These two-person teams looked after eight to nine patients between them. However, due to the mixture of skills, qualifications and experience, task allocation was necessary so that the RNs and EENs mostly attended to the medications and treatments whilst the AINs performed most of the intimate patient care, such as bathing and toileting.

At the start of each shift, the on-coming nursing staff gathered to listen to a verbal handover of the details and requirements or changes for each patient from the incumbent nurses. The NUM or the designated Nurse-in-Charge would then assign the nurses to particular patient bed number groups. The nurses were then at liberty to seek clarification or add details during the handover, at the bedside or to peruse the patients' notes before taking over responsibility for their allocated patients.

Four separate case conferences to discuss patients' care, progress and discharge plans were conducted each week on assigned afternoons by the different specialist medical staff. This was attended by the NUM or Nurse-in-Charge (if available) and the allied health staff, as well as the doctors for that specialist team. A routine discussion of the patients' progress and plans also took place each morning at 8am in front of the white board list of patient details. The NUM or the Nurse-in-Charge, the Doctors and the allied health staff attended this. The ward RNs were unable to attend any of these consultations due to time constraints.

The ward layout consisted of two long parallel corridors of rooms separated by utility rooms and a staff work station. There were five four-bed rooms and five one-bed rooms and all were separated from the corridor by further utility rooms or bathrooms making patient visibility from the corridor mostly impossible. It was usual to nurse the patients with behavioural problems in the four-bed room closest to the workstation, for convenience, though visibility from the workstation was nil. Staff endeavoured to care for behaviourally disturbed patients in single rooms where possible, but these were usually needed for patients with infections, such as multiresistant staphylococcus aureus (MRSA) which required careful isolation procedures.

The average length of stay for patients in this ward was approximately 7.4 days and all patients had complex conditions with multiple comorbidities. Falls and/or increased confusion were the most common reasons for admission.

3.2.4 Study Population – Sample Selection

- The **nurses** who participated in the study were a convenience sample of nurses from the study ward. The aim was to involve at least 30 nurses who were caring for the selected patients during the planned interaction observation time periods as described in Section 3.2.3. This sample included any permanent and /or casual staff who were present at the time of the observations.

- The **patients** selected were a convenience sample of patients admitted to the ward during the before and after intervention observation periods. The patients were admitted via the Emergency Department under the care of specialist physicians (that is, geriatricians) and other medical officers at various stages of their specialist training (that is, registrars and interns). All patients were admitted with complex 'geriatric syndromes' such as confusion, falls, immobility and/or incontinence (Inouye, Studenski, Tinetti, & Kuchel, 2007; Mecocci et al., 2005). Coexisting active medical problems included: dementia, cardiac abnormalities, sepsis, fractures, urinary conditions, mental disorders, pulmonary disorders and other neurological conditions. Each selected patient had a Mini Mental State Examination (MMSE) (Folstein, Folstein, & McHugh, 1975) score of less than 24/30, which signifies significant cognitive impairment, and was deemed to be, or at risk of being agitated. This study involved 14 different patients during each of the periods before and after-intervention.

3.2.5 Measurements and Data Collection

The following data were collected and measurements were undertaken before and after the intervention in order to establish descriptors of the characteristics of the nurses and of the patients, the nurse-patient interactions, the care environments and outcomes for all.

Nurses

Baseline Characteristics and Outcomes

These included the following demographic information collected from a questionnaire: age, gender, professional position, ward position, approximate hours worked in the ward most weeks, years worked specifically with older patients (>70 yrs) and notation of having participated in specific dementia or aged care or delirium training. The baseline and outcome levels of nurses’ strain when caring for patients with delirium, levels of burnout and knowledge about dementia were measured in the questionnaire using the instruments described below. Examination of the study ward roster records was also undertaken in order to understand the nursing turnover before, during and after the intervention period. Study field notes and minutes of meetings were documented throughout the study period as a way of keeping track of proceedings and to enable reflexive insights.

Outcome Measures and Instruments

- The *Strain of Care for Delirium Index* (SCDI) (Milisen et al., 2004) – a method for rating the self assessed level of stress experienced by nurses in caring for patients with delirium. Permission to use this scale was granted by Professor Koen Milisen by email (26/2/06). Twenty symptoms of delirium were grouped under categories with four headings: hypoactive behaviour, hypoalert behaviour, fluctuating course and psychoneurotic behaviour and hyperactive/hyperalet behaviour. Scores for each question ranged from 1-4 and were totalled within the categories. Internal consistency had been tested on a convenience sample of 190 nurses and showed a Chronbach's α score of 0.88. (Milisen et al., 2004, p. 784). Each subscale score was examined separately.

- *Maslach Burnout Inventory Human Services Survey* (MBI) (Maslach, Jackson, & Leiter, 1996) – a scale for rating levels of 'hypothetical' stress or burnout in human services employees. Permission to use the MBI was granted by the CPP Inc. Palo Alto, California, by email (24/3/06). The survey consisted of 22 questions (for example, 'I feel emotionally drained by my work', 'working with people all day is really a strain on me'). Each question required a range of answers: 0 = never, 1 = a few times a year, 2 = once a month or less, 3 = a few times a month, 4 = once a week, 5 = a few times a week, 6 = every day. The questions were categorised under subscales designed to feature aspects of the burnout syndrome. These were Emotional Exhaustion (EE) – 'feelings of being overextended and exhausted by ones work'; Depersonalisation (DP) – 'unfeeling and impersonal responses to one's service, care treatment and instruction'; and Personal Accomplishment (PA) – 'feelings of competence and successful achievement in one's work with people' (Maslach, Jackson, & Leiter, 1996, p. 4). Participants' individual scores were calculated and then aggregated for the whole group. High scores in the EE and DP scales (that is, showing stress) were claimed to be counter balanced by high scores in the PA scale (that is, showing personal accomplishment). An average degree of burnout was indicated if all three scores lay in the average range. The score ranges were
    - Emotional Exhaustion (EE): ≤ 18 low; 19-26 average; ≤ 27 high;
    - Depersonalisation (DP): ≤ 5 low; 6-9 average; ≤ 10high;
    - Personal accomplishment (PA): ≤ 33 high; 39-34 average; ≥ 40 low.

  Convergent validity was demonstrated and the reliability coefficients for the subscales were significant at Emotional Exhaustion 0.82; Depersonalisation 0.60; Personal Accomplishment 0.80 (Maslach, Jackson, & Leiter, 1996, pp. 12, 13).

- *Dementia Knowledge Scale* (Loveday & Bowie, 2000) – a short 'true and false' questionnaire to elicit information about participants' knowledge of basic dementia facts, such as 'Most old people get dementia - TRUE/FALSE' and 'People with dementia all show the same symptoms - TRUE /FALSE'. It consisted of 14 questions and was one of the training exercises offered in the manual *Improving Dementia Care – A Resource for Training and Professional Development* (Loveday & Kitwood, 2000). No advice was provided regarding recommended scores, but the content was claimed to be suitable for 'qualified and unqualified staff' and 'volunteers' (Loveday & Kitwood, 2000, p. 31). Respondents' correct scores out of 14 were summed and the percentage of correct scores calculated.

- *Nursing staff turnover* – to examine the nursing staff turnover or 'churn', the number of individual nurses working permanently on the ward (that is, full time and part-time) in the before-intervention data gathering period, including those on short term rotating placements such as New Graduate nurses (NG) and Trainee Enrolled Nurses (TEN), were compared with those in the after-intervention period. This was the method used to analyse staff turnover data by Duffield et al. (2007, p. 95). The hours worked by casual staff, such as those on the hospital 'pool' or agency staff, were included in the analyses due to the time constraints of this study. This study used the equation

$$\text{Percentage new/additional staff} = \frac{\text{New Nurses Second Round}}{\text{Nurses First Round}} \times 100\%$$

A general overview of rates of sick-leave taken by staff in the three-month periods before and after the intervention period were also calculated. A method for obtaining a basic understanding of changes in nurses' required sick-leave was suggested by Hensing, Alexanderson, Allebeck and Bjurulf(1998, p. 142) using a 'frequency of sick leave measure'. This involved counting the number of sick-leave days for a given period and dividing by the total number of nurses in the 'study group', that is those on the ward roster during that period, not including casual staff. Therefore, the equation used to calculate staff sick-leave rates was

$$\text{Sick Leave Rate} = \frac{\text{Current or new sick-leave spells during study period}}{\text{Number of persons in the study-group (including those currently sick-listed).}}$$

Nurses' Care Planning

Surveys of the nurses' care planning activities included

- Audits of nurses' handover sessions and care plans for notation of individual patient social history and communication support needs three times per week over the observation time periods.
- Audits of the patients' integrated notes for evidence of the use of personal and communication support needs, information and the effectiveness three times per week.
- Surveys of the patients' bedside environments for displays of reassuring personal memorabilia.
- Audits of the patients' notes for documentation of the use of antipsychotic, analgesic and sedative medications.

Interactions Between Nurses and Patients

Volunteer nurses (called the 'Observers') were trained to undertake observations of nurse and patient interactions during standardised time periods throughout each chosen patient's day. Feedback focus groups with these Observers, and separately with the ward nurses, were instigated in order to facilitate suggestions for possible interventions for change.

Instruments and Actions

- The *Quality of Interactions Scale* (QUIS) (Dean, Proudfoot, & Lindesay, 1993) – is a time sampling non-participant observation scale for coding nurse and patient interactions, which was developed as part of an evaluation of two residential units for older people with severe mental illness. Permission to use this scale was granted Dr James Lindesay by email (9/ 5/05). Reliability studies found that the Kappa measure for agreement for coding each category was above 0.70, which showed good agreement between observers (Pallant, 2007). Descriptions of the categories were provided by Dean, Proudfoot and Lindesay (1993, pp. 825-826) with expanded explanations given in Appendix A. The original category codes involved observations for 'Positive Care' (interactions during the appropriate delivery of physical care); 'Positive Social' (interactions principally involving good, constructive beneficial conversation and companionship); Neutral (brief indifferent interactions which do not meet the definitions of the other categories); Negative Protective (providing care, keeping safe or removing from danger, but in a restrictive manner, without explanation or reassurance); Negative Restrictive (interactions which oppose or restrict a patients' freedom of action without good reason, or which ignores the patient as a person) (Dean, Proudfoot, & Lindesay, 1993, pp. 825-826). Two extra codes were added in order to provide explanations for times when patients were alone or being attended to by other people outside of the study (see Appendix A).

- *Observers' and ward nurses' focus groups* – following collation of the QUIS data, feedback focus groups were held with the Observers and then with the ward nurses in order to provide them with the data to enable responses to the findings, as recommended by Morgan (1988). It was expected that this feedback would stimulate discussion about issues that helped or hindered the care of patients with disturbed behaviour. This was expected to provide information for a plan of interventions.

Patients

Baseline Characteristics and Outcomes

This included the following demographic information and clinical characteristics

- Age, gender, risk status for falls and pressure area development, use of mechanical restraints; sedative, psychotropic, and administration of analgesic medication; preadmission and discharge abodes, major reasons for admission and co-morbidities, lengths of stay, adverse events - all collected from the patients' routine clinical records.
- The patients' levels of sight were tested by either observing the patient or asking the family if the patient could usually read a newspaper (Lundstrom et al., 2005).
- The levels of hearing were tested by either speaking softly behind the patient and waiting for an appropriate response or asking the family about the patient's usual hearing ability (Lundstrom et al., 2005).
- The levels of agitation, cognition, delirium symptoms and function were measured using the instruments described below.

Measurement instruments were

- *Pittsburgh Agitation Scale* (PAS) (Rosen et al., 1994) – a method for rating the severity of agitation associated with dementia (or other cognitive impairment), which is grounded in direct observation of a patient or discussion with the staff. Permission to use this scale was given via email by Dr Jules Rosen (14/2/06), Director of the Division of Geriatric Psychiatry and Behavioural Neurology, University of Pittsburgh School of Medicine. The PAS comprised of four items, each with a score range for symptom intensity from 1 (symptom not present) to 4 (extreme or intense symptoms) under the headings of ‘aberrant vocalisation’, ‘motor agitation’, ‘aggressiveness’ and ‘resisting care’. The highest score possible was 16 indicating greater agitation. It was found to be quick to use and inter-rater reliability scores of 0.82 – 0.93 showed that no special training or trained researcher in an acute psychiatric nursing home was required, other than adherence to the brief instructions included in the scale template. These authors established validity of the content by the comparison of before and after-intervention scores which were found to be significantly different.

- *Mini Mental State Exam* (MMSE) (Folstein, Folstein, & McHugh, 1975) – a screening tool for cognitive mental status, which was validated by the comparison of the established MMSE scores for a group of 69 people with diagnosed clinical conditions including dementia and depression, with 63 normal people of similar age. Concurrent validity was established by the comparison of those scores with the Wechsler Adult Intelligence Scale Verbal and Performance scores. For the MMSE versus Verbal Intelligence, the Pearson product moment correlation was $r = 0.776$ ($p < 0.0001$). For the MMSE versus Performance Intelligence, the Pearson $r = 0.660$ ($p < 0.0001$). Reliability was established by the application of the MMSE twice, either 24 hrs or 28 days apart, in stable patients with single and multiple examiners. The Pearson r ranged from 0.887 to 0.827, with 1 being a perfect correlation (Pallant, 2007).

- *Confusion Assessment Method* (CAM) (Inouye et al., 1990) – a validated method of assessing confused patients for symptoms of delirium for use by non-psychiatric professional staff. This tool was developed to fit the criteria for delirium diagnosis according to the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2000, p. 250). The development involved observations at two hospital sites where delirium diagnosis was compared with the features of the CAM and a diagnosis of delirium by psychiatrists. Sensitivity was between 94%-100% and specificity was between 90%-95%.

- *Modified Barthel Index* (Mahoney & Barthel, 1965) – a 10-item functional measure of activities of daily living scale used to judge patients' progress or readiness for discharge. Observer and/or informer opinions were used to establish scores for designated activities of daily living, such as mobility and transfers. Validity for completeness and sensitivity to change were established (Gresham, Phillips, & Labi, 1980) and inter-rater reliability was shown to be excellent (≥ 0.88) (Wolfe, Taub, Woodrow, & Burney, 1991).

Patients' Relatives

Satisfaction surveys

After the study patiens' were discharged, semi-structured telephone interviews were undertaken with the patients' relatives to gauge their opinions of the nursing care which their family members had received. Questions were created from Kitwood's concepts of Person-Centred Care (1993). These questions were tested with families of people with dementia who had been hospitalised before the start of the present study, as suggested by O'Connor (2004).

The questions asked were

1. Overall were you satisfied with the nurses' **care** of your relative?
2. Do you think the nurses generally tried **to listen** to your relative when they were confused?
3. Do you think the nurses generally tried **to reassure** your relative when they were confused?
4. Do you think the nurses generally tried **to encourage** your relative when they were confused?
5. Do you think the nurses generally tried to find out and **to use personal background information** so that they could help your relative to understand what was happening?

As well as being invited to discuss or to explain their answers, relatives were asked to consider a rating for each question on a 5 point Likert scale: very satisfied, somewhat satisfied, neither, somewhat unsatisfied, very unsatisfied. The relatives were also asked if there was anything else that they wanted to say for each topic.

Investigator's Field Notes and Meeting Minutes

The Investigator recorded 'field notes' throughout the course of the study and kept minutes of any meetings pertaining to the study. This ethnographic approach (Wilson, 1989) enabled the analysis of the course of actions, surrounding events that occurred and personal insights as they arose. Ethnography is used to 'understand the native's view of the world' or 'the insider's view' (LoBiondo-Wood & Haber, 1994, p. 268). As the progress of action research depends on the skills and actions of the facilitator, field notes were considered important to enable an examination of as many influences as possible, in order to provide an understanding of the final outcomes. The minutes of staff and management meetings provided a record of activities, decisions and progress. These descriptions and insights are added to each cycle where appropriate.

3.2.6 Intervention

The intended use of the Participatory Action Research method meant that the actual details of the interventions to be undertaken to meet the study aims would be decided by the participants during the planning and reflection phases of the action research cycles. Nevertheless, it was understood that the focus of the study was to find ways to enhance the nurses' experience of caring for patients with cognitive impairment through a greater understanding of the causes of disturbed behaviour and the concepts of person-centred care. From past research it was clear that the nurses had knowledge deficits in this area (Poole & Mott, 2003). Feedback to the nurses of that would include the results of the observed nurse-patient interactions and information about person-centred care, using of action-learning techniques (as described in section 3.1.3), was planned to facilitate individual awareness and ideas for possible interventions.

3.2.7 Data Analysis

The types of data to be gathered and the intended analytical processes to be employed are listed in Table 3.1. The quantitative data were entered into SPSS Version 16 statistical software data files and analysed as independent samples for the before and after-intervention periods using calculated medians and means. Continuous data were analysed using *t* tests or where normality of distribution was not present, with Mann-Whitney U tests. Categorical data were analysed using chi-square tests with Fisher Exact Probability for small sample sizes (Pallant, 2007).

The qualitative data obtained from the various focus groups, open-ended feedback questions and field notes were subjected to both ‘semantic’ or thematic and ‘latent’ or personal feelings content analysis (Wilson, 1989, p. 470) using ‘inductive’ and ‘reflexive’ thought processes (Burns & Grove, 1995, p. 398). This involved reading and re-reading the Observers’ and ward nurses’ feedback group notes, the relatives’ questionnaire responses and the Investigator’s field notes in order to gather a sense of the ideas, themes or feelings, both positive and negative, that were documented. Similar themes and comments were grouped together and some quoted to demonstrate the ideas expressed. The themes applied to the Observers’ and staff feedback responses were then discussed with the staff involved to check for accuracy or further ideas. A list was posted on the staff room wall with an invitation for further comments to make sure that all staff had an opportunity to thoroughly consider the feedback and themes. The field notes were also analysed using personal reflection or reflexivity; this questioned the personal effect that the Investigator might have had on the actions and insights recorded in the notes.

Table 3.1: Descriptions of the types of study data and analytical techniques used.

Outcome	Type of data	Level of measurement	Analytic technique
Nurses: gender, ward position;	Quantitative	Categorical	Fishers Exact Probability
Nurses: age, profession & position, approx. days worked, years worked in aged care, aged care or dementia training, delirium training	Quantitative	Categorical	Pearson chi-square test
Nurses: SCDI, MBI, dementia knowledge tests	Quantitative	Continuous	Mann-Whitney U test
Nurses: care planning	Quantitative	Categorical	Fishers Exact Probability
Nurses: documentation practices in patients' files	Quantitative	Continuous	Mann-Whitney U test
Nurse – patient: interactions (QUIS)	Quantitative	Continuous	Mann-Whitney U test
Nurse Observers: focus group	Qualitative	Semantic themes	Inductive thought
Nurses: focus groups	Qualitative	Semantic themes	Inductive thought
Patients: age; levels of cognition; function & agitation; LOS.	Quantitative	Continuous	Mann-Whitney U test
Patients: gender; senses; delirium diagnosed; falls; restraints or IPS used; medication issues	Quantitative	Categorical	Fishers Exact Probability
Relatives: satisfaction	Quantitative	Categorical	Pearson chi-square test
Relatives: open ended question responses	Qualitative	Semantic & latent themes	Inductive thought
Nurses: opinions of large name badges	Quantitative and Qualitative	Categorical Latent themes	Fishers Exact Probability Inductive thought
Researcher: Field notes, meeting minutes	Qualitative	Ethnographic interpretation and clarification	Inductive and reflexive thought

Note. IPS= independent Patient Special. LOS = length of stay. MBI = Maslach Burnout Index. QUIS = Quality of Interaction Schedule. SCDI = Strain in Care of Delirium Index.

3.2.8 Ethical Considerations

The ethical guidelines and principles as they are set out by the National Health and Medical Research Council for the conduct of research with vulnerable people (National Health & Medical Research Council, 2007) were adhered to in this study.

Gaining Informed Consent

The proposal for the study was approved by the Human Research Ethics Committees (HREC) for the study hospital (Protocol No. 0509-172m, see Appendix B) and the University of Technology, Sydney (UTS) (Protocol No. 2005-199, see Appendix C). As the patients included in this study were expected to be moderately to severely cognitively impaired, information (see Appendix D) and consent documents (see Appendix E) were provided for the relatives to gain proxy informed consent. The nurses involved in the project were also provided with information (see Appendix F) and consent documents (see Appendix G). During nurse-patient interaction observations, explanations for the presence of the nurse Observers were offered to the patients and their assent was gauged. Ongoing explanations were provided for the staff and verbal consent was obtained at all stages of the activities.

Study Observers' and Investigator's Role Conflict

Due to the possibility that the nurse Observers might face situations in which they needed to step out of the observer role and into the nursing role, aspects of role conflict were considered. Beale and Wilkes (2001, p. 34) investigated the problems of 'role conflict' or 'duality and dichotomy' which might arise when nurses performed research, particularly due to the requirement to adhere to their Code of Conduct. Whilst nurses attempted to maintain the soundness of a research project, they might at times be concerned about the well-being of the patients, so that they felt the need to provide nursing care. This might then threaten the integrity of the research.

Wilkes and Beale (2005, p. 67) also examined the ethical issues, such as justice, beneficence and respect, involved in research with vulnerable populations, particularly within the clinical arena. They concluded that 'being close to the research participants' was a necessary role which could uncover important and rich data. They recommended that, if possible, situation guidelines should be prepared. Education of potential nurse researchers should include the examination of personal moral values with opportunities provided for debate about possible role conflict.

Nevertheless, Leslie and McAllister (2002) claimed that nurses should be encouraged to undertake Critical Social Research due to the breadth of their skills. This was because most nurses have well developed people skills which enabled them to probe into the ‘unspeakable’ aspects of healthcare (Leslie & McAllister, 2002, p. 710). In doing so, nurses could show the public the crucial, but often hidden, aspects of healthcare

Following discussions with the staff Observers, it was decided that appropriate responses would be made if it was thought that a patient was likely to be harmed if no help was given; for example, providing help with the patient’s meal or intervening if a fall was likely. This would then be noted in the QUIS documentation and taken into consideration during the data analysis.

Investigator’s Position of Authority

Concerns that the nurses might feel coerced by senior staff to participate in the study (Williamson & Prosser, 2002) were broached through the Investigator who made every effort to be as collegial and transparent as possible. The information sheet was carefully written with explanations that the project was a joint effort of collaboration and exploration. Whenever possible the Investigator assisted the nurses with their duties to encourage a feeling of teamwork in the action research study.

Nurses’ Confidentiality

To ensure confidentiality of the participating nurses, all staff consent documents were returned to the Investigator, separated from the completed questionnaires, either directly or in self-addressed envelopes. All staff were asked to mark their questionnaires with a personally chosen code with the intention to try to match them with the post-intervention surveys. Every effort was made to filter the identification of staff members from their designated role or to generalise any characteristic information which might identify them. All progress reports were made available to the nurses through presentations, news bulletins and meeting reports. Any information that pertained to individual study participants was de-identified.

The only potential breach of confidentiality was the possibility that the nurses under observation during care delivery might have felt threatened by being directly observed by their colleagues. The nurses were reassured that their identity would not be recorded and code numbers that were known only to the Investigator, would be substituted for each nurse's name to facilitate plans for an even spread of observation times for each participating nurse. This information was filed securely and the individual nurses were discussed only as code numbers. Before the feedback sessions, all QUIS data were totalled only under the category codes, so that identifying data was removed. A separation time period of several weeks between the observations and the feedback was instigated in order to discourage any staff conjecture about which coding category had been applied to any direct observation of a staff member.

Beneficence and Patients' Confidentiality

There was no potential harm to the participating patients in the study as a result of the nurse-patient observations and care planning activities. The study focussed on the observation and records of the interactions of the nurses with the patients and their care activities. All other patient assessments and observations used to describe patient characteristics and outcomes were part of regular nursing practice. The patients were identified by a code only known to the Investigator and all patient-related documents were kept in a locked filing cabinet in the Department of Aged Care and Rehabilitation Medicine, inaccessible to anyone other than the Investigator. These procedures protected patient confidentiality.

Research Validity

The validity of each chosen measurement tools was examined to make sure that it's purpose matched that required by the study. Issues of rigour were approached initially through regular meetings with the project supervisors then formal assessment and acceptance of the research proposal by the university. Every effort was made to maintain a strict adherence to the study methods with ongoing validity approached through observation and reflection on results by the Person Centred Care Research Group (PCCRG) (described in Chapter 4, Section 4.1.3) and the ward management meetings. These mechanisms aimed to maintain transparency of purposes and processes, and were maintained throughout the study.

3.3 SUMMARY

Chapter 3 provided a description of the theoretical and the conceptual framework that guided the choice of action research methods. These were aimed at the reduction of the stress which was said to be felt by nurses when caring for older people with cognitive impairment and disturbed behaviour in the acute hospital care sector. The study aims were to be achieved through an exploratory before and after-intervention study employing mixed methods in one 25-bed acute aged care ward of a large tertiary referral hospital. An account was given of the ward layout, admission practices and staffing profile which led to a description of the intended sample of nurses and patients, the measurement and data collection tools and data analysis methods. Ethical issues were examined regarding the provision of informed consent, Observer and Investigator role conflicts, the Investigator's position of authority, patient and staff confidentiality, the maintenance of confidentiality and research rigour. Management strategies were described.

The following chapters describe the action research processes that were undertaken with the ward nurses to help them care for older patients with cognitive impairment through the application of the principles of person-centred care. Four connected action research cycles incorporating planning, action, observations and reflection now follow.

CHAPTER 4: ACTION RESEARCH CYCLE 1: *NEGOTIATION, RECRUITMENT, BASELINE MEASUREMENTS, OBSERVATIONS AND FEEDBACK*

The action research process comprised of four complete cycles to achieve the study aims. Each cycle partially achieved the desired goals and these are described in turn under the headings of plan, act, observe and reflect. Chapter 4 provides a description of the action research Cycle I, as it is depicted in Figure 4.1. The triggers for this study are reviewed and the processes for the negotiation of nurses' participation are described. The initial baseline measurements and observation results, undertaken to enable participant reflection and the formulation of intervention plans are then described.

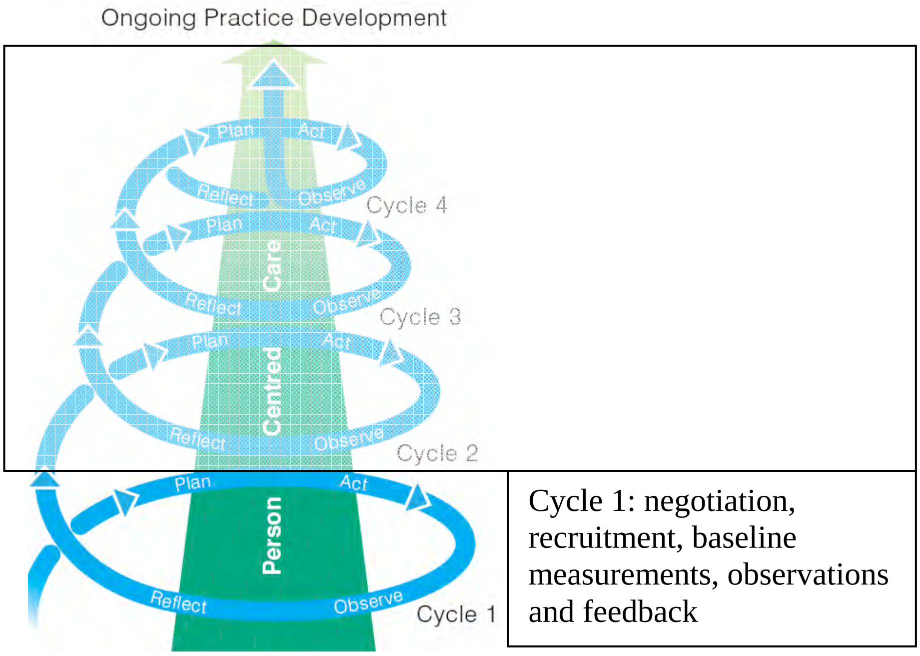


Figure 4.1: Action research Cycle 1 – negotiation, recruitment, baseline measurements, observations and feedback

4.1 PLAN

4.1.1 Background

Following years of engagement in the care of people with dementia, it was observed that educational initiatives had omitted the effects of delirium as a cause for disturbed behavior in older people (Inouye, 1994; Poole & Mott, 2003; Schofield, 2008). This meant that remedial causes of acute confusion (a common term for delirium) were ignored and the person suffered through misguided care practices whilst the nurses expressed frustration and feelings of stress (Poole & Mott, 2003). A series of education packages were therefore developed which detailed recommended assessment and management strategies, in order of required prioritisation for delirium, depression or other mental disorders and dementia and which incorporated elements for care and respect for the older person (Poole, 2003). The Aged Care Facilities version of the package was trialed successfully (Poole & McMahon, 2004). Replication of this study in the acute care sector proved difficult, so that this action research study was instigated in order to attempt to encourage and facilitate practice improvement.

The study ward setting is described in Chapter 3: Section 3.2.3. A high proportion of patients were admitted to this ward with either a presentation of an acute confusional state (that is, delirium) or a co-morbid diagnosis of dementia. High levels of staff turnover were common. In addition to a number of mandatory and orienting education programs provided by the hospital, ward based in-service education sessions were presented on individual wards and provided details of the assessment, diagnosis and management of patients with cognitive impairment and disturbed behaviors. The established education presentation was eventually removed from the mandatory and orientation programs prior to the commencement of the present study. However, expanded education sessions in relation to the care of older people with disturbed behaviour, which were open to other Area Health Service employees, were provided twice yearly during special three-day workshops.

These education programs were considered essential for the provision of safe care for older patients. For example, the fall rates on the study ward fluctuated between approximately 3 and 18 falls per 1,000 bed days per month. In a study by Cumming (2008) it was found that most falls happened to confused patients. The nurses had expressed frustration in trying to care for and to supervise confused patients who were likely to fall (Inouye, Foreman, Mion, Katz, & Cooney, 2001) in a ward environment which did not allow easy surveillance. It was therefore of concern that the hospital mandatory and general orientation level education programs aimed at the assessment and the prevention of confusion, which was a key to quality care for older patients, had ceased. This situation provided an impetus for the study.

4.1.2 Stakeholder Negotiation

The study background and aims were discussed with the staff of the hospital Medical Division, the Department of Aged Care and Rehabilitation Medicine (AC&RM) and the acute aged care ward (henceforth called ‘the ward’). Agreement to proceed was reached and full support was promised by the Department of AC&RM with acknowledgement that the education program was the key to quality care of the older patient (Meeting minutes, 3/3/05).

Following the approval of the project by the Human Research Ethics Committees at the hospital and the university, further meetings were arranged with the Medical Division Nurse Manager, the ward Nursing Unit Manager and the Director of the Department of AC&RM, in order to gain final confirmation of support. The project was discussed with the medical specialists of the department who agreed that their patients and relatives (where appropriate) could be approached by the Investigator to seek consent for participation in the study. Further discussion about the project was undertaken at the regular ward management meeting with the Department Director, the Nursing Unit Manager (NUM), the Clinical Nurse Educator (CNE) and representatives of the allied health disciplines. Whilst all these personnel had already given initial approval for the project and had been kept informed about the early development processes, the background and intentions of the proposed research study were again explained and discussed, with explanations of the need for active staff participation. Agreement for the study to go ahead was reached.

4.1.3 Person-Centred Care Research Group

In order to provide a group of staff to participate and guide the study, a notice asking for interested volunteers was posted in the ward. The purpose of action research and practice development was explained and discussed at ward staff meetings and whenever interest or questions arose during day-to-day activities. A volunteer action group was then formed amongst the nurses and managers of the ward and was named the Person-Centered Care Research Group (PCCRG). As some participants in this group later left the department to work in other wards of the hospital or resigned, their position titles herein are numbered, to signify the different personnel that participated in the actions.

Senior staff movements are noted in the tables that provide summaries of the actions for each cycle (for example, see Table 4.1). The initial PCCRG members were the Director of the Department of AC&RM, the Nursing Unit Manager (NUM1), the Clinical Nurse Educator (CNE1) and the CNC (henceforth called the Investigator) as the study facilitator. Other nurses expressed interest in the study, but seemed unable to commit to regular PCCRG meetings due to changes of shift work and leave arrangements in addition to the continuous busyness of the ward. Therefore progress notices were posted on a special notice board and discussed at ward staff meetings. Meetings were planned to be held at least every second week, and when necessary, in between. The PCCRG reported to the monthly ward Management Meeting, the ward Staff Meeting, the AC&RM Research Meeting, as well as the Medical Division Senior Aged Care Nurses' Meeting. The aims, the procedures for participant recruitment and consent, as well as the baseline measurement activities (as described in Chapter 3: Section 3.2.5) were agreed to by the PCCRG.

4.1.4 Funds

Funds to cover the costs of the study were received from the Kings Australia Innovation and Technology Scholarship, Geelong, Victoria, to the amount of $5,000 and were supplemented by an anonymous donation of $6,000. These funds were intended to cover the study costs, such as equipment and payments for research assistance.

4.2 ACT, OBSERVE and REFLECT

The study 'actions' initially involved the recruitment and establishment of informed consent from the nurses and for the patients through proxy consent by their relatives. Data was then collected which included the nurse and patient demographic characteristics and baseline measurements, as well as observational coding information of selected nurse-patient interactions. Feedback information from the Quality of Interaction Schedule (QUIS) observation experiences and the relatives' opinions of satisfaction with care was also documented. These perceptions were reported to the PCCRG to progress the study aims and processes. The different activities and events (including senior staff movements), which occurred in Cycle 1, are listed in Table 4.1 and outlined more fully in Section 4.2.1.

Table 4.1: Cycle 1 monthly activities plan and senior staff movement list.

Year 2006	**Activity**	**Senior Staff Movements**
February	• Meetings with relevant stakeholders	
March	• HREC applications approved	
April	• Nurses' information sessions – consent, questionnaires • Interviewing and training of Observers • Patient recruitment, consent and measurements • QUIS observations • Audits of care planning	• NUM 1 seconded elsewhere • Acting NUM appointed
May	• Patient recruitment, consent and measurements • QUIS observations • Audits of care planning	• CNE1 resigned
June	• Patient recruitment, consent and measurements • QUIS observations • Audits of care planning • Nurses QUIS feedback sessions • Relatives' satisfaction survey	• CNE2 commenced

Note. CNE = Clinical Nurse Educator. HREC = Human Research Ethics Council. NUM = Nursing Unit Manager. QUIS = Quality of Interaction Scale.

4.2.1 Nurse Recruitment and Baseline Measurements

The Facilitator arranged meetings with the nursing staff during the afternoon in-service education session times in order to explain the project and to seek their consent for participation. Weekend sessions were provided for staff who were not available during the week, and the project was discussed with permanent night duty staff before they finished their shifts in the mornings. Any new or casual nurses who worked on the ward, and were likely to be observed during the study, were informed about the project by the Investigator and asked to sign the consent forms. There were no refusals.

After the nurses had signed the consent forms, they were given the prepared questionnaire pack, which included a survey of nurse characteristics, the Strain in Care of Delirium Index, the Maslach Burnout Inventory and the Dementia Knowledge

Questionnaire. All staff were asked to mark their documents with a personally chosen code so that the after-intervention data might be compared, but anonymity could be protected. No record was kept of any connection between person and code.

Nurses' Characteristics

Forty-four nurses consented to participate in the study and 34 (77%) returned completed questionnaires. This group of nurses was called Nurse Group1 (NG1). The baseline characteristics of these nurses are summarised in Table 4.2. Most nurses were female, and slightly over half were over 40 years of age. Almost three-quarters were either Registered Nurses (RN) or Endorsed Enrolled Nurses (EEN) and more than three-quarters were hospital employees, with the remaining nurses being recruited as casual staff from nursing agencies. There was a close split between nurses who worked 1-3 three days and those that worked 4-5 days per week. A majority of nurses had worked in the specialty of aged care for over one year, with less than half having had specific aged care or dementia training. Over three-quarters of the nurses had not had any education about delirium.

Table 4.2: Baseline demographic characteristics of the nurses who returned questionnaires in the before-intervention group (NG1)

Characteristics	**NG1** **n = 34** **n (%)**
Gender :	
Female	31 (91)
Male	3 (9)
Age :	
< 40 yrs	15 (44)
≥ 40 yrs	19 (56)
Professional position:	
RN/EEN	24 (71)
TEN/AIN	10 (29)
Ward position:	
Permanent/Ward pool/New Grad	29 (85)
Hospital pool/Agency	5 (15)
Approx. days worked/week:	
1-3 days	16 (47)
4-5 days	18 (53)
Years worked specifically in aged care:	
Nil or < 1yr	4 (12)
≥ 1 yr	30 (88)
Specific dementia or aged care training:	
Yes	14 (41)
No	20 (59)
Specific delirium training:	
Yes	6 (18)
No	28 (82)

Note. AIN = Assistant in Nursing. EEN = Endorsed Enrolled Nurse. New Grad = Newly Graduated nurse. RN = Registered Nurse. TEN = Trainee Enrolled Nurse.

These data showed a group of nurses who lacked the training required to provide the optimum care of older patients in their specialty and many who worked part time. Kanter (1993) noted that disempowerment was likely in part-time workers and might cause feelings of discontent and inertia resulting in behaviours, such as inactivity or sluggishness. These behaviours might be seen as a lack of enthusiasm or interest for new information or activities. This opinion was supported by Laschinger et al. (1997) who also found that disempowerment could affect a nurse’s motivation to seek access to information. The PCCRG therefore considered that the undertaking of action research activities aimed at the enablement of greater feelings of empowerment for all the ward nurses, would be needed, before embarking on any possible education program.

Nurses' Outcome Measures

Measures of the nurses' outcomes which were expected to be amenable to intervention activities are described below. These included the self-reported levels of strain obtained through the Strain in Care of Delirium Index (Milisen et al., 2004) in Table 4.3; levels of nursing burnout using the Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996) in Table 4.4; as well as relevant dementia knowledge measured by the Dementia Questionnaire (Loveday & Bowie, 2000). The baseline nursing staff numbers and sick-leave rates were also recorded to enable comparisons of nursing turnover during and after the intervention period.

The Strain in Care of Delirium Index

A summary of the nurses' overall self-reported scores for considered strain in caring for older patients with delirium (Milisen et al., 2004), are shown in Table 4.3. There was a wide range in all scores for nurse strain in the subscales for 'hypoactive', 'hypoalert' and 'fluctuating course with psychoneurotic behaviour', however, all the median scores fell in the 'easy' range'. The score range for the Hyperactive/hyperalert behaviour subscale was also wide but the median just reached the 'difficult' range.

Table 4.3: Nurses' Strain in Care of Delirium Index (SCDI) scores by subscale category before the intervention period (NG1).

Subscales	**NG1: n = 34 Median (range)**
A: Hypoactive behaviour [a]	7 (3-11)
B: Hypoalert behaviour [b]	9 (4-12)
C: Fluctuating course with psychoneurotic behaviour [c]	13 (5-18)
D: Hyperactive/hyperalert behaviour [d]	25 (8-31)

[a] Hypoactive behaviour range: 3-5 Very Easy; 6-8 Easy; 9-11 Difficult; 12 Very Difficult.
[b] Hypoalert behaviour range: 4-7 Very Easy; 8-11 Easy; 12-15 Difficult; 16 Very Difficult.
[c] Fluctuating course and psychoneurotic behaviour range: 5-9 Very Easy; 10-14 Easy; 15-19 Difficult; 20 Very Difficult.
[d] Hyperactive/hyperalert behaviour range: 8-15 Very Easy; 16-24 Easy; 25-31 Difficult; 32 Very Difficult.

These results may be a reflection of the variety of staff supplemented by those from nursing agencies and the overall reported lack of training about delirium, which is supported by the literature (Inouye, Foreman, Mion, Katz, & Cooney, 2001; Poole &

Mott, 2003). Nurses' poor knowledge about delirium was particularly reported by Milisen, Braes, Flick and Foremen (2006), with a special warning that it was the quiet, sleepy (hypoactive), undiagnosed delirious patient who often escaped attention and was likely to die. Therefore, it could be expected that knowledgeable nurses would be very concerned (if not stressed) about the care of the hypoalert patient, and thus demonstrate a high score for this subscale, rather than a median score in the 'easy' range. Whilst the median for the subscale for hyperactive/hyperalert behaviour did reach the 'difficult' range, it could be expected to have been higher given that these patients have a propensity to injure themselves and others, such as patients and nurses. This result reinforced the PCCRG's resolve to consider the need for delirium education for these nurses.

Maslach Burnout Inventory

The nurses' scores in each of the subclasses of the Maslach Burnout Inventory (MBI) (Maslach, Jackson, & Leiter, 1996) are listed in Table 4.4. The median scores for Emotional Exhaustion (EE) and Depersonalisation (DP) were in the low ranges, whilst the median score for Personal Accomplishment (PA) was in the average range. This would indicate overall that there was no burnout in this group of nurses. However, the individual score ranges were very wide and Maslach, Jackson and Leiter (1996) have recommended that individual scores were most useful for the identification of participants' stress levels rather than overall group scores. The results showed a number of nurses who were at risk of burnout in all three categories.

Table 4.4: Nurses' Maslach Burnout Inventory (MBI) subclass scores for the before-intervention (NG1).

Subclass	**NG1 n = 34 Median (Range)**
Emotional Exhaustion (EE) [a]	18.0 (0-47)
Depersonalization (DP) [b]	4.0 (0-15)
Personal Accomplishment (PA) [c]	35.00 (47-11)

[a] Emotional Exhaustion (EE) : ≤ 18 Low 19-26 Average; ≤ 27 High.
[b] Depersonalisation (DP): ≤ 5 Low; 6-9 Average; ≤ 10 High.
[c] Personal Accomplishment (PA): ≥ 40 Low; 39-34 Average; ≤ 33 High.

The wide score ranges showed some scores reaching those which indicated burnout and were of concern, as this must have hampered the ability of some staff to perform their duties optimally. Whilst it is again recognised that the use of casual agency staff made it harder to judge the effects of this particular workplace, there was evidence of high work stress for some nurses in this ward which might have affected nurse and patient well-being and morale (Zangaroo & Soeken, 2007). Bakker et al. (2000, p. 885) also noted that burnout was likely if there was an ‘effort-reward imbalance’ as might have been experienced by nurses who had deficits in knowledge and empowerment. This further reinforced the need for the PCCRG to consider the enhancement of empowerment and knowledge.

Dementia Knowledge Questionnaire

The participating nurses’ correctly answered a median of 79% of the 14 questions in the Dementia Knowledge Questionnaires. The range showed 50-100% of the questions to be correct and whilst some nurses answered all items correctly, others could only correctly answer half of the questions. Higher scores could have been expected in an aged care ward where the greater percentage of the patients had dementia. Bradley (2008) noted that the care of people with dementia required special knowledge and skills. All the questions posed were straightforward and the authors claimed that there was not a high degree of difficulty in answering them (Loveday & Bowie, 2000, p. 31); which again indicated that basic education in dementia and delirium was needed for these nurses.

Nurses’ Care Planning Activities

During the seven-week QUIS observation period (described in Section 4.2.3) a minimum of three nurses’ handover sessions were observed each week. The notes of the participating patients’ were also examined for documentation of instructions for communication needs and personalised care, as well as evidence for the prescription and administration antipsychotic, sedative and analgesic medications. In addition, the bedside environments were surveyed for evidence of personalised communication aids and care advice as well as displays of patients’ personal and recognisable memorabilia.

These audits found no documentation of personalised communication or care information in the patients’ files or bedside notes, nor was this type of information mentioned at the nursing handover sessions for the 14 participating patients during the observation period. No personal orienting memorabilia was observed at the bedsides of any of the patients in the study. No specific person-centred nursing activity could be discerned, apart from some occasions where a nurse offered to make a telephone call for the patient or called their relative to ask them to come into the ward in order to assist with care or reminded a confused patient that they were sick and in hospital.

Despite the availability of an original version of a Communication and Care Cues (CCC) form being available in the ward (Poole, 2000a), there was no evidence that it was considered or discussed. Over the previous eight years, this form had been demonstrated during aged care education courses held at the hospital, at least twice per year, and at many individual ward based in-service education sessions. The only time this form was activated was following a specific recommendation through an individual CNC consultation for a patient.

It was possible that the lack of interest shown for the patients' personal communication and care needs arose from the nurses' poor knowledge of patient needs generally (Liaschenko & Fisher, 1999) and poor knowledge of specific care requirements for patients with delirium and dementia (Fessey, 2007; Inouye, Foreman, Mion, Katz, & Cooney, 2001; Kitwood, 1997). These findings reinforced the need for the PCCRG to consider interventional strategies which involved personalised care planning activities for vulnerable patients with cognitive impairment.

Nursing Staff Turnover

During the course of Cycle 1, it became obvious that there was a constant turnover of nursing staff or 'churn' as was described by Duffield et al. (2007, p. 96). The ward had a variable nursing compliment and approximately 25% of the nurses were AINs as was explained in Chapter 3: Section 3.2.3 and shown in Table 4.2. In addition, it was normal practice for the ward to support four different newly graduated registered nurses (NGs) in the ward through the new graduate program every four months, as well as a different Trainee Enrolled Nurse (TEN) each month.

The supervision of these staff placed a heavy burden of teaching and mentoring on the CNE and the senior ward nurses. The only nurse on the ward during Cycle 1 (and the following cycles) with formal postgraduate aged care qualifications, and therefore best suited to support the new staff, apart from the CNC, was the CNE1. However, despite supporting the project and participating in the Observers' training, the CNE1 resigned before the start of the initial QUIS data collection. This placed a restriction on the project activity until a new, albeit inexperienced CNE2 was employed, orientated to the project activities and had given consent to participate in the study.

An added complication at this stage of the study, involved further changes to the senior ward staff. The ward leader, the NUM1, was seconded to another department for two months. The replacement nurse appointed in an acting capacity was an RN who had no NUM experience and had English as a second language. Both factors impeded the study progress. A critical component for supporting culture change was claimed to be leadership (IMA, 2007). An effective leader needed to have sufficient influence or power to enable change processes or access to necessary resources. The effective application of leadership skills were also noted to be essential for maintenance of the nurses' morale, which in turn affected their ability to adopt new practices (Day, Minichiello, & Madison, 2006). The new acting NUM's reduced influence and language ability was therefore a factor in the slow progress in the study at this point (Field notes, 24/4/06) . In addition, before the trials of inter-rater reliability for the intended nurse-patient interaction observations could be undertaken (as explained in the next Section 4.2.2), two of the intending Observers (including the CNE1) withdrew due to personal time constraints.

Another aspect of staff turnover was demonstrated through the number of days taken away from work by nurses for sick-leave. The simple calculation suggested by Hensing et al. (1998) was used. In the three-month period before the start of the intervention period in Cycle 2 (April-May-June 2006) there were 32 nurses on the ward roster list with 26 days recorded as sick-leave. This gave a rate of 0.8 days sick-leave per nurse. Further calculations were planned for comparison at the end of the study.

Overall, it was clear that the staff 'churn' which indicated nurse turnover, created difficulties in keeping all the staff informed and up to date with the best practice evidence for person-centred care, particularly in relation to the prevention and management of delirium in older patients. It was apparent that the PCCRG would need to consider ways to improve ward leadership and reduce nurse ‘churn’, as well as to update nurse education.

4.2.2 Nurse Observer Recruitment and Training

Funds awarded to the Investigator were allocated to recruit assistants from amongst the ward nurses whose role would be to use the QUIS measures to observe nurse-patient interactions, outside of their rostered ward duty hours. Following ward-based advertisements for nurse volunteers to undertake these observations, an interview process which involved the NUM1 and the Investigator meant that five nurses (including the CNE1) were initially appointed but that was later reduced to three, as described. The nurses assumed the role named ‘the Observers’ and joined the PCCRG. Three training sessions were facilitated by the Investigator to review the person-centred care literature and the Quality of Interaction Schedule (QUIS) measurements. An observation form was developed and trialed using the QUIS code explanations in order to record coded observations.

Initial trials of the QUIS observation sessions were conducted with each of the three remaining Observers and the Investigator, over a total of 12 hours. The Kappa Measure of Agreement values for inter-rater reliability between the nurse Observers and Investigator were 0.786, 0.835 and 0.915, thus within the ‘good’ to ‘very good’ categories, as was recommended by Pallant (2007, p. 220). When the Observers were available to undertake patient observations, suitable patients were recruited. The QUIS observation process and results are described in Section 4.2.4.

4.2.3 Patient Recruitment and Baseline Measurements

In view of the limited availability of the Observers and the Investigator, the relatives of two patients at a time, where possible, who met the study criteria, were approached by the Investigator for consent to participate. The intention was to find suitable patients within the same four-bed room to allow ease and accuracy of the observations which were to be coded every 2.5 minutes. After an explanation of the intended study, the relatives were given a printed explanation sheet and asked to consent on behalf of the patient, if they were unable to consent for themselves. It was explained that they could refuse to be observed at any time and a form was provided which explained how to revoke consent. There were no refusals from any relatives who were approached and all signed and returned the consent forms to the Investigator. Baseline assessments were then conducted and recorded with details of the patients' demographic and health characteristics. Examinations of the relevant patient clinical data were undertaken during their ward stay and afterwards, where necessary, via audits of medical records. The patient data that was collected are summarised below.

Patient Characteristics

A summary of the characteristics of the patient demographic and clinical data is provided in Table 4.5. This first group of patients was called Patient Group 1 (PG1). Fourteen patients were recruited, including slightly more females than males, and the majority had good hearing and eyesight. All the patients had evidence of cognitive deficits on admission and over three-quarters had a diagnosis of dementia. Although most were reported by their relatives to have had fairly good levels of function prior to admission, the majority experienced a major functional decline on admission to the ward. Most patients had a mild to moderate level of agitation and over three-quarters of the patients had symptoms of delirium on admission. All patients were assessed to have a high risk for falls and pressure ulcers. Just over half the patients were admitted from a residential aged care facility. The majority of patients in PG1 were admitted because of falls or delirium, or both. Other coexisting active medical problems included dementia, cardiac abnormalities, sepsis, fractures, urinary conditions, mental disorders, pulmonary disorders and other neurological conditions. This signified a high degree of medical complexity**.**

Table 4.5: Characteristics of patients in the before-intervention group (PG1).

Characteristics	**PG1** **n = 14**
Female: n (%)	8 (57)
Male: n (%)	6 (43)
Age: Median (Range)	83 (76-93)
Sight: n (%)	
Good	10 (71)
Poor/blind	4 (29)
Hearing: n (%)	
Good	9 (64)
Poor/deaf	5 (36)
Cognition on admission (MMSE): Median/30 (Range)	0 (0-18)
Function (Barthel): Median/100 (Range)	
Before admission	88 (5-100)
On admission	5 (0-90)
Agitation Scale (Pittsburgh): Median/16 (Range)	4 (0-12)
Delirium diagnosed (CAM): n (%)	11 (79)
Fall risk – High: n (%)	14 (100)
Pressure ulcer risk – High: n (%)	14 (100)
Pre-admission abode: n (%)	
Community (with or without services)	6 (43)
Residential Aged Care Facility	8 (57)

Note. CAM = Confusion Assessment Method. MMSE = Mini Mental State Examination.

Patient Clinical Outcome Measures

The clinical outcomes for patients in PG1 are shown in Table 4.6. Two patients died during the hospital admission and all the patients had reduced functional levels on discharge. One patient still had symptoms of agitation after one week, and over half of the remaining patients exhibited symptoms of delirium on discharge.

Six of the patients fell during the admission, with two of the patients falling twice. One injury (a skin tear) was recorded, one patient was restrained with a Posey chest restraint for a short period and no pressure ulcers developed in these patients. None of the patients received care from an individual patient special (IPS) nurse.

The average length of stay (LOS) for the patients was 11.5 days. However there was a wide range from 4 to 58 days. Two patients' stays were outside the 3rd quartile of 17.75 days. Two of the patients who had been admitted from the community were discharged to a residential aged care facility.

The use of psychotropic, sedative and analgesic medication was variable. Just over half of these patients were treated with small doses of psychotropic medication (such as, haloperidol or risperidone) for varying periods whilst resident in the ward. No new sedatives were ordered for any of the patients during their stay. Examinations of the patients' diagnoses showed that most of the patients appeared to have issues with pain management. For example, a patient with dementia and extensive cellulitis of both legs was recorded as having fluctuating, agitated behaviour. This patient was prescribed Panadeine 2 tablets t.d.s. (three times per day) but this medication was only given three times in total over 12 days. Another patient was admitted with dementia and spinal canal stenosis and was prescribed and given Paracetamol 500 mgs x 2 tablets t.d.s. However, a much stronger analgesic was also prescribed - Endone 5 mgs q.i.d. p.r.n. (four times per day as required but not more often than 4th hourly), but this was never given. This patient was very restless, constantly tried to climb out of bed and finally had a fall. No nurse-initiated Paracetamol administration was recorded for any of the patients observed.

Table 4.6: Clinical outcomes for patients at discharge in the before-intervention group (PG1).

Variable	PG1 n = 14
Function (Barthel): Median/100 (Range)	
Discharge	25 (0-75)
Agitation Scale (Pittsburgh): Median/16 (Range)	
Day 3	3 (0-15)
Day 7	1 (0-12)
Delirium diagnosed (CAM): n (%)	
Day 3	11 (79)
Day 7	8 (57)
LOS in days: Median (Range)	11.5 (4-58)
Patients who fell: n (%)	6 (67)
Injuries from falls: n (%)	1 (7)
Pressure ulcers developed	0
Mechanical restraints used: n (%)	1 (7)
IPS nurse : n (%)	0
Discharge abode: n (%)	
Community (with or without assistance)	2 (14)
Facility	10 (71)
Died in hospital	2 (14)
Medications: n (%)	
Psychotropics prescribed	8 (57)
New sedatives prescribed	0
Analgesic issues	13 (93)

Note. CAM = Confusion Assessment Method. LOS = Length of Stay. IPS = Independent Patient Special.

The patients in the study were all very ill and vulnerable with complicated medical problems requiring involved care that caused workload issues for the nurses. Nevertheless, none of the patients developed any pressure ulcers and even though there were some patient falls, there were no apparent serious injuries. The use of a Posey chest restraint for one confused patient was however, a negative event that needed to be avoided in the future, especially in relation to the increased risk for injury and delirium severity (Inouye, 2006).

The deficiencies in analgesic administration may have shown that the nurses did not understand that disturbed behaviour in patients with delirium or dementia, could be a symptom of uncontrolled pain (Herr et al., 2004; Horgas, Nichols, Schapson, & Vietes, 2007). This finding was of concern because the Abbey Pain Scale (Abbey et al., 2004), which was specifically developed to assess pain levels in cognitively impaired older people, was available in the patients’ end-of-bed notes, with a designated place for the results on the care plans for all the patients in the study ward. This was not utilised. It has been reported that delirium may be prevented, or the severity reduced, if careful attention was paid to adequate pain relief (Voyer, McCusker, Cole, St-Jacques, & Khomenko, 2007).

In view of the study intention to focus on a person-centred approach to care, avoidable pain was of concern. Hence the PCCRG identified that interventional strategies were needed to mitigate these problems in vulnerable older patients (Meeting minutes, 27/6/06).

4.2.4 Nurse and Patient Interactions

Quality of Interaction Schedule Measures

Following the Quality of Interaction Schedule (QUIS) training and establishment of the inter-rater reliability, as described in Section 4.2.2, a suitable schedule for observation periods of nurse-patient interactions was arranged, aiming for a total of six hours per patient in two-hour time periods. All the staff were notified of the planned observation procedures and time frames, and verbal consent was obtained. Attempts were made to maintain a balance between the number of times that each nurse was observed. This became increasingly difficult as the project progressed, so that the total number of patients observed was capped at 14, an increase of two patients from the original 12 who were observed in the QUIS development study (Dean, Proudfoot, & Lindesay, 1993) and study by the Proctor et al. (1998).

During the QUIS observations of the 14 patients, codes (see explanations in Table 4.7) were recorded every 2.5 minutes, over the six hours in two-hour periods, giving a total of 84 hours of observations. Twenty-eight nurses were observed for varying periods of time. The numbers and percentages of coded interactions are summarised in Table 4.8 and the comparative percentages are presented in Figure 4.2. Overall, there were a total of 2016 observations recorded. Of these, the majority showed No Staff (NS) interaction with the patients. There were more than three times as many Positive Care (PC) interactions than Positive Social (PS) interactions, with very few Neutral (NE) interactions and two Negative Restrictive (NR) interactions.

Table 4.7: Descriptions of Quality of Interaction Schedule (QUIS) codes (Dean, Proudfoot, & Lindesay, 1993).

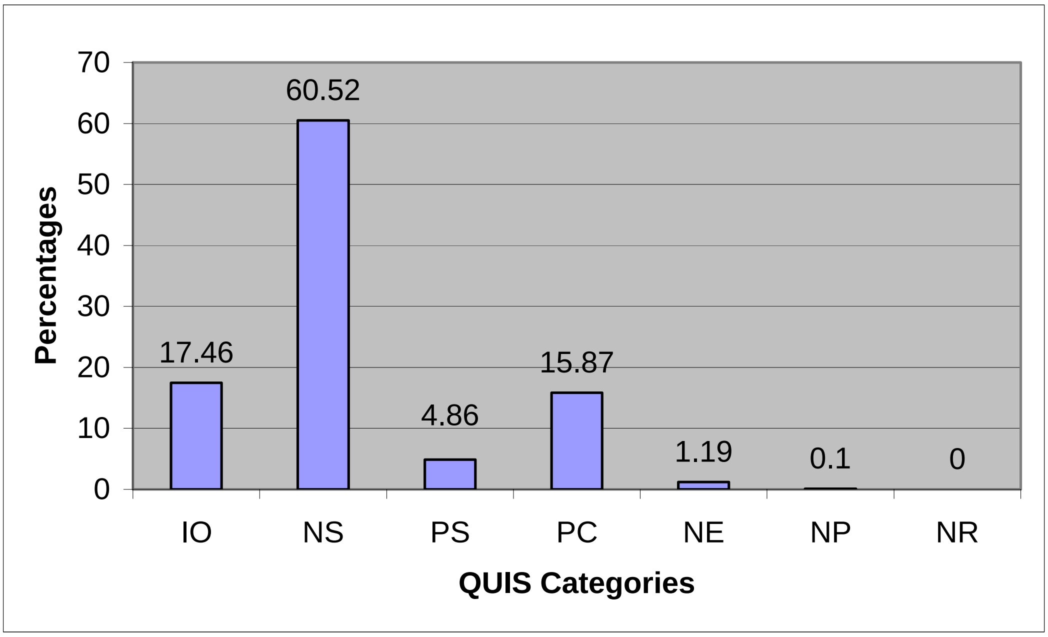
Category	Description of QUIS Code Categories
IO: Interaction with Others	Patient interaction with Dr, OT, PT, visitors, having tests on or off ward.
NS: No Staff interaction	No staff interaction with patients; sleeping, dozing.
PS: Positive Social	Staff interactions principally involving ‘good, constructive beneficial’ conversation and companionship.
PC: Positive Care	Staff interactions during the appropriate delivery of nursing care.
NE: Neutral	Brief indifferent staff interactions with patients not meeting the definitions of the other categories.
NP: Negative Protective	Staff providing care, keeping patients safe or removing them from danger, but in a restrictive manner, without explanation or reassurance to the patient.
NR: Negative Restrictive	Staff interactions which oppose or restrict the patient’s freedom of action without good reason, or which ignores the patient as a person.

Note. Dr = Doctor. OT = Occupational Therapist. PT = Physiotherapist.

Table 4.8: Total number and percentage of coded Quality of Interaction Schedule (QUIS) observations in the before-intervention group (PG1).

Categories	IO	NS	PS	PC	NE	NP	NR	Total
Total number and percentage of observations: n (%)	352 (17.46)	1220 (60.52)	98 (4.86)	320 (15.87)	24 (1.19)	2 (0.1)	0	2016 (100)

Note. IO = Interaction with Others. NE = Neutral. NP = Negative Protective. NR = Negative Restrictive. NS = No Staff interaction. PC = Positive Care. PS = Positive Social.



Note. IO = Interaction with Others. NS = No Staff interaction. PS = Positive Social. PC = Positive Care. NE = Neutral. NP = Negative Protective. NR = Negative Restrictive. QUIS = Quality of Interaction Schedule.

Figure 4.2: Percentage of total coded Quality of Interaction Schedule (QUIS) observations of nurse-patient interactions in the before-intervention group (PG1).

The QUIS data showed that this group of patients had long periods with no interaction with nursing staff or others. However, whilst this may be of particular concern in a long term care facility, such as that described by the authors of the QUIS (Dean, Proudfoot, & Lindesay, 1993), it could be seen as acceptable in the acute care sector where rest is imperative for patient recovery. This finding also does not imply that the patients were unobserved by staff during the NS code frames, rather it implies that the staff did not communicate with or provide care for the patients during those periods of observation.

Of concern however, is the proportion of staff interactions with this group of confused patients who were categorised as 'positive care' rather that 'positive social'. Positive care episodes were also small in number and are described as

> Toileting, bathing, medication, feeding, dressing etc. These may involve brief verbal explanations and encouragement, but only that necessary to carry out the task with no general conversation (Appendix A).

The work of Kitwood (1997) and the Bradford Dementia Group (2003), which aimed to change the focus of care from the patient to the person, explained that person-centred care sought to achieve a state of well-being through a sense of identity, belonging and attachment. Positive care and positive social care are the foundations for quality person-centred care in all health settings. A 'positive social' care approach would have involved

> General chat and conversation on its own or during the course of physical care, verbal explanations, encouragement and comfort other than that is necessary to carry out the task (Appendix A).

Whilst all of the patients in PG1 at times exhibited states of 'ill-being', such as anger, anxiety, apathy or despair, these could be attributed to their illnesses, in particular the presence of delirium. Therefore, the provision of person-centred care which involved recognition and reinforcement of individuality through personal social knowledge and interaction, would have been of reassuring therapeutic value as recommended by Voyer et al. (2007) and Liaschenko and Fisher (1999). However, there was no mechanism employed for obtaining the patient's personal social profile so that the nurses did not appear to know what to say or how to communicate effectively with their confused patients. This was another point for consideration by the PCCRG in order to progress satisfying quality nursing care for the patients.

4.2.5 Feedback from Observers and Nurses

Observers' Focus Group Feedback

Following the completion of the initial QUIS observation period, the Investigator facilitated a focus group with the nurse Observers in order to encourage reflection on what they had observed. The conversation was recorded on audiotape. A semi-structured format was used with open-ended questions intending to follow the line of discussion as it arose and a summary is provided below.

Main impressions of the observation period: All three nurse Observers said that they had found if difficult to refrain from helping in the care of the patients in the rooms in which they were stationed. They all said that the shifts were very busy and they noted that there were frequent new admissions to the ward, particularly in the late afternoons, which took the nurses away from their allocated duties, particularly at the evening meal time. All commented on the difficulty which the staff had in finding time to help the patients with their meals. The Observers' comments included: *"… some needed their meals cut up – knives are so blunt", "… all needed meal set-ups"*; *"…the ward was chaotic and I kept wanting to put a patient back to bed because he was cold and tired and had been waiting for ages ... it was really hard to know what to do but it was no one's fault.* One Observer noted that she usually set up all the meal trays in the room of her designated patient and assisted with the feeds. All noted how hard it was for patients to open the food packages and while the Observers tried to avoid actually helping the struggling patients under observation, at times this was necessary because the ward nurses were unable to attend to all the patients in a timely fashion at mealtimes. It was recognised that by assisting the other patients in the room, the Observers were making more time for the nurses to help the designated patient if necessary – that is, more help than might have happened otherwise.

What the Observers would like to change: The Observers all noted that their education or training did not teach them how to communicate with confused patients, for example: "*they should be taught about validation"*. One of the AIN observers noted that when performing IPS (one-to-one care) duties on another ward, she could not get any staff to help her to reposition her patient during the whole shift. She said, "*I felt powerless … I'm only an AIN"*. However, all the Observers agreed that this would not have happened on the study ward. There was discussion about the difficulty of 'working together' when there were many casual staff on the ward. It was noted that when the permanent staff nurses were available, they helped each other and tasks were more easily achieved.

It was noted that the composition of the ward shift-teams impacted on patient care, especially when extra time was needed to support New Graduate nurses or to attend to 'in-charge' nurse responsibilities. Whilst it was agreed that there were no guidelines for the team allocation, the RN Observer noted that she always teamed up with a New Graduate nurse *"… to support them and keep then under my wing"*. This was not necessarily the usual practice for others. It was noted that the optimum care of the patients was always under threat when there was not an evening Ward Clerk to answer the phone and take enquires.

Suggestions for anything which would help to improve nursing care, apart from more staff: The Observers stated that it would help if the patients with delirium had a special one-page personal information form. *"It could be just one piece of paper", "… to give some insight into family things – old notes sometimes help, but you have to have time to find them"*. The form which they requested was intended to give pertinent personal information so that the nurses could know what to say to reassure the patients, such as using the family names and information about important events or pets.

The Investigator then asked questions about person-centred care as had been formulated for the survey questionnaire about the relatives' satisfaction with care practices.

Q1 – Do you think the staff generally tried to LISTEN to the patients?

The Observers agreed that some staff listened to the patients but many did not. They noted that listening was a special skill and probably needed to be taught, particularly to some newer staff. It was noted however, that *"… some young nurses are terrific with old people but some are not interested"*. It was said that there was a lack of training in dementia care, such as *"… dementia is everywhere"*.

Q2 – Do you think the staff generally tried to ENCOURAGE the patients?

The observers generally agreed that most did: *"…to a degree – they try to get them up and on the move"*.

Q3 – Do you think the staff generally tried to REASSURE the patients?

All Observers agreed that they did often try to reassure their patients. When questioned about whether they saw others do it, the answer was: "*No – generally probably not*".

Q4 – Do you think the staff generally tried to GET PERSONAL INFORMATION about the patients?

The comments included: *"Maybe not"; "No – but I enjoy talking to the families – for example how long has he been like this – really helps?"* When asked if they saw others do it, all Observers said *"No". "It's a technique you develop over years; so many new nurses don't see the need"; "… gives us clues as to what to teach at university – students should see more patients – have actual experience*".

The problem of having to designate the single rooms to patients with infectious conditions, was also seen as an obstacle to the provision of person-centred, palliative care for patients who were dying. The Observers' said that there was a need for ward-based guidelines that supported the quarantining of special family rooms with support features, such as extra beds for family members and tea making facilities.

In summary the issues which were reported by the Observers' during their feedback focus group were

1. There was not enough staff at the right times, especially to help with the unpacking of meal trays.
2. Staff were always very busy and the ward was often 'chaotic'.
3. Staff were not well informed about clinical issues.
4. Some staff said that felt powerless at times.
5. There was not enough information about the patients' personal backgrounds, preferences or tactics for effective communication.
6. There was a lack of dementia education.
7. There were special issues in relation to the provision of palliative care, room allocation and nurse team allocation processes.

The Observers' reflections about the lack of dementia knowledge supported the results of the nurses' dementia knowledge questionnaire and again raised concern for the nurses' morale. Nurses' knowledge, workloads and the relationships to job stress and morale have been the topic of a number of studies, as were discussed in Chapter 2, Section 2.5.2. (Day, Minichiello, & Madison, 2006; Hegney, Plank, & Parker, 2003; Ruggiero, 2005; Unruh, 2008; Zangaroo & Soeken, 2007). It had been claimed that workers’ sense of dignity was highly related to morale and supported by ‘autonomy and reasonable workloads’ (Lawless & Moss, 2007, p. 229), which raised concern for the well-being of the nurses on the study ward. These points were to be considered by the PCCRG.

Nurses’ Focus Groups Feedback

The collated QUIS data were presented to the ward nurses in three separate sessions. The Investigator facilitated one session as a demonstration for the Observers and then one of the Observers facilitated each of the other sessions. This was accompanied by a brief overview of the elements of person-centred care, which was part of the conceptual framework for the study.

During the feedback sessions, a nurse took notes of the participants’ responses. These were written on a chart and displayed on the staff room wall with designated spaces to invite further anonymous written comments and suggestions. After a two-week period, there were no further comments recorded. After discussion with members of the PCCRG, the comments were collated and categorised under the headings of power, distribution and opportunity, as described by Kanter (1993) and listed in Table 4.9. Issues which were thought to be most amenable to intervention, are noted in italics. The remaining issues were raised with the NUM1 for consideration and action through general ward staff meetings.

Table 4.9: Nurses' responses to feedback from the Quality of Interaction Schedule (QUIS) observations and the conceptual framework of the study, categorised under the concepts of the Integrated Structural Model of Human Behaviour (Kanter, 1993).

POWER
- *Medical Specialists don't know our names*
- *Our opinions are not sought about patient needs*
- *Families are too demanding*
- *Not enough information comes up from Emergency Department*
- *Difficult to get all patients fed*
- End of week discharge/admission scramble too much – needs to be staggered
- We don't have *power* over rosters, shifts, uniform etc
- Need equipment: portable phone needs to be linked to ward phone

DISTRIBUTION
- *Need more staff; more senior staff*
- *Heavy work, high patient load*
- *More communication about changes*
- Need better cover for Ward Clerk

OPPORTUNITY
- *Need training in delirium and dementia*
- *Difficult to know what to say to patients – no personal information*
- *Poor support for AINs*
- *Lack of competency assessments & orientation of new staff*
- No supernumerary days for New Graduates
- Need training: CPR, wounds, stroke, respiratory, cardiac, renal, nutrition.

Note. Responses in italics formed the basis for reflection about possible intervention plans in Cycle 2.
AIN = Assistant in Nursing; CPR = Cardio-Pulmonary Resuscitation. ED = Emergency Department.

The nurses' responses were summarised as: a lack of recognition, interaction and communication with other staff members; difficulties in accessing information and communicating with their patients; difficulties in communicating with relatives; and problems with workload, particularly at patient meal times. The nurses acknowledged that they needed training and support for skill development in care of patients with delirium and dementia, as well as ways to communicate with patients and relatives. These responses fitted the concepts of Kanter's theory (1993) that workers self image and career progression could be enhanced or handicapped by the enablement or disablement of power. This feedback stimulated discussions of possible interventions by the PCCRG to progress person-centred care in the ward (Meeting minutes, 28/6/06).

4.2.6 Relatives' Satisfaction

Following the discharge of patients, their relatives were telephoned by a volunteer research assistant and asked for their opinions of the nursing care, which was received during each patient's stay. These data were captured using five closed and open-ended questions based on the elements of person-centred care.

Closed Questions

Table 4.10 lists the relatives' responses to the closed questions employing a Likert scale of 'very satisfied', 'satisfied', 'neither', 'unsatisfied', 'very unsatisfied'. As the number of relatives surveyed was small (n =14), it was decided to collapse those responses down to the headings of 'satisfied', 'neither', ' not satisfied', in order to aid statistical interpretation. In Q1, more than three-quarters of the relatives said that they were satisfied with the nurses' overall care. When questioned about their observations of the nurses' efforts to 'reassure' (Q2), 'encourage' (Q3) and 'listen to' their relatives (Q4), approximately one third of the relatives did not know how to respond. Nevertheless, approximately half of the relatives still gave 'satisfied' responses to these questions. When asked if they had observed the nurses' efforts to 'find out and to use personal background information' (Q5), over half the relatives reported that they were 'not satisfied'.

Table 4.10: Relatives' responses to questions about their opinions of aspects of nursing care in the before-intervention group (PG1). (n = 14).

Question	**PG1 n (%)**		
	Satisfied	**Neither**	**Not satisfied**
Q1. Overall, where you satisfied with the nurses' **care** of X?	12 (86)	1 (7)	1 (7)
Q2. Do you think the nurses generally tried **to reassure** X when he/she was confused?	8 (57)	4 (29)	2 (14)
Q3. Do you think the nurses generally tried **to encourage** X when he/she was confused?	7 (50)	5 (36)	2 (14)
Q4. Do you think the nurses generally tried **to listen** to X when he/she was confused?	7 (50)	4 (29)	3 (21)
Q5.Do you think the nurses generally tried **to find out and use personal background** information so that they could help X to feel safe and understand what was happening?	2 (14)	4 (29)	8 (57)

Note. PG1 = Patient Group 1.

Open-ended Question Responses

After each relative had stated their satisfaction response to the questions, they were asked if they would like to further explain their answer. Using semantic and latent content analysis, as described by Wilson (1989, p. 470), four concepts emerged – positive views, negative views, specific comments relating to staff or their workloads, and unknown, the latter for those relatives who had not visited the patient very often.

There were some positive responses to all questions, such as *"some very good"; "… very impressed; staff were patient with my father", "one lovely person; I appreciate how difficult it is"*. Some relatives qualified their positive responses regarding the reassuring, encouraging and listening activities of the nurses, with comments such as, *"… did see a bit of off-handed attitude by staff"; "One lovely person but one not very nice person"; "… nurses very busy – no one mistreated her", and "They explained he had a catheter, but he couldn't remember".*

There were more negative comments (n = 25) than positive comments (n = 16). One relative said, *"… looked cared for but had problems with one particular person that made the whole experience awful"*. When asked about the use of personal background information, one relative said, "… *didn't even try to take down a few points. A volunteer person was the most interested in mother"*. Another said, "… *one glove fits all – didn't use her name – bit disrespectful".*

The relatives appeared to understand that the patients themselves were not always easy to care for, as demonstrated in the comment: "… *some things she said were nonsense – so hard for the staff*". The lack of time or available staff was an issue mentioned five times, for example, *"… don't think they had time"; "… they were so busy"*.

Use of the English language was noted to be a barrier for patients and staff. This was reflected in comments such as: *"… listened but didn't understand so didn't try"* and "… *listened to her, though some responded to my mother in a way that was intimidating and perhaps a little bit threatening*".

Whilst empathy was demonstrated for the nurses' efforts in difficult circumstances by some of the patients' relatives, overall, the survey showed, that despite the higher number of positive responses in the closed response section, the number of negative comments were higher in the open response section. The negative comments were considered with concern in view of the vulnerability of the patients, their relatives and the nurses themselves. The reported use of descriptions of nurses or their practices (however few) as ‘not very nice’, ‘disrespectful’, ‘intimidating’ and ‘threatening’ did not fit the concepts for person-centred care and presented a challenge for practice development attention.

4.3 Summary

The actions and issues arising in Cycle1 are summarised in Table 4.11 and is formatted to provide an ongoing representation of each cycle content. The stakeholder negotiation, participant recruitment, baseline measurements, observations of care practices and feedback responses were described. Staff turnover proved to be a handicap, particularly affecting the leadership of the ward. Reflections on the observations of the emerging and informing information and ideas which could direct the plans and actions necessary for Cycle 2, showed a need to address the following issues: the nurses sense of empowerment; knowledge enhancement regarding delirium, dementia and person-centred care; recognition of behavioural symptoms related to uncontrolled pain; obtaining and using the patients’ personal social information; mitigation of the effects of staff turnover, including leadership positions, which affected the knowledge which was essential for patient care; and the need for effective communication techniques to help the patients’ relatives.

Table 4.11: Summary of actions undertaken and issues which arose in Cycle 1.

Cycle 1 **Negotiation, Recruitment, Baseline Measurements and Observations**
Ethics clearance
Stakeholder negotiation
Before-intervention measures
– Nurse recruitment, consent, characteristics, baseline measurements, care planning
– Patient/relatives' recruitment, consent, characteristics and baseline measurements
– Nurse-patient interaction observations (QUIS)
– Relatives satisfaction measurements
– Nursing staff turnover
– Observers' and Nurses' focus groups feedback
Issues for intervention plans
1. The nurses sense of empowerment
2. Knowledge regarding delirium, dementia and person-centred care
3. Recognition of behavioural symptoms related to uncontrolled pain
4. Obtaining and using patients' personal social information
5. Mitigation of the effects of constant staff turnover which affects knowledge essential for patient care
6. Effective communication with relatives

Note. QUIS = Quality of Interactions Schedule

The literature revealed that action research should be undertaken through processes of facilitation, which involved actions on a continuum from enabling-to-doing. The concepts of practice development included in the study's conceptual framework and associated with action research methods required that health care teams should be supported by facilitators to bring about processes of continuous, systematic change which incorporated the opinions and experiences of the service users. The literature has shown that change was needed. It was acknowledged that 'nursing work' was often unrecognised and unrewarded. The Investigator's inability to change care practices over a long period was described. The 'authenticity' of the evidence in relation to the recommendations for best practice care of patients with cognitive impairment and the nurses' entitlement to assistance was justified through the literature review.

This PhD study had been chosen as the agent for change with the expectation that the university guidance and support system would provide the best possible chance of finding a way through the complexities of the health system in order to enable best practice change. It was recognised that many nurses were naturally part of an oppressed group both through nursing and life experiences, which could then hinder effective facilitation of action research and practice development. The recommendation for the Investigator to seek out extra personal 'resources' in order to withstand the reported stresses was noted.

Whilst the PCCRG had been formed to enable the action research, in reality the major reflection, planning, activities and observations were performed by the CNE2 and the Investigator. The change of leadership personnel in both the NUM and CNE positions during Cycle 1 created a hiatus in participation and support. Reports were given to meetings with the NUM1 (and the seconded replacement NUM) and the Medical Director as well as any other staff who happened to be present at ward management or general ward staff meetings. Discussions and participation were encouraged where possible.

However, little participation occurred, which left the Investigator and the CNE2 to attempt to carry on the study as effectively as possible. Using study funds, a special research information notice board was erected in a prominent place in the ward so that flyers and photographs, depicting study progress and results could be regularly posted, in order to enable as much transparency as possible. It was hoped that the staffing 'churn' would settle down and more effective action research participation would be possible.

A confronting comment by a senior staff member during the early negotiations, *"but it's your PhD"*, seemed to imply that the study was only intended for the Investigator's benefit (Field notes, 2/2/06). This could have been an example of marginalisation, attempted disempowerment or simply a statement of fact. It seemed prudent to avoid mentioning the PhD aspect of the study on the ward or in the hospital at large. However, it was recognised that resilience, or the capacity to move on in a positive way, could be developed through persistence. Additional support was gained through understanding the trait of hardiness or 'being committed to a meaningful purpose … one can learn and grow’ (Bonanno et al., 2002, p. 25), which was claimed to be protective and attainable in times of stress.

As the research aim was to discover if the use of elements of a person-centred approach to care of patients with cognitive impairment and disturbed behaviour could result in decreased nursing stress, improved patient care practices, and improved patient and relatives’ outcomes, it was clear that strategies to address the issues discussed above, were needed. Discussion with the CNE2, other members of the PCCRG and ward nurses when possible, enabled the beginning of a plan for interventions which are described in Chapter 5, Cycle 2.

CHAPTER 5: ACTION RESEARCH CYCLE 2: *THE INITIAL INTERVENTION PLAN*

Following the Cycle 1 baseline measurements of nurse and patient characteristics, nurse-patient interactions and relatives' satisfaction with care, analysis showed that the nurses were handicapped by high levels of staff turnover, felt disempowered by workloads and lack of access to patient information and had deficits in knowledge about delirium and dementia. This may have contributed to apparent problems in patient analgesic administration and communication with the relatives.

Activities in Cycle 2, as depicted in Figure 5.1, are described as plans which enabled the activation, observation and reflection of the initial intervention strategies. This cycle focused on the nurses' participation, empowerment and education; nurse 'churn' mitigation, patient information and care planning; and communication with relatives, as described in detail below.

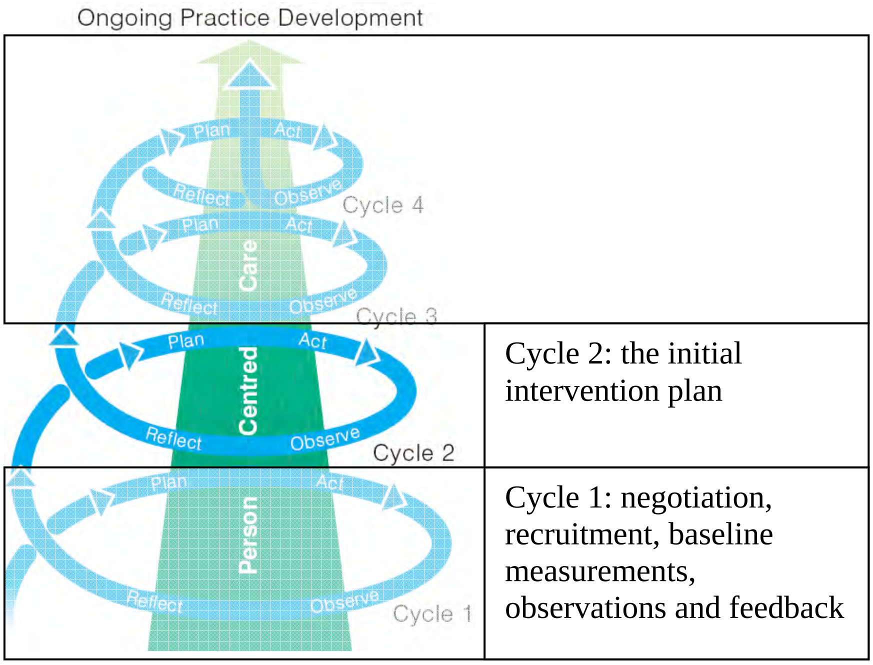


Figure 5.1: Action research Cycle 2 – the initial intervention plan.

5.1 PLAN

The members of the PCCRG considered the actions, observations and reflections from Cycle 1 which had fulfilled the requirement for the action research method for collaborative information gathering (Greenwood & Levin, 2007). Some problems were identified which appeared to be beyond immediate remediation during this study and were passed on to the ward Nursing Unit Manager 1 (NUM1) and Clinical Nurse Educator 2 (CNE2). This included the reported issues of workloads, staff availability, mealtime inefficiencies, equipment deficits, other needed educational topics and palliative care management (Meeting minutes, 4/7/06).

5.1.1 Nurse Participation, Values, Empowerment and Education

Participation

A basic premise of action research and practice development is the intention for active collaboration of people with a common issue, experience or purpose, preferably a core group of those at the 'coal face', who seek and grow together as they explore common issues (Greenwood & Levin, 2007; McCormack, Manley, & Garbett, 2004; Morton-Cooper, 2000). Despite agreements for this study to be undertaken by the acute aged care nurses, the participation of the nurses and their managers was spasmodic, as described in Cycle 1. In recognition of possible covert resistance, it seemed that the only way forward was for the Investigator to continue to try to encourage interest wherever possible. Therefore, attempts were made to provide as much transparency as possible through notices and reports about the study progress at all ward meetings, as well as to open discussion of the study on a one-to-one basis whenever possible (Field notes, 28/7/06). The aim was to provide easy access to project information in order to appeal to expected staff values that assumed that nurses seek to improve their care practices and to gain feelings of satisfaction from their work.

Values, Assumptions, Beliefs

Personal values and beliefs are based on particular personal assumptions that are honed by life experiences, often 'underpin the way things are done' and when accepted by groups can become taken for granted as part of workplace culture (McCormack, Manley, & Garbett, 2004, p. 54). In particular, the person-centred framework developed for nursing by McCormack and McCance (2006, p. 475) stressed the prerequisite for nurses to develop interpersonal skills and 'demonstrate clarity of beliefs and values'. Perusal of the names of the nurses in the study ward showed that over half had names could have signified a cultural background other than Australian. Therefore the multicultural nature of this nursing compliment meant that a careful and broad view of personal assumptions related to personal values and beliefs would be necessary. It was planned to undertake exploratory sessions where the available nurses' values, beliefs and assumptions could be shared and explored to gain an understanding of possible actions to aid the study.

It was planned to enable the nurses to create their own ward mandala. The Sanskrit word mandala means a circle or centre with a pattern, which incorporates elements of a prescribed focus. In this case, person-centred care was the central focus. Use of the mandala had been described in nursing education by Marshall (2003, p. 518), as a way to achieve 'self awareness, critical thinking and group processes'. It was a method taught at the time of the study conception in practice development workshops, conducted by the Area Health Service in which the hospital was located.

Empowerment

The difficulties which the nurses reported about not being able to address other staff by name whilst they themselves were also not addressed by name (see Table 4.9), could have had an effect on their morale, and therefore their work practices. The Person-Centred Care Research Group (PCCRG) agreed that this might be due to the small print on the staff identification labels and decided to investigate the provision of larger name badges which would be easier for patients and staff to read. Some staff had seen examples of large print name badges used in another hospital. One of the ward physiotherapists already wore a special large name badge and the nurses agreed that this was helpful to orientate the patients to the clinician treating them, and to help the nurses to communicate with each other.

Education

To meet the identified educational needs of the nurses, particularly in relation to delirium and dementia, the PCCRG decided to draw up an education plan with the intention to present one topic repeatedly over a month that related to the causes and management of disturbed behaviours (Poole, 2003). This would enable as many staff as possible to have an opportunity to obtain information about each topic (see Appendix H). Each calendar month was to be given a title, such as 'Delirium Month', 'Depression Month' and 'Dementia Month'. It was also intended to create a shortened version of the dementia experiential workshop (Gaunsen, Horgan, & Walker, 1994), to be presented as part of the ‘Dementia Month’ activities. The education sessions involved explorations of the meaning of person-centred care and other topics of interest to the ward nurses. A notice board was made available in the nurses’ staff room so that information about the study in-service education topics and pertinent journal articles could be displayed.

5.1.2 Nurse ‘Churn’ Mitigation

The constant turnover of new or short-term staff throughout the ward made it difficult to keep the nurses’ skills and information updated. An Orientation Manual had been established, which provided an overview of staff, lists of nurses’ duties and information regarding ward work practices, to try to minimise the effects of the staff ‘churn’. Participants at the PCCRG meetings agreed that this manual should be amended to include instructions for accessing essential aged care specific protocols and competencies, particularly those pertinent to the study. It was also planned that dementia experiential workshops should be provided regularly beyond the allocated ‘Dementia Month’, to enable regular orientation for new staff members (Meeting minutes, 17/10/06).

5.1.3 Patient Information and Care Planning

The lack of nursing access to patient information and consultation at case conferences, as demonstrated by the statement “*… no one asks us*” (Field notes, 27/6/06), was discussed by the PCCRG and at ward staff meetings. The problem was thought to be exacerbated by the number of medical specialists who treated the patients; seven different medical specialists looked after the patients in the ward. The specialist’s patients were placed around the ward in available beds, rather than in designated areas that could match the nurse-patient allocations. The patient case conferences were attended only by the NUM (or Nurse-in-Charge when possible) and the allied health staff. The ward nurses rarely had time to attend the discussions at the morning patient ‘board rounds’ or the medical staff patient rounds. All of these factors served to marginalise the ward nurses from important decision-making processes regarding the patients.

Patient care planning and information processes were in a state of flux. The ward Patient Care Plan template had undergone several changes through consultations with the ward nurses over the preceding years but the most recently updated version created by the CNE1 was not used because the New Forms Committee refused to give approval due to hospital staffing re-structures. Plans were also underway to provide a ward based 'Handover Tool' to hasten and facilitate the nurses spoken patient handover sessions at the start of each shift. The Handover Tool was a computer-based list of patients with pertinent headings for information which was updated by the nurses each shift. In many ways this tool served as a pseudo-care plan because it contained comprehensive patient information and was carried by the nurse at all time, thus making the information easily accessible. The PCCRG agreed to support and reinforce the information particularly pertinent to patients with disturbed behaviour on this tool and to try to resurrect the withheld Patient Care Plan.

5.1.4 Communication with Relatives

The problems encountered by some staff in communicating effectively with some of the patient's relatives, were thought to be related to a combination of staff inexperience, knowledge deficits or language difficulties. It was decided that these communication issues could initially be addressed through the education plan, as outlined in Table 5.1.

5.2 ACT, OBSERVE and REFLECT

The actions and staff movements in Cycle 2 are described in Table 5.1 below.

Table 5.1: Cycle 2 monthly plan for education, other activities and senior staff movements.

2006/7	Education Topic and Activity	Senior Staff Movements
July	• Delirium • *Large Name Badges* • *Values clarification mandala*	• Hospital Division structure changed – Medical Division Nurse Manager retrenched • Assistant Operational Nurse Manager in acting position
August	• Delirium • MMSE video	• NUM1 took one months leave • Acting NUM replacement
September	• Depression • … and Other Mental Disorders	
October	• Dementia • 'Brain & Behaviour' video • Dementia Experiential Workshops	• NUM1 resigned • Acting NUM2 from another specialty appointed
November	• Dementia Experiential Workshops • Person-Centred Care • *Talking Pictures folder*	
December	• Communication & Care Cues • *CCC form developed & trialled* • *'C' sign* • *Ward Activities Cupboard*	• Acting NUM2 appointed to position
January	• Pulling it all together • **Continuum of Care Project** o **ACR Diagnostic** o **Chronic and Complex Care**	• New divisional structure finalised • New Divisional Manager appointed • Divisional Nurse Manager position abolished.
February	• Project Overview • *Competency development* • **Continuum of Care** o **ACR Diagnostic** o **Chronic and Complex Care**	• Area EO resigned • Acting EO appointed
March	• **Continuum of Care** o **ACR Diagnostic** o **Chronic and Complex Care Diagnostic** • *Name badge survey*	

Note. Topics in italics denote specific tools developed. Topics in bold denote the new over-riding hospital projects. ACR = Aged Care & Rehabilitation. 'C' = Sign place on handover sheet to show that special communication was needed. CCC = Communication and Care Cues. EO = Executive Officer. MMSE = Mini Mental State Examination. NUM = Nursing Unit Manager.

5.2.1 Nurse Participation, Values, Empowerment and Education

Participation

Meetings of the PCCRG were planned to be held each fortnight, with discussions of activities at other times whenever necessary. The study was placed on the agenda of the ward management and general staff meetings as a regular item. Presentations were given at the department clinical meeting and the Medical Division Senior Nurses' meeting. Progress flyers and photos were posted in the ward staff room and the research notice board, and invitations were offered to the nurses' to participate and provide their ideas for activities. However, little interest or discussion arose.

The CNE2 was at all times supportive and participative through encouraging other staff to attend the in-service education sessions and to actively participated in the topic discussions and reflections. One of the Assistant-in-Nursing (AIN) Observers, who worked a full-time roster, maintained a high interest, offered ideas and provided leadership to seek out supportive activity material for the patients. However, this enthusiasm did not translate to changes in the managers' or other nurses' care practices, that had been discussed during the person-centred care education sessions.

It is possible that the apparent reluctance of the managers and ward nurses to actively promote the study activities, related to the busyness of the ward (Carradice & Round, 2004); or it might have occurred because of a lack of supporting knowledge and resistance or a deliberate attempt to undermine the change process (Lawless & Moss, 2007). If the Investigator had had the courage and skills to address the apparent tensions, as recommended by Fitzgerald (2003), or had more actively sought support from the senior managers, then more participation might have been evident. Following consultations with the Employee Support Officer, the Department Director and the study supervising panel, it was decided that pursuing a grievance process with the senior staff could have resulted in confrontation, dissent, further disengagement and thus, jeopardise to the study validity. This may be an important finding regarding nursing research conducted by and for oppressed people. It might also be an important finding about the practicability of action research for nursing practice change.

The response to this difficult situation was for the Investigator to renew efforts to enable and encourage participation as much as possible, whilst being grateful for the support of the CNE2 and the participating AIN. Reflections about the issues that occurred happened ‘on the run’ with many informal conversations that began as, “W*hat do you think is happening here”* and *“What do you think might help”* or *“Do you think it might help if…?”* (Field notes, 24/10/06). Thus the cardinal features of action research, such as responsiveness, cycles that occur within cycles, and flexibility were implemented, as recommended by Dick (2002). Adhering to these hallmarks meant that sometimes the planned in-service education sessions were cancelled to relieve the pressure on the busy staff, or attempts were made to take a different approach, such as the provision of an appropriate video or case study.

Values, Assumption and Beliefs

Only one exploratory session was attempted which focussed on the nurses’ values, assumptions and beliefs, because of the difficulty experienced in the engagement of the nurses, who were constantly busy. It became apparent that the multicultural nature of the staffing compliment created some important differences in values and belief systems. Some staff professed to come from disadvantaged backgrounds and despite efforts to apply ‘best’ or ‘better’ practice, it seemed that many of these staff had very little experience or considered opinions about the ethical dimensions pertaining to old age. One nurse said, *“We never care for old people in hospital in my country – they are just kept at home”.* Another nurse said, *“We never see confused old people in hospital”* (Field notes, 12/7/06). Nevertheless, with encouragement, the nurses created a colourful ward mandala as a poster that depicted the presence and connection between the nurses and older patient of aspects of dignity and politeness; listening to each other, teamwork and communication; knowledge, trust, understanding, honesty, smiling, sense of humour and consideration. The poster was displayed on the ward wall, however no comments were received from other staff or the managers and no mention was made at the PCCRG meetings. It was not known how much the ward staff identified with the constructs depicted on the mandala poster. This may have been a very important signal about the major obstacle to the successful participation in the study by the nurses as there was no wider encouragement for them to personally consider their values or to apply those insights to their care practices.

Empowerment – Large Name Badges

To provide the large staff name badges as requested, study funds were used to acquire a badge-making machine. Several possible versions were created and considered by as many staff members as possible, including the medical officers, allied health staff, Personal Care Assistants, Ward Clerk, as well as the nurses. The final agreed formats, as shown in the examples in Figure 5.2, were provided in colours that matched traditional staff designations where possible. The NUM1 instructed that the nurses could only have their first names on their badges. The doctors’ badges included their full names and titles as well as the surnames of their specialist team leaders. Examples, using fictional names, are shown below in Figure 5.2. The badges were free of charge and given to all the staff, including any new staff as they arrived on the ward, accompanied by an explanatory letter, such as:

Dear X,

> *You are a STAR – thank you for all your hard work and talents. We’d be pleased if you would consider joining the 11D ‘know your nurse’ campaign.*
>
> or

Dear X,

> *Welcome to 11D. We’d be pleased if you would wear this badge as part of the ‘know your staff member’ campaign which is an initiative of the*
> *‘An evaluation of a ‘person-centred approach’ to care of people with dementia, or other causes of disturbed behaviour, in acute care’ project.*
> *Sincerely,*
> *The XD nurses*

Figure 5.2: Examples of staff large name badge designs.

The initial distributions of the name badges were organised as special occasions with afternoon teas and 'lucky dips' of specially wrapped motivational sayings, such as 'attitude more than age determines energy' and 'happiness is the way you are and it comes from the way you think' (Motivational Quotes, 2006). The staff appeared to enjoy these processes. After five months, a satisfaction survey was distributed to all the staff to gauge their reactions.

The nurses' responses are summarised in Table 5.2. The majority of nurses were happy to wear the badges, did not want to make any changes and felt that they had helped improve communications with other staff members, patients and relatives.

Table 5.2: Nurses' responses to questions about their satisfaction with the special large name badges (n = 21).

Questions	**Yes n (%)**	**No n (%)**	**Undecided n (%)**
Are you happy to wear your name badge?	19 (90)	1 (5)	1 (5)
Would you like to make any changes to it?	3 (14)	18 (86)	0
Has it been helpful in improving communications with other staff?	20 (95)	1 (5)	0
Has it been helpful in improving communications with patients and/or relatives?	19 (90)	1 (5)	1 (5)

The survey invited open comments to give staff the opportunity to expand on the responses, to provide suggestions about other aids to communication and to increase the nurses' sense of power in relation to communication amongst the health care team. Semantic content analysis of the open-ended responses showed that almost all the comments were positive, such as *'…good idea'*; *'…made life easier'*; *'…now I'm happy because they call* (me by) *my name even* (though) *I'm new staff*' and '… *everyone seems to like them and wears them with pride'*.

The only negative comment referred to the practice of pinning the badge to the regular identification badge lanyard, such as *'… is a pain hanging around my neck'*. This respondent was undecided about wearing it at all, made no suggestions for change and found it made no difference to communications. There were two suggestions about the badge colour and size of the lettering and one respondent asked for her surname to be added to the badge, as had been done for the medical staff. A new badge was subsequently provided for this staff member.

Suggestions about further aids to communication and ways of empowering the nurses were: '… [need] *more staff so that you have time to talk and establish relationship with both patient and relatives'* and *'… more meetings for nursing staff to interact with medical and allied health staff'*. The badges became a ward tradition and the CNEs continued to make and supply appropriate badges for all the new staff. Other wards in the hospital then often requested similar badges for their staff.

It was encouraging to see the positive results and comments provided by the survey of the staff satisfaction with the name badges, but surprising that the NUM1 instructed that the nurses' badges must not include their surnames. It was also surprising that only one senior nurse objected. This was not an issue for the allied health staff or for the medical staff, NUM, CNC or the CNE who all agreed to the display of their surnames on their badges. This may have been an example of victim mentality and disempowerment on behalf of the nurses (Matheson & Bobay, 2007). The question then arose, could the nurses attain a sense of professional worth (Day, Minichiello, & Madison, 2006) or dignity (Lawless & Moss, 2007), if their name badges only showed their first names, whilst the other staff had name badges proclaiming their full names and titles? This might have reflected the idea that a nurse was not important enough for the display their full name. The NUM1 may have felt that the nurses needed to maintain some anonymity to protect them from critical patients or relatives. It was of concern that the decision was made by the NUM1 without consultation with the ward nurses.

The omission of the nurses' surnames on the name badges might have reflected the nurses' sense of depersonalisation (Maslach, Jackson, & Leiter, 1996) and their acceptance may have arisen from a degree of emotional exhaustion that can occur if staff do not receive encouragement and reward (Stordeur, D'hoore, & Vandenberghe, 2001). The nurses' ready acceptance of this decision may also have been an example of being controlled by rigid work practices (Lawless & Moss, 2007). However, discussion with the PCCRG and at general ward staff meetings produced only positive comments, such that the provision of these badges was accepted into the usual ward practices.

Education

In delivering the monthly education plan, the CNE2 and the Investigator prepared and presented most of the initial in-service education sessions. Other staff then offered to present the education sessions when they felt confident. Most sessions were given between 1445 and 1530 hours on weekday afternoons. When possible, some sessions were presented to the weekend staff. However, it was not feasible to present any sessions during the evening, for the benefit of night staff, due to the short overlap of shifts. Pertinent information and journal articles were displayed on the staff room notice board. All participants signed attendance sheets for each education session.

Staff who volunteered to present sessions were encouraged to either develop their own education material or to use the prepared overhead transparencies. Staff were also encouraged to provide case studies for analysis and discussion within the sessions. The Investigator demonstrated the techniques of action-learning, as suggested by McGill and Beaty (2001). This involved the presentation of a case study as suggested by the nurses, with reference to the planned topic, followed by pertinent questioning to encourage the participants to seek further and to discover the answers for themselves. Whenever possible, food was provided as refreshment, to encourage participation and provide a reward for the staff who were recognised to be either feeling tired at the end of their shifts or preparing for a busy shift ahead.

The dementia experiential workshops were intended to enable staff to actually experience what it might be like to have cognitive impairments, such as those experienced in dementia (Gaunsen, Horgan, & Walker, 1994). This involved an invitation for participants to take part in a prepared role-play that required the supervised completion of a set of ambiguous tasks, within a symbolic hospital setting. Signs were placed in strategic places, such as ‘clothing area’, ‘ask a question’ and ‘find your way’. Participants were given half facemasks and hospital pyjamas to wear over their uniforms and the workshop convenor and designated helpers, wore hospital gowns and masks (see photograph in Appendix I). The resulting ‘confusion’ was intended to stimulate personal feelings and actions that might emulate those experienced and demonstrated by confused patients. A group reflective session was conducted immediately following the ‘experiential’ session to encourage discussion of insights and ideas. These responses were listed on a white board to aid discussion, and later collated for ongoing referral (see Appendix J).

Experiential learning was recognised to be helpful, particularly in mental health nursing (Gosen & Washbrush, 2004), because it alternated between action and reflection (Dick, 1997a, p. 3). It has been shown that nurses need to understand themselves, in order to develop interpersonal skills (Green, 1995). The experiential workshops were relevant for the study nurses because the care of patients suffering from cognitive impairments caused by delirium and dementia often overlaps with mental health specialties. The workshop was modified to allow it to be undertaken with a small number of participants, within a one-hour time slot instead of the usual 2-3 hour time frame, recommended by the authors (Gaunsen, Horgan, & Walker, 1994). This shortened time-frame was necessary to fit in with the available ward in-service education times. After consultation with the permanent night duty staff, it was agreed to pay them with study funds, to attend one workshop during their days off duty. All the permanent night duty nurses took advantage of this opportunity.

Examination of the in-service education records showed that almost all the ward nurses, including the short-term new graduate and trainee-enrolled nurses, attended the major education topics at least once. Overall, there were 396 staff attendances in Cycle 2 with a small number of staff who attended some topics more than once. In particular, all the permanent staff participated in one dementia experiential workshop. The list of in-service education topics and attendee numbers is shown in Appendix K. Neither of the NUMs present in the ward during Cycle 2 (NUM1 & NUM2) attended any education sessions, apart from one dementia experiential workshop participation for the NUM2. Several one-to-one in-service education sessions were provided for the NUM2 to provide an update of knowledge that pertained to the study. Carradice and Round (2004) warned that managerial support for staff involvement and re-education, was of great importance in practice development. In this case, the support was expected through the NUM involvement in the education sessions, so that the improvement strategies could be encouraged and reinforced. The NUM 1 and 2 appeared to believe that all necessary change processes were in place, and that the dementia experiential workshop was an important aspect of routine education for the staff.

Problems arose during one in-service session that aimed to present the results of the relatives' satisfaction survey for group discussion. A senior RN who worked part time, arrived at the session after the initial explanation of what was intended, and immediately and very loudly exclaimed that she was *"…not going to listen to any negative feedback; we have enough to do as it is!"* (Field notes, 8/2/07). This was very confronting, and given the RN's obvious distress at the topic for discussion, it was decided to facilitate a discussion of nursing stressors, using action-learning techniques. In this session the participants were asked to continue to describe their problems and then to discuss what they thought could be done about them. After useful discussion, a list of issues was documented and permission was given by the group for the Investigator to report their concerns to the NUM2.

The ward nurses claimed that the most aggravating problem that they experienced was the pressure that was placed on them to accept new-patient admissions to the ward in the evenings. This pressure often occurred when they were already short staffed or extremely busy. Therefore, the nurses sometimes requested time to finish what they were doing before they received a new patient admission. The manner in which this request was often refused, was said to be rude and demoralising. The nurses' claimed they often felt bullied by administrators and others at these times. Not all the staff present at the session felt the same way, and some of the more senior RNs said that they just absolutely refused to accept the admissions, until they were ready (Field notes, 14/3/07).

The problems expressed about patient admissions to the ward in the evening, were examples of differing levels of power residing in the ward nurses. There may have been elements of oppression where the rights of the dominant group (such as, the hospital administrators) sought to control a lower 'submissive' group (such as, the nurses), as described by Wolfe (2007). The example cited by the nurses, reflected elements of disempowerment and low morale (Hutchinson, Vickers, Jackson, & Wilkes, 2006). Both elements could, therefore have influenced the nurses' engagement in the action research and practice development activities. Wolfe (2007) and Hutchinson et al. (2006) also warned about the slow, time consuming nature of practice development, where skilled facilitation was used to support and accept that people may have different learning capacities and are able to progress only according their ability. However, in this case it was also possible that staff might have actively undermined the work or passively not engaged ‘by being silent or absent’ (Carradice & Round, 2004, p. 736). On the other hand it could have been that the nurses were too busy working constantly changing shifts with different patients and with different nurses who were often very junior or casual staff from an agency so that any attempts to change care practices was seen as too hard.

These possibilities were considered reflexively at length, with the result that the Investigator doubted her capacity to facilitate change in the ways described by Harvey et al. (2002), or to lead action-learning processes that involved questioning insight, as described by Revans (1982). The self-reflection dichotomy involved *“Am I now the Investigator or am I now the CNC?”* and was a constant concern to the Investigator (Field notes, 12/2/07). The Edmonstone and McKenzie (2005) claim that practice development always encompassed a risk of failure, was a constant reminder that the study aims might not be achievable. Morton-Cooper’s (2000) adage that action research involved flexibility, with trial and error in which a final answer might not be found, seemed pertinent at that stage.

5.2.2 Nurse ‘Churn’ Mitigation

During Cycle 2 it became apparent that the constant staff ‘churn’ was occurring not only in the hospital but also across the Area Health Service as described below.

Ward

In October 2006, the NUM1 resigned after two long periods of secondment away from the ward and a period of annual leave. During these absences, and immediately after the resignation, the role was filled by three different inexperienced RNs in the ‘acting’ NUM role. Following interview and selection processes, the position was filled by a permanent NUM (NUM2). Explanations of the study were given to each acting NUM and all consented to participate and join the PCCRG.

Advice was sought from hospital policy experts about the creation of competency documents to match the protocols in the updated ward Orientation Manual so as to support the new and ever changing ward staff. Following discussion and agreement with the CNE2, a competency document was written to match the protocol for care of confused patients, that was already available on the hospital policy and protocol intrant site (Poole, 2006). The CNE2 agreed to undertake a trial of this tool with a range of nurses. However this did not occur.

The constant changes of ward staff meant that the CNE2 was very busy orienting new staff to other ward matters. This also meant that it was necessary to provide extra education sessions to update their understanding of the study concepts. The planned intention to employ action-learning techniques was difficult to enact, due to time constraints which impeded the required careful questioning (Edmonstone & MacKenzie, 2005) and enablement of the staff, as recommended in practice development literature(Carradice & Round, 2004). Therefore, the underpinning concepts of action research and practice development were tested, as new staff were expected to attend the in-service education sessions and to accept the information that was provided.

Hospital and Area Health Service Restructure

During Cycle 2 there were also many changes within the hospital divisional management structures and the Area Health structures. The hospital organisational design was discarded, which resulted in the sudden retrenchment of the Medical Division Nurse Manager, who had encouraged and supported the study. The Operational Nurse Manager then covered this position for the next six months in an acting capacity, thus taking responsibility for two managerial positions. A position of overall Medical Division Manager was then created and the Investigator/CNC was required to report at an operational level, rather than at the previous management level. Towards the end of Cycle 2, the Area Health Executive Officer resigned and was replaced by an officer in an acting capacity.

These constant senior staff movements predicated a very turbulent and unhappy time for the ward nurses, as their managers, with whom they had built relationships of trust and understanding, were suddenly removed. In particular, the study networking activities were threatened by the loss of support from the Medical Divisional Nurse Manager who had been the Investigator’s direct line manager. There was no guarantee of such support from acting replacement staff during this period. The major support for the study, therefore, rested with the busy Medical Director of the Aged Care Department and the new ward NUM2, who was also new to the specialty of Aged Care. Each of these staff changes, in combination, threatened the validity of action research, as a method of practice improvement.

NSW Health Continuum of Care Project

Aged Care & Rehabilitation in Acute Care Diagnostic Phase.

In January 2007, a Continuum of Care Program was initiated by the NSW Department of Health and funding was directed to the local Area Health Service to find ways to improve access for older patients and their length of stay in hospital. One of the projects that was commenced was the Aged Care and Rehabilitation (ACR) Acute Care Project. This meant that the Investigator's workload increased to support and lead parts of the project, whilst new project officers were given access to the ward staff, to survey care activities.

The first phase of the ACR involved a broad 'diagnostic' investigation to find out where problems might lie. It was necessary for the Investigator to spend a major proportion of time and energy leading the local arm of the project. Many stakeholder interviews were conducted across several local hospitals and the community, and involved questions such as, 'What we do well'? 'What are the gaps or deficiencies'? 'How could we improve'? These questions were based on a 'patient journey' diagram denoting key points, such as: staying well at home; responding to crisis; assessment at home and in hospitals; care in hospital; planning and preparing to return home.

This time consuming activity took some of the momentum from the study. However, it was recognised that not only was this the reality of conducting research in the healthcare environment with multiple competing demands, but that it might also work to support the study. The ACR project at least provided an expanded 'observation' function through the 'diagnostic' phase, that in some ways reinforced the present study findings.

Chronic and Complex Care Diagnostic Phase.

In addition to the ACR project, the whole hospital was engulfed in the diagnostic phase of another arm of the Continuum of Care Project, namely the Chronic and Complex Care Project. This project involved detailed staff consultations across the hospital, including the study ward, which sought the same information from the nurses as detailed above. This caused a double-up effect and staff started to complain about ‘consultation fatigue’. Common staff comments overheard included, *“What’s the point, they keep asking us the same questions but no one really listens. Nothing new happens”* (Field notes 22/2/07).

Therefore, the additional activities during January to March 2007 in Cycle 2 reduced the opportunities to provide in-service education sessions about person-centred care for the ward staff. The PCCRG agreed that it was important to try to keep the person-centred messages and tools ‘alive’ whilst the ACR and Chronic and Complex Care project consultations were taking place. However, it was noted that Duffield et al. (2007) reported that staffing ‘stability’ was necessary for improved patient outcomes through knowledge enhancement, meaning that patient outcomes in the study, were under threat.

The constant loss of historical knowledge through the staff turnover during Cycle 2, forced the ongoing repetition of the study aims and processes, with the hope that ward nurses would consent to participate and be willing to catch up with the development of person-centred knowledge. It is debateable whether action-learning techniques should have, or could have, been applied more thoroughly, so that all participants, particularly those newly in management positions, could have been more informed and supportive. The risk was always that new staff members might not have agreed with the plans and activities that had already been democratically formulated and agreed. Unfortunately, the limits of available time for both the PCCRG members and the new participants, as well as the levels of frustration and anxiety that were felt in response to these difficulties, may have reduced the rigour with which the study consent processes were maintained. This further supports the findings of Carradice and Round (2004, p. 736) regarding the stress that facilitators may experience in practice development. It is questionable how much repetition was truly feasible or at what stage the new staff could be expected to just accept and participate in the current study actions. Therefore, the question must be asked: are practice development or Participatory Action Research activities really feasible in a dynamic, changing environment? The PCCRG needed to consider other ways to enable and ensure the instigation of evidence based best practice implementation.

5.2.3 Patient Information and Care Planning

The Communication and Care Cues Form and the 'C' Sign

As part of the dementia experiential workshop education sessions, specific feedback about the participants' feelings and actions was requested, to stimulate discussion about the need for personalised patient information and care planning. The nurses were asked, "How did you feel and what did you do?" Lists of the feelings and actions observed during the experiential workshops were documented and included: frustration, suspicion, claustrophobia, devaluing, anger, neglect, indignity, anxiety, exhaustion, disorientation, misunderstanding and powerlessness. Actions that were observed in these participants in response to those feelings included: stealing, following each other around, leaving the area, copying what others did, withdrawing and making loud demands. Thus the experiential workshops enabled the nurses to personally experience similar triggers for the behaviours that they sometimes witnessed in their confused patients.

Workshop participants were then asked, 'What would have helped?" This led to the development of an inventory of suggested activities that might help a patient with dementia or delirium, whilst in hospital. During December 2006, discussions of this information led to requests for amendments to the 'Communication and Care Cues' form (CCC). In response to these requests, an explanatory heading was added at the top of the form, 'We realise that as carer (spouse, partner, relative or friend) there may be important information that you would like us to know so that we can provide better care. Please can you explain the significant things?' Direct questions were then added to the form, such as 'Does the patient have any communication difficulties (e.g. can't say what they may want to, can't understand)'? The nurses recommended that this form be offered to the relatives of all patients who were confused to enable then to provide the staff with information about person-centred care needs (see Appendix L).

The nurses' ideas for the form were formatted to meet the hospital's Forms Committee requirements and the necessary registration and printing specifications were arranged. After giving out the CCC form to the relatives of their patients, the nurses said that they felt particularly encouraged because no relative ever refused to fill it in, apart from one or two requests to just take it home to confer with other family members (Field notes, 2/2/07).

In recognition of the problems of enabling new and transient staff to be aware of the CCC form, it was agreed to add a special sign to the Handover Tool, to highlight the availability of a completed form. A special sign (‘C’), was added to the handover sheet where appropriate, with an explanatory legend at the top of the tool.

However, during the months of January to March 2007, regular reviews of nursing handover practices, showed no mention of the personal communication or care needs of any patient with disturbed behaviour, apart from those particularly pertaining to their medical problems. An often heard and documented notation at nursing handover sessions was, *‘This patient is aggressive’* (Field notes, 28/2/07). During the observed nursing handover sessions, there was never any explanation of possible triggers or assessment plans to avoid aggressive incidents. Very occasionally, the CCC form was filled in and noted with the ‘C’ on the handover form, but it was invariably placed at the back of the patient’s bedside notes or in the main patient file that was kept at the ward workstation, and was largely unheeded. The PCCRG agreed that some other form of encouragement would be need to be sought to encourage use of the CCC form (Meeting minutes, 14/3/07).

Ward Activities Cupboard

One positive outcome from the dementia experiential workshops was the establishment of a Ward Activities Cupboard. Stimulated by the fresh insights into the needs of patients with impaired cognition, the project Observers and the AINs initiated the acquisition of a special cupboard to hold activity material for the patients to use. These staff placed advertising notices around the ward and received donations of equipment, including large print books, magazines, games, music tapes, exercise books and pens and even a guitar. This equipment was then made available to staff, patients and relatives, when a need for activity or interest diversion was evident

However, the ward Activities Cupboard was rarely seen to be used, except by the AINs who had set it up. The most useful items proved to be the magazines and National Geographic journals that were given to patients whom the nurses thought needed distraction, because they were ‘wandering’ about the ward. Often this ‘wandering’ was observed to be in an agitated fashion. This was not seen as an automatic trigger for a pain assessment (Abbey et al., 2004). Nevertheless, on occasions the Ward Activity Cupboard was seen to be appreciated because older patients were very often not in a position to bring to hospital the necessary reassuring and distracting items needed, due to their emergency admissions or lack of family and friends.

Talking Pictures Folder

In response to the apparent lack of support for patients who spoke languages other than English, the availability of language support material was investigated. This resulted in the collation of a ward folder titled the *Talking Pictures* folder, named after the title of the translated material made available through the hospital Interpreters' Department intranet site (Silver, 2007). The material consisted of sheets of translated questions and pictures of commonly needed patient information in a range of community languages. The language sheets were laminated and some nurses agreed to place the relevant pages prominently by the bedsides of the patients who had difficulties with the English language and to initiate discussion their use with the other nurses, and the patients' relatives when possible.

However, the Talking Pictures folder was also rarely seen to be used. On the occasions when the laminated sheets were delivered to the bedside, they were not mentioned at handover sessions nor were they documented in the Patient Care Plan or Handover Tool. Invariably they were then lost, because no one took the responsibility to return the sheets to the folder, following the discharge of the patient.

Whilst it was encouraging that new communication tools were developed, support from all levels of the management hierarchy might have seen them applied consistently for the benefit of the patients. This tardiness was reflected in change management literature, that recommended that the application of descending hierarchical sponsorship (IMA, 2007), to ensure change sustainability. The lack of support by management became a point for consideration by members of the PCCRG (Field notes, 25/3/07).

5.2.4 Communication with Relatives

The development of the CCC form, following the dementia experiential workshops, provided the staff with a way to approach the relatives to ask for information about the patients. The ward clerk was asked to routinely include the CCC form in the bundle of forms prepared for newly admitted patients.

Despite the initial staff keenness to use the form and the enthusiasm with which the relatives approached filling it in, the appearance of the form in the patients' notes quickly diminished. In informal surveys of the patients' documents each week during February and March 2007, it was rare to see a completed and available CCC form (Field notes, 26/3/07).

The task of communicating effectively with the patients' relatives, and the provision of appropriate patient care plans, are integral parts of nursing care. However, the multicultural nature of the Australian health care sector has added an extra degree of difficulty. The relatives had already noted in their satisfaction survey, the problems some staff had with English, as well as the nurses' difficulties in understanding other languages used by their patients. The inconsistent use of the CCC form and the Talking Pictures folder may have been a reflection of apathy, ignorance or resistance given the apparent language difficulties seen in the ward, and thus required further examination by the PCCRG.

5.3 Summary

The actions and many structural difficulties that occurred during Cycle 2 are summarised in Table 5.3**.** However, reflections on the observations of those actions undertaken to overcome the deficits in nursing knowledge and difficulties experienced in caring for patients with cognitive impairment, as well as the problems experienced in communicating with the patients' relatives, also revealed some major achievements including

1. The satisfaction with the large name badge system.
2. The attendance of most ward staff at the education sessions.
3. The acceptance of the dementia experiential workshops as regular methods of ward education.
4. The nurses' insights that led to the enhancement of the CCC form.
5. The nurses' and relatives' enthusiasm for the Communication and Care Cues (CCC) form.

6. The instigation of the ‘C’ sign on the patient handover sheet.
7. The establishment of the Activities Cupboard.
8. The establishment of the Talking Pictures folder.
9. The draft competency for the Management of Disturbed Behaviour in Older People.
10. The ward Values Clarification Mandala poster.

Nevertheless, the major issues that dominated Cycle 2, whilst attempts were made to stimulate nursing and management participation in the study are summarised as

1. Difficulties in encouraging nurses’ participation in agreed care activities, such as the use of the CCC form.
2. Disempowerment and perceived bullying activities among the nurses and management staff.
3. Difficulties in encouraging management reinforcement of agreed activities.
4. Ongoing staff ‘churn’ at all levels of the hospital and Area Health Service.
5. The questionable suitability of practice development and action research methods for encouraging evidence based practice change in a ‘churning’ environment with oppressed populations.

Participation was mainly at a receptive rather than active engagement level. This was a problem for an intended Participatory Action Research (and practice development) study. The staff non-engagement may have been alleviated if more overt management support had been achieved (Carradice & Round, 2004), though this would have been contrary to action research methods for voluntary participation. Despite the findings of no overall nursing stress or burnout from the formal measures employed for the study (see Chapter 4, Section 4.2.1), disempowering activities and perceived bullying were uncovered, which possibly influenced the nurses’ engagement with the study. This may have also been the cause of the poor uptake of the tools, particularly in relation to care planning and communication actions with the relatives.

As the literature had noted that action research and practice development might be time consuming and doomed to failure, the suitability of these methods as stimulants for the instigation of best practice evidence based care in nursing, must be questioned. Nevertheless, the constant change of staff, or ‘churn’, both at the ward and at higher management levels, may have been a critical factor in the obstruction of the study.

Therefore, in moving to Cycle 3 it was necessary to plan for activities which aimed to overcome the effects of poor participation, possible staff disempowerment and bullying, management disengagement and staff ‘churn’, which impeded the uptake and activation of person-centred care for patients with cognitive impairment.

Table 5.3: Summary of activities undertaken and issues arising in Cycles 1 and 2.

Cycle 1 **Negotiation, Recruitment, Baseline Measurements, Observations and Feedback**	**Cycle 2** **The initial intervention plan**
Ethics clearance **Stakeholder negotiation** **<u>Before-intervention measures</u>** – Nurse recruitment, consent, characteristics, baseline measurements, care planning – Patient/relatives’ recruitment, consent, characteristics and baseline measurements – Nurse and patient interaction observations (QUIS) – Relatives satisfaction measurements – Nursing staff turnover – Observers’ and Nurses’ focus groups feedback	**Nurses’ participation & morale** - Large name badges - Satisfaction survey **Nurse ‘churn’** - Orientation Manual - Competencies **Nurses’ knowledge** - In-service education program - Dementia experiential workshops **Patient care planning** - CCC form - ‘C’sign - Activities cupboard - Talking Pictures folder **Communication with relatives** – CCC form
Issues for intervention plans 1. The nurses sense of empowerment 2. Knowledge regarding delirium, dementia and person-centred care 3. Recognition of behavioural symptoms related to uncontrolled pain 4. Obtaining and using patients’ personal social information 5. Mitigation of the effects of constant staff turnover that affected knowledge essential for patient care 6. Effective communication with relatives.	**Issues for intervention plans** 1. Difficulties in encouraging nurses’ participation in agreed care activities 2. Disempowerment and perceived bullying activities 3. Difficulties in encouraging manager’s reinforcement 4. Ongoing staff ‘churn’ at all levels 5. The questionable suitability of practice development / action research, for the encouragement of evidence based practice change in a ‘churning’ environment with and by oppressed populations.

Note. CCC = Communication and Care Cues. QUIS = Quality of Interactions Schedule

CHAPTER 6: ACTION RESEARCH CYCLE 3: *OBSTACLES IN THE ‘SWAMP’*

> To experience the awesome complexity of clinical nursing practice is to spend time in the swamp (Street, 1990, p. 16).

Schon (1987, p. 3) coined the term ‘swamp’, meaning that sections of professional workplaces could house ‘messy, confusing problems that defy technical solutions … problems of greatest human concern’. Cycle 2 presented problems that appeared resistant to immediate solutions to embed and sustain practice change, due to an environment where the staff constantly changed. Nevertheless some progress was made. This was shown in the lists of participants who had participated in the many in-service education sessions, the acceptance and instigation of the empowering large name badges and in the development of nursing care tools, by the nurses themselves, to support the care of people with cognitive impairment and disturbed behaviour. These tools included, the enhanced Communication and Care Cues form (CCC), the ‘C’ sign for use on the nurses’ handover sheet, the draft competency for nursing management of disturbed behaviour, the Ward Activities Cupboard and the Talking Pictures folder. The acceptance that dementia experiential workshops should be routine events for all new staff, was also a positive accomplishment.

On the other hand, there was little evidence that the tools had been fully accepted and integrated into ward work practices. The competency for ‘nursing management of disturbed behaviour’ had not yet been trialled. There was continued difficulty in the engagement of anyone, other than the ward CNE2 and one of the AIN Observers, in the action research activities, apart from the general encouragement from the Medical Director and the agreed, but unspoken approval from the managers. This may have been related to the constant staff ‘churn’ at ward level and the high turnover of senior staff at hospital and Area Health levels, together with the competing demands of the Continuum of Care projects that were underway in the hospital. There was also evidence that staff felt disempowered and bullied.

A question was posed about the suitability of action research or practice development, as useful methods to accomplish practice change in such a workplace. Therefore, descriptions of the events that occurred in this ‘swamp’, and that incorporated the plans, actions, observations and reflections for Cycle 3, are described under the headings of ‘study maintenance’ and ‘new resources’.

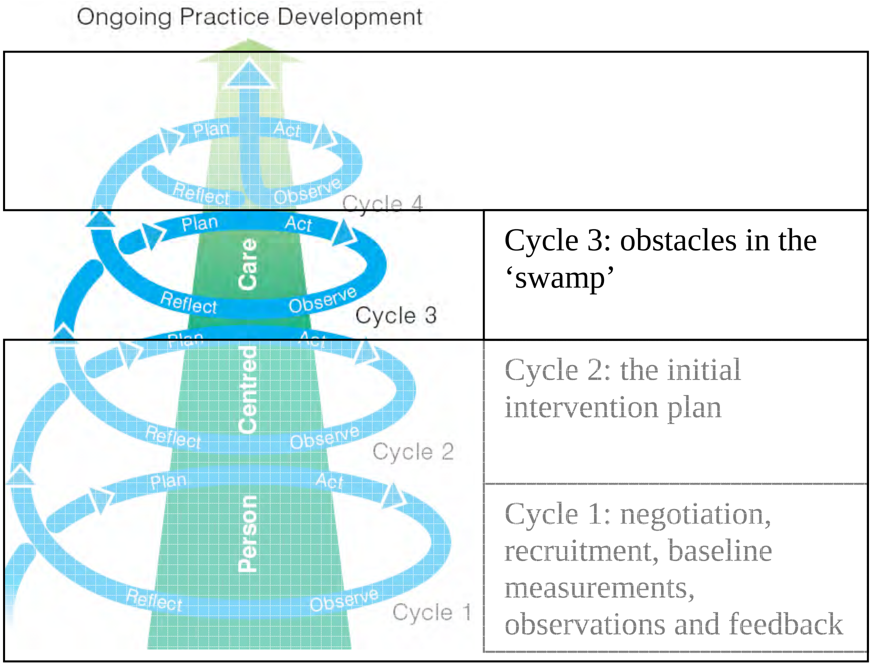


Figure 6.1: Action research Cycle 3 – obstacles in the ‘swamp’

6.1 PLAN

6.1.1 Study Maintenance

In recognition of the lack of application of the person-centred practices, the Person-Centred Care Research Group (PCCRG) agreed that the after-intervention evaluation activities should not be instigated at that stage, despite the completion of the planned intervention stage. The Aged Care and Rehabilitation (ACR) Diagnostic Phase of the Continuum of Care project was seen to replicate and absorb some of the study findings. This was seen as an opportunity to involve a wider audience, and thus to attract possible support and resources for remedial actions that might overcome the deleterious effects of the staff ‘churn’. Therefore, plans were made to try to maintain staff awareness of the study aims and progress, as well as to develop further tools, when opportunities arose to stimulate practice enhancement, whilst continuing to comply with the requirements of the new projects.

The planned fortnightly meetings with the PCCRG, whilst spasmodic in Cycle 2 became even more difficult to maintain in Cycle 3. To counter this, the CNE2 and the Investigator (as well as the AIN Observer when available) conferred almost daily in order to maintain focus and to conduct informal audits of care planning activities, so that reports could be given at ward meetings, to raise awareness whenever possible (Field notes, 15/7/07). Educational initiatives to support the integration of the Ward Orientation Manual were continued, but were reduced in number to allow the staff to attend meetings about the other projects.

The large name badges continued to be supplied and were given to new staff by the NUM2. Compliance and staff reactions to these badges continued to be favourable. Descriptions and discussions of the study progress were included in the Investigator's career appraisal meetings with the Operational Nurse Manager in an effort to optimise managerial awareness and support.

At this time, the ward nurses noted that although lot of time had been given to the exploration of the diagnosis, prevention and management of delirium, they rarely saw the diagnosis of delirium documented in the patients' notes. It seemed that the term 'confusion' (or acute confusion) was accepted by the medical staff to signify 'delirium'. Whilst the diagnosis and treatment of the cause of a patient's symptoms of 'confusion' did not appear to be an issue from the medical point of view, the nursing staff appeared to struggle to see the connection with the delirium education sessions. The strategies that had been developed for prevention and treatment of delirium were therefore lost in the common nursing handover comment of *"They're just a bit confused"* (Field notes, 30/7/07).

It was therefore planned by the PCCRG, to undertake an audit of the patients' files to ascertain the degree of discrepancy between the documentation of 'confusion' by nurses and doctors, and the documentation of the diagnoses of delirium and dementia. The data gathered would include patients' lengths of stay (LOS) in the ward and the designated medical records activity codes applied from the International Code of Diagnoses - Australian Modification (ICD-10-AM) and the Australian Refined - Diagnosis Related Groups (AR-DRGs). Formulation of these codes provided an expected average LOS for each patient diagnostic group. This data formed the basis of hospital activity reports that were required by the NSW Department of Health and could potentially be the basis for casemix funding for the hospital. It was also used in predictions of nursing workload formulations and required staffing levels (NSW Health, 2008). The audit was aimed to gain the attention of the medical staff and managers through the provision of information about these issues so that more accurate and applicable diagnostic documentation could be encouraged.

6.1.2 New Resources

Aged Care and Rehabilitation Diagnostics project

During Cycle 3 there were ongoing time-consuming activities planned to finalise the Continuum of Care, Aged Care and Rehabilitation Diagnostic (ACR) project. The PCCRG recognised and supported the necessity for this project, particularly as there was a possibility to attract new resources that might assist the study.

Accelerating Implementation Methodology

In June 2007, the NUM2 and the Facilitator were invited to attend a two-day Accelerating Implementation Methodology workshop (AIM) (IMA, 2007), sponsored by the Continuum of Care Project committee. This workshop provided insights into a different way to implement change; namely a top-down approach through a series of ‘sponsors’, change agents’ and ‘targets’. The overall goal of the AIM method was that ‘the right sponsors doing the right things cascade down and across the organisation’ meaning that ‘if you want someone to change, impact the person that reinforces their performance’ (IMA, 2007, p. 26). The intention was to use the AIM approaches to prepare staff for leadership roles to formulate and activate solutions to the problems that would be uncovered in the diagnostic phase of the ACR project.

6.2 ACT, OBSERVE and REFLECT

The activities that occurred in Cycle 3 between April and September 2007, and the ongoing movements of senior staff during that period, are summarised in Table 6.1.

Table 6.1: Cycle 3 monthly activities plan and senior staff movements.

2007	Activities and tools	Senior Staff Movements
April	• *Worksheets* • **Continuum of Care – ACR Diagnostic**	• New Area DONM
May	• *Competency* • **Continuum of Care – ACR diagnostic**	
June	• AIM Workshop • **Continuum of Care – ACR Diagnostic**	• Hospital DONM resigned • Acting DONM appointed
July	• *'Is You Patient Confused?' – Poster* • **Continuum of Care – ACR Diagnostic** •	• CNE2 seconded elsewhere
August	• *Handover Guide* • **Continuum of Care – ACR Report**	• Acting CNE3 commenced
September	• **Continuum of Care – ACR Report** • Essentials of care project – the 'blitz' • *Medical records audit* • Malignant Outside Influences	• New Area EO

Note. Topics in italics signify tools developed. Topics in bold denote the over-riding hospital projects. ACR = Aged Care & Rehabilitation. aDONM = acting Director of Nursing and Midwifery. AIM = Accelerating Improvement Methodology. CNE = Clinical Nurse Educator. DONM = Director of Nursing and Midwifery. EO = Executive Officer.

6.2.1 Study Maintenance

Staff Turnover

The changes in the senior staff positions continued during Cycle 3. In April 2007, a new Area Director of Nursing and Midwifery (Area DONM) was appointed. In June, the hospital DONM resigned and was replaced by an acting DONM. In September, a new Area Executive Officer was appointed to the substantive Area Health position. This ongoing instability dissuaded the Investigator from taking time to repeatedly attempt to bolster management interest and support for the study.

In July 2007, the CNE2 took a secondment to another department. Within two weeks the position was replaced with acting CNE (aCNE3), who agreed participate in the study. The aCNE3 had been a nurse on the ward for a short time but appeared to have little formal training in educational presentations. It was impossible to replicate the experience of the CNE2, who had been supported by the Investigator during the previous 12 months of the study. It was recognised that the aCNE3 needed time to adjust to the new role and ward requirements, without the added responsibilities of helping to facilitate the study by encouraging and enabling participation of the constantly changing nurses (Field notes, 9/7/07).

Morale

In September 2007, there was the beginning of an unprecedented period of negative media publicity aimed at the study hospital, as well as the NSW Department of Health, that could be titled *Malignant Outside Influences*. This began after a stressful patient event occurred in the hospital Emergency Department which attracted the attention of the media. For several months thereafter, there were frequent reports of alleged negative incidents on the radio, the television and in the newspapers. Staff were sought out by the media to give their stories, whilst being warned by their managers to decline to do so. Relatives complained to the media when patients were cared for in ward treatment rooms because staff wanted to keep a closer watch on them or because there was not a spare bed space ready in the ward. It seemed that staff efforts to explain these necessities to the relatives were ignored. There was an observable increase in patient and relatives' complaints, many of them trivial. For example, one patient, newly admitted to the study ward, was heard to demand a white vomit bowl instead of "*… the nasty green one*" (Field notes, 28/9/07). The Investigator became careful in telling acquaintances where she worked, because several people outside of the hospital had asked, *"Is it so bad there?"* (Field notes, 30/9/07). Overall, this negative media barrage against the study hospital was shocking in its intensity and explanations of events were ignored.

Thus Cycle 3 covered a period of continued and increasing staff turnover and unrest. This affected the maintenance of the study, and was a very disconcerting time. The caveats that practice development could be stressful and needed managerial support seemed true (Carradice & Round, 2004). All staff, including the senior managers were under siege through media onslaught, continuous staff turnover and the demands of the Continuum of Care projects.

Knowledge

During this cycle, in response to the redirection of the Investigator's time to the ACR project, the in-service education sessions were reduced to the provision of ad- hoc sessions that were deemed necessary to orientate new staff, both new graduate and 'new starter' nurses. However, the dementia experiential workshops continued to be provided every six to eight weeks. The reflective sessions included in these workshops were, at this stage, not aimed to change the Communication and Care Cues (CCC) form, as had been accomplished in Cycle 2, but as a way to encourage an understanding and reinforcement of person-centred care approaches. In spite of the time limitations caused by the new projects, more tools that supported and progressed the study intentions continued to be developed during this time and are described below.

Poster: 'Is Your Patient Confused?

During an action-learning session, a poster was developed to provide information for staff who cared for patients who were confused. It was made up of five slides, each headed with the question, 'Is Your Patient Confused?' Separate slides then focused on the answers to that question, under further questions including

- How do you know?
- Why are they confused?
- What is causing the confusion?
- What are you doing to try to reduce the confusion?
- How have you made sure that other staff can continue these actions?

This poster was displayed on the wall of the staff room to provide information and stimulate discussion. A week later, two of the five sections of the poster disappeared. Despite questions from the CNE2 and searches of the staff room, no one seemed at all interested in the disappearance and no trace of the missing parts were found. When those sections were replaced, there was still no comment. Perhaps the sections fell off the wall and were taken away by a cleaner but it could have been an example of resistance, as described by Lawless and Moss (2007), or marginalisation of the study by the staff, as discussed by Mathieson and Bobay (2007). Both could also be explained as reactions to the disempowerment and stress experienced by the staff at that time.

Worksheets and Competency

Early in Cycle 3, the NUM2 requested that the CNE2 and the Investigator (as the Clinical Nurse Consultant) direct efforts towards the development of special worksheets to match all the policies that pertained to the aged care specialty. A policy for the *Management of Confusion or Disturbed Behaviour in Older People (Delirium, Depression/Mental Disorder, Dementia),* based on the Poole's Algorithm program (Poole, 2006) was already registered by the hospital Policy and Procedures committee and was available on the hospital intranet site. It was agreed that the provision of matching worksheets, would also support the study, through the reinforcement of the education program. These worksheets were meant to enable all staff, especially the new nurses, to quickly gain an understanding of pertinent policies, but did not require the same level of scholarship as a formal competency document. The worksheets were to be incorporated into the Ward Orientation Manual (as mentioned in Cycle 2), which was still under development. It was planned that the RNs and EENs would read and complete the worksheets, within a certain time designated by the CNE2. The formal competency document still had not been trialled by the CNE2 and seemed to have been forgotten.

Over the remaining time of Cycle 3, the competency remained untouched, but the worksheets appeared to be more successful. The aCNE3 incorporated the Orientation Manual and the worksheets into routine ward orientation procedures. Lists of the names of the new staff and required dates for the completion of the worksheet were created and monitored.

Although the reinforcement of staff knowledge through the worksheets was useful for the study, it did not result from participatory processes of action research or practice development. Rather, these tools were successfully instigated via managerial directives. This occurred without staff comment or resistance. The trial of the competency tool that was developed through the study received no managerial reinforcement and did not take place. The worksheets enabled easier and faster base level knowledge enhancement but the competency was the mode of choice by Hospital Policy and Procedure directives, so both would have been advantageous in the enhancement of knowledge. The establishment of the use of this particular competency might also have provided heightened legitimacy for the policies of the aged care specialty, especially for nurses in other wards where older patients required care.

The managerial approach taken to instigate the worksheets in day-to-day practice was recommended in the broader literature, to successfully embed sustainable change through ‘sponsorship’ (IMA, 2007). The NUM2 was the ‘sponsoring agent’ who insisted on the change, and the aCNE3 was able to ensure the completion of the worksheets for the New Graduate (NG) nurses (at least) because it was a requirement for their progressive New Graduate Program appraisal. This provided insights for further possible action plans by the PCCRG.

Audiotaped Nurses’ Handover

At this stage, the NUM2 also instructed that nursing handover sessions be converted from face-to-face reports to a pre-recorded audiotaped format**.** The RNs were directed to record their patient reports and care instructions before the end of their shifts, so that they could be free to take care of the patients, whilst the incoming staff listened to the audiotape. Ideally it was intended that the new staff could then follow up any particular concerns with the incumbent staff before their shift ended, as well as to read the patients’ files, when possible.

The audiotaped handover procedures were accepted by the nurses and appeared to progress uneventfully. Following the shift handover sessions, there did not appear to be any follow-up discussions between the new shift and the departing shift nurses about the patients. Nor were there concerns raised about the lack of time for the morning shift nurses to check patients’ notes, before commencing their shift duties (Field notes, 20/9/09).

Again a managerial directive succeeded without apparent comment or disruption and achieved accepted integration into ward practices. No questions were heard from staff nor were best practice findings of shift handover practices discussed, before making and accepting the directives. It appeared that the instructions of the NUM2 had achieved authority, legitimacy and power.

The authoritarian managerial instruction directly opposed recommendations for action research methods of democratic participatory action. Perhaps the authoritarian instructions were necessary in a constantly changing environment and in response to a short time frame. Nevertheless, research suggested (Sarmieno, Laschinger, & Iwasiw, 2004) that authoritarianism risked short-term gains against long-term problems, as staff might exhibit submissive-aggressive syndromes, or leave because they felt that their workplace was rigid and controlling. This could have been an example of ‘authoritarian leadership and poor access to information’ which was said obstruct staff empowerment (Kanter, 1993), a prerequisite for personal accomplishment that prevented burnout (Maslach, Jackson, & Leiter, 1996). It could also have been both a contributing cause and a response to ‘churn’. Again these observations about the opposing outcomes of managerial instructions and staff facilitation activities, provided information for reflection by members of the PCCRG.

Handover Guide

Following the instigation of the audiotaped handover procedure, the aCNE3 decided to develop a Handover Guide to provide instructions for a methodological approach to information exchange. This was developed as a brief instruction list that tabulated the most important topics to be covered in nursing handover. As the CNC, the Investigator was invited to review the list. Following discussions with the aCNE3 about the study aims and the role of the study ‘facilitator’, recommendations were made for the inclusion of instructions pertaining to cognitive impairment and the care, which was intended to provide a trigger for the nurses to mention the CCC form, as follows

Cognitive state – delirium, depression &/or mental disorder &/or dementia – reason/s, brief management

The guide was printed on a small laminated card that could be worn on the hospital identification lanyard.

During regular informal audits of nursing handover practices, it did not appear that the nurses made use of the suggested handover guide format. In particular, there was no mention made of cognition, apart from regular comments, such as “*… is confused*” or “*… is aggressive*” (Field notes, 29/08/09); no mention was made of the cause of any cognitive deficits and no management advice was offered. No reinforcement of the suggested format was heard from the NUM2. It seemed that the aCNE3 was not ‘powerful’ enough to integrate new tool into practice without managerial reinforcement.

This may have been a further example of resistance, marginalisation or disempowerment behaviour by the nurses and managers or just work overload.

NUMs' Discharge Planning Handover Tool

At this time, as part of the 'solutions phase' of the hospital Continuum of Care Project, the hospital acting DONM instructed that all wards must use a standardised patient handover sheet (called the 'NUM's Discharge Planning Tool'). This tool was a computer generated document with the usual patient demographic information, including the diagnostic and care information, but was expanded to require notation regarding allied health referrals and discharge plans. The form was created 'on line' so that all information was then available to the hospital Patient Flow Officers and was intended to make bed flow activities more transparent and controllable from a centralised point. In recognition of the action research (and practice development) ideal for facilitation activities to include the 'doing' of some tasks when necessary, the Investigator requested the option to include the 'C' sign on the new Handover Tool to advise staff of the availability of the CCC form (as had been the practice on the previous form). Although this request was refused, the inclusion of a 'box' to note brief descriptions of a patient's cognitive state was accepted.

The nurses were heard to express dismay due to the sudden change in their Handover Tool (Field notes, 25/9/07). Firstly it was embedded in an unfamiliar computer program for which no advance training had been provided, and the NUM2 was on leave at the time of instigation, so that updates of changes to the information provided on the form was difficult and sometimes impossible to make. Secondly, the space available for patient care information was reduced to make way for allied health referral information. This was largely irrelevant on the study ward, because the allied health staff had automatic patient referral rights to all the patients and were always included in medical rounds. Thirdly, the removal of the accepted information trigger, the 'C' sign, which designated the presence of a completed CCC form, created an obstacle to study progress.

Once again the authoritarian approach to change was successful in activating the NUMs' Discharge Planning Handover Tool. Even though there was some unrest and dissent at first, the nurses then accepted the new format even though it had reduced space for important information. There was no appearance of real or covert resistance from staff to the use of this mandated form. However, the loss of the ‘C’ sign to highlight the presence of the CCC form, could have devalued the study in the eyes of the staff.

The ‘Blitz’

At this time, the leaders of the Chronic and Complex Care team placed further demands on the ward staff through the Continuum of Care project. Senior managers had decided that nursing care practices across the hospital needed improvement, especially those activities called ‘the essentials of care’, such as those involved in eating, hygiene, elimination and general assessment. The acting DONM instructed all senior nurses, particularly the CNEs and the CNCs, to redirect their work endeavours to provide education and to role model aspects of basic patient care during daily sessions with the ward nurses. This activity was called ‘the blitz’, a name which showed the pressure that was put upon staff to carry out the activities. Whilst ‘the blitz’ theoretically included assessment of a patient’s level of cognition, this was observed to be a very minor issue in the overall undertaking (Field notes, 18/9/07).

The compulsory nature of the ‘essentials of care’ and the ‘blitz’ activity resulted in much nursing unrest. The aCNE3 was required to produce lists of the names of staff members that showed the ‘blitz’ activities in which they had participated. The hospital and Area DONM regularly inspected these lists. Staff expressed feelings of stress and burden at this added work requirement, imposed without the support of additional resources, and with an apparent lack of appreciation of prior workloads. Whilst the nurses said that they recognised the imperative for improvement in care practices, the authoritarian directive was then said to be overbearing and belittling. Complaints were voiced at all staff meetings that the Investigator attended. This approach could be have been construed as bullying, as described by Hutchinson et al. (2006), in relation to organisational power plays based on legitimate authoritarian power.

Audit Of Documentation Practices

To fully understand the apparent disparity in the documentation of assessment practices and the diagnosis of symptoms of confusion in the patients’ files, the hospital Human Research Ethics Committee (HREC) was approached for permission to extend the current study medical records review list. Permission was granted to undertake an audit of the patients' notes for this additional purpose (see Appendix M). Fifty consecutive files were chosen for patients who had been admitted to the study ward under the care of the geriatrician specialists, in the month of May 2007. An audit template was created with the topic headings of: confusion documented in file by a nurse, confusion documented in file by a doctor, delirium diagnosis documented in the file, dementia diagnosis documented in file, delirium diagnosis documented in the discharge summary, length of the patient's stay in hospital, major AR-DRG code and expected average length of stay (LOS).

The results of the documentation audit are summarised in Table 6.2 and showed that of the 50 files audited, the nurses documented the symptom of confusion for 60% and the doctors for 50% of the patients. A dementia diagnosis was documented for 13% of the patients. A delirium diagnosis was documented for 12% of the patients and delirium was recorded in the discharge summary for 6% of the patients. There was a difference between the combined total actual length of stay (LOS) and Australian Refined – Diagnosis Related Groups (AR-DRG) coded expected average LOS of 189.34 days.

Table 6.2: May 2007 audit results of consecutive patients' files for documentation of confusion symptoms, and delirium diagnosis.

Audit questions	n = 50
Confusion documented in notes by nurse: n (%)	30(60)
Confusion documented in notes by doctor: n (%)	25 (50)
Dementia documented in notes: n (%)	13 (26)
Delirium diagnosis documented in notes: n (%)	6 (12)
Delirium documented in discharge summary: n (%)	3 (6)
Combined LOS in days: n (median)	517 (8)
Combined Av. AR-DRG LOS in days: n (median)	327.66 (6.3)

Note. AR-DRG = Australian Refined – Diagnosis Related Group. LOS = Length of stay. n = number.

It was therefore shown that there were discrepancies between the documentation and diagnosis of the symptom of confusion in the patients' files and discharge summaries. There was a gap in the documentation of the symptom of confusion by the nurses and the doctors, as well as in the explanatory diagnoses. The nurses' claims that they did not see the diagnosis of delirium very often were supported, reinforcing the opinion that their teaching and learning sessions may have been of dubious relevance.

It was also of concern that there was a gap of 189.34 days between the total actual LOS for the 50 patients and the total expected LOS according to the hospital ICD-10-AM and AR-DRG codes. This gave an incorrect expected LOS for the patients with delirium or dementia or both, who needed a high level of nursing care. When correctly coded, delirium and dementia attract a high weighting with high complexity codes and long expected lengths of stay (Fillit, Geldmacher, Welter, Maslow, & Fraser, 2002). Therefore, if the documentation and coding of diagnoses for the patients in the study ward were not correct, there was a danger that the required number of nurses for competent patient care could not be justified. The possibility that the ward staffing levels were inadequate could have created added obstacles for this study. Therefore, future plans for the study needed to involve facilitation of improved assessment, diagnosis, documentation and coding of the diagnosis of delirium and dementia.

6.2.2 New Resources

Accelerating Improvement Methodology

Attendance at the Accelerating Improvement Methodology (AIM) (IMA, 2007) workshop provided new insights into strategies to implement sustainable change in the workplace. The acting DONM and various Divisional Managers also attended the workshop and became aware of the flowchart techniques for mapping staff with responsibilities to form descending hierarchical plans for the sponsorship of change projects. The person who was the major change agent was titled the ‘authorising sponsor’ for the project. Then followed the designation of the titles and names of people who should be the ‘reinforcing sponsors’, the ‘change agents’ and the ‘targets’ for the practice change information (IMA, 2007, p. 28).

For the present study, this meant that the authorising sponsor was deemed to be the Medical Division Manager. The reinforcing sponsor was the Department Director and the Operational Nurse Manager. The ward NUM2, the staff specialist geriatricians, the aCNE3 and the ward medical registrars were in turn first nominated as targets, then as the agents and finally as reinforcing sponsors. It was intended that these staff would be given the information about the project by the main change agent (the Investigator), and then they would be expected to educate those under them and provide reinforcement of the agreed strategies. The nurses, the allied health staff and the interns were the final targets who were expected to carry out the project aims.

The methodology inherent in the AIM program was contrary to the ideals of practice development (McCormack, Manley, & Garbett, 2004) and action research (McNiff & Whitehead, 2006), which relied on various facilitating, enabling and empowerment activities for the instigation of evidenced based best practice. The AIM was a technique in which ‘communication and reinforcement cascaded level by management level down the organisation’ (IMA, 2007, p. 27). Sponsorship was said to be the single most important factor to ensure successful change implementation.

These techniques seemed achievable at this stage of the study because the nurses had already developed the tools for change, using action research methods as authentically as possible despite the staff ‘churn’. Those who had participated in the educational sessions, particularly the dementia experiential workshops, had already agreed that change was needed and had detailed what that change should be. The only difference that the AIM techniques could add was the managerial and stakeholder reinforcement. Therefore, the PCCRG agreed that the AIM strategies might enable managerial recognition and reinforcement of practices to ensure sustainability of the study developments (Meeting minutes, 28/7/07).

Aged Care and Rehabilitation Project – Clinical Redesign

In August 2007, a recommendation was made through the Continuum of Care Aged Care and Rehabilitation (ACR) Diagnostics Report, that a Clinical Redesign Project should be funded over 10 weeks to accelerate the implementation of the person-centred care strategies that had already been developed in the study ward. The PCCRG were asked to provide a plan based on formats illustrated through the AIM training described above.

Time was then spent writing an Implementation Report and discussing the study’s new status and methodology. The Clinical Redesign arm of the study was then called the Delirium and Dementia Project. Whilst the study had struggled to maintain the action research methods, a application of a Clinical Redesign project was expected to use the authoritarian practices of the AIM techniques (IMA, 2007). This created a dilemma. Could the PCCRG stay true to the study plan, as outlined in the hospital ethics application, and yet take advantage of the resources and the opportunity to improve the outcomes for the patients and nurses in the study ward? This required careful negotiation and plans of action by the PCCRG (Meeting minutes, 27/9/07).

6.3 Summary

The actions and issues that arose from Cycle 3 are summarised in Table 6.3**.** Cycle 3 was characterised by sustained staff' 'churn' at all levels of the Area Health Service and the study hospital, as well as a sudden negative media barrage against the hospital, all of which threatened to affect staff morale. A lack of interest by the managers in adopting the study tools, continued. Nevertheless, despite the negative influences, some changes were successfully implemented through managerial directives, including

- Protocols related to the aged care policy worksheets instigated by the NUM2.
- The audiotaped nursing handover sessions instigated by the NUM2.
- The NUMs (Discharge Planning) Handover Tool and instigated by the Continuum of Care project.
- The re-education program regarding the 'essentials of patient care' instigated through the Chronic and Complex Care project.

It was noteworthy that these managerial initiatives were implemented despite the popularity and availability of funded courses offered to the hospital staff in the practice development approaches of facilitation and participation that incorporated person-centred care principles.

Issues that arose during Cycle 3 that directly related to the study and directions for the ongoing plans were

- The documentation of delirium and dementia diagnoses in the patients' notes and discharge summaries resulting in discrepancies in AR-DRG coding and LOS data.
- The implications of AR-DRG codes on hospital activity and nursing workload data.
- The recognised need for hierarchical managerial sponsorship for sustained change.
- The recommendation that a specific Clinical Redesign project should be instigated to bolster support for the tools and protocols developed through the study.

Whilst the time consuming and distracting Continuum of Care projects undertaken throughout the hospital, took momentum from the study, the ACR Diagnostic project supported the need for practice enhancement for patients with cognitive impairment and disturbed behaviour. This provided an opportunity to bolster the initiatives originally developed to improve the nurses' sense of empowerment and well-being. The utilisation of the reinforcing effects of the AIM sponsorship techniques, in conjunction with the action research methods, are described in the final cycle in Chapter 7.

Table 6.3: Summary of activities undertaken and issues arising in Cycles 1, 2 and 3.

Cycle 1 **Negotiation, Recruitment, Baseline Measurements, Observations and Feedback**	**Cycle 2** **The initial intervention plan**	**Cycle 3** **Obstacles in the 'swamp'**
Ethics clearance **Stakeholder negotiation** **Before-intervention measures** - Nurse recruitment, consent & characteristics, baseline measurements and care planning - Patient/relatives' recruitment, consent, characteristics and baseline measurements - Nurse and patient interaction observations - Relatives satisfaction measurements - Observers' and Nurses' focus groups feedback	**Nurses' participation & morale** - Large name badges - Satisfaction survey **Nurse 'churn'** - Orientation Manual - Competencies **Nurses' knowledge** - In-service education program - Dementia experiential workshops **Patient care planning** - CCC form - 'C'sign - Activities cupboard - Talking Pictures folder **Communication with relatives** – CCC form	**Increased 'churn' across Area Health Service** **Continuum of Care projects** • Chronic & Complex Care • ACR Diagnostic project **New tools** • Poster 'Is Your Patient Confused'? • Worksheets **Imposed protocol changes** • Audio taped handover • NUM's (discharge planning) handover sheet • 'the blitz' **Malignant outside influences** **Documentation audit for delirium/dementia** **AIM workshop**
Issues for intervention plans 1. The nurses sense of empowerment 2. Knowledge regarding delirium, dementia and person-centred care 3. Recognition of behavioural symptoms related to uncontrolled pain 4. Obtaining and using patients' personal social information 5. Mitigation of the effects of constant staff turnover affecting knowledge essential for patient care 6. Effective communication with relatives	**Issues for intervention plans** 1. Difficulties in encouraging nurses' participation in agreed care activities 2. Disempowerment and bullying activities 3. Difficulties in encouraging manager's reinforcement 4. Ongoing staff 'churn' at all levels 5. The questionable suitability of practice development/action research for encouraging evidence based practice change in a 'churning' environment with and by oppressed populations	**Issues for intervention plans** 1. Poor documentation of delirium / dementia diagnoses 2. Discrepancies in AR-DRG coding and LOS data 3. Implications of incorrect AR-DRG coding on hospital activity data and nursing workload calculations 4. Need for hierarchical managerial sponsorship for sustained change. 5. Clinical Redesign project to bolster support for the tools and protocols developed through the PCC study.

Note. ACR = Aged Care & Rehabilitation. AR-DRG = Australian Refined - Diagnosis Related Group. CCC = Communication and Care Cues. LOS = Length of Stay. NUM = Nursing Unit Manager. QUIS = Quality of Interactions Schedule

CHAPTER 7: ACTION RESEARCH CYCLE 4: *CLINICAL REDESIGN SUPPORT AND FINAL MEASUREMENTS*

> It should be borne in mind that there is nothing more difficult to handle, nor more doubtful of success and more dangerous to carry through than initiating changes (Machiavelli, 1961, p. 51).

Cycle 3 featured ongoing staff ‘churn’ at all levels of the Area Health Service with the vulnerable staff morale burdened by a sustained period of negative media reports against the study hospital, with particular reference to the care of older people. The imposition of a number of Continuum of Care projects, including the Aged Care and Rehabilitation (ACR) Diagnostic Phase project, cut across the study purposes but both helped and hindered progress. Whilst the instigation of new tools and protocols outside of the study were successfully dictated, the adoption of the tools developed by the nurses languished. However, there were two positive outcomes. Firstly, the findings of the patient file audit that supported the nurses’ opinions that delirium diagnoses were not well documented, provided valuable insights into possible mediating actions. Secondly, the ACR Diagnostics Phase project supported the study findings concerning the need to enhance care practices for older confused patients and had recommended that funds be directed towards a 10-week Clinical Redesign Delirium and Dementia project. This was intended to focus on embedding the tools and processes already developed during the study, using action research methods, thus there was a possibility for reinforcement of the nurses’ sense of achievement and empowerment. It was therefore necessary to realign the action research methods with the intended project activities using the Accelerating Improvement Methodology (AIM) (IMA, 2007).

The activities and outcomes of Cycle 4 (the final cycle in the study) as shown in Figure 7.1, are described below. This cycle incorporated the Clinical Redesign project leading to the final study evaluations, and is described using the usual format of plan, act, observe and reflect. The sub-headings used are ‘nurse morale’, ‘Clinical Redesign’ and the ‘study measures and results’.

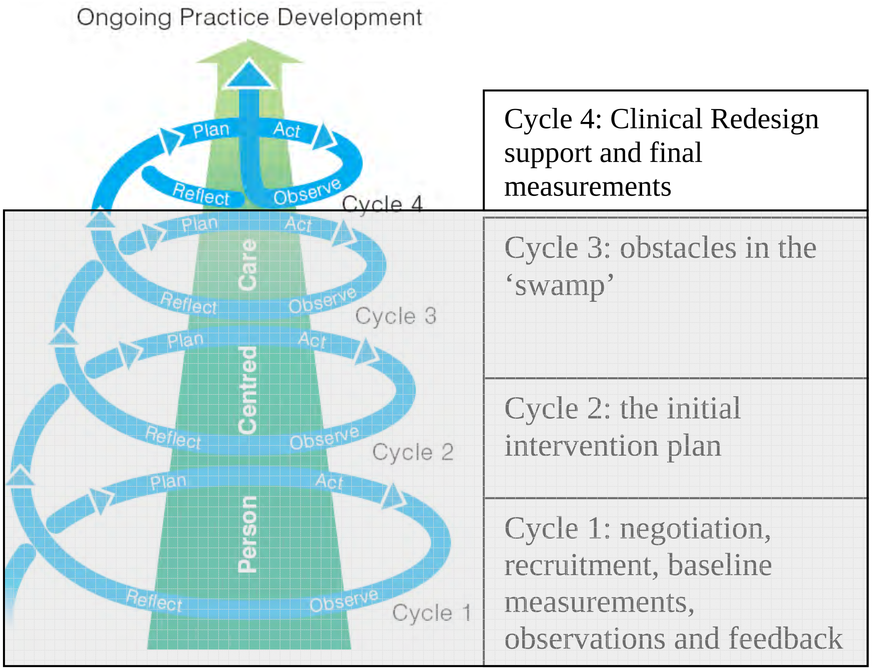


Figure 7.1: Action research Cycle 4 – Clinical Redesign support and final measurements

7.1 PLAN

7.1.1 Nurse Morale

The nurses' morale continued to be supported through the acceptance and maintenance of the large name badge system, as described in Chapter 5, Section 5.2.1. It was intended that the task of making the badges would be continued by the aCNE3. However, at the same time, the nurses' morale was threatened by ongoing negative media publicity and 'over consultation' through the multiple projects, the enforcement of sudden changes to the Handover Tool and the re-education requirements (the 'blitz'). Strategies were sought at Area Health, hospital and ward levels to reassure staff and highlight positive hospital images.

7.1.2 Clinical Redesign

The Clinical Redesign Implementation Plan was written in consultation with the PCCRG using the study information, the Continuum of Care requirements and the AIM guidelines (IMA, 2007, p. 1), as required by the Area Health Service Clinical Reference Group. This plan incorporated headings for: our approach, the business case for change (see Table 7.1), the end vision (see Table 7.2), the implementation plan and timetable, the risk management plan, milestones and deliverables, governance structure and the key role map. The plan was to be discussed with the Medical Divisional Manager and the Operational Nurse Manager, who were already aware of the AIM ideals for cascading sponsorship to support projects. It was agreed that leadership support was crucial to the success of the project.

Table 7.1: Clinical Redesign Delirium and Dementia Project Business Case for Change.

BUSINESS CASE FOR CHANGE

Implementation of the Person-Centred Care Model for Patients with Disturbed Behaviours (Delirium and Dementia)

WHAT are we changing?

We are changing the model of care for older patients through enhancement of staff knowledge in relation to care delivery, in particular, the diagnosis and management of delirium, depression and dementia. We will develop systems and processes that support

1. The orientation and education of all staff to the aged care environment.
2. The implementation of a systems approach to patient assessment practices.
3. Appropriate documentation of diagnoses such as delirium &/or dementia.
4. Documentation and communication of patient personal communication and care information.

WHY are we changing?

There is increasing demand for services to manage older people with complex needs. Where there are high performing teams, with greater sophistication in the approach to managing these patients, there is a marked improvement in patient outcomes (Inouye, Bogardus, Leo-Summers, & Cooney, 2000).

1. Delirium can be prevented or reduced thus reducing the incidence of aggression and adverse events.
2. There will be a greater opportunity for recruitment and retention of qualified staff. An informed, supported environment discourages ageist attitudes and results in a reduction in work pressures and workforce burn out.

This will decrease adverse outcomes (such as, falls, restraint) and constraints within the system (for example, bed block and inappropriate nursing home admissions).

What are the CONSEQUENCES OF NOT changing?

There will be ongoing de-skilling of the workforce leading to

1. Increased adverse events.
2. Decreased patient /carer / staff satisfaction.
3. Deteriorating hospital performance measures.
4. Nurses will continue to leave prematurely and will be harder to replace.

Table 7.2: Clinical Redesign Delirium and Dementia Project End Vision.

THE END VISION

1. A correct diagnosis **for patients suffering from the symptom 'confusion' is routinely made and documented**
    - in the notes
    - on the handover sheet
    - on the patient care plan
    - in the discharge summary.
2. For these 'confused' patients:
    a. A **formal cognitive assessment** is performed and documented at least once.
    b. A **Communications and Care Cues** (CCC) form is completed by the family or staff members in consultation with the family.
    c. Specific mention is made at **handover** of the presence of the CCC form and any important points for reference.
    d. All staff use the information in the CCC form to assist in reassuring, orienting **conversation** when interacting with the patient.
    e. Families are actively encouraged to **bring in personal support items** such as toiletries, photos, books, music, dressing gown, slippers, comforters etc. This may mean contacting families by phone and follow up calls. Where possible photos etc will be displayed beside the bed for reference.
    f. Staff **explain**, role model and monitor these practices to any **new** or **transient** staff
    g. The implications of mechanical or chemical restraint will be understood and avoided.
3. All staff within the ward **address each other by name** to build empowered cohesive teams.
4. All nursing staff use the **Orientation Handbook** and matching Protocols in their day-to-day work practices.
5. All nursing staff are proactive in bringing their **competencies** up to date**.**
6. **New Medical Officers and Allied Health staff are** proactive in the use of evidence based **Delirium Guidelines.**
7. **Medical Records coding of AR-DRGs** will consistently reflect the complexity of the patient journeys.

Note. The major topic for each statement was highlighted in bold font to enable ease of understanding. AR-DRG = Australian Refined – Diagnosis Related Group. CCC = Communication and Care Cues form.

Plans were made to hold the PCCRG meetings each week to enable optimum support for this cycle of the study. Agreement was reached that the Clinical Redesign resources would be used to fund a full-time Project Officer for 10 weeks. The criteria for the Project Officer's required skills and a job description were drawn up. The Project Officer was to be orientated and supported by the PCCRG members, to provide an intense in-service education program, individual role modelling and demonstrations of skills, as well as to undertake progress audits. It was intended to ‘update’ the nursing staff and interested allied health staff members, using the materials already developed. This would include the dementia experiential workshops, as well as the use of ward case studies interspersed with demonstrations and role modelling of assessment and communication techniques. The Project Officer would also assist the aCNE3 with the ‘the blitz’ re-education activities, especially focussing on patient cognitive assessments and the requirements for person-centred nurse-patient interaction.

To support the nurses’ recognition and care for patients with delirium through improved documentation of diagnoses in the patients’ files, the department director agreed to allow the presentation of regular information sessions for the medical officers. This was planned to include the provision of results from the file audit, ongoing file surveys and the latest evidence about delirium. The newly released *Clinical Practice Guidelines for the Management of Delirium in Older People* (Melbourne Health, 2006) provided the best practice information. It was agreed that the sessions would be presented by the NUM2, the aCNE3 or the Project Officer at the regular department clinical meeting times on Fridays. All the department medical staff, including the interns and registrars, attended these sessions on a regular basis. An initial 45-minute presentation would be followed by weekly 10-minute updates, after the usual planned clinical meeting presentation. The improved documentation of delirium was also intended to encourage improvements in medical records coding of AR-DRG episodes that would then provide more accurate ward activity data.

As part of the Clinical Redesign project evaluation, an audit of another 50 consecutive files from December 2007 was planned as a follow-up to the audit of the patients’ files from May 2007. Comparisons of the documentation levels of the symptom of confusion, in relation to the diagnoses of delirium and dementia, as well the patients’ lengths of stay data, would be included

It became clear at this time that it would be useful to develop a tool that could be used to trigger delirium risk assessment, as well as to provide directions for delirium prevention and management. A similar format to the fall prevention and pressure ulcer risk assessment tools, was considered. Therefore, activities commenced to experiment with tool designs based on information from the Melbourne Health (2006) and the Poole’s Algorithm (2000a) (Field notes, 7/1/08).

During this time, the Medical Director and the Investigator had been attending meetings of the Greater Metropolitan Clinical Task Force Aged Care Network. This group of clinicians, representing teams from across the Sydney metropolitan area, expressed an interest in creating models of care for older people, especially those with dementia. To this end, the PCCRG started to investigate the possibility of creating a ‘model of care’ for patients with disturbed behaviours, based on the study and Clinical Redesign project findings. It was thought that this might also provide direction and distinction for the aged care specialty.

In January 2008, instructions were received to extend the Clinical Redesign project to other medical and surgical wards in the hospital, as well as a ward in another hospital. This was outside the study project charter and resulted in another redirection of the Investigator’s attention for a short time.

7.1.3 Study Measures and Results

Participants in the PCCRG agreed that Cycle 4 would be the final major action research cycle in the study (Meeting minutes, 14.12.07). Therefore it was decided to re-apply the formal evaluation measures used in the before-intervention period for the nurses and patients or relatives.

7.2 ACT, OBSERVE and REFLECT

The activities undertaken and descriptions of staff movements during Cycle 4 are summarised in Table 7.3 as described below.

Table 7.3: Cycle 4 monthly plan for activities, tool developments and details of senior staff movements.

2007/8	Topic and Activity	Senior staff Movements
October	• **Continuum of Care – Clinical Redesign ACR Solutions project** • *Ward 'D' Sign*	
November	• **Intensive Clinical Redesign Delirium and Dementia in-service program** • Workshop 'Modelling Best Practice Through Leadership' with the Lush Thinking Company • *PCC Model of Care*	• New acting Area DONM
December	• **Intensive Clinical Redesign Delirium and Dementia in-service program** • *Notice Boards, clock & document holders*	
January	• **Clinical Redesign extension planning** • After-intervention measurement preparation • *Draft Delirium Risk Assessment Tool (DRAT)*	
February / March	• After intervention measurements	

Note. Tools developed are listed in italics. Topics in bold denote the over-riding hospital projects. ACR = Aged Care & Rehabilitation. DONM = Director of Nursing and Midwifery. DRAT = Delirium Risk Assessment Tool. PCC = Person-Centred Care.

7.2.1 Nurse Morale

During this period, the negative publicity increased in all aspects of the media. In October 2007, the Sydney Morning Herald newspaper published comments reflecting 'significant concern' regarding poor hospital care from a report of the opinions of nursing home staff of acute hospital care outcomes for their residents. This report was entitled 'Hospitals under fire for mistreating elderly' (Metherell, 2007). It was reported that the Chief Executive of the Aged Care Association 'called for urgent action to avoid harm to vulnerable and confused patients which, he said would inevitably end up leading to death in some instances' (Metherell, 2007, p. 3).

At the same time, a report on bullying and harassment of nurses from the study hospital was published, again in the Sydney Morning Herald, claiming that '… staff were howled down at meetings', '… were reduced to tears' and that certain staff were '… a savage lot' and had a '… bulldog attitude' (Wallace, 2007, p. 5). It was also claimed in the article that this report was made in 2003, was not released nor were recommendations implemented. It was reported that the Chief Executive had '… met with staff to ensure they are aware of a zero-tolerance policy to bullying' (Wallace, 2007, p. 5)

In November 2007, a NSW Parliamentary Inquiry into the study hospital was set up. Staff were invited to report their concerns. A Sydney Morning Herald newspaper article reported claimed that the hospital was '… aging and poorly resourced … dilapidated … a public planning disgrace … the stuff of nightmares … there was little compassion' (Smith, 2007, p. 3). A senior physician was reported as saying that 'there had been a subtle decline over the 17 years he had worked there, the main problems being poor financial management, patient access and staff morale' (Smith, 2007, p. 3). A local resident was heard to say that she would never go back to *"… that hospital"*, meaning the study hospital, because of the alleged incidents (Field notes, 27/11/07).

The ongoing media focus had the effect of increased pressure on the study hospital staff. The references to the care of older people in particular, also cast aspersions against the study ward even though no particular hospital was named. Staff said that they avoided disclosing to outsiders where they worked.

The hospital management then attempted to offset the tension caused by the negative publicity by circulating copies of the many positive email messages that had been sent to the hospital. None of these messages were printed in the newspapers. The NUM2 of the study ward installed a special 'thank you' notice board to display the cards and messages of appreciation and support that the patients and members of the public provided.

The changes in the Area Health executive staff continued when the Area Director of Nursing and Midwifery was transferred to a senior non-nursing position. Therefore, a new acting Area DONM was appointed. The substantive position of DONM at the study hospital was still not filled.

The nursing ‘churn’ at ward level continued with under-graduate student nurses, new-graduate nurses and new starting RNs supplemented by pool and agency staff. Overall there had been more than an 80% change of staff since the beginning of the study (see ‘Nursing Staff Turnover’ in this chapter, Section 7.2.3).

During this period, the NUM2 initiated ‘staffing orders’ for the provision of one-to-one nursing care for patients with disturbed behaviours who were at risk of falls or other adverse events. These staff, called Independent Patient Specials or IPS, were provided as extra staff, over and above the usual staffing of the ward. The IPS nurses were expected to provide most of the care for the designated patient. This provided relief for the busy nurses but also added complications because the IPS staff were mostly AINs whose knowledge and experience were unknown. Communication between these nurses and their patients were often complicated by different culture and language backgrounds.

In all, the last few months of 2007 were very trying for all staff. The major effect seemed likely to have been that of demoralisation, particularly for the nurses who had to cope with the concern of the public as well as their acquaintances, whilst having little opportunity to refute the accusations. At the same time there was constant staff turnover at all levels of the health service leading to a persistent loss of workplace knowledge and traditional support. Under threat were the intrinsic factors necessary to support nurses’ positive morale such as, ‘a sense of professional worth’ and ‘being respected’ (Day, Minichiello, & Madison, 2006, p. 518).

The negative effects on the nurses’ morale might have been relieved in some way by the support for maintaining the large name badge system. Most staff seemed to make efforts to wear their badges and several requests for replacements, after wash-day damage were received. As it had been noted that job stress, which contributed to low morale, could be diminished by good nurse-physician collaboration (Zangaroo & Soeken, 2007), the fact that the medical staff could identify the nurses and vice versa, may have eased the strain and encouraged greater collaboration. The positive responses documented in the nurses' name badge satisfaction survey also indicated support for the nurses' morale (see Chapter 5, Section 5.3.1).

The effects of being able to speak to staff members by name might also have helped support feelings of reciprocity and thus tip the Effort-Reward balance away from burn-out (Bakker, Killmer, Siegrist, & Schaufeli, 2000). This simple act might also have enhanced the nurses' feeling of ease to ask questions about work tasks; thus it may have reduced their feelings of emotional exhaustion (Stordeur, D'hoore, & Vandenberghe, 2001).

7.2.2 Clinical Redesign

Project Sponsorship

The Area Health Clinical Reference Group for the Clinical Redesign project accepted the implementation plan for the Dementia and Delirium project and gave instructions for the project to go ahead. The sponsor role map, which designated the participants' roles, was also accepted. Meetings were arranged with the Medical Division Manager and Operational Nurse Manager to provide information regarding the project.

Whilst the PCCRG meetings were increased in frequency to support the Clinical Redesign project initiatives, attendance by the ward senior staff remained patchy. Often ward activities took precedent. Other meetings were undertaken with the major sponsors to provide them with details of the aims and activities. This was particularly necessary because there were no senior executive staff from the hospital acute sector actually involved in the Area Clinical Redesign Reference Group, which reduced the overall leadership support for the project imperatives. Despite agreements reached at these meetings there was little discernable discussion or reinforcement of project activities outside of the meetings.

Project Officer

The Project Officer position was advertised internally and following interviews, an RN was appointed from the AC&RM department's community team who had aged care mental health qualifications, experience and skills. Office space was provided in another building from the ward and equipment was supplied through the Poole's Algorithm cost centre. Introduction to the PCCRG plus orientation to the project and in-service education materials were provided. The Project Officer offered added insights and ideas (Field notes, 12/10/09).

Introductions and explanations about the extension of the study and the amalgamation with the Clinical Redesign Delirium and Dementia project were given to all the ward staff, including the medical and allied health staff. Dates and times for in-service education sessions were set up with the aCNE3, which used and extended the developed material with the addition of further appropriate case studies. The Project Officer spent time on the ward demonstrating and role modelling examples of care practices and assessment tools for staff on a one-to-one basis.

As the project progressed, the Project Officer also undertook weekly one-day snapshot surveys of the documentation of patient symptoms of confusion, assessment practices and diagnoses. This information was discussed during the weekly clinical meeting presentations to the medical staff.

Evidence of friction between the NUM2 and the Project Officer appeared during this time (Field notes, 20/12/09). The NUM2 instructed that the Project Officer should undertake additional project evaluation procedures that had not been planned at the beginning of the Clinical Redesign project. This evaluation incorporated some of the measures that were already planned for the final stage of the overall study as well as a new anonymous questionnaire intended to evaluate the Project Officer’s personal work performance. The Project Officer was instructed to spend time preparing this specific questionnaire. The staff expressed concern about being asked to fill in “… *more questionnaires”*. A very distressing exchange between the NUM2 and the Project Officer ensued when it appeared that the staff had inadvertently become aware that the Project Officer, rather than the NUM2, had prepared the self-evaluation questions as directed. It was said that the staff would therefore not truthfully express their opinions of the Project Officer’s actions. At no time was there any apparent problem between the nurses and the Project Officer; in fact all seemed to enjoy participating in the person-centred in-service education programs and discussion of the many case studies. The Project Officer was observed to be welcomed to the ward by the nurses and was often asked for bedside advice (Field notes, 20/12/07).

On reflecting on these events with the PhD supervising team, it was thought that the pressures on the ward, such as the constant staff turnover at all levels combined with the negative media publicity, might have led to a heightened sensitivity regarding levels of power. People from oppressed groups were said to be likely to try to emulate the powers and behaviours of a more powerful group (Freire, 1968). Similar friction had been described between nurses by Wolfe and McCarthy (2007) when there was a change in power base, as occurred during the secondment of the Project Officer to the Clinical Redesign team. This may have had a negative effect on the project uptake and outcomes.

Education Program

The Clinical Redesign Delirium and Dementia project in-service education session topics, using ward case studies where possible, incorporated updates about the study, the project, delirium, dementia, depression, suicide prevention, psychotic depression; person-centred care for patients and nurses, confusion, the Communication and Care Cues (CCC) form, Poole's Algorithm; communication with patients, relatives and staff as well as reassuring activities; and results of interim file surveys. Individual demonstrations and role modelling activities included 'how to use' various tools, including the Mini Mental State Examination, the Abbreviated Mental Test Score, the Clock-Drawing Test, the Confusion Assessment Method and the Geriatric Depression Scale. Two dementia experiential workshops were conducted. Eight staff participated in individual role modelling and patient assessment demonstrations. The Project Officer also spent time with patients' relatives explaining the CCC form and 'unravelling' problems for patients who exhibited disturbed behaviour.

Overall, 26 in-service education sessions were presented during the 10-week project, with 217 participations. The aCNE3 assisted the Project Officer to set up the in-service education program but did not attend the sessions. The Project Officer also assisted the aCNE3 to undertake 'the blitz' re-education activities that proved to be very time consuming. This did not always allow discussion of assessment and care pertaining directly to delirium and dementia, as intended through the Clinical Redesign project.

Leadership Workshop

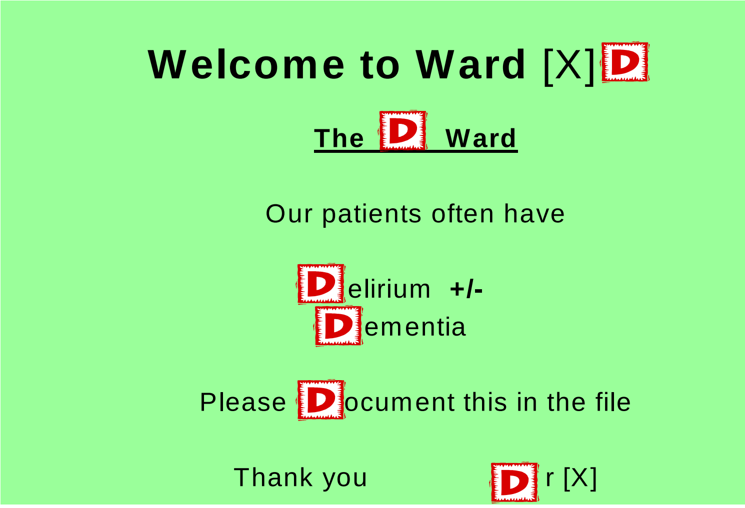
In view of the apparent lack of active sponsorship support by the ward leaders, the Project Officer suggested to the PCCRG that a special workshop titled *'Modelling Best Practice Through Leadership'* might advance the AIM (IMA, 2007) ideals for descending hierarchical sponsorship. It was agreed to use study funds to instigate the workshop. This was designed and facilitated by a representative of the *Lush Thinking* C*ompany*, an organisational development consultancy business, in November 2007. The intention of the workshop was to inspire and facilitate commitment and leadership within the Clinical Redesign project team, through the examination and discussion of literature regarding leadership and team building. Participants were all the senior medical staff including the Medical Director, the aCNE3, the Project Officer and the Investigator. The NUM2 gave an apology. The presentation incorporated descriptions of the Lencioni Model of Change and the paradox of change (Lencioni, 2005), and stimulated discussions of what leadership was meant to be and how to craft a special leadership brand for the study ward.

The participants' evaluation of the workshop showed that all felt that the session was productive and that there was a desire to improve leadership processes, practices and behaviours in the ward. The evaluation report from the *'Lush Thinking'* consultant was that the ward nurses probably saw the specialist medical staff as the leaders of the ward. Greater communication, hospitality and confidence between the medical staff and the nurses could therefore be developed if the medical staff were supported and encouraged. Suggestions were made for pursuing ideas and suggestions that arose but it was recognised that the ward NUM was the pivotal person in any proposed ward change. It was difficult to follow through with any of the suggestions because the NUM2 was not present at the workshop.

Consequently, in the following weeks, there did not seem to be any obvious change in sponsorship support, particularly from the senior nursing staff. The NUM2 and the aCNE3 did not attend any in-service education sessions and there was no obvious reinforcement for the use of care planning tools such as, the CCC form, the cognitive assessment tools or the Handover Guide, at any patient handover sessions. These problems and the issues that arose between the Project Officer and the NUM2 may reflect the elements of ingrained oppression which had been observed in nursing (Freire, 1968; Matheson & Bobay, 2007). Evidence of inconsistencies related to these issues will be shown in the study measures described further on.

The ‘D’ Sign

Nevertheless, increased sponsorship support by the medical staff seemed to occur when the Medical Director suggested to the PCCRG that a small ‘awareness raising’ laminated sign be displayed in obvious places, such as on the tops of the ward computers. This sign was intended to provide a reminder for the medical staff to document patient diagnoses carefully, particularly in relation to delirium and dementia. After discussions and trials the final version became known as the ‘D’ sign (see Figure 7.2).



Welcome to Ward [X] D

The D Ward

Our patients often have

Delirium **+/-**
Dementia

Please Document this in the file

Thank you Dr [X]

Figure 7.2: The study ward ‘D’ sign attached to the top of the computers to highlight two of the major diagnoses in the ward and to encourage careful documentation.

Although not formally evaluated, the ‘D’ sign did provide a trigger for staff discussions regarding the causes of confusion in their patients. The sign enabled an orientation focus to increase awareness by new medical staff, as recommended by Tabet et al. (2005) and was further supported by a brief explanatory letter with each new large name badge. The Melbourne Health (2006) delirium guidelines recommended that efforts should be made to generally increase staff the awareness of delirium.

The Person-Centred Model of Care

In response to the GMCT request for the development of models of care for older patients, the members of the PCCRG discussed ideas for a model of care for older people with disturbed behaviour in acute care. Various pictorial models were created showing what were considered to be the essential elements of person-centred care particularly applicable to the acute aged care study ward. The final model was titled *'Best Practice Model Incorporating Person-Centred Care for People with Disturbed Behaviour'* and included a depiction of components around a central picture of an older person with the heading 'the Patient Journey'. Beneath this heading were listed the elements of person-centred care, as documented by Loveday and Kitwood (2000). Coloured shapes surrounded this with headings for Empowerment, Leadership, Education and Communication. These were interspersed with other shapes depicting the intended outcomes for increased patient and carer satisfaction, increased staff satisfaction and increased teamwork. It was intended that this model should be included in the ward Orientation Manual.

The establishment of this pictorial model also provided a summary of the study activities and potentially afforded triggers for further discussion and the development of care practices. It was possible that it could be used in the future to develop key performance indicators pertaining to the study ward or the wider aged care sector. It may thus have provided an avenue for a greater sense of pride for the nurses of the ward leading to improved attitudes, as described by Courtney, Tong and Walsh (2000). However, although this pictorial representation was incorporated into the ward Orientation Manual, it attracted no obvious comments.

Notice Boards, Clock and Document Holders

Unexpected support for elements of the Clinical Redesign project came at this time from the Continuum of Care project. In order to improve patient discharge planning, an instruction was issued from the hospital executive staff that signboards should be placed above each bed showing the patient's name, the specialist medical officer's name and the expected date of discharge. This provided an opportunity for the PCCRG, who had discussed the apparent problem of inadequate bedside space for the patient's personal memorabilia, particularly photos or cards, which were needed for information to reassure and orientate the patient. It was agreed to use study funds to purchase small magnetised notice boards to attach to the wall above each bed in one four-bed bay nearest the staff workstation, henceforth know as the ‘delirium room’. This room was utilised for the care of particularly confused patients who needed close supervision. The notice boards had magnetised attachments that enabled the safe display of the patient’s cards and orienting or reassuring pictures.

A larger notice board was attached to the wall opposite the room entranceway on which the nurses could record the day, date and season as well as the names of the staff who cared for the patients in that room for each shift. The intention was to assist communication by informing patients, families and medical staff which nurses were responsible for each patient. Above this notice board was attached a large clock to assist the patients’ orientation to time.

As the use of the CCC form had not improved, in fact the Project Officer often found the completed form at the back of the patient’s file, it was agreed that clear Perspex document holders be purchased and attached to the wall above each bed in the delirium room. The CCC forms could be placed in these holders, thus making their availability obvious and within easy reach when communication and care information was needed.

Informal audits of the use of magnetic notice boards showed that it was rare for any personal cards or pictures to be displayed for reference in conversations. Sometimes encouraging messages were written on the boards by the staff but the patients would not have been able to read them as the boards were on the wall behind their heads. However, the orienting notice board was mostly updated with day, date and season as well as the first names of the nurses responsible for patient-care in that room. When a CCC form was completed it was observed to be placed on view within the Perspex holder (Field notes, 8/1/08).

The use of the CCC form supported the recommendations of de la Rue (2003) that nursing students should investigate the life history of an older person to combat ageist attitudes. The provision of the readily visible and available CCC form offered personal insights into the confused patients’ lives to encourage reassuring conversations and person-centred care. This also supported the interpretation of the literature by Liaschenko and Fisher (1999, p. 34) that nurses needed to ‘make judgements, act wisely and get work done', that led to their model that included the use of 'social knowledge' to enable such actions.

Delirium Risk Assessment Tool

During this time the PCCRG discussed ideas that might further encourage the improved documentation and care of patients with delirium, leading to suggestions for a care planning tool formulated in a similar way to the current Falls or Pressure Area Risk assessment tools. A draft version on an A5 page sized sticker, called the Delirium Risk Assessment Tool (the DRAT) was created the ancluded a table for delirium risk assessment and instructions for the investigation of symptoms of confusion as well as the prevention, diagnosis and patient management instructions. Due to time constraints the DRAT was not finally trialled during the study but was carried over to the extended Clinical Redesign project in other wards.

Therefore the study paved the way for increased delirium prevention, recognition and management. The *Clinical Practice Guidelines for the Management of Delirium in Older Persons* (Melbourne Health, 2006) had recommended that further risk assessment research was necessary. This therefore, reflected the intentions of action research and practice development methodologies that were intended to stimulate ongoing action and development.

Audit of Documentation Processes

A follow-up file audit was undertaken to measure differences that may have occurred in delirium documentation and management as a result of the Clinical Redesign education and awareness sessions. Fifty consecutive files of patients admitted to the study ward under the care of the aged care medical specialists during December 2007 were examined. The same criteria were used as that of the May 2007 audit. The data were collated and compared using Mann-Whitney statistical analysis.

The results of the audit are summarised in Table 7.4 and showed that whilst both the nurses and doctors documented a lower percentage of confusion symptoms for the patients in December audit, there was a higher percentage of delirium diagnoses documented in the notes and in the discharge summaries. The difference between the combined total numbers of days for the patients' lengths of stay (LOS) and the total expected lengths of stay as shown in the AR-DRGs was 189.34 days in May and 81.7 days in December 2007. This reduction was not statistically significant.

Table 7.4: Results of the audits of consecutive patients' files for documentation of confusion symptoms and delirium diagnosis for May and December 2007.

Audit questions	**May n = 50**	**December n = 50**	**p value**
Confusion documented in notes by nurse: n (%)	30 (60)	22 (44)	
Confusion documented in notes by doctor: n (%)	25 (50)	21 (42)	
Dementia documented in notes	13 (26)	17 (34)	
Delirium diagnosis documented in notes: n (%)	6 (12)	13 (26)	
Delirium documented in discharge summary n (%)	3 (6)	11 (22)	
Total LOS in days: n (median)	517 (8)	430 (6)	
Total average AR-DRG LOS in days: n (median)	327.66 (6.3)	348.3 (6.4)	
Difference in total LOS and average AR-DRG in days: n (median)	189.34 (1.2)	81.7 (.25)	.170[a]

Note. [a] Mann-Whitney U Test. AR-DRG = Australian Refined – Diagnosis Related Group. LOS = Length of Stay

The apparent movement towards improvement in the documentation and coding of delirium, whilst not significant, appeared to indicate a possibility for making improvements through careful and accurate documentation. It may have been that this audit of 50 files each from May and December 2007, conducted as part of the Clinical Redesign project, was underpowered and results from a larger audit might be more informative. The change in lengths of stay between the groups could have been explained by the seasonal variation from autumn to summer that may have affected illness severity. This could indicate an area for future research.

7.2.3. Study Measures and Results

The quantitative methods planned in Chapter 3, Section 3.2.7 to investigate differences in the overall study measurements in the before and after-intervention groups, were then undertaken.

Nurse Recruitment and Measures

To set up the after-intervention measurements, meetings were again arranged with staff during the afternoon in-service session times to explain the study and seek consent for the participation of new staff with ongoing agreement from the previously consented staff. Weekend sessions were again provided for staff who were not available during the week and the project was discussed with permanent night duty staff before they finished their shifts in the mornings. Any pool or agency nurses who worked on the ward at that time and were likely to be observed during the study measurement activities, were informed about the project and asked to sign the consent forms. As in the before-intervention period there were no refusals.

After the new nurses had signed the consent forms they, and the previously consented nurses were given the same prepared questionnaire pack . A list of self-chosen identifying ‘codes’ used by the nurses during the before-intervention measurement period was posted on the staff room notice board to assist the nurses to remember and enter their own code names so that comparisons might be undertaken. No record had been kept of any connection between person and code and only two of the nurses could remember which code name they had used.

Nurse Characteristics

An overview of the characteristics of the nurses who returned the anonymous questionnaires is provided in Table 7.5. The before-intervention group of nurses had been named Nurse Group 1 (NG1) and the after-intervention group was named Nurse Group 2 (NG2). Forty-four nurses in NG1 consented to participate in the study with 34 (77%) questionnaires returned. Forty-seven nurses in NG2 consented and 27 (57%) questionnaires were returned. Six of the consenting nurses in NG2 were rostered for Independent Patient Special (IPS) duty to give one-to-one patient care. There were no IPS nurses in NG1.

There were no significant differences in the nurses’ gender, age, professional or ward positions nor in the usual number of days worked in the ward. There was a slightly older cohort in NG1 and significantly more nurses in NG1 had worked for a longer time in specific aged care wards or facilities. There was a trend towards more dementia or aged care training received by NG2, and a significant difference specifically for delirium training received by NG2; twice as many nurses in NG2 reported to have received delirium training as those in NG1 (p = .005)

Table 7.5: Baseline characteristics of the nurses who returned questionnaires in the before-intervention (NG1) and the after-intervention (NG2) groups.

Characteristics	**NG1** **n = 34**	**NG2** **n = 27**	**p value**
Gender : n (%)			.143 ^{a}
Female	31 (91)	21 (78)	
Male	3 (9)	6 (22)	
Age : n (%)			.240 ^{b}
< 40 yrs	15 (44)	16 (60)	
> 40 yrs	19 (56)	11 (40)	
Professional position: n (%)			.743 ^{b}
RN/EEN	24 (71)	18 (67)	
TEN/AIN	10 (29)	9 (33)	
Ward position: n (%)			.514 ^{a}
Permanent/Ward pool/New Grad	29 (85)	21 (78)	
Hospital pool/Agency	5 (15)	6 (22)	
Approx. days worked/week: n (%)			.279 ^{b}
1-3 days	16 (47)	9 (33)	
4-5 days	18 (53)	18 (67)	
Years worked specifically in aged care: n (%)			.041 ^{b}
Nil or < 1yr	4 (12)	9 (33)	
> 1 yr	30 (88)	18 (67)	
Specific dementia or aged care training: n (%)			.091 ^{b}
Yes	14 (41)	17 (63)	
No	20 (59)	10 (37)	
Specific delirium training: n (%)			.005 ^{b}
Yes	6 (18)	14 (52)	
No	28 (82)	13 (48)	

Note. ^{a} = Fishers' Exact Probability test, ^{b} = Pearson Chi-Square test. Agency = nurse employed on a casual basis, may include those undertaking IPS duties. AIN = Assistant in Nursing. EEN = Endorsed Enrolled Nurse. IPS = Independent Patient Special nurse. New Grad = New Graduate Registered Nurse. NG1 = Nurse Group 1 (the before- intervention group). NG2= Nurse Group 2 (the after- intervention group). RN = Registered Nurse. Pool = nurses employed by the hospital to work self-selected shifts when requested. TEN=Trainee Enrolled Nurse.

Nurse Outcomes

The results of the nursing outcome measurements are summarised below. This included the self-reported levels of strain through the Strain in Care of Delirium Index in Table 7.6, levels of individual burnout on the Maslach Burnout Inventory in Table 7.7, as well as relevant nursing knowledge measured by the Dementia Questionnaire in Table 7.8. Changes in ward nursing staff numbers and sick-leave levels were also described to provide some indication of possible nursing stress reactions through turnover.

The Strain in Care of Delirium Index

Referring to Table 7.6, the nurses' self reported median scores for considered strain in caring for patients with delirium were in the middle of the 'easy' range for both groups except for the subscale Hyperactive/hyperalert behaviour which reached the 'difficult range'. Some individual scores for both groups reached the 'difficult' and 'very difficult' ranges. There was a significant difference in the median scores for the Hypoalert behaviour subscale (p = .048) with higher scores for NG2.

Table 7.6: Nurses' Strain in Care of Delirium Index (SCDI) (Milisen et al., 2004) scores by subscale category for the before-intervention (NG1) and after-intervention (NG2) groups.

Subscales	**NG1 Median (range) n = 34**	**NG2 Median (range) n = 27**	**p value**
A: Hypoactive behaviour[b]	7 (3-11)	8 (6-11)	.136[a]
B: Hypoalert behaviour[c]	9 (4-12)	10 (5-13)	**.**048[a]
C: Fluctuating course with psychoneurotic behaviour[d]	13 (5-18)	13 (10-17)	.476[a]
D: Hyperactive/hyperalert behaviour[e]	25 (8-31)	26 (15-32)	.156[a]

Note. [a] = Mann-Whitney U test. NG1= Nurse Group 1 (the before-intervention group). NG2 = Nurse Group 2 (the after-intervention group).

[b] = Hypoactive behaviour range: 3-5 Very Easy; 6-8 Easy; 9-11 Difficult; 12 Very difficult.

[c] = Hypoalert behaviour range: 4-7 Very Easy; 8-11 Easy; 12-15 Difficult; 16 Very difficult.

[d] = Hyperactive/hyperalert behaviour range: 8-15 Very Easy; 16-24 Easy; 25-31 Difficult; 32 Very Difficult.

[e] = Hyperactive/hyperalert behaviour range: 8-15 Very Easy; 16-24 Easy; 25-31 Difficult; 32 Very difficult

On reflection, it seemed that a possible explanation for the significant increase in the median score for considered strain when caring for patients with 'hypoalert' behaviour, may have been as a result of knowledge enhancement through the education sessions in which the nurses has participated. Inouye et al. (2001) noted that nurses often did not recognise the common delirium symptom of 'hypoalert' behaviour which may have serious consequences for the patients. Therefore, for the nurses to have recognised that this signified more complex care could have been construed as a good outcome, in spite of the possible added nursing strain that was generated and observed in the individual scores. The wide variation in individual scores was a matter for concern, as some reached the ‘difficult’ ranges.

Maslach Burnout Inventory

Table 7.7 showed the nurses’ scores in the Maslach Burnout Inventory (MBI). Ranges were categorised according to those described for medicine. Each of the subclass median scores for Emotional Exhaustion and Depersonalisation were higher in NG2 than in NG1, and moved from low to average categories but were not significant. The median score for Personal Accomplishment decreased (or improved) marginally for NG2 but remained in the average category and was also not significant. Examination of the separate subclass categories for emotional exhaustion using the low, average and high burnout cut points showed a trend towards an increase from low to average for NG2 (p = .083). The other categories did not differ significantly.

Table 7.7: Nurses’ Maslach Burnout Inventory (MBI) (Maslach, Jackson, & Leiter, 1996) sub-class scores for the before intervention (NG1) and after intervention (NG2) groups.

Subclass	**NG1 Median (Range) n = 34**	**NG2 Median (Range) n = 27**	**p value**
Emotional exhaustion (EE) [b]	18.0 (0-47)	23.0 (3-37)	.309 [a]
Depersonalization (DP) [c]	4.0 (0-15)	6.0 (0-15)	.212[a]
Personal accomplishment (PA) [d]	35.00 (47-11)	34.0 (48-19)	.844 [a]

Note. [a] Mann-Whitney U Test. NG1= Nurse Group 1(the before- intervention group). NG2 = Nurse Group 2 (the after- intervention group).
[b] Emotional Exhaustion (EE) : ≤ 18 Low; 19-26 Average; ≥ 27 High
[c] Depersonalisation (DP): ≤ 5 Low; 6-9 Average; ≥10 High
[d] Personal accomplishment (PA): ≥40 Low; 39-34 Average; ≤ 33 High

The MBI results signified that there might have been an average degree of burnout in the nurses in the after-intervention group. Once again, it is possible that the lack of knowledge regarding delirium contributed to the ward nurses ‘not knowing what they didn’t know’ and therefore they did not feel particularly stressed when caring for these complex patients before the intervention period. Whilst individual scores showed that some staff were untroubled, others scored in the high ranges for burnout. Both groups showed some scores well above the high burnout levels, incorporating scores that were well below the low ‘personal accomplishment’ levels. This meant that some staff may not have had the necessary balance between ‘emotional exhaustion’ and ‘depersonalisation’ versus ‘personal accomplishment’ to resist burnout.

Dementia Knowledge Questionnaire

The median scores and range of percentages for correctly answered questions for the Dementia Knowledge Questionnaires showed that there was no difference between NG1 and NG2 (see Table 7.8).

Table 7.8: Percentage of questions correct in the nurses’ Dementia Knowledge Questionnaire in the before-intervention (NG1) and after-intervention (NG2) groups.

	NG1 Median % (Range %) n = 34	**NG2 Median % (Range %) n = 27**	**p value**
Dementia knowledge questions correct (n = 14)	78.57 (50-100)	78.57 (50-100)	.492 [a]

Note. [a] Mann-Whitney U Test. NG1 = Nurse Group 1 (the before- intervention group). NG2 = Nurse Group 2 (the after- intervention group).

Whilst some nurses obtained perfect scores of 100% with all 14 questions answered correctly, it was of concern that some staff could only answer half of the questions correctly in both groups, despite the prolonged and intense education programs.

Nurse Observer Inter-rater Reliability

In the after-intervention period, the same three nurses who had undertaken the nurse-patient communication observation duties in the before–intervention period agreed to participate in the study, again in their own time, with study fund payments for the tasks. The refresher session undertaken to review the literature pertaining to Person-Centered Care and a re-acquaintance with the observation coding methods included discussions of any remembered difficulties or helpful hints.

To check for the reliability of inter-rater coding, the Investigator accompanied each Observer during observation periods for a total of twelve hours in the before-intervention and four hours in the after-intervention periods. The Kappa measure of agreement (Cohen, 1960) showed inter-rater reliability was in the ‘good’ to ‘very good’ range (see Table 7.9).

Table 7.9: Inter-rater reliability scores (Kappa) (Peat, 2001) for coded QUIS observations for Observers and Investigator in the before and after-intervention observation periods.

Observer + Investigator	**Kappa Before**	**Kappa After**
O1 + I	.835	.865
O2 + I	.915	.876
O3 + I	.786	.748

Note. Value of .5 = moderate agreement; >.7 = good agreement; >.8 = very good agreement (Peat, 2001, p. 228). I = Investigator. O = Observer. QUIS = Quality of Interaction Schedule.

Patient Recruitment and Measures

Once again, in view of the limited availability of the Observers and the Investigator, the relatives of one, or preferably two patients at a time, who met the study criteria, were approached. After initial discussions, the relatives were given printed explanation forms and consent was requested for the patient and themselves to participate in the study. It was explained that they could withdraw at any time and a form explaining how to do this was provided. As in the before-intervention period there were no refusals and the relatives returned the signed consent forms. Baseline assessments were then undertaken and recorded with details of the patients' characteristics. A review of the patients' outcomes was undertaken during their ward stays and afterwards via medical records audits.

Patient Characteristics

The characteristics of the patients involved in the before and after-intervention periods of the study are given in Table 7.10. The results of Mini Mental State Examinations showed that the study candidates had deficits in cognition with scores equal to or less than 24 out of 30, possibly affecting their ability to understand the study. Therefore, twenty-eight patients' families overall, gave consent for participation, fourteen each in the before-intervention (PG1) and after-intervention groups (PG2).

There were no significant differences in the gender proportions or the median ages between the groups. The groups were similarly well matched for sight and hearing ability with approximately two thirds of patients in both groups in the good ranges.

Measures of cognition on admission showed markedly low medians in both groups with ranges from 0-18/30 in PG1 and 0-22/30 in PG2 and no significant difference between the groups. The estimated levels of function on the Barthel Index before admission, which showed sharp drops on admission and slightly lower levels for the PG1, were also not significantly different between the groups. Most patients had at least a low level of agitation on the Pittsburgh Agitation Scale on admission. Delirium symptoms were diagnosed for a majority of patients in both groups using the CAM tool and all patients in both groups were assessed to be at a high risk of falls and pressure ulcers.

More patients were admitted from an aged care facility that provided the category of either high or low care, in PG1 compared with PG2. This was not statistically significant. Most patients in both groups were admitted to hospital because of delirium or falls or both, and over three-quarters of the patients in each group had dementia. Other coexisting active medical problems in both groups included cardiac abnormalities, sepsis, fractures, urinary conditions, mental disorders, pulmonary disorders and other neurological conditions.

Table 7.10: Characteristics of patients in the before-intervention (PG1) and after-intervention (PG 2) groups.

Characteristics	**PG1** **n = 14**	**PG2** **n = 14**	**p value**
Female: n (%)	8 (57)	7 (50)	1.00 [b]
Male: n (%)	6 (43)	7 (50)	
Age: Median (Range)	83 (76-93)	85 (75-95)	.231 [a]
Sight: n (%)			1.00 [b]
Good	10 (71)	9 (64)	
Poor/blind	4 (29)	5 (36)	
Hearing: n (%)			1.00 [b]
Good	9 (64)	9 (64)	
Poor/deaf	5 (36)	5 (36)	
Cognition on admission (MMSE): Median/30 (Range)	0 (0-18)	10 (0-22)	.128 [a]
Function (Barthel): median/100 (Range)			
Before admission	88 (5-100)	95 (65-100)	.137 [a]
On admission	5 (0-90)	18 (0-75)	.162 [a]
Agitation Scale (Pittsburgh): Median/16 (Range)	4 (0-12)	3 (0-15)	.871 [a]
Delirium diagnosed (CAM): n (%)	11 (79)	14 (100)	.222 [b]
Fall risk – High	14 (100)	14 (100)	
Pressure Ulcer risk – High	14 (100)	14 (100)	
Pre admission abode: n (%)			.252 [b]
Community (with or without services)	6 (43)	10 (71)	
Facility	8 (57)	4 (29)	
Patients' reason for admission: n (%) *			
Back pain	1 (7)	0	
Delirium	9 (64)	6 (43)	
Falls	2 (14)	7 (50)	
Haematuria	1 (7)	0	
Stroke	1 (7)	1 (7)	
Coexisting active conditions: n *			
Cardiac abnormalities	9	1	
Delirium	1	1	
Dementia	11	12	
Mental disorders	3	0	
Falls	2	0	
Fractures	1	2	
Sepsis	2	3	
Pulmonary disorders	4	2	
Urinary system conditions	7	6	
Other neurological conditions	4	4	
Diabetes	0	2	
Other major system abnormalities	4	1	

Note. [a] = Mann-Whitney U test. [b] = Fishers' Exact Probability test. * The number of patients for each variable does not equal the total number of patients because of the inherent co-morbidity complexity of older patients. CAM = Confusion Assessment Method. MMSE = Mini Mental State Examination.

Patient Clinical Outcomes

Table 7.11 shows a summary of the patients' clinical outcomes during their hospital stays or on discharge. Scores for function on discharge using the Barthel Index were doubled for PG2, but the difference between groups was not statistically significant. The patients in PGI experienced slightly higher levels of agitation on the Pittsburgh Agitation Scale and slightly more delirium symptoms were diagnosed using the Confusion Assessment Method in PG2 during the first week of admission, as compared with PG1, but neither was significantly different.

No patient from either group developed pressure ulcers whilst in hospital. Six patients in PG1 and three patients in PG2 fell whilst in hospital, but this was not significant. However, two patients in PG1 fell twice. A mechanical restraint device (Posey chest restraint) was instigated for one patient in PG1. The use of an Individual Patient Special nurse (IPS) for periods of one-to-one care for seven patients in PG2 was significant (p = .006). The patients' discharge destinations were not significantly different, although two patients in Group 1 died whilst in hospital.

Audits of the patients' notes seeking evidence for the prescription and administration of psychotropic or sedative medications showed no significant differences. There were no new sedatives (such as, temazepam) commenced in hospital. Equal numbers of patients were prescribed and administered psychotropic drugs (such as, haloperidol or risperidone) for varying periods during their admission. All of these patients were given small doses for short periods and two patients in each group were both admitted and discharged on a small dose of a psychotropic drug.

However, significant differences in the prescription and administration of analgesic medications were found. Over twice the number of patients in PG1 appeared to require more analgesic administration than in PG2 (p = .013). There was still evidence of problems for some patients in PG2. Most analgesic prescriptions were for p.r.n. (pro re nata – as necessary but not more often than 4th hourly) administration but were given irregularly. Examples of these concerns were given for PG1 in Chapter 4, Section 4.2.3. An example in PG2 showed a patient admitted with dementia and bursitis of the knee, that was exacerbated by several falls whilst in the hospital. This patient persisted in wandering about the ward in an agitated fashion. It was documented that his knee was swollen, red and hot but that he said he was not in pain. Therefore, over the 52 days of his admission he was given only three doses of the paracetamol that had been prescribed to be given p.r.n. Kaasalainen (2007) reported that patients with dementia may not be able to understand or report the reason for their agitation, even when they are in pain.

Table 7.11: Outcomes for the surviving patients at discharge from hospital in the before-intervention (PG1) and after-intervention (PG2) groups.

Variable	**PG1** **n = 14**	**PG 2** **n = 14**	**p value**
Function (Barthel): median/100 (Range)			
Discharge	25 (0-75)	52 (5-95)	.104[a]
Agitation Scale (Pittsburgh): median/16 (Range)			
Day3	3 (0-15)	2 (0-5)	.089[a]
Day 7	1 (0-12)	1 (0-4)	.363[a]
Delirium diagnosed (CAM): n (%)			
Day3	11 (79)	14 (100)	.222[b]
Day 7	8 (57)	7 (50)	1.00[b]
LOS in days: median (Range)	11.5 (4-58)	12.5 (7-52)	.381[a]
Patients who fell: n (%)	6 (67)	3 (33)	.429[b]
Injuries from falls : n (%)	1 (7)	1 (7)	
Pressure ulcers developed: n (%)	0	0	
Mechanical restraints used: n (%)	1 (7)	0	1.00[b]
IPS nurse: n (%)	0	7 (50)	.006[b]
Discharge abode: n (%) *			1.00[b]
Community (with or without assistance)	2 (14)	3 (21)	
Facility	10 (71)	11 (79)	
Medications: n (%)			
Psychotropics prescribed	8 (57)	8 (57)	
New sedatives prescribed	0	0	
Analgesic issues	13 (93)	6 (43)	.013[b]

Note. [a] Mann-Whitney U Test. [b] Fishers' Exact Probability Test. CAM: Confusion Assessment Method. LOS: Length of Stay. PG1: Patient Group 1= patients in the before- intervention group. PG2: Patient Group 2 = patients in the after-intervention group. * In Group 1 two patients died whilst in hospital.

The patients' median lengths of stay (LOS) in hospital are shown in Figure 7.3 and were similar for both groups. There were two outlying stays in PG1 and one in PG2, though the 1st quartile was slightly wider in PG2.

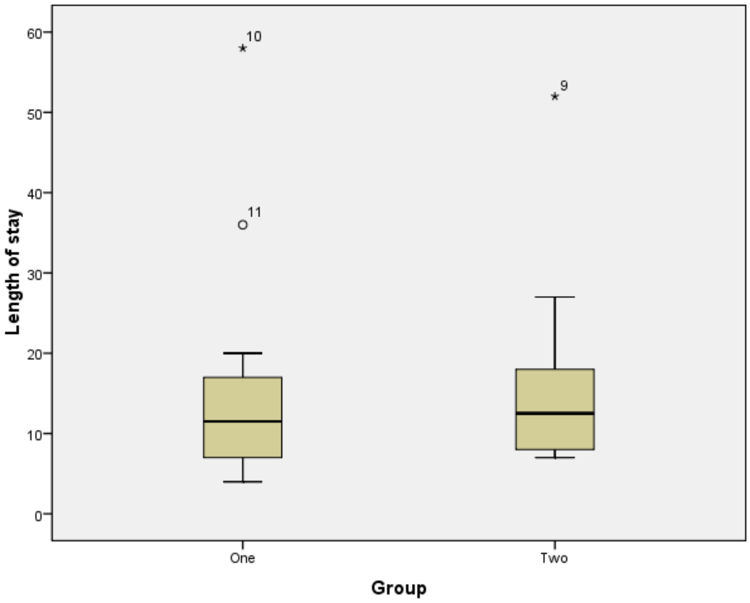


Figure 7.3: Length of stay in hospital in days for the before-intervention (PG1) and after-intervention (PG2) groups, showing 1st and 3rd quartiles plus median values and outlying stays.

The descriptions of the patients' characteristics showed that the conditions of the patients in this acute aged care ward were complex and required highly skilled care. All patients displayed some agitation and were at risk of poor outcomes, which necessitated accurate assessments and time-consuming care. The fact that no pressure ulcers developed and there were few falls, especially with very few obvious injuries is notable, given the demands of the work situation.

In reflecting on the patients' outcomes it is difficult to state categorically what the major reason was for each of these patient's admissions, because experience has shown that clinical opinions are often divided as to the major reason for presentation to hospital. For example, there are arguments regarding some likely initiating events such as, falls versus delirium versus urinary tract infection, because these events and conditions are often related. This needs to be carefully examined to support correct medical record coding and the provision of activity data reports. In particular, nursing acuity weights may be inaccurately applied to complex patient episodes, thus contributing to workforce problems, such as staffing shortages and overwork as described by Duffield et al. (2007), and may lead to adverse patient events and ongoing staff 'churn'. Thus the coding of delirium and dementia encouraged in the previously described Clinical Redesign project attempted to reduce this possible anomaly.

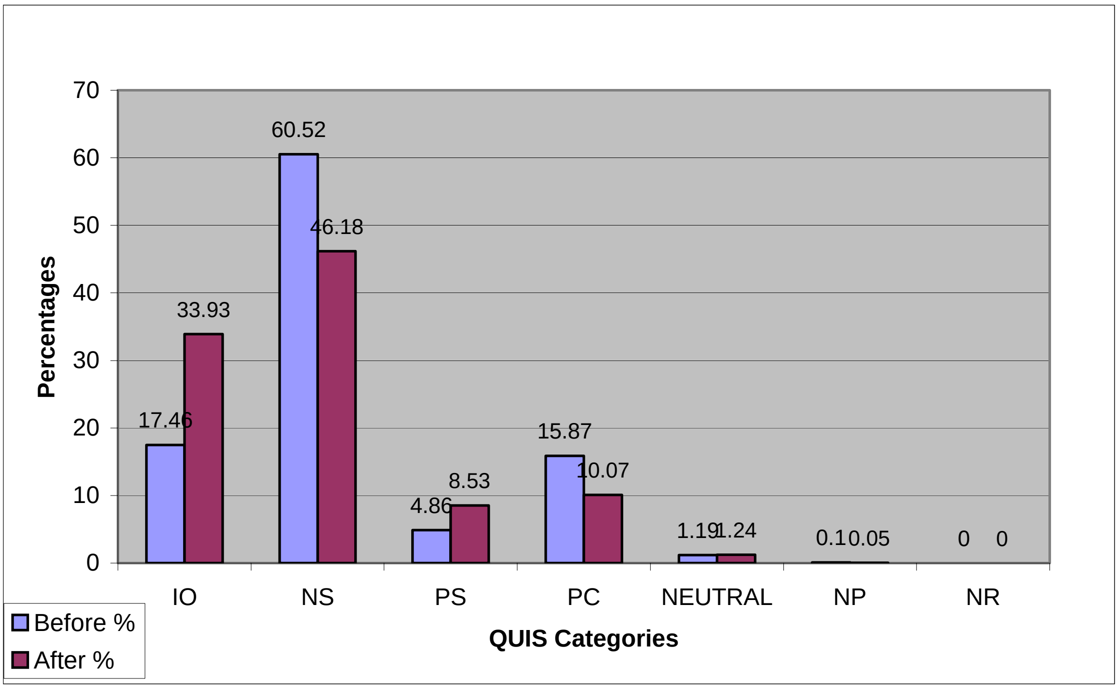
The finding of adverse outcomes involving poor administration of analgesic medications is a concern that needs future attention. Pain assessment in people with cognitive impairment has been noted to be difficult by a number of authors (such as, Cohen-Mansfield & Creedon, 2002; Fuchs-Lacelle, Hadjistavropoulos, & Lix, 2008; McAuliffe, Nay, O'Donnell, & Fetherstonhaugh, 2009). A number of assessment tools have been developed and the Abbey Pain Scale (Abbey et al., 2004) was available in the end-of-bed notes of all the patients in the study ward. The statistically significant improvement in analgesic administration in the after-intervention group may be explained by the significant improvement in nurse participation in delirium training in the post-intervention group. Nevertheless, it was of concern that there were still possible analgesic administration issues for 6 (43%) of these study patients.

The use of Independent Patient Special (IPS) nurses to assist in the care of the most confused and agitated patients in the after-intervention period was encouraging. This most likely contributed to the decreased numbers of patient falls during this period.

Nurse-Patient Interactions

Following the training refresher sessions and inter-rater reliability checks, a suitable schedule for observation periods was arranged to measure the nurse-patient interactions using the Quality of Interactions Schedule (QUIS). The ward nurses were notified of the planned activities and observation time frames and consent was gained.

Fourteen patients were observed for a total of six hours each as had been done in the before-intervention period. Codes specifying the type of interaction observed (see Chapter 4, Table 4.7) were documented every 2.5 minutes in 2-hour periods for a total of 84 hours giving 2016 observations in each group. These counts were totalled for each patient and the ranges and distribution of observations per category, across all patients were calculated. Each category is shown as a percentage of the total interactions observed in Table 7.4. The medians were calculated and compared between PG1 (before-intervention) and PG2 (after-intervention) using the Mann-Whitney U test (see Table 7.12). The number of nurses observed during this activity varied from 28 nurses for PG1 group before-intervention to 35 nurses for PG2 group after-intervention.



Note. IO = Interaction with others. NS = No Staff Interaction. PS = Positive Social. PC = Positive Care. NP: Negative Protective. NR = Negative restrictive. QUIS = Quality of Interaction Schedule.

Figure 7.4: Total percentage of coded nurse-patient interactions recorded using the Quality of Interaction Schedule (QUIS) every 2.5 minutes in 2-hour periods over a total of 84 hours in each before-intervention (PG1) and after-intervention (PG2) period (Patients n = 14/14. Nurses n = 28/35. Hours n = 84/84. Observations n = 2016/2016).

Table 7.12: Median score and range of nurse-patient coded interactions using the Quality of Interaction Schedule (QUIS) recorded every 2.5 minutes in 2-hour periods over a total of 84 hours in each before-intervention (PG1) and after-intervention (PG 2) period (Patients n = 14/14. Nurses = 28/35. Hours n = 84/84).

Category	**PG1 Median (Range)**	**PG2 Median (Range)**	**p value**
Interaction with Others (IO)	16.00 (1-70)	52.50 (9-113)	.017[a]
No Interaction (NS)	89.00 (29-132)	66.00 (3-112)	.098[a]
Positive Social (PS)	5.50 (0-31)	10.00 (0-33)	.065[a]
Positive Care (PC)	20.50 (7-52)	14.00 (3-37)	.069[a]
Neutral	0.50 (0-6)	1.50 (0-6)	.718[a]
Negative Protective (NP)	.00 (0-1)	.00 (0-1)	.549[a]
Negative Restrictive (NR)	0	0	

Note. [a] Mann-Whitney U Test. PG1 = Patient Group 1 (before-intervention). PG2 = Patient Group 2 (after-intervention).

There was a statistically significant change between groups in the Interaction with Others (IO) category (p = .017), indicating that the patients in PG2 interacted more often with people other than the nurses who had consented to participate in the study, than in PG1. There was a trend towards an increased number of Positive Social (PS) interactions in PG2, signifying that the nurses provided social interaction and companionship as well as physical care during their care activities. This corresponded with a trend for decreased numbers of Positive Care (PC) interactions or those that only addressed physical care, in PG2

The significant increase in the number of coded Interactions with Others for the patients in PG2 could have been interpreted in different ways. It may have been an indication of an increase in the nurses' understanding that confused patients needed constant reassurance and orientation so that other staff or visitors endeavoured to interact more often with them. It might also have been a result of the increased availability of staff because IPS nurses were available to help with patient care.

The trend towards increased Positive Social interactions in the post-intervention group (PG2) was encouraging. This meant that the nurses who were observed seemed to endeavour to expand their communications with their confused patients to encompass 'good, constructive, beneficial' conversation, rather than just that which was necessary for delivering care. This could have reflected an increased knowledge and understanding of the person-centred needs of confused patients. This may have been related to the increased numbers of staff due to the presence of IPS nurses who had time to pursue more Positive Social interactions with the patients during their one-to-one care.

Nurse Care Planning Activities

During the QUIS observation period of approximately 7 weeks, a minimum of three nurses' handover sessions per week were surveyed as had been done in the before-intervention period. The designated patients' notes were examined for evidence of instructions regarding communications and person-centred care, as well as evidence of antipsychotic, sedative and analgesic medication prescription and administration. The bedside environments were also surveyed for evidence of communication and person-centred care advice and the display of personal reassuring memorabilia.

Evidence of nursing activities planned to specifically mitigate the effects of delirium and dementia are summarised in Table 7.13. Whilst none of the expected activities were observed in NG1, there was one significant difference in activities in NG2. This was demonstrated by the inclusion of completed CCC forms in the bedside notes of seven of the 14 patients (p = .006). However, the availability of these completed forms was not documented in the Patient Care Plans or Integrated Notes nor mentioned at any surveyed patient care handover sessions. Reference to any individual patient's personal history was not observed during patient handover sessions at any time before or after the intervention period. Personal orienting memorabilia was not observed at the bedsides of any of the patients in the study.

Table 7.13: Summary of nursing care-planning activities gathered in surveys of nursing handover activities, patients' notes and the ward environment, three times per week during the QUIS observational periods for the before-intervention (NG1) and the after-intervention (NG2) groups.

Variable	**NG1 n= 14**	**NG2 n = 14**	**p value**
Communication & Care Cues form: n (%)			
Completed and present in bedside notes	0	7 (50)	.006 [a]
Mentioned at handover	0	0	
Documented in Care Plan	0	0	
Personal history mentioned: n (%)			
Handover	0	0	
Care plan/Integrated notes	0	0	
Orienting memorabilia present at bedside: n (%)	0	0	

Note. [a] Fishers' Exact Probability Test. NG1 = Nurse Group 1(the before- intervention group). NG2 = Nurse Group 2 (the after- intervention group).

Whilst the provision of social supports for older patients is recommended (Laschinger, Finegan, Shamian, & Wilk, 2001) and the extended action learning sessions had focussed on aspects of person-centred of care, there was little overt sign of nursing application in this regard. This could have been an example of resistance behaviour but may have been related to busyness and 'churn'.

Nursing Staff Turnover

Investigations of the possible effects of the intervention period activities on the nurses' turnover and sick leave rates involved an examination of the nurses names on the ward roster lists and the sick leave data in the computer-based rostering program. There was no attempt made to rationalise the hours worked by individual staff members who made up the overall full-time-equivalent roster compliment required for the ward in the before and after-intervention periods. This was expected to vary according to the number of staff who wished to work differing hours to suit their out-of-work responsibilities. In the before-intervention period there were 32 permanent nurses listed, made up of the NUM, CNE, CNS, RNs, NGs, EEN, TEN and AINs. In the after intervention period there were 39 nurses listed with similar professional representations. Eleven of the names were the same as in the before–intervention period and there were 28 new nurses' names. An equation provided by the Duffield et al. (2007, p. 95) study was used to calculate the percentage of nurse turnover

$$\%\ \text{New/Additional} \quad = \quad \frac{\text{NewNursesSecondRound}}{\text{NursesFirstRound.}} \times 100\%$$

It was found that there had been an 88% change in nursing staff in the before and after-intervention seven-week data gathering periods, demonstrating the presence of nursing 'churn'. The study ward ranked within the rates for the top 15% of the 34 wards surveyed and ranked by Duffield et al. (2007) for high nursing turnover rates.

Whilst this analysis did not attempt to explain the differences in hours worked by staff in the study ward, it did show the presence of a high proportion of new staff who required information about the study and educational updates. This was partially related to the effects of nurse training rotations as described in Chapter 3, Section 3.2.3. The rotations involved approximately 12 new RNs and 10-12 new TENs who passed through the ward each year. It also did not attempt to provide a picture of the flow of pool or agency staff who were used to fill nurse vacancies, leave requirements and IPS duties during those times, and thus required repetitive orientation to the aged care ward protocols.

The turnover of senior management staff during the intervention period has already been noted in each Cycle description. In the ward, in particular, during the intervention period, there were two different NUMs who took a combined total of four periods of more that four weeks leave at a time and were replaced by four different inexperienced nurses. There were three different CNEs, all of whom were new to the teaching role, as well as aged care specialty responsibilities. The Hospital and Area management structures changed during the intervention period leading to the appointment of new staff in all senior positions.

A basic understanding of changes in the nurses' sick-leave requirements was gained by counting the number of sick-leave days taken during the three months before and after the intervention period (April, May, June in 2006 and 2008) These numbers were then divided by the total number of nurses in each study group; that is those on the ward rosters during those periods, as suggested by Hensing et al. (1998, p. 142). This did not include casual staff. The results are shown in Table 7.14. The calculation showed an increase in the frequency of sick leave taken in the after-intervention period from 0.8 to 1.6 days per person.

Table 7.14: Nurses' frequency of sick-leave compared between the before-intervention and after-intervention periods.

YEAR April, May, June	**Number of Nurses on Ward Roster**	**Total Days of Sick Leave**	**Frequency of Sick Leave in Days**
2006	32	26	0.8
2008	39	62	1.6

This result might have been expected given the high staff turnover (particularly at senior levels) and the increased stress expressed by the nurses' caring for hypolert patients with delirium in the Strain in Care of Delirium Index measures, during the after-intervention period. It is also possible that the negative media publicity might have contributed to the need for the nurses to take increased numbers of sick-leave days.

Relatives' Satisfaction

Following the discharge of the study patients the same volunteer research assistant who had undertaken the satisfaction surveys in the before-intervention period telephoned the relatives. The same closed and open-ended questions based on the elements of person-centred care were utilised to seek their opinions of nursing care during the patients' stays.

A summary of the closed responses under the headings of 'very satisfied', 'satisfied', 'neither', 'unsatisfied', very unsatisfied' was undertaken. As in the before-intervention results reported in Chapter 4, Section 4.2.5, it was decided to collapse these responses down to the headings of 'satisfied', 'neither', 'not satisfied' to aid statistical interpretation (see Table 7.15). The relatives reported more satisfaction than dissatisfaction with the nurses' care (Q1) including their efforts to reassure (Q 2) and encourage (Q3) the patients in both groups, with no significant difference between groups. There was a trend towards more reported satisfaction with the nurses' attempts to 'listen' (Q4) to their patients in PG2.

There was a significant difference in the responses regarding the use of the patients' personal background information (Q5) in PG 2. More than half of the respondents in PG1 did not think that the nurses tried to find out background information so that they could help the patients understand what was happening to them, added to just under a third who did not know if this had happened at all. In PG2 over a third of the relatives were satisfied that nurses had asked for this information and had used it, although over a half did not know. Post hoc analysis of the differences in the Q5 2 x 3 chi square comparisons was conducted using three 2 x 2 comparisons and Fishers Exact probability. There was a significant difference between the 'don't know' and 'not satisfied' (p = .024) and between 'satisfied' and 'not satisfied' (p = .035). That is, the relatives in PG2 were more satisfied that the nurses had tried to learn about and use personal information about the patient.

Table 7.15: Relatives' responses to questions regarding their opinions of aspects of nursing care in the before-intervention (PG1) and the after-intervention (PG2) groups.

Question	PG1 n = 14 n (%)			PG2 n = 14 n (%)			p value
	Satisfied	Neither	Not satisfied	Satisfied	Neither	Not satisfied	
Q1. Overall, where you satisfied with the nurses' **care** of X?	12 (86)	1 (7)	1 (7)	13 (57)	1 (7)	0	.595 [b]
Q2. Do you think the nurses generally tried to **reassure** X when he/she was confused?	8 (57)	4 (29)	2 (14)	10 (71)	3 (21)	1 (7)	.705 [b]
Q3. Do you think the nurses generally tried to **encourage** X when he/she was confused?	7 (50)	5 (36)	2 (14)	11 (79)	3 (21)	0M	.184 [b]
Q4. Do you think the nurses generally tried to **listen** to X when he/she was confused?	7 (50)	4 (29)	3 (21)	12 (86)	2 (14)	0	.063 [b]
Q5.Do you think the nurses generally tried to **find out and use personal background** information so that they could help ... to feel safe and understand what was happening?	2 (14)	4 (29)	8 (57)	5 (36)	8 (57)	1 (7)	.018 [b]
Q5. Category analysis	2 (14)	4 (29)		5 (36)	8 (57)		1.00 [a]
		4 (29)	8 (57)		8 (57)	1 (7)	.024 [a]
	2 (14)		8 (57)	5 (36)		1 (7)	.035 [a]

Note. [a] Fishers' Exact Probability test, [b] Pearson Chi-Square test. PG1 =Patient Group 1 (before-intervention). PG2 = Patient Group 2 (after-intervention).

After each relative had stated their satisfaction response to each question, they were asked if they would like to explain their answer. Using semantic and latent content analysis, four concepts emerged – positive views, negative views, and specific comments relating to staff or workloads and those who really did not know what happened because they had not visited very often. There were positive responses in both groups, such as in PG1, *"… some very good"; "… very impressed, staff were patient with my father"; "… one lovely person, I appreciate how difficult it is"*. The PG2 positive example responses were: *"… wonderful people, caring and supportive"; "…nurses all very nice"; and "… nurses were reassuring".*

Whilst there were more positive answers in PG2 than in PG1 (22 versus 16 respectively), twice as many relatives in PG2 qualified their positive responses about the reassuring, encouraging and listening activities of the nurses with comments such as *"Some nurses though didn't know what to do"; "Some did, some didn't"; "I'm sure the regular ones did* (listen)*"*. One relative in PG1 said' *"… looked cared for but had problems with one particular person that made the whole experience awful'.* The relatives observed that lack of time or staff was an issue five times in PG1 and three times in PG2, for example, *"Don't think they had time"; They were so busy".* One relative in PG1 responded *"… seeing different people made father confused",* whilst another in PG2 commented *"… moving rooms all the time made the problem worse".*

Use of the English language was noted to be a barrier for patients and staff in each group. This was reflected in comments by PG1 relatives, such as *"… listened but didn't understand so didn't try"* and "*… listened to her though some responded to my mother in a way that was intimidating and perhaps a little bit threatening".* There was one particularly negative comment in the PG2 about the lack of blankets and help with meals. This family noted that they felt they had to arrange their own shifts to look after their relative.

Few relatives reported in the structured questionnaire or in the comments that they were aware of any efforts being made to seek personal background information to help the nurses to reassure their patients. This was contrary to the significant finding of CCC forms being present in the patient end-of-bed notes for seven of the 14 patients in PG2. One relative from PG1 could not remember just what had been asked but felt sure something had been requested. One relative from PG2 remembered filling in a Communication and Care Cues form that was initially placed by the bed, but reported that this seemed to disappear after the bed was moved to another room.

This lack of awareness shown in the comments regarding the CCC form and it's intention, may signify either high family stress levels (particularly in regards to admission assessment practices) or some level of disengagement with hospital care.

However, the negative comments about individual staff members cannot be discounted, despite the higher number of comments that were positive.

7.3 SUMMARY

In summary, reflections on the activities carried out in Cycle 4 showed that there was instigation of an intense final effort to facilitate person-centred care practices in the study ward using Clinical Redesign resources, before the initiation of the after-intervention study evaluations. There were some successes demonstrated quantitatively and the development of new care planning tools, despite continued obstacles. However, full engagement of the ward staff with the action research activities and person-centred aims of the project was not achieved.

The Clinical Redesign project was implemented through the employment of a special Project Officer. Twenty-six separate in-service education sessions of various topics pertaining to the study were given with 217 overall staff participations, as well as numerous individual demonstrations and role modelling sessions. An audit of the patients' files showed improved documentation of delirium and dementia, which was not significant in the small number of records audited. Interpersonal issues arose during the Clinical Redesign project and a workshop was conducted to encourage leadership and sponsorship with probably limited impact.

Nevertheless, recognising that an aim of action research was to stimulate ongoing and sustainable change, the development of more care planning tools and strategies to spur and maintain change during this last cycle must be noted. These included the person-centred model of care, the 'D' sign, the new bed notice boards, the orientation board, a clock and bedside document holders and the draft Delirium Risk Assessment Tool. Thus the potential building blocks for supporting practice enhancement and nursing stress reduction, as well as creating sustainable practice change were assembled.

The nursing groups who returned questionnaires were well matched. More nurses consented to participate in the study in NG2 but there was a higher questionnaire return rate from NG1. The NG1 respondents had significantly more experience in the aged care specialty and a slightly higher proportion of older, permanent nursing staff which was not significant. The trend for more specific dementia or aged care education for NG2 was supported by a significantly higher reported rate of delirium education participation.

Changes in nursing outcomes were variable. Using the SCDI the nurses in both groups did not report much strain in caring for patients with delirium as median scores were mostly in the ‘easy’ range except for hyperactive/hyperalert behaviour which was in the ‘difficult range. However, there was a slight shift in the scores towards the ‘difficult’ range for NG2 and individual scores in both groups reached the ‘difficult’ or ‘very difficult’ category. The only significant change was in the subscale for hypoalert behaviour but the median scores still remained in the easy range. Similarly, although all subclass scores for nurses’ burnout measures (MBI) were worse in NG2 and there were wide individual score ranges, there were no significant changes. Whilst the Dementia Knowledge Questionnaires showed little apparent difference in scores between groups, with both showing a median of more than three quarters of the answers correct, both showed wide ranges between half to all 14 questions correct.

The nurses’ morale continued to be challenged by sustained negative media publicity that focussed on the study hospital and specifically the aged care service, plus continuing staff ‘churn’ at all levels of the Health Service. However, the continued use and acceptance of the large name badge intervention may have helped to support morale.

Summaries of the patient measurements showed that the groups were well matched with no differences in their baseline characteristics. All the patients were cognitively impaired with severely reduced levels of function and high risks for falls and pressure ulcers. All displayed some level of agitation on admission. The most common reason for admission was falls or delirium or both and more that three-quarters of the patients in both groups had dementia on admission.

Most patient outcomes during and at the end of hospitalisation were also similar, with just a few significant differences. Similar numbers of patients were discharged to aged care facilities despite the slightly lower levels of function and slightly higher levels of agitation on admission for PG1 (as well as the death of two patients). There was no statistical difference in fall numbers, even though more patients in PG1 fell (and two patients fell twice), nor in mechanical restraint use. However, there was a significant improvement in use of IPS nurses in PG2 and the availability of CCC forms for PG2, even though the CCC information was not supported by documentation audits or observations of handover practices. There was no difference in the use of psychotropic medications but there was a significant difference in the pharmacological management of pain. Almost all patients in PGI appeared to have been under-treated for pain at times during their admission, particularly in the administration of analgesic medications as needed rather than regularly, compared to possible under-treatment for half of the patients in PG2.

The telephone survey of the relatives' considered opinions of the nurses' care in relation to person-centred factors, showed a trend towards the recognition of more efforts made by the nurses to listen to the patients in PG2. There was a small but significant increase in the recognition of nurses' endeavours to gather the patients' personal social background information to assist in the reassurance of cognitively impaired patients and a lower level of dissatisfaction for PG2.

The relatives' open-ended questionnaire responses provided some praise and some criticism for the nursing staff in both groups. The praise was mostly general but was sometimes qualified with criticism for an individual nurse. There were more negative comments in PG1 but more positive comments in PG2 were expanded in a negative way. There were slightly more comments regarding the lack of staff and busyness in PG1. Only one relative remembered filling in a CCC form in PG2**.**

In summary, despite the lack of staff engagement, possible increases in the nurses' stress and burnout levels plus other obstacles, there were a number of significant and encouraging changes. The significant improvements involved patient analgesic administration, the use of IPS nurses to care for confused patients, the numbers of nurses who participated in delirium training, the use of the CCC form to enable appropriate communication with confused patients, the increase in interactions with confused patients, the relatives' increased satisfaction with the nurses' use of background information to reassure their patients and the trend towards increased social interactions between nurses and patients. The encouraging changes involved the number of new care planning tools that were developed by the nurses that could lead to ongoing practice improvement. The obstacles included competing Area Health Service activities, negative media reports plus possible staff oppression and resistance behaviours that may have contributed to a diminution of the study achievements.

A summary of the activities undertaken and influences experienced during the four action research cycles is provided in Table 7.16. Further discussions of the outcomes, influences and limitations leading to recommendations for future research and action are provided in Chapter 8.

Table 7.16: Summary of activities and influences in Cycles 1, 2, 3 and 4.

Cycle 1 Negotiation, Recruitment, Baseline Measurements and Observations	**Cycle 2 The initial intervention plan**	**Cycle 3 Obstacles in the 'swamp'**	**Cycle 4 Clinical Redesign support and final measurements**
Ethics clearance **Stakeholder negotiation** **Before-intervention measures** – Nurse recruitment, consent & characteristics, baseline measurements, care planning and turnover – Patient/relatives' recruitment, consent, characteristics and baseline measurements – Nurse and patient interaction observations (QUIS) – Relatives satisfaction measurements – Nursing staff turnover – Observers' and Nurses' focus groups feedback	**Nurses' participation & morale** - Large name badges - Satisfaction survey **Nurse 'churn'** - Orientation Manual - Competencies **Nurses' knowledge** - In-service education program - Dementia Experiential Workshops **Patient care planning** - CCC form - 'C'sign - Activities cupboard - Talking Pictures folder **Communication with relatives** - CCC form	**Increased 'churn' across Area Health Service** **Continuum of Care projects** • Chronic & Complex Care • ACR Diagnostic project **New tools** - Poster 'Is You Patient Confused'? - Worksheets **Imposed protocol changes** – Audio taped handover – NUM's (discharge planning) handover sheet – 'the blitz' **Negative media influences** **Documentation audit for delirium/dementia** **AIM workshop**	**Continued negative media influences** **Continued staff 'churn'** **Clinical Redesign Project** – Intense in-service education program - Case studies - Dementia Experiential Workshops - Junior medical staff targeted - Demonstrations and role modelling **PCC Model of Care** - Pictorial model **Bed-based notice boards** **Clock** **Orientation notice board** **'D' sign** **DRAT**
Issues for intervention plans • The nurses sense of empowerment. • Knowledge regarding delirium, dementia and person-centred care. • Recognition of behavioural symptoms related to uncontrolled pain. • Obtaining and using patients' personal social information. • Mitigation of the effects of constant staff turnover affecting knowledge essential for patient care. • effective communication with relatives.	***Issues for intervention plans*** •Difficulties in encouraging nurses' participation in agreed care activities. •Disempowerment and bullying activities. •Difficulties in encouraging manager's reinforcement •Ongoing staff 'churn' at all levels. •The questionable suitability of practice development/ action research for encouraging evidence based practice change in a 'churning' environment with and by oppressed populations.	***Issues for intervention plans*** • Poor documentation of delirium / dementia diagnoses. • Discrepancies in AR-DRG coding and LOS data. • Implications of incorrect AR-DRG coding on hospital activity data and nursing workload calculations. • Need for managerial sponsorship for sustained change. • Clinical Redesign project to bolster support for the tools and protocols developed through the study.	**After-intervention measures** • Nurse recruitment, consent & characteristics. • Nurse measures • Patient/relatives' information, recruitment & consent. • Patient measures. • Nurse and patient interaction observations. • Nurses' care planning. • Nursing turnover. • Relatives' satisfaction measures. • Documentation audit.

Note. ACR = Aged Care & Rehabilitation. AR-DRG = Australian Refined Diagnosis Related Group. CCC = Communication and Care Cues. DRAT = Delirium Risk Assessment tool. LOS = Length of Stay. NUM = Nursing Unit Manager. PCC = Person-centred care. QUIS = Quality of Interactions Schedule

CHAPTER 8: DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

The purposes of the final chapter are to review the study intentions, actions and results so that the study achievements and limitations can be examined to integrate the study findings into extant literature and provide recommendations for further actions and research. The discussion also involves reference to recent literature that was not available during the action research cycles.

A continuous search of the literature has shown that there are likely to be more older and complex patients with cognitive impairment and disturbed behaviour in the acute hospital care sector in the future (Access Economics, 2009). These patients require skilled nursing and nurses have reported feeling stressed by the demands of care for the older patient. It has been reported that nurses often feel neither well-prepared nor motivated to look after these patients due to workforce issues, knowledge and skill deficits as well as ageist ideas about the patient’s capacity (Courtney, Tong, & Walsh, 2000; Higgins, Van Der Riet, Slater, & Peek, 2007; Poole & Mott, 2003). Nurses’ feelings of stress can be exacerbated when older people often have adverse outcomes during a hospital stay and care is complicated by episodes of delirium, which may be preventable (Inouye, 2004). Various approaches to reducing nurses’ stress levels and improving patient care were reviewed, mindful of the reported link between work conditions and the sense of possible powerlessness in women, since the predominant nursing workforce is female. Therefore, the study guiding framework was informed by the theory of the Integrated Structural Model of Human Behaviour (Kanter, 1993), that showed the link between employees perceptions of organisational power and their work behaviour. To find ways to influence this behaviour, the processes of facilitation and reciprocation that underpin the concepts of Person-Centred Care (Kitwood, 1993) and Practice Development (McCormack, Manley, & Garbett, 2004) were applied using action research methods (Badger, 2000; Greenwood & Levin, 2007).

The intention of this study was, therefore, to investigate the implementation of person-centred care for older patients with cognitive impairment and disturbed behaviour in an acute aged care hospital ward. The study examined these endeavours and their effect on the nurses’ stress levels, nursing practice, patient outcomes and family satisfaction. Four action research cycles were undertaken which included processes of observing the current situation, planning for changes, acting on the agreed plans and observing the outcomes with a reflective and collaborative approach. The first cycle (Chapter 4) involved setting up the study, recruitment of nurses and patients and the collection of baseline data for both groups of participants. Non-participant observation was employed to assess the quality of nurse-patient interactions, which provided the foundation to inform care planning and shape the particular interventions that were anticipated to enable person-centred care. The next three cycles (Chapters 5, 6, 7) documented the processes employed to carry out these plans in the context of workplace diversions and stressors. In response to constant staff turnover and issues with nurse participation, the reflections undertaken during each cycle assisted in the planning of ongoing actions to progress the study intentions. It was recognised that reflection on these actions was an '…active, dynamic, often threatening process, which demands total involvement of self and a commitment to action' (Bolton, 2005, p. 76) and relied heavily on the skills of the facilitator or, in this study, the Investigator. Given the difficulty in progressing change through action research in a dynamic, often chaotic environment, the viability of action research methods is considered with a review of the study results. Whilst action research proved difficult to achieve in this setting, there were some benefits for the patients.

Given the high level of acuity of the patient population, it was expected that there would be more adverse outcomes for the study participants (Inouye, Rushing, Palmer, & Pompei, 1998; Maher & Almeida, 2002). There were only a few adverse events identified in participating patients. When delirium occurred in these patients, an anticipated consequence of illness and hospitalisation for older people, this resolved by day seven for approximately half the patients in both groups. There were few falls, no pressure ulcers developed, low levels of antipsychotics were prescribed and there were no new sedative medications administered. Whilst approximately three quarters of the patients in each group were discharged to an aged care facility and lengths of stay exceeded the ward average of 7.4 days for that period (NSCCHS, 2007), these were not in themselves necessarily poor outcomes given the debility of the particular sample of patients deliberately chosen for their symptoms of agitation and confusion (Amador, Reyes-Ortiz, Reed, & Lehman, 2007) .

There were also some positive outcomes in care services following the two-year period of interventions, planned in response to the nurses' expressed lack of clinical knowledge and sense of empowerment. Positive outcomes were shown through a number of organisational culture changes that occurred at the ward and hospital level and the development of new care planning tools. There were statistically significant improvements in the numbers of nurses who participated in delirium training, nurses' interactions with confused patients, the completion of the new Communication and Care Cues form (CCC), the use of Individual Patient Special (IPS) nurses to care for confused patients, the administration of patient analgesic medications and the relatives' satisfaction with the nurses' use of background social information to reassure the patients. There were trends towards increased nurse participation in dementia or aged care education and the number of social interactions between the nurses and patients. The nurses expressed satisfaction with the instigation of large staff name badges that enabled them to communicate more effectively with each other and with other members of the multidisciplinary team and there was some improvement, though not of statistical significance, in the documentation and coding of delirium diagnoses. However, some of these improvements may not have been associated with the study interventions, for example the use of IPS nurses.

During the intervention period the nurses participated in the development of new patient care practices and care enhancement tools which, although not fully implemented during the study, provided the opportunity for ongoing practice improvement towards the end of the study and beyond. These positive developments included the education program, the modified dementia experiential workshop, the enhanced Communication and Care Cues form, the Activities Cupboard, the Talking Pictures folder, the competency for the Management of Disturbed Behaviour in Older People, the Worksheets, the enhanced Orientation Manual, the ward Values Clarification Mandala poster, the Model of Care for Older People with Disturbed Behaviour and the draft Delirium Risk Assessment Tool.

Conversely, there were a few negative outcomes observed in the nurses that occurred throughout the study. There was a trend towards increased feelings of strain reported by nurses when caring for delirious hypoalert patients, increased levels of emotional exhaustion in the after-intervention group and increased rates of sick leave taken by the nurses in the after-intervention period. These findings and overall results are discussed in relation to the selected action research methods employed and the guiding conceptual frameworks for the study.

8.1 DISCUSSION

It is claimed that there are three requirements for the enablement of action research methods: a social need that is susceptible to change activities, a question of how to address the need and the willing involvement of stakeholders in change activities (McCormack, Manley, & Garbett, 2004). The social need that triggered this study was recognition that nurses in the acute care sector needed special help to improve the care of older patients with cognitive impairment and disturbed behaviour which was often associated with poor patient outcomes and feelings of stress for the nurses. The question of how to address the need to improve patient care and outcomes was answered through the nurses' reflections on feedback regarding observed nurse-patient interaction practices. This prompted investigations into the causes, prevention or management of disturbed patient behaviour, including factors that influenced patient care and well-being, such as nurses' knowledge, morale and attitudes towards the care of older people. The willingness of these nurses and their managers to be involved in improvement activities was indicated initially through discussions and then their consent at the start of the study. However, a period of constant staff turnover at every level of the Health Service then complicated the study environment, which necessitated repeated revisits to the study purpose and processes and efforts to gain or maintain staff and managers' consent.

The triangulated conceptual framework that guided the study originated in a review of the Person-Centred Care concepts based on the belief that all human beings are equal and the moral imperative for care of those with cognitive impairment must be to maintain a balance between the well-being needs of both the impaired person and the carer (Kitwood & Bredin, 1992). The characteristics and actions of family carers have been linked to levels of negative neuro-psychiatric symptoms, which demonstrated levels of ill-being or well-being in people with dementia (Sink, Covinsky, Barnes, Newcomer, & Yaffe, 2006). Family carers in the Sink et al. study who were found to be younger, less educated, more depressed, more burdened or spent more hours giving care than others in the group and reported more difficult behavioural symptoms in family members with dementia. These findings revealed a link between the carers' own levels of well-being and the symptoms generated in those for whom they provided care. The correlation between the client's levels of cognition and quality of life and the carer's state of well-being is well-established (Bannerjee et al., 2006). It is therefore considered possible that the patient's impaired cognition and lower levels of well-being could also be influenced by particular nurse characteristics. Consequently it was considered important to examine the well-being of the nurses to see the influence this had on patient care and patient outcomes.

8.1.1 Nurse Well-Being

Nurse well-being is a contemporary issue, given the increases in turnover across all health care settings (Duffield, Gardener, & Catling-Paull, 2008). Reduced well-being in women at work is said to be linked to an unequal distribution of power caused by the effects of organisational policies as well as structure and politics that negatively affect women's self image leading to discontent and inertia (Kanter, 1993). Oppressed group behaviours in people who feel they are powerless, which becomes manifest in a range of ways such as, resistance to change and active marginalisation of change agents (Freire, 1968), may initially give oppressed groups a sense of power, but will ultimately further impact their well-being and sense of place in the organisation. In this study, the application of practice development concepts through action research (McCormack, Manley, & Garbett, 2004) intended to free the nurses from these types of negative reactions to change. The intention was to employ action research processes to elevate their sense of well-being through empowerment strategies, where they were encouraged and supported to seek and apply their own informed ideas for more satisfying patient care. Whilst this empowerment and change process was not entirely achieved for the ward staff, the process of documenting 'how the change process was obstructed or not seen as viable despite persistent efforts' (Herr & Anderson, 2005, p. 128) has provided very useful insights into the suitability of introducing change processes into a highly complex, dynamic health care setting.

In retrospect, in discovering the link between nurses' oppression and disempowerment, it might have been more enlightening to actually measure and compare the constructs of empowerment rather than burnout. The model developed by Spreitzer (1995) involved self-rated measures of empowerment including, meaning, competence, self-determination and impact as well as social structure items including, socio-political support, access to strategic information, access to resources and unit culture. This might have provided more overt indications for positive actions for improvement than the negative construct of the burnout scale. Nevertheless the lack of all these constructs was demonstrated throughout the study and is recommended for research attention in the future.

8.1.2 Suitability of Action Research and Practice Development Methods

It has been argued that action research and practice development activities are very alike (Unsworth, 2000). In attempting to unravel the concepts when undertaking work as a practice development nurse in the United Kingdom, Unsworth (2000, p. 320) claimed that practice development encompassed the ‘implementation of research findings into clinical practice’ whilst action research was the actual research method applied to the ‘implementation of change while at the same time gathering data collection about a social situation’. The claim that practice development was an enabling process to stimulate continuous improvements in patient care (McCormack, Manley, & Garbett, 2004) has led the NSW Nursing and Midwifery Office (NSW Department of Health, 2008) to adopt this approach in a wide range of health care settings in NSW. Despite considerable effort by the Investigator in the present study to implant practice development as a way of enabling practice change, the promise of staff empowerment towards change was not fully realised. Like action research, practice development requireds a stable and supportive workplace to provide nurses with the opportunity to effect change (Bannerjee et al., 2006).

Given the ongoing instability that occurred in the study setting, it was not possible to fully implement ‘emancipatory’ practice development activities through participatory action research to assist nurses to deliver person-centred care. Instead the positive outcomes that did occur, outlined above, were probably achieved through ‘technical practice development’ activities (McCormack, Manley, & Garbett, 2004, p. 269). Desired change is said to occur in technical practice development if the facilitator is perceived as the authority figure with knowledge to impart to action groups, as occurred in this study, through education and supervision in the implementation of new clinical guidelines and developing staff skill. In this way, the technical practice development approach, though inadvertently employed in response to constant staff and managerial turnover as well as inadequate nursing participation, was probably the only feasible approach given the variation in staff knowledge, ‘churn’ and resistance to change by some of the ward managers.

The progression to adopt this particular practice development approach arose out of the difficult situation occurring at the ward level, which reflected the wider difficulties being encountered at the hospital level during the study period. Initially action research was the method of choice, however, it became apparent as the action group was being formed and management support was requested, that the conditions required to undertake action research, such as workplace stability and management support were lacking. There are a number of variations in action research methods that can be employed to facilitate health service change when these conditions are not ideal and these could have been considered: action science, action enquiry, cooperative enquiry, soft system methodology, community development; participatory, experimental, organizational, professional or empowering research (Street, 2003, pp. 220, 221). This flexibility of action research methods allows action groups to move between suitable action research approaches as the need arises and this occurred in the present study. Initially the study commenced with the intention to use purely participatory methods. It then became clear that the level of management support and staff opportunity to fully engage in the action process was less than required; the action group (PCCRG) decided to adopt an organisational approach. Key members of the PCCRG, the Clinical Nurse Educator and the Investigator/Clinical Nurse Consultant, decided to use the technical action research model in agreement with the PCCRG members. At the same time, it was agreed that the PCCRG would maintain professional and empowering relationships with all ward staff through ongoing consultation. Action research approaches were, therefore, maintained throughout the study and attempts were made to operationalise the actions through the processes of practice development.

This approach was only partially successful. In recognising the underlying concepts of practice development contained within action research methods, the difficulties experienced by various other action researchers and practice development practitioners must be heeded. The variable results of the present study are understandable in view of the complexities occurring in the study setting, confirmed by Binnie and Titchen (1999) and further explored by Carradice and Round (2004, p. 735)

> … practice development means winning over the hearts and minds of the staff team ... this means facilitating staff to see the need, allowing them to practice, try out their skills, reflect on areas of success and areas for development. This takes time and can be frustrating as everyone develops at their own pace, with their own needs and their own style. It can be difficult to resist the temptation to force change through management pressure or to do it yourself.

With this caution in mind, it became clear during the study that there could be no guarantee that the PCCRG ’s efforts would result in enhanced practice on the ward because of the different levels of nurses’ awareness and their ability to engage in the processes (Carradice & Round, 2004). As the study progressed there were concerns that the focus on enabling nurses to discover new ways of care delivery might have led them to ignore patient needs. The question is, should not the instigation of recognised best practice activities be a requirement, not an optional extra? The practice development idea sometimes expressed, that nurses needed to be individually facilitated and enabled to discover and instigate knowledge at their own ‘pace’ (Carradice & Round, 2004, p. 735), seemed to be advice unable to be carried out given the lack of available supervision for these nursing staff. On reflection, the lack of support for staff may have occurred because of staff ‘churn’, or the failure of managers and senior staff to instill respect for the application of best practice knowledge into a young profession.

This possibility has led to questions about some of the language reported to be used in practice development literature in that it ‘… leaves us questioning whether the flamboyant language serves the interests of a developing discipline which still has not achieved full integration of research into practice’ (Thompson, Watson, Quinn, Worral-Carter, & O'Connell, 2008, p. 221). In recognising the importance of practice development intentions and initiatives, these authors were concerned that practice development might have been taken up as an ‘easy substitute for scholarship and enquiry’ and therefore, they questioned the legitimacy of this particular approach to practice change.

A similar critique of practice development was offered by Walker (2008) when commenting on the apparently ambiguous nature of practice development:

> The only way to convince others (health bureaucracy, colleagues in medicine, allied heath, patients) of our worth and contribution to the well-being of the community is to conduct compelling and useful programmes of strategically focused research into outcomes and effectiveness of our care and then to ‘apply and translate’ the results from such research into clinical practice (Walker, 2008, p. 157).

To do this Walker (2008, p. 159) argued that ‘staff development and education’ plus ‘recognition and reward’ must be addressed. The PCCRG attempted to apply Walker’s recommendations to enact change, but found that lack of managerial sponsorship was also a key ingredient to the low level of achievement of study goals in a time of staff ‘churn’(IMA, 2007).

In answer to Walker’s challenge, McCormack (2008, p. 158) argued that the salient difference between practice development and action research was that practice development was not research and thus did not alienate participants who had been ‘disenfranchised’ by the health system. Results from the present study indicated that this disenfranchisement might have been a result of a lack of knowledge or empowerment to apply the knowledge. McCormack (2008) further argued that practice development was about ‘developing practice’ with ‘new knowledge a secondary intent’. This appears to challenge the statement that practice development included ‘generating evidence’ (McCormack, Manley, & Garbett, 2004, p. 35) and begs the question, how can new practice not be new knowledge? If nurses had been driven away from clinical practice by insurmountable practice challenges, as McCormack claimed, then why not quickly supply the best practice knowledge rather than gradually facilitate discovery whilst coping with mounting practice deficits? The challenges of such tactics in times of staff ‘churn’ seemed too great for the nurses involved in the present study, as they struggled with chaos and competing demands at a very difficult time during the hospital’s history. Rather, the straightforward provision of evidence based knowledge and practice requirements, managerially endorsed, with some appreciation for research outcomes at all levels of education, is probably the most helpful and effective way forward during times such as those experienced throughout the study.

A successful Australian participatory action research study that demonstrated improvements in the care of patients with delirium has been reported by Day, Higgins and Koch (2009). Three researchers, who did not work within the hospital, supported a stable committee of 8 volunteer ward nurses, plus one physiotherapist to facilitate changes to practice over a six-month period. Organisational commitment to the project was ensured at the initial managerial agreement to participate in the study and their recognition that it was important to ensure that ‘administrators sanction, support and promote every aspect of the participatory action research process’ (Day, Higgins, & Koch, 2009, p. 15). Therefore, contract agreements and communication strategies were agreed before the start of the project. Despite similar approaches and efforts in the current study, the sudden unplanned and repeated turnover of important senior ward staff negated the efforts and effectively removed the necessary managerial support needed to progress the study. Duffield et al. (2007) exposed the problems of staff ‘churn’ but there have been no studies that have directly shown the negative effects of ‘churn’ on practice development activities, as occurred in this study. Given the negative impact that constant managerial and staff turnover had on achieving the study goals, it is recommended that written agreements are put in place to authorize ongoing executive and managerial support, to counteract unforeseen changes in managerial positions throughout the study period.

Managerial endorsement of practice improvement is supported by the NSW Special Commission of Inquiry (Garling, 2008) through the recommendation that NUMs should be enabled to spend more time supervising nursing practice, especially for new and novice staff. This recommendation implied that best practice care initiatives should be reinforced over time, rather than simply be given a ‘try out’ as proposed by Carradice and Round (2004, p. 735) or according to the individual ‘practice culture’ of staff (McCormack, Manley, & Garbett, 2004, p. 41). Kanter (1982) observed that it was necessary to involve key managers in practice change to ensure appropriate staff participation in the application of innovations. Necessary roles for change management included the ‘innovator’ and the ‘pusher’ (Kanter, 2004, p. 9) with the ‘pusher’ working with staff to foster adoption of innovation through comprehensive education. According to Kanter (2004, p. 11), participation works better when the parties involved in planned change are strong change agents, and when there is clear-cut organisational leadership’ for change. Neither of these recommendations could be achieved in this study for the reasons already cited.

Given the unstable environment in the study setting, it was an unreasonable expectation that practice development activities alone would have been immediately successful, particularly at managerial levels. Indeed there was a ‘gap’ between the conditions needed to implement practice development, the level of support afforded management and the recommended use of action-learning techniques to provide a connection between managers and practice development practitioners (Edmonstone & MacKenzie, 2005).

Another possible explanation for lack of progress is that whilst the action research methods enabled the PCCRG’s discovery of workplace difficulties and the development of new care planning tools, the methods may also have handicapped the actual embedding of person-centred care by ward nurses. Reason and Bradbury (2005, p. 31) described the skills required to carry out action research as ‘both a blessed relief, profoundly simple, maddeningly elusive and most difficult to describe’. A keynote address given by Judi Marshall at an Action Research World Congress (2008, p. 568) noted the key importance of self-recognition and reflection on the application of the self in action research. The complex skill challenges for an action research facilitator were described as, building relationships, acknowledging and sharing power, encouraging participation, making change, establishing credible accounts, facilitation and leadership.

Other action research skill challenges required of the facilitator included managing the role dichotomy between the altruism of practice change and the seeking of an academic qualification in a workplace which might be influenced by organisational politics that affected the change activities (Reason & Bradbury, 2008). In the present study, the inability of the Investigator to effectively broach the subject of resistive managerial behaviour was influenced by the perceived threat of being unable to continue the study as planned. In addition, the complex facilitation role was claimed to include skills such as, preparing self, observing, listening and attending, ensuring all voices are heard, noticing what is going on, following or leading, presenting or imparting information, making meaning and structuring activities (Mackewn, 2008). These activities were difficult to consistently undertake or measure and in this study may not have been adequately achieved.

The ‘asymmetrical power relations’ of workplace research (Coghlan & Casey, 2001, p. 677) meant that the facilitation of the study involved treading a difficult line between the support of the intended research and working within the confines of managerial dictums, such as gaining ongoing ethically informed consent, voluntary staff participation and transparency of information over the two-year intervention period. Reliance on negotiation, facilitation and capacity building to enable change as recommended by Grant, Nelson and Mitchell (2001), was difficult without active managerial sponsorship. Difficulties in the presentation of credible accounts of the study progress were encountered where meeting minutes recorded differences between what was agreed by the NUM3 and what actually took place in practice actions.

The high order skills necessary for facilitation and leadership, such as those described by Ball (2004), proved difficult. Being able to describe the study in simple terms whilst not appearing to be overly anxious about the methods or outcomes and at all times showing respect for the multiple completing demands of the nurses and managers was demanding. The ability to maintain a focus on the study priorities in the ward at a time of workplace ‘churn’ may not have been fully mastered.

8.1.3 Results

In spite of the action research skill challenges for the study facilitator (Investigator), there were achievements in nursing care outcomes and in staff developments, though the lack of significant change in nursing stress and burnout scores proved perplexing. The nurses’ comments in feedback groups (see Section 4.2.5) included dealing with heavy workloads, often-chaotic ward activities and events, unmet requests for more senior staff, increased sick leave rates and some individually high levels of stress. Yet the SCDI subscale median scores demonstrated little reported nurse strain in the care of delirious patients. Most median scores were in the ‘easy’ range except for scores associated with caring for hyperactive/hyperalert patients, which were scored in the ‘difficult’ range. This is understandable given that agitated, possibly aggressive behaviours are considered to be the most disruptive and potentially dangerous for the patient and others in a hospital ward setting. This finding indicated that the measure was not sufficiently sensitive to subtle changes in nurse stress levels in some categories. Millisen et al. (2004) noted that more research was needed to find out if there should be a grading between the SCDI response categories, rather than the equal application of one additional point for each category. For instance, it is possible that there is a greater stress-felt difference between the responses of ‘easy’ and ‘difficult’ than between ‘very easy’ and ‘easy’. Such grading on the instrument might, therefore, have highlighted a more accurate response, thus raising a greater awareness of the nurses’ stress levels than was apparent from the measure employed.

In addition, the only significant SCDI change following the intervention period was an increase in the median score for care of the hypoalert patient, even though it still remained in the ‘easy’ range. This could have been a Type 1 error due to the sample size (Pallant, 2007) which was restricted by the number of nurses employed on the ward during the measurement periods. As some individual scores did reach the ‘difficult’ group and the range for the after-intervention group was slightly higher than the before-intervention group, there may also have been a greater difference in the numerical scores if there had been a hierarchical weighting of scores for the response groups. It has already been noted that some staff may not have recognised the seriousness of hypoalert behaviour in delirious patients (Inouye, Foreman, Mion, Katz, & Cooney, 2001). The results could show that once the staff understood more about the symptoms of delirium through the education sessions, they were more concerned or ‘strained’. Therefore, this may have created a double jeopardy. Once enlightened, the staff would be more likely to recognize the seriousness of the patients’ conditions, and feel that they could not adequately respond to the patients’ needs. It seems likely that the wide variation in individual nurses’ scores was a result of the differences in nursing training, knowledge and experience, which both modified the median scores and showed the possibility for high stress levels in regular staff. Therefore it is recommended that ongoing delirium and dementia education be provided to staff to enable improved care for older patients.

The nurses’ burnout scores overall, showed a slight, but not significant shift towards burnout in the after-intervention group. In particular a trend in the movement of the emotional exhaustion score from low to the average range in the after-intervention group was noted. This trend is understandable, since the nurses were more aware of the requirement of person-centred care and the hospital had been subjected to constant staff turnover and negative media attention. The wide variation to either extreme in individual scores may also reflect the variation in training, experience and work balance. As well, the wider effects of nurses' personal lives on stress levels cannot be discounted and may have affected the results. For example, an Australian study found lower levels of emotional exhaustion and depersonalisation to be 'associated' with nurses' increased age, experience and working fewer hours (Patrick & Laverty, 2007, p. 43). In the present study, the after-intervention group were slightly younger but more nurses worked part-time than in the before-intervention group although neither score was statistically significant. As well, there were more transient pool and agency staff in the after-intervention group who would not have had regular access to the ward in-service education sessions and thus required greater supervision by the regular staff, possibly creating added stress for regular ward staff. These contextual factors are the most likely reasons for an increase in the nurses' stress scores in the after-intervention period.

8.1.4 Nurses' Knowledge

The lack of change in the nurses' dementia knowledge scores between the before and after-intervention periods is surprising. However, it could mean that the groups were too small to show statistical improvement and/or the questions were too hard, or there was too much staff 'churn' in the ward to maintain adequate knowledge among the nurses. The questions had been developed for non-professional care staff (Loveday & Bowie, 2000), and therefore should not have been a problem for the ward nurses to answer correctly since records of attendance showed that all the permanent nursing staff, except for the NUMs and the CNE3, had attended the major education topics as part of the intervention plan. It was expected that their knowledge levels would have improved.

A barrier to nurses' uptake of new knowledge has been claimed to be the lack of time at work for information access or investigation (Parahoo, 2000; Veeramah, 2004). This was not the case for the nurses in this study because all education sessions were provided either in work hours or supported by extra payments for attendances out of work hours for a few weekend or night duty staff. However, other research has found that nurses in an intensive care ward, whilst recognising the usefulness of clinical guidelines and formal education, preferred to ask a colleague for patient care advice than rely on their own learning (Marshall, 2008). If this occurred in the current study ward it would have been problematic because the staff were constantly changing and there was a high level of inexperienced new graduate and agency nursing staff. This could also have been affected by managerial and education staff not availing themselves of the opportunity to refresh and increase their knowledge about the care of patients with cognitive impairment, thereby diluting the effectiveness of their instructions and advice. However, it has been recognised that traditional hospital management processes value organisational managerial knowledge above clinical specialty skills (Duffield, Donoghue, & Pelletier, 1996), a finding that in view of the results of this study requires further investigation.

These deficiencies in the nurses' knowledge acquisition combined with a growing level of stress and feelings of burnout, may have contributed to the development of friction that occurred between the Project Officer and the NUM3 in Cycle 4. This friction caused some obstruction to the action research progress, revealing occurrences of oppressed group behaviour, as described by a number of authors (Freire, 1968; Hutchinson, Vickers, Jackson, & Wilkes, 2006; Matheson & Bobay, 2007; Roberts, 1983). In seeking answers for a way of changing this nursing behaviour, Daiski (2004) reported that nurses wanted change to come from within their ranks and that non-hierarchical leadership was one of the ways to reduce disempowerment. In the present study the nurses seemed reluctant to drive change even though action research and practice development methods were implemented specifically to free them from feeling disempowered, which was said to be a root cause of oppressed group behavior (Freire, 1968). The firmly embedded disengagement with taking responsibility for change and the insurmountable staff ‘churn’ worked together to seemingly defeat the effects of action research facilitation and application of agreed interventions through practice development.

8.1.5 Staff Churn

Whilst the facilitation skills of the Investigator may have been questionable, staff and management ‘churn’ probably explains many of the study findings, including the nurses' reluctance to fully engage in practice development. The high level of staff turnover before, during and after the study ranked with the top 15% of wards studied for turnover in an Australian study (Duffield et al., 2007). In addition, the ward nurses' sick leave rates during the seven weeks after the intervention period were double that recorded during the seven weeks before the start of the intervention period. Both occurrences could signify the level of stress reported by ward staff (Hansson, Vingard, Arnetz, & Anderzen, 2008; Rauhala et al., 2007; Toppinen-Tanner, Ojajarvi, Vaananen, Kalimo, & Jappinen, 2005). Paying attention to recommendations put forward by Duffield et al. (2007) to offer nursing education and develop strategies for autonomy, as well as to implement practice development support, did not appear to overcome the leadership issues and staffing deficits which occurred throughout the study. The overwhelming structural changes occurring in the whole hospital at the time of the study were most likely the cause of staff stress and subsequent turnover and sick leave.

8.1.6 Managerial Support

In situations like these, leading change is difficult; therefore practice improvement may have to be approached in other ways. It may be that in circumstances such as these, action research and practice development are ineffective because the nurses and facilitators are '…still socialised to fear talking about their work and exposing critical problems' (Gordon, 2005, p. 439). A lesson learned is that in the face of such disempowerment, the acceptance and embedding of protocols like the staff audiotaped handover sessions can be more successfully implemented through direct managerial policy or request. Whilst taking such action could risk increasing the nurses' levels of disempowerment, inertia and task focused care, the stabilisation of evidence-based practice in a workplace fraught by 'churn', may mean that the direct approach is the best one to adopt. However, managerial direction can create its own problems and risk sabotage of required change if the preparation of managerial and education staff for this role is inadequate.

A growing concern throughout the study was the apparent lack of managerial recognition of the merits of person-centred care and thus, the managers' support for staff development and care improvement. Whether the lack of support resulted from the action research methods, the facilitation skills of the Investigator or the ambiguity of ‘insider’ research is unknown. Nevertheless, if the elements of person-centred care could have been applied and the application had been managerially assured, the reciprocity necessary to progress the study goals might have engendered nursing satisfaction, stress reduction in nurses and improved outcomes for patients and staff. Reciprocity is claimed to be the key ingredient of person-centred care (Loveday & Kitwood, 2000), without which there is a danger that

> The receiver might be envious of the giver’s power and competence, and resentful about having to be so dependent. The giver is envious that so much is being given to the receiver, and resentful at having to give it (Loveday & Kitwood, 2000, p. 18).

It is possible in this study, that the overwhelming pressures on the ward staff and the hospital at the time meant that managers could not pay attention to maintaining worker satisfaction, which may have resulted in increasing resentment towards the study facilitator, thereby resulting in a form of oppressed group behaviour.

Significantly, in recent years Dewing (2008) provided a systematic review of practice development activities undertaken in the United Kingdom which resulted in 169 papers being reviewed. Forty-five items of ‘gray literature’ were also reviewed and 47 telephone interviews were completed. As a result 10 key points were recommended for nurse managers to consider to enable successful outcomes: 1) it is imperative that nurse managers provide support and are involved; 2) service users must be involved; 3) there should be consideration of multidisciplinary involvement; 4) facilitation roles should be clarified and embedded in other roles; 5) attention should be given to using knowledge, stakeholders, shared participation and improving patient care; 6) participation is essential; 7) outcome measurements and practice development principles must be embedded in any project; 8) costing must be undertaken as part of a project; 9) relationships with higher education institutions should be sought; 10) a balance should be reached between traditional education practices and work-based learning strategies. If these strategies had been possible there may have been different outcomes from the present study. Therefore such recommendations for practice development activities are recommended for consideration in the future.

8.1.7 Empowerment

Nevertheless as identified earlier, despite the lack of support which became increasingly evident in a number of ways over the study period, the nurses successfully generated a number of ideas for practice improvement. The most notable improvement was the almost complete acceptance of the new large staff name badges (see Section 5.3.1) triggered by the results of the QUIS feedback that had prompted the nurses to express feelings of disempowerment, stress and burnout (Kanter, 1993; Maslach, Jackson, & Leiter, 1996). The Special Commission of Enquiry conducted for the NSW State Health Service (Garling, 2008) has also recommended the instigation of large name badges for all health care staff. This single action will ensure that patients and their visitors can be aware of the designation and duties of staff attending to them. One of the wider findings from this present study was that the provision of the large name badges also helped the nurses to communicate with each other and other staff members, possibly enabling an improved sense of empowerment and a buffer against stress. The staff name badges helped the nurses to feel recognised and respected for their role, a core value of nursing practice (Lawless & Moss, 2007). However, only the nurses' first names were allowed to be printed on the badges. Refusal to allow the inclusion of the nurses' surnames on the badges needs further investigation, since the identification of one's whole name is a key to personal identity. The use of the large name badges continued throughout the study and their use was supported and reinforced by the ward NUM3. This example of managerial support signalled the application of the extended practice development ideal for developing and sustaining nurses' suggestions through ongoing managerial direction.

Whilst the adoption of the large print name badges was received positively, other factors seemed to have obstructed the nurses' feelings of empowerment. Access to information is said to be a key to job satisfaction and a major requirement for staff empowerment (Laschinger, Finegan, Shamian, & Wilk, 2001; Sarmieno, Laschinger, & Iwasiw, 2004). The nurses stated that they did not have good access to their patients' clinical information, were not included in decisions about their patients whereby they might gain greater insights into their patients' history and potential outcomes (Section 4.2.50), and were observed to have little time to read the patients' notes or attend medical rounds or case conferences (see Chapter 4: Section 4.2.5). This could have been an example of their reported acceptance of a sense of inequality between themselves, the doctors and the allied health staff, which may have been caused by a lack of opportunity to form 'productive, constructive professional relationships'(Gordon, 2005, p. 18). However, these information and consultation deficiencies may have been the result of a highly pressured health system that was forced to favour patient throughput over staff and patient well-being. The reported lack of time to consult with the allied health staff about their patients may also have contributed to the nurses' feelings of disempowerment (Kanter, 1993) and may have discouraged them from actively pursuing person-centred care nursing.

Ensuring organisational support and scheduling adequate time for staff to do their jobs to the best of their ability, are essential managerial responsibilities and contribute to staff job satisfaction and self esteem (Kanter, 1993). Lack of managerial leadership in these areas had a negative influence on staff ability to progress the study goals. The care planning tools developed by the nurse participants, intended to improve their ability to care for patients with cognitive impairment, were not openly supported by their nursing managers. If the nurses had been encouraged to use the CCC forms they would have been able to employ this information to engage more effectively with the patients and their relatives, as well as contribute more capably in interdisciplinary consultations about their patients. Whilst half the patients in the after-intervention group had completed CCC forms available at the bedside, the ward managers did not encourage the nurses to use or discuss these at staff handover sessions, which effectively downgraded their importance as a nursing care tool. Therefore, opportunities to increase the nurses' feelings of achievement, empowerment and arguably a better sense of effective time management were missed. The recurring claims by staff that the ward was in 'chaos' may have been related to this lack of encouragement, or possibly ineffective nurse-manager communications, which could have contributed to time inefficiencies in undertaking nursing duties (see Section 5.2.1).

In order to improve care quality and achieve time efficiency it is necessary for NUMs to provide supervision of ward nurses care practices, as recommended in the Garling report (2008). This report strongly recommended that new clerical support positions be established in the wards to assist nurses with important clerical and administrative tasks that otherwise distracted them from direct patient care. However, the expansion of medical and nursing specialisations and the forced separation of NUMs from clinical practice through the weight of managerial tasks, may mean that some NUMs have not been able to maintain up-to-date specialty knowledge and therefore be able to provide nurses with appropriate clinical supervision. The Garling Report provided no recommendations for resources to enable enhanced education for NUMs in this role. During the study, the study leave policy of the Department of Learning and Development for hospital RNs allowed for up to five days leave at the discretion of the employer (NSCCHS, 2003). At the same time, senior medical officers in the public health system were provided with an agreement for 25 days training, education and study leave supported by up to $19,000 for costs from their private practice trust funds (NSW Department of Health, 2005). This anomaly in the study leave opportunities for nurses, compared with that allowed for doctors, failed to recognise that specialty nursing skills are required to provide person-centred care for older patients with, not only cognitive impairment, but multiple co-morbidities as well (Bellchambers & Penning, 2007).

The apparent emphasis of health services' attention to medical and technical tasks over the taken-for-granted functional care of patients, is thought to have reduced nurses' concern for holistic care, even though this attention to the person's biopsychological needs could have resulted in positive patient outcomes (Kilstoff, 2006). Furthermore, managerial supervision is said to be needed to prevent organisation-led processes occurring that 'covertly and overtly subvert the professional status of nurses' which resulted in their disempowerment and disengagement (Kilstoff, 2006, p. 172). This was demonstrated by the lack of inclusion of the study nurses in the medical consultative processes for the patients in their care. It is recommended that NUMs be provided with opportunities for advanced specialty education to assist then to support nurses through improved clinical supervision and facilitation for greater nurse involvement in health team deliberations. It also seems that further action is needed to develop managerial key performance indicators that aim to reinforce the importance of person-centred care for cognitively impaired patients.

An unexpected confounder and gap in care practices identified during the study was the nurses' claim that medical documentation of a delirium diagnosis was rare (Section 6.1.1) a finding also reported in the literature (Inouye et al., 2005; Maher & Almeida, 2002). File audits showed that the use of the term 'acute confusion' by the medical staff, signifying the presence of a probable delirium, was common. Consequently the nurses' recognition of their duty to prevent and manage delirium in their acutely ill patients was compromised by this lack of medical information and the often incorrectly recorded diagnostic episode coding. To address this identified problem, one of the study actions was to provide educational outreach for hospital medical staff to encourage them to record on the patient charts when delirium was identified. Audits of the patients' charts following this education program showed that improvements had occurred for patients where this was relevant. This success revealed that ongoing efforts are required to ensure correct documentation of a delirium diagnosis to guide nursing practice.

8.1.8 Patient and Relatives' Outcomes

In spite of the barriers to implementation of best practice through practice development, the person-centred care planning tools and activities that were developed with the nurses were evidence of the success of their engagement with the action research methods to create more focused care for older patients. Stimulating change by innovation using action research methods in a complex unstable ward environment was 'slow and evolutionary' (Davis, 2003, p. 286). However, some of the planned changes were achieved by staff, many of whom were very committed to improvements in patient care. These hard earned achievements evolved with a great deal of support by the PCCRG and the study Investigator.

It was not expected that there would be statistically significant improvements demonstrated in patient outcomes because of the small sample size and the level of patient complexity. However, in spite of the difficulties of providing quality care to these patients and the pressures in doing so for the study nurses because of staff shortages and staff management turnover, the outcomes for the before and after-intervention patient groups were better than those reported in other acute aged care wards (King, Jones, & Brand, 2006). Most patients did not experience adverse outcomes from hospitalisation. Indeed there were significant improvements observed in patient pain management.

Whilst it is of concern that almost half of the patient sample in the post-intervention group still had possible pain issues, this is consistent with the findings of poor pain control found in more than half the patients participating in another Australian acute hospital study (Gnjidic, Murnion, & Hilmer, 2008). Titration of adequate analgesics can be difficult for patients with cognitive deficits who cannot explain their own needs. In these cases, the prescribing of analgesics to be given ‘as required’ are often documented by medical staff so that they can see how often the extra medications have been given and therefore gauge an appropriate regular dose regimen (Cohen-Mansfield & Creedon, 2002). However, it has also been shown that the full administration of prescribed analgesic medications may not occur, particularly due to nurses’ poor understanding of opioid preparations (Murnion, Gnjidic, & Hilmer, in press). In addition, if behavioural changes are not correctly assessed as being attributable to painful stimuli, then other medications, such as antipsychotics might be given, which can lead to an escalating pain and behaviour continuum. Poor outcomes for patients, relatives and staff are therefore likely. As it had been reported that nurses do not always recognise pain indicators in patients with dementia (Cohen-Mansfield & Creedon, 2002; McAuliffe, Nay, O'Donnell, & Fetherstonhaugh, 2009), the improvement demonstrated in the study might be attributed to the increase in nurse education, already reported. It might also be ascribed to the extra time the nurses found available to consider their patients’ needs as they had the assistance of significantly more staff in the form of the IPS nurses. Even though there were few apparent adverse patient outcomes for these study participants, it is recommended that more actions are needed to improve pain management for people with cognitive disorders.

Another successful outcome was the improvement in the relatives’ satisfaction with the nurses’ efforts to find out and use the patients’ personal background information. These actions supported the study aim of encouraging person-centred care. Study field notes showed comments by relatives who had been asked to fill in the CCC form, such as *“I’m really glad to tell you these things about my father”*, *“Thank heavens you asked”* and *“You need to know this”* (Field notes, 8/4/07). There were also positive comments about the care provided by some of the staff. However, it was of concern that some negative comments were also made about some of the staff members and the fact that only one relative remained really aware of the CCC form. Overall, whilst dissatisfaction levels were low, success in improving the relatives’ levels of satisfaction was shown. More intense efforts are required to activate support for the CCC initiative, or similar, in the acute care environment as a way of alerting nurses and other health care staff to the value of obtaining personal patient information that may reduce the risk of delirium occurring in older patients.

8.1.9 Summary

In summary, there were many benefits arising from the action research processes and from the study intervention. Some of the hoped-for improvements were not realised, largely as a result of the 'chaotic' environment of the ward arising from staff and management pressures and turnover, and the larger organisational dysfunction that was evident in media reports. Whilst recognising that there was a close alignment between practice development and action research methods in this study, a warning was offered, supported by the literature, that practice development activities needed to be fully supported by nursing managers. The processes of reflection by facilitators and participants in action research, whilst imperative to enable behaviour change, was noted to be potentially traumatic to staff and was often avoided. The effects of job stress and burnout could result in sabotage of the change activities and marginalisation of the change agent. These reported outcomes were experienced in the study, signalling that action research methods based on practice development may not be the most useful way to engage busy nurses in practice improvement, especially during periods of staff turnover, shortages or times where organisational structures were in a state of flux.

Undertaking action research in such a chaotic environment was found to be extremely challenging and was a formidable test of the Facilitator's skill, patience and endurance. A quote from a study titled 'Muddling Through: Facing the Challenges of Managing a Large-scale Action Research Project' seemed to epitomize the situation that occurred in the study:

> 'Muddling through … accurately reflects the experience of decision making in a complex environment in the midst of action: surrounded (sometimes overwhelmed) by inchoate and partial data, assailed by strong emotions, faced with unclear personal motivations, political machinations and plurality of choice' (Mead, 2008, p. 641).

Thus, in the face of constant staff changes and organisational obstacles, action research methods were employed in this study in whatever way was possible at the time with the goals of improving nurses' stress and care practices for older patients with cognitive impairment, potentially resulting in improved patient and family outcomes, were maintained throughout the study. It was the care setting itself that erected barriers to achieving these goals. However, the action research processes did help to discover these barriers, since the methods employed were flexible enough to move in concert with the dynamic events occurring. The high degree of management and staff 'churn' and possibly oppressed group behaviour by managers and nurses, hampered the achievement of optimal study outcomes.

8.2 STUDY LIMITATIONS

Limitations to the planned study outcomes were experienced, not only in the action research methods and practice development strategies employed, but also in the types and number of patients and nurses available to join the study. The patients were part of a convenience sample which fitted the required study timeframe but meant that they may not have been typical of the ward patients generally and this may have introduced a risk of bias (Wilson, 1989). However there were no significant differences between the before and after-intervention group patient characteristics. The patient sample size of 14 was chosen to exceed the 12 patients observed in the original QUIS development studies (Dean, Proudfoot, & Lindesay, 1993; Proctor et al., 1998). Further numbers were restricted during the observation phases due to the increasing difficulty experienced in maintaining a balance in the numbers of times each nurse was observed interacting with the patients. As each new patient was added to the study, the likelihood that certain nurses would be observed more than others due to their rosters and availability, threatened to skew the observational data. Balance was maintained by stopping observations after the recruitment of 14 patients.

As previously stressed, the turnover in the nursing staff created a great number of limitations. It would only have been possible to reliably match the stress, burnout and knowledge data from two groups of nurses, if staff were stable. However, most of those who were present in both the before and after- intervention periods could not remember the code word they had applied to their initial questionnaires, despite the prompt list provided, so it was impossible to match data.

There could also have been an element of the Hawthorne effect occurring (Wilson, 1989) that affected the nurses interactions with the patients during the QUIS observations because they knew that they were being observed. In addition the relatives' interview responses might have been more complimentary to the nurses in a possible desire to support them under difficult circumstances. However, this was just as likely to have been present in both the before and after-intervention phases and possible changes in observed nurse-patient communications were not found to be an issue in the original QUIS development study (Dean, Proudfoot, & Lindesay, 1993). It may however, have reduced the likelihood of negative nurse-patient communications. In the case of the relatives, the volunteer researcher conducting the interviews explained that she was not an employee of the hospital, so families might have felt free to express honest opinions about patient care. In view of the identified study limitations and the barriers evident in practice change, to improve nursing care of older people with cognitive impairment in the acute care hospital, other approaches to change are necessary.

8.3 CONCLUSIONS

Implementing a person-centred approach to care of people with cognitive impairment and disturbed behaviour in the acute hospital care setting through action research and practice development strategies has enabled a greater understanding of the complexities of using these collaborative practice improvement approaches. The quest for the study goals has shown that some progress occurred in changing the culture of care. Given the 'chaos' occurring in the ward and throughout the hospital during the study period, ongoing nursing support and patient care enhancement can still be achieved in some degree at such times. It is the ingrained barriers to systems change in the way nursing care is organised and practiced at a structural level, which presents the main impediments to practice improvement.

A question that was asked repeatedly during the study was *"Is it actually possible to provide person-centred care for older people in the acute hospital care sector?"* (for example, Field notes, 20/7/06, 8/11/06 and 3/2/07). The answer must be that, despite the difficulties involved in a complex health care environment we have no choice, since acute care settings do not always provide the most effective environment for healing to occur in the older person. The essence of nursing is the recognition that all people are worthy of quality nursing care of equal value. Nurses are charged with the responsibility to protect the less able from injury and abuse, whether it is physical or psychological. Those with intact cognition are more able to understand and correct imbalances than those without, so that vulnerable people, like older patients with impaired cognition, are dependent on the moral values and actions of others for protection against ‘deceit and abandonment’ (Loveday & Kitwood, 2000, p. 19). Therefore, the achievements and care planning developments that have emerged from the study have taken on more urgent and theoretically attainable characteristics, as the action research methods intended.

The generalisation of any recommendations arising from the study findings to other acute hospital aged care wards, other than the principles underpinning person-centred care and staff empowerment, are not possible, given the unique situational characteristics that occurred for staff and patients during the study period. The personalities of participants and particular organisational influences across health services must be individually distinctive. However, the literature has demonstrated some accepted generalisations pertaining not only to the position of women in organisations but also to the complexities of caring for older patients with cognitive impairment, so that further studies of the findings can be justified.

8.4 RECOMMENDATIONS FOR ACTION AND FUTURE RESEARCH

A search of the Cochrane Database of Systematic Reviews updates for 2009, using ‘sustainable practice change’ and limited related terms as the keywords, showed that although there has been much interest, there is still little firm guidance for ways to instigate sustainable practice enhancement. Despite attempts in the present study to adhere to practice development methods in the belief that nurses needed to be freed from the constraints of the controlling health system (McCormack, 2008), a review of ‘*Tailored Interventions To Overcome Barriers To Change’* (Cheater et al., 2005), had found that the identification and prioritisation of the actual barriers to change were unclear and needed more research. The effects of printed educational material (Farmer et al., 2008), local opinion leaders (Doumit, Gattellari, Grimshaw, & O'Brien, 2007), interprofessional education (Reeves et al., 2008) and educational outreach visits

(O'Brien et al., 2007), all still showed uncertain results. However, all reviewers note that the combined effects of these interventions might provide some outcomes in practice improvement. A review of ‘O*rganizational Infrastructures To Promote Evidence Based Nursing Practice’* (Foxcroft & Cole, 2000) also still failed to give conclusive results due to the lack of sufficiently rigorous studies. Nevertheless, the focus of education on the most serious patient outcomes, as well as the provision of educational presentations that used a mixture of interactive and didactic methods, were suggested as likely to be the most effective in stimulating practice change (Forsetlund et al., 2009). Simpson and Doig (2007) also suggested focussing change strategies on a recognition of the local barriers to change, the available resources necessary to effect change, a combination of change strategies and attention to a reduction in staff workload.

In support of these findings, a systematic review of literature concerned with actualising innovations in the health system resulted in a proposal for a model for *‘Considering the Determinants of Diffusion, Dissemination and Implementation of Innovation in Health Service Delivery and Organisations’* by Greenhalgh, Robert, Macfarlane, Bate and Kyriakidou (2004, p. 595). This comprehensive model documented linkages between the user and resource systems with recommendations for careful readiness assessment and implementation processes. As with the Cochrane reviews it was obvious from this model alone that system change is complex with great time and resource implications.

Meanwhile, a ‘change’ project has been reported by the Clinical Excellence Commission (CEC) (2008) in partnership with the NSW Department of Health and The Greater Metropolitan Clinical Taskforce Sydney. This group had commissioned a project called ‘*Between the Flags – Keeping Patients Safe’* in response to a growing recognition that there were gaps in staff recognition of signs of deterioration in sick patients. This could be construed to include the deteriorating older patient with unrecognised delirium. Nine hospitals from across the metropolitan and rural areas have been involved in action plans for the identification of issues and barriers to the optimal management of patients who might be in danger. These included the early identification of the at-risk patient, escalation protocols and rapid response systems, education and training, data collection, communication at handover, executive and clinical buy-in and evaluation (Clinical Excellence Commission, 2008, p. 6). Most of these functions were attempted in the present study to some degree but were thwarted by the dynamic environment already described. A list of reinforcing strategies, all of which were claimed to be necessary for change, was recommended by the CEC and may be applicable for future actions for the present study. These prioritized strategies are forcing functions and constraints, automation and computerization, standardization and protocols, checklists and double check systems, rules and policies and education and information (Clinical Excellence Commission, 2008, pp. 8-11).

The present study has already begun the development of a type of 'forcing function' and 'checklist' through the draft Delirium Risk Assessment Tool, supported by the CCC form and the Worksheets for assessment of staff knowledge about the care of patients with delirium. Australian clinical guidelines for the management of delirium are available (Melbourne Health, 2006), so that the educational programs used during the study were based on standardised information. However 'rules' and 'automation' have yet to be applied, so will need to be considered in recommendations for future action and research.

Whilst is it recognised that staff education alone cannot bring about practice improvement, it is an imperative component of change (Clinical Excellence Commission, 2008; IMA, 2007; McCormack, Manley, & Garbett, 2004). Therefore, specific educational programs that explain the causes, prevention, complications and management of cognitive impairment, should be incorporated into the training of all health care professionals to enable optimum care, diagnosis, correct documentation and classification of older patients' with multiple illnesses, including delirium. This should include the explanations of possible changes in symptom presentation, such as pain responses.

The erosion of nursing skills and positions should be carefully investigated. The empowerment of nurses to assume their rightful position in the multidisciplinary team should involve research into models of nursing care that enable equal access to patient information and adequate time to provide quality nursing care to patients with dynamic and variable health status.

The recommendation from the Garling Report that NUMs should provide clinical supervision of ward nurses, means that senior nurse study leave entitlements should be increased and built into job descriptions. This will enable access to updates of specialist clinical knowledge, similar to that of medical staff entitlements.

Key Performance Indicators should be developed for senior staff to provide governance of evidence-based best practice nursing activities. Further reinforcement of managerial influence at the clinical interface, could be ensured through guidelines written for future practice development activities that require the inclusion of managerial sponsorship, to make sure that evidence based practice is embedded in practice.

Further development of the new care planning tools created during this study should be undertaken to ensure their use in usual practice.   Twelve months following the completion of the after-intervention measurement period, and after of a six-month leave of absence from the work place by the study Investigator, progress with these recommendations has been made and is listed in Appendix N.

8.5 CONCLUDING REMARKS

Obstacles, achievements and developments were evident in this study that endeavoured to encourage person-centred care for older people with cognitive impairment and disturbed behaviour in the acute hospital care sector. The initial, insightful nursing responses to information about their observed care practices provided a sturdy platform to launch the action research study, informed by practice development methods. From those responses it was evident that the nurses felt disempowered and restricted by management strategies and constant staff turnover which occurred at the time.

It was noted that some nurses felt that their names were unknown, that their opinions about patient care were not sought, that they were not provided with enough appropriate information or education, that there was often not enough time to provide necessary care and that some of the patient’s families seemed to be adversaries. Kanter (1993) had already described similar issues familiar to women workers. Kitwood (1993) described the concepts that could be instigated to provide satisfaction in workers. McCormack, Manley and Garbett (1997) endeavoured to show how nurses’ care practices and satisfaction could be improved. It is therefore intended that the recommendations from this study will be pursued with the aim to enhance the nurses’ feelings of well-being, as well as their care practices in acute hospital care wards and thus, the care of older patients and their families. Perhaps an overall difference can also be made to current ageist ideas.

> In listening, we as professionals need to be aware of our own discourse and how, through its assumptions about needs of elderly people, it obstructs the expression of those needs by the elderly themselves…having acquired some insight through listening … we make peace with our own ageing through greater understanding (Blytheway, 1995, p. 128)

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APPENDICES

APPENDIX A

Quality of Interactions Schedule (QUIS) Dean, Proudfoot and Lindesay (1993)

QUIS Guidelines and examples for coding

IO **(Interaction with others)**: Dr, PT, OT, visitors, having tests on or off ward, etc
NS **(No Staff Interaction)** No interaction with staff, sleeping, dozing
PS **(Positive Social)**: Interactions principally involving 'good, constructive beneficial' conversation and companionship
PC **(Positive Care)**: Interactions during the appropriate delivery of physical care
NE **(Neutral)**: Brief indifferent interactions not meeting the definitions of the other categories
NP **(Negative Protective)**: Providing care, keeping safe or removing from danger, but in a restrictive manner, without explanation or reassurance
NR **(Negative Restrictive)**: Interactions that oppose or restrict a patients' freedom of action without good reason, or which ignores patient as a person

Nurse number + designation & colour: RN **Red**: EN **Blue**: TEN **green**: AIN **Black**: IO, NS pencil

IO (Interaction with others)	Dr, PT, OT, visitors, having tests on or off ward, etc	* Self initiated interaction with others * Having tests or treatment on or off the ward eg xrays, physiotherapy * Interactions with visitors to the exclusion of staff care
NS (No Staff Interaction)	No interaction with staff, sleeping, dozing	* sleeping * watching activity in ward, reading
PS (Positive Social):	Interactions principally involving 'good, constructive beneficial' conversation and companionship *(includes appropriate smiling and touch)*	* Greetings directed at individuals * General chat and conversation, on its own or during other social * and physical care activities * Offering choices (eg food, drink) * Serving food while saying what it is, asking if subject likes it, who made it etc * Offering more food/asking if finished – only if carer waits for a response * Verbal explanation, encouragement and comfort during other care tasks (lifting, moving, walking, bathing etc) that is more than necessary to carry out the task
PC (Positive Care):	Interactions during the appropriate delivery of physical care	* Toileting, bathing, medication, feeding, dressings etc. these may involve brief verbal explanations and encouragement, but only that necessary it carry out the task. No general conversation. * Keeping safe, or removal from danger with explanation and reassurance
NE (Neutral):	Brief indifferent interactions not meeting the definitions of the other categories	* Putting plates down without verbal or non verbal contact * Undirected 'good morning/ hello/goodbye'
NP (Negative Protective):	Providing care, keeping safe or removing from danger, but in a restrictive manner, without explanation or reassurance	* 'Don't eat that, its been on the floor' * Don't hit X' * Being told to wait for medication/treatment * Being fed too quickly
NR (Negative Restrictive):	Interactions that oppose or restricts a patients' freedom of action without good reason, or which ignores patient as a person	* Being moved without warning or explanation * Told to do something (eg role over) without discussion, explanation or help offered * being told they can't have something or do something (eg cup of tea, go home) without good reason/ explanation * being sworn at or physically assaulted

APPENDIX B

Northern Sydney Health
better health: from the Harbour to the Hawkesbury
ROYAL NORTH SHORE HOSPITAL
ST LEONARDS NSW AUSTRALIA 2065

RESEARCH OFFICE
Level 4, Vindin House
Telephone: (02) 9926 8106
Facsimile: (02) 9926 6179

26 October 2005

Ms J Poole
Department of Aged Care and Rehabilitation
Royal North Shore Hospital, Pacific Highway
St Leonards NSW 2065

Dear Ms Poole,

Re: **Protocol 0509-172M(SP) - J Poole, S McKinley, L Chenoweth**
An evaluation of a 'person-centred approach' to care of people with dementia, or other causes of disturbed behaviour, in the acute care sector. A study using the information provided by the Communication and Care Cues form as part of the 'Poole's Algorithm: nursing management of disturbed behaviour in older people project.

Thank you for providing information as requested by the Northern Sydney Health Human Research Ethics Committee at the meeting held on 12 October 2005. I am pleased to inform you that your protocol has now been approved. The approval includes:

- Relatives/Person Responsible/Guardians Information Sheet and Consent Form, version dated 4 October 2005
- Nursing Staff Information Sheet and Consent Form, version dated 4 October 2005
- Quality of Interaction Schedule (QUIS)
- Person Centred Education Work Plan

The HREC recommends that you consult with your Medical Defence Union to ensure that you are adequately covered for the purpose of conducting this clinical trial.

In order to comply with the *Guidelines for Good Clinical Research Practice (GCRP) in Australia*, and in line with NSH HREC policy, may I remind you that it is the Chief Investigator's responsibility to ensure that:

1. You notify the HREC of the completion of the study at this site and submit a final report (including final results) when available.
2. The HREC is notified as soon as possible of any changes to the protocol. All changes must be approved by the HREC before continuation of the research project. This includes notifying the HREC of any changes to the staff involved with the protocol.
3. All serious and unexpected adverse events are reported to the HREC within 15 working days.
4. The HREC is notified of the outcome of all submissions of this protocol to other Ethics Committees.

As at 18 May, HREC approval is now valid for four (4) years from the date of the approval letter. **Your approval will expire on 26 October 2009.** Investigators are requested to submit a progress report annually. **Your first progress report will be due on 26 October 2006.**

Investigators are required to ensure that the usual Infection Control Policies and Procedures for Royal North Shore Hospital and Community Health Service apply.

Yours sincerely,

Production Note:
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Professor Stewart Dunn
Chairperson
Human Research Ethics Committee

C:\HREC 2005\Protocols Approved\9 Nov\0509-172MProtocol Approval-Committee info provided.doc

A facility of the Northern Sydney Area Health Service and teaching hospital of the University of Sydney and University of Technology, Sydney

APPENDIX C

Research and Commercialisation Office
PO Box 123
Broadway NSW 2007
Australia

Tel +61 2 9514 9681
Fax +61 2 9514 1244

UTS CRICOS Provider Code 00099F

UTS
University of Technology, Sydney

12 December2005

Professor Sharon McKinley
KG05.00.01
Faculty of Nursing, Midwifery and Health
UNIVERSITY OF TECHNOLOGY, SYDNEY

Dear Sharon,

UTS HREC REF NO 2005-199 – MCKINLEY, Professor Sharon, CHENOWETH, Professor Lynn, HILMER, Dr Sarah, (for POOLE, Ms Julia Lorna ,PhD student) - "An evaluation of a 'person-centred approach' to care of people with dementia, or other causes of disturbed behaviour, in the acute care sector" *[External Ratification- NHHREC - HREC approval Ref: 0509-172/(SP)].*

At its meeting held on 06/12/05, the UTS Human Research Ethics Committee considered the above application and I am pleased to inform you that your external ethics clearance has been ratified, subject to the following:

1. that the consent form and information sheet identify Ms Poole as a UTS doctoral student, and Professor McKinley as her UTS doctoral supervisor; and
2. that the consent form and information sheet contain UTS Ethics Committee contact details for complaints

Your UTS clearance number is UTS HREC REF NO. 2005-199R

Please note that the ethical conduct of research is an on-going process. The *National Statement on Ethical Conduct in Research Involving Humans* requires us to obtain a report about the progress of the research, and in particular about any changes to the research which may have ethical implications. This report form must be completed at least annually, and at the end of the project (if it takes more than a year). The Ethics Secretariat will contact you when it is time to complete your first report.

I also refer you to the AVCC guidelines relating to the storage of data, which require that data be kept for a minimum of 5 years after publication of research. However, in NSW, longer retention requirements are required for research on human subjects with potential long-term effects, research with long-term environmental effects, or research considered of national or international significance, importance, or controversy. If the data from this research project falls into one of these categories, contact University Records for advice on long-term retention.

If you have any queries about your ethics clearance, or require any amendments to your research in the future, please do not hesitate to contact the Ethics Secretariat at the Research and Commercialisation Office, on 02 9514 9615.

Yours sincerely,

Production Note:
Signature removed prior to publication.

Professor Jane Stein-Parbury
Chairperson,
UTS Human Research Ethics Committee

Office: City campus, Level 7, Room 719, No 1 Broadway Sydney NSW 2007

APPENDIX D

Northern Sydney Health
Royal North Shore Hospital

NORTHERN SYDNEY
CENTRAL COAST
NSW HEALTH

RELATIVES / PERSON REPONSIBLE / GUARDIANS
RESEARCH PROJECT INFORMATION SHEET (version 04.10.05)

1. **Study Title:** An evaluation of a 'person-centred approach' to care of people with symptoms of disturbed behaviour in the acute care sector.

2. **Invitation:** As the relative or 'person responsible ' for a patient in this ward, you are invited to take part in this research project, and to consider giving your permission to allow your relative/ patient to be also be part of the research.

3. **Purpose of study:** Sometimes older patients experience periods of confusion when they are sick and are unable to understand what is happening to them. This can make them very anxious and agitated so that it is hard to care for them.

   Nurses find it difficult to reassure confused patients because they don't know enough about their personal background to be able to know the really special things that are necessary to reassure and comfort them.
   This project seeks to enable nursing staff to develop better ways of caring for patients who are confused and/or show disturbed behaviour.

4. **What is known about the procedures:** Research has shown that when nurses are given the time and opportunity to step back, observe and think about their own care practices, they more readily seek ways to improve.

Care of patients who are confused has been shown to be more effective when staff have access to personal profile details of their patients. This is called a **'person-centred'** approach. At present these details are not routinely collected during an acute hospital stay.

NORTHERN SYDNEY HEALTH
APPROVED

5. **The procedure will involve:**
- nursing staff observing and monitoring the way that other nursing staff interact with your relative/patient
- the research team collecting and analysing information about treatment and documentation by nursing and medical staff.
- requests for you to **anonymously** complete a survey form about your perceptions of the way staff care for your relative/patient.
- you may be asked to fill in a special form asking about care and communication information for your relative/patient so that nursing staff are better able to reassure, communicate and care for them

We expected that staff will be able to observe a minimum of 24 patients. These observations will be recorded anonymously for feedback at later meetings with staff.

6. **Why was your relative/patient chosen:** Your relative/patient has been chosen because he/she seems to be experiencing some periods of confusion.

Aged Care & Rehabilitation Medicine
Building 12, Royal North Shore Hospital
St Leonards NSW 2065
Tel (02) 9926 8705 Fax (02) 9926 6840

Northern Sydney Central Coast Area Health Service
ABN 48344669728

7. Participation: You and your relative/patient can refuse to take part in this project or withdraw from it at any time without affecting your relationships with staff or the research team.

8. Risks: It is not expected that there will be any risks for you or your relative/patient. In fact it is expected that it will result in improved care for the patients and their families, as well as improved staff attitudes and reduced staff turnover.

9. Records: Your research records will be stored in a locked filing cabinet in a secure building. The research team, authorised personnel, the study sponsor, and regulatory entities may have access to your study records to protect your_safety and welfare.

10. Confidentiality: You are asked to consent to the collection, processing, reporting and transfer within or outside Australia of your **anonymous** personal and/or sensitive information for healthcare and/or medical research purposes. Your information will only be identified by a code which will not be traceable to you or your relative/patient.

Your views about these activities and your interest in the project are welcomed at any time.

You will be given a copy of this information sheet and the signed consent form to keep.

If you require more information about this project before giving your consent, you can contact: Julia Poole, Clinical Nurse Consultant in Aged Care on 02-9926 6632 or Tracey Ronald, Nursing Unit Manage, Ward 11D on 02-9926 7435, Royal North Shore Hospital.

Alternatively, you are at liberty to contact:
the Patient Representative on ph. No. 9926 7612

Thank you very much for considering to help us in this study

APPENDIX E

Northern Sydney Health
Royal North Shore Hospital

NORTHERN SYDNEY
CENTRAL COAST
NSW HEALTH

RELATIVES/PERSON REPONSIBLE/GUARDIANS

Consent Form to Participate in a Research Project (version 04.10.05)

I, ____
(name of participant)

of ____
(street) (suburb/town) (state & postcode)

have been invited to participate in a research project entitled:

An evaluation of a 'person-centred approach' to care of people with symptoms of disturbed behaviour in the acute care sector.

In relation to this project I have read the Participant Information Sheet and have been informed of the following points:

1. Approval for the protocol has been given by the Human Research Ethics Committee (HREC) of Northern Sydney Health
2. The aim of the project is to enable nursing staff to participate in practice improvement activities in caring for patients who have disturbed behaviour.
3. The results obtained from the study may or may not be of direct benefit to my relative's medical management.
4. The procedure will involve:
   - nursing staff observing and monitoring the way that other nursing staff interact with my relative/patient
   - the research team collecting and analysing information about treatment and documentation by nursing and medical staff.
   - requests for me to anonymously complete a survey form about my perceptions of the way staff care for my relative/patient.
   - possible requests for me to fill in a special form regarding communication and care information
5. There are no possible adverse effects or risks related to this project.

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Building 12, Royal North Shore Hospital
St Leonards NSW 2065
Tel (02) 9926 8705 Fax (02) 9926 6840

Northern Sydney Central Coast Area Health Service
ABN 48344669728

6. Should I develop a problem which I suspect may have resulted from my involvement in this project, I am aware that I may contact –

Ms Julia Poole on ph. No. 9926 6632 or pager 41421

Date: ______________________ Witness: ______________________
(Please print name)

Signature: ______________________ Signature: ______________________
(of participant)) (of witness)

7. Should I have any problems or queries about the way in which the study was conducted, and I do not feel comfortable contacting the research staff, I am aware that I may contact the Ethics Manager on 992 68106.

8. I can refuse to take part in this project or withdraw from it at any time without affecting my relationship with management or the research team nor would it affect the care we receive.

9. I understand that my research records will be stored in a locked filing cabinet in a secure building The research team, authorised personnel, the study sponsor, and regulatory entities may have access to my study records to protect my safety and welfare.

10. I consent to the collection, processing, reporting and transfer within or outside Australia of my personal and/or sensitive information for healthcare and/or medical research purposes. All data to be transferred will be de-identified, therefore not including my name, address or phone number. My information will be only identified by a numerical random code.

11. If the results of my information are published, my identity will not be revealed.

12. I declare that I am over the age of 18 years.

After considering all these points, I accept the invitation to participate in this project.

I am aware that I will be given a copy of the Participant Information Sheet and Consent Form.

I also state that I have/have not participated in any other research project in the past 3 months. If I have, the details are as follows:

Dr ______________________ on: ______________________
(phone and page numbers)

Date: ______________________ Witness: ______________________
(Please print name)

Signature: ______________________ Signature: ______________________
(of Relative/Person Responsible) (of witness)

Investigators' confirming statement:

I have given this research subject information on the study, which in my opinion is accurate and sufficient for the subject to understand fully the nature, risks and benefits of the study, and the rights of a research subject. There has been no coercion or undue influence. I have witnessed the signing of this document by the subject.

Date:________________

Investigator's Name:________________________________

Investigator's Signature: ________________________________

Northern Sydney Health
Royal North Shore Hospital

NORTHERN SYDNEY
CENTRAL COAST
NSW HEALTH

RELATIVES/PERSON REPONSIBLE/GUARDIANS

Withdrawal from Participation in a Research Project (version 04.10.05)

Protocol Title: **An evaluation of a 'person-centred approach' to care of people with symptoms of disturbed behaviour in the acute care sector.**

An option, should I wish to withdraw my consent to participate in the research protocol entitled above, is to contact the researcher and/or return this slip. I understand that if I withdraw from the research protocol my relative's/patient's medical care, my relationship with the Hospital and medical attendants will not be affected nor would it affect the care we receive..

Relative's/Person Responsible's name: ____________________

Relative's/Person Responsible's Signature: ____________________

Date: ____________________

Please detach the Withdrawal of Participation Section and send to

Julia Poole
Department of AC&RM, Building 12
Royal North Shore Hospital
St Leonards NSW 2065

or if I would like to speak to a member of the study investigation team I may contact:

Professor Sharon McKinley Ph. No. 9926 8281

APPENDIX F

Northern Sydney Health
Royal North Shore Hospital

NORTHERN SYDNEY
CENTRAL COAST
NSW HEALTH

NURSING STAFF
RESEARCH INFORMATION SHEET (version 04.10.05)

1. **Study Title:** An evaluation of a 'person-centred approach' to care of people with symptoms of disturbed behaviour in the acute care sector.

2. **Invitation:** You are invited to learn more about this research project, with the view to gaining your permission to agree to be part of activities to enhanced support and communication with your patients.

3. **Purpose of study:** Sometimes older patients experience periods of confusion (possibly related to delirium and/or dementia) when they are sick and are unable to understand what is happening to them. This can make them very anxious and agitated so that it is hard to care for them.

Nurses sometimes find it difficult to reassure confused patients because they don't know enough about their personal background to be able to know the really special things that need to be said to reassure and comfort them. This project seeks to enable nursing staff to develop better ways of caring for patients who are confused and/or show disturbed behaviour.

4. **What is known about the procedures:** Research has shown that when nurses are given the time and opportunity to step back, observe and think about their own care practices, they feel more able to seek ways to improve.

Care of patients who are confused has been shown to be more effective when staff have access to personal profile details of their patients. This is called a **'person-centred'** approach. At present these details are not routinely collected during an acute hospital stay.

NORTHERN SYDNEY HEALTH
HUMAN RESEARCH
ETHICS COMMITTEE
APPROVED

5. **The procedure will involve:**

- a short training period for several ward nurses (mappers) who will be replaced so that they can spend short periods observing the interactions of their nursing colleagues with confused patients
- removal of all identifying data (such as names, shift days and times) from these anonymous observations which will be documented with broad codes for feedback at later meetings with staff
- participation by the observers in a recorded focus group to provide feedback about what they learned and to plan feedback sessions
- all nurses will be asked to fill in an anonymous survey for measures of their perceptions of caring, stress levels, job satisfaction and attitudes
- observation of some patient 'handover sessions' by researchers to gain a view of type of information shared
- audits of patient notes for documentation of nursing and medical care planning instructions
- participation by nurses in education and planning sessions in response to the feedback.

We expected that staff will be able to observe approximately 24 patients in the pre and post education phrases.

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Northern Sydney Central Coast Area Health Service
ABN 48344669728

6. Why have you been chosen: Patients in this acute aged care ward are particularly likely to suffer from dementia and/or delirium so that nursing them can be especially difficult.

7. Participation: Your involvement in this project may be terminated and you may withdraw from it at any time without affecting your relationships with management or the research team.

8. Risks: Possible adverse effects or risks related to this project include the possibility of ward nurses trying to guess which coded interaction observations are related to particular nurses but a period of several weeks will separate the observations and feedback to minimise this risk. All identifying data related to days and shift times will be removed.

9. Records: Your research records will be stored in a locked filing cabinet in a secure building. The research team, authorised personnel, the study sponsor, and regulatory entities may have access to your study records to protect your safety and welfare.

10. Confidentiality: You are asked to consent to the collection, processing, reporting and transfer within or outside Australia of your anonymous, personal and/or sensitive information for healthcare and/or medical research purposes. Your information will only be identified by a code and /or an anonymous code of your own choosing which will not be traceable to you.

Your views about these activities and your interest in the project are welcomed at any time.

You will be given a copy of this information sheet and the signed consent form to keep.

If you require more information about this project before giving your consent, you can contact: Julia Poole, Clinical Nurse Consultant in Aged Care on 02-9926 6632 or Tracey Ronald, Nursing Unit Manager, Ward 11D on 02-9926 7435, Royal North Shore Hospital.

Alternatively, you are at liberty to contact:
the Ethics Manager on 992 68106

Thank you very much for considering to help us in this study

Northern Sydney Health
Royal North Shore Hospital

APPENDIX G

NORTHERN SYDNEY
CENTRAL COAST
NSW HEALTH

NURSING STAFF
Consent Form to Participate in a Research Project (version 04.10.05)

I, ____
(name of participant)

of____
(street) (suburb/town) (state & postcode)

have been invited to participate in a research project entitled

An evaluation of a 'person-centred approach' to care of people with symptoms of disturbed behaviour in the acute care sector.

In relation to this project I have read the Participant Information Sheet and have been informed of the following points:

1. Approval for the protocol has been given by the Human Research Ethics Committee (HREC) of Northern Sydney Health

2. The aim of the project is to enable nursing staff to participate in practice improvement initiatives in caring for patients who have disturbed behaviour.

3. The results obtained from the study may or may not be of direct benefit to my work environment.

HUMAN RESEARCH
ETHICS COMMITTEE
APPROVED

4. The procedure will involve:
   - a short training period for several ward nurses (mappers) who will be replaced so that they can spend short periods observing the interactions of their nursing colleagues with confused patients
   - removal of all identifying data (such as names, shift days and times) from these anonymous observations which will be documented with broad codes for feedback at later meetings with staff
   - participation by the mappers in a recorded focus group to provide feedback about what they learned and to plan feedback sessions
   - all nurses will be asked to fill in an anonymous survey for measures of their perceptions of caring, stress levels, job satisfaction and attitudes
   - observation of some patient 'handover sessions' by researchers to gain a view of type of information shared
   - audits of patient notes for documentation of nursing and medical care planning instructions
   - participation by nurses in education and planning sessions in response to the feedback.

5. Possible adverse effects or risks related to this project include the possibility of ward nurses trying to guess which coded interaction observations are related to particular

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Northern Sydney Central Coast Area Health Service
ABN 48344669728

nurses but a period of several weeks will separate the observations and feedback to minimise this risk.

6. My involvement in this project may be terminated if I feel too uncomfortable with the observation periods.

7. Should I develop a problem which I suspect may have resulted from my involvement in this project, I am aware that I may contact –

Ms Julia Poole on ph. No. 9926 6632 or pager 41421

Date: ______________________ Witness: ______________________
(Please print name)

Signature: ______________________ Signature: ______________________
(of participant)) (of witness)

8. Should I have any problems or queries about the way in which the study was conducted, and I do not feel comfortable contacting the research staff, I am aware that I may contact the Ethics Manager on 992 68106.

9. I can refuse to take part in this project or withdraw from it at any time without affecting my relationship with management or the research team.

10. I understand that my research records will be stored in a locked filing cabinet in a secure building The research team, authorised personnel, the study sponsor, and regulatory entities may have access to my study records to protect my safety and welfare.

11. I consent to the collection, processing, reporting and transfer within or outside Australia of my personal and/or sensitive information for healthcare and/or medical research purposes. All data to be transferred will be de-identified, therefore not including my name, address or phone number. My information will only be identified by a numerical random code and/or an anonymous code of my own choosing.

12. If the results of my information are published, my identity will not be revealed.

13. I declare that I am over the age of 18 years.

After considering all these points, I accept the invitation to participate in this project.

I am aware that I will be given a copy of the Participant Information Sheet and Consent Form.

I also state that I have/have not participated in any other research project in the past 3 months.
If I have, the details are as follows:

Dr ______________________ on: ______________________
(phone and page numbers)

Date: ______________________ Witness: ______________________
(Please print name)

Signature: ______________________ Signature: ______________________
(of participant/volunteer) (of witness)

Investigators' confirming statement:

I have given this research subject information on the study, which in my opinion is accurate and sufficient for the subject to understand fully the nature, risks and benefits of the study, and the rights of a research subject. There has been no coercion or undue influence. I have witnessed the signing of this document by the subject.

Date:____________________

Investigator's Name:____

Investigator's Signature:____

Northern Sydney Health
Royal North Shore Hospital

NORTHERN SYDNEY
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NSW HEALTH

NURSING STAFF

Withdrawal from Participation in a Research Project (version 04.10.05)

Protocol Title: **An evaluation of a 'person-centred approach' to care of people with symptoms of disturbed behaviour in the acute care sector.**

An option should I wish to withdraw my consent to participate in the research protocol entitled above is to contact the researcher and/or return this slip. I understand that if I withdraw from the research protocol my relationship with management and the research team will not be affected.

Nurse's Name:______________________________

Nurse's Signature:___________________________

Date: ________________________

Please detach the Withdrawal of Participation Section and send to

Julia Poole
Department of AC&RM, Building 12
Royal North Shore Hospital
St Leonards NSW 2065

[illegible] HEALTH
[illegible]
APPROVED

or if I would like to speak to a member of the study investigation team I may contact:

Professor Sharon McKinley Ph. No. 9926 8281

Aged Care & Rehabilitation Medicine
Building 12, Royal North Shore Hospital
St Leonards NSW 2065
Tel (02) 9926 8705 Fax (02) 9926 6840

Northern Sydney Central Coast Area Health Service
ABN 48344669728

APPENDIX H

An evaluation of a 'person-centred approach' to care of people with dementia, or other causes of disturbed behaviour, in the acute care sector.

PROGRESS REPORT – 8th February 2007

1. Baseline characteristics collected and collated
2. Staff feedback groups completed and data collated
3. Intervention phase nearing completion
    - list of staff issues and concerns will be reviewed again soon
    - *'know your staff member'* continues – all new Medical Officers have badges; New grads will receive badges as they start on the ward
        i. information and awareness raising progress:

1	August 2006	*Delirium Month*	Definition, signs & symptoms, predisposing / precipitating causes, diagnosis, MMSE, AMTS, CAM, treatment & management
2	September 2006	*'Depression Month' (and other mental disorders)*	Definitions, signs & symptoms, common ageing changes, causes, diagnosis, GDS, 5 questions GDS, suicide prevention, treatment/management. Schizophrenia, anxiety disorders etc
3	October 2006	*'Dementia Month'*	Definitions, causes, signs & symptoms, diagnosis, treatment/prevention/management, Experiential Workshops, 'Brain and Behaviour' video
4	November 2006	*Person-centred approaches*	If you had dementia; what is personhood; how would you feel if? Ethics and rights; coping with stress; personal fact file / *Communication Cue,* meeting the needs of people with dementia; improving communication; working with challenging behaviour [ACUTE] / seeing challenging behaviour as communication
5	December 2007	*Care and Communication Month*	What did we learn from the Experiential Workshops and the needs of people with cognitive impairment; how can we gather the right sort of information that will help us care for confused patients; what would a form look like; who would fill it in; what questions a are necessary; what would we call it = Nursing Notes for Care and Communication (CC form)
6	January 2007	*Pulling It All Together Month*	How do we signify the availability of a CC form; Redesigned Handover notes; Using an asterix in the Cognition column; referring to the CC information at handover
7	February 2007	*Competency Development Month*	Checking the intranet policy for Disturbed Behaviour Management; Getting information about how to write a competency; Writing a the Ward 11D Disturbed Behaviour Worksheet (delirium, depression, dementia) for the SuPpOrT package; Trialling the Worksheet ; Getting endorsement for the Competency

CONGRATULATIONS EVERYONE!

APPENDIX I

Photograph of the types of actions undertaken during dementia experiential workshops

APPENDIX J

Summary of nurses' feelings, actions and recommendations documented following four dementia experiential workshop during November 2006.

Feelings		**Actions**	**Participants Recommendations for Care**
• hot • unkempt • disorientated • relieved now is over • bit cross • angry at self • confused • difficult to concentrate • scared • felt nurses were teasing • lost • loss of dignity • loss of moral compass • buggered (tired) • left out • dizzy • annoyed • weird • felt it was like a game • didn't know what was real • mis-understood • felt excluded • no one was listening • lonely • Relieved it is over • powerless • Frustrated • agitated • Bit stupid • fear • Like a failure • Overwhelmed • tired • Isolated/lonely • anxious • Anger • depressed • Loss of control → lost • disorientated • devalued • demoralized • hopeless	• suspicious • childlike • awful • neglected • better without masks • Frustrated+++ • Anxious • Uncomfortable • Hopelessness • 'Shit' - Helpless • Childlike • sad • out of control • Miserable • Driven nuts • don't care • Claustrophobic • angry • Confused • overwhelmed • Embarrassed • breathless • frustrated • anxious • Exhausted • Aggressive • Mis-understood • Disrespected • Locked in • Herded • Like a prisoner	• wanted everything to calm down • didn't know what to do - sat down • waited to see what would happen • ran out of things to do • just wanted to get out - go home • felt like giving up • became withdraw • determined • stole comb • became demanding • wanted to fight • wanted to go home- wanderer • acting like a child → deteriorated • ' got naughty' • copy other people • try to get direction • get cranky • Want to walk out the door • Wanted to strangle both • Wanted to rip off mask • Turn off noise • I'm out of here - don't want to do it anymore • needed to sit down • followed the nurses • looking for a safe place • try to find a person to help (anyone) • tried to help each other • group together	• *COMMUNITY INFO SHEET* • *TEA BAG EXAMPLE* • *Preferred name* • *Them & us* • *Relative's names* • *Special events, pets* • *Daytime/night time* • *Social history form - ED* • *Routines e.g. shower -how sleep* • *Preferred food - how settling* • *Slow down* • *Talk quietly & be gentle* • *reassure* • *re-orientate* • *be patient to the patients* • *simple directions* • *Find out family members - nick (name) or* • *language log of staff who speak sp. languages* • *flip chart to point to items* • *'Talking pictures'* • *COLOURS* • *PICTURES* • *'Family* • *country themes* • *NEW IDEAS* • *Companionship* • *Family support* • *Ear muffs/plugs* • *Own clothes* • *More PJs allocated for men* • *Volunteers* • *Schedule ADLS/activities* • *Roster staff member for short period - DT* • *patients to eat at table at lunch*

APPENDIX K

Ward nurses in-service education topics and attendance numbers by professional group in Cycle 2.

Topic	Total number of sessions	Total attendees	Senior RN	Junior RN	New Grad RN	E/EN	AIN	TEN	UG Nurse	CNE	NUM	Others
1 Project overview	9	63	11	5	13	5	20	2	2	3	0	0
2 Delirium	12	91	17	13	12	7	24	7	2	9	1	0
3 MMSE	3	12	4	2	0	0	4	2	0	0	0	0
4 Depression & Suicide	4	33	6	2	8	1	9	2	3	2	0	0
5 … other mental disorders	2	25	6	3	4	1	7	2	0	2	0	
6 Dementia	5	38	5	4	9	2	13	2	2	2	0	0
7 Brain & Behaviour video	2	11	3	2	2	1	2	0	0	1	0	0
8 I'm Still Here video	1	8	2	0	1	0	1	0	3	1	0	0
9 Dementia Experiential Workshop	6	55	11	3	6	2	7	1	11	1	1	18
10 Different realities	1	8	1	0	1	0	4	1	0	1	0	0
11 Debrief	1	8	1	1	0	0	3	1	1	1	0	1
12 DEW feedback	1	8	0	1	2	1	3	1	0	0	0	0
13 CCC	5	39	9	3	7	3	12	3	2	0	0	0
Total for 2006	**52**	**399**	**76**	**39**	**65**	**23**	**109**	**24**	**26**	**23**	**2**	**19**

Note. CCC = AIN = Assistant in Nursing; CNE = Clinical Nurse Educator; Communication and Care Cues; DEW = Dementia Experiential Workshop; E/EN = Endorsed/Enrolled Nurse; MMSE = Mini Mental State Examination; New Grad – Newly Graduated Registered nurse; NUM = Nursing unit Manager; RN = Registered Nurse; TEN = Trainee Enrolled Nurse; UG = Undergraduate.

NORTHERN SYDNEY
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NSW HEALTH

NURSING NOTES FOR COMMUNICATION AND CARE CUES

Surname: .... MRN: ....
Given Names: ....
Date of Birth: .... Sex: ....
(Affix patient label here)

We realise that as a carer (spouse, partner, relative or friend) there may be important information that you would like us to know so that we can provide better care. Please can you EXPLAIN the significant things?

1. *Does the patient have any **communication difficulties** (eg can't say what they may want to, can't understand etc)?*

   ....

2. *Does the patient normally **move about** (eg by themselves, with walking stick or walking frame, holding on to the furniture etc)?*

   ....

3. *Does the patient wear any **artificial aids** (eg dentures, hearing aid, glasses, limbs etc)?*

   ....

4. *What are the usual **hygenie habits** (eg showering/bathing, shaving, toileting, continence, denture management etc)?*

   ....

5. *Are there any **special food or drink** requirements or likes/dislikes (eg allergies, consistency, religious, milk/sugar etc)?*

   ....

   ....

6. *What are the usual **sleeping habits** (eg bed time, waking time, pillows, blankets, position, night caps, settling routines etc)?*

   ....

Does the patient SMOKE ☐ *Yes* ☐ *No*

Does the patient drink alcohol regularly ☐ *Yes* ☐ *No*

Please could you bring in some comforting personal items (eg toiletries, photos, rug, clothing, books, music etc) so that we can reassure and orientate your relative.

Name & relationship of person completing the form:

Name: .... *Relationship* .... *Date:* ....

BINDING MARGIN
DO NOT WRITE

NURSING NOTES FOR COMMUNICATION AND CARE CUES

NORTHERN SYDNEY
CENTRAL COAST
NSW⊕HEALTH

Surname:	MRN: ....
Given Names:	
Date of Birth:	Sex: ....

(Affix patient label here)

PREFERRED NAME: ....

Where born: .... Time lived in Australia: ....

Language spoken at home: .... English ability: ....

Names of Adult **Family** Members (spouse, brothers, sisters, etc): ....

....

Names of **Children:** ....

....

Names of **Grandchildren:** ....

....

Names of other **Special People or Pets:** ....

Cultural or Religious Practices: ....

....

Past Major **Occupation:** ....

Past **Hobbies or Interests:** ....

....

Occasions of Importance: ....

....

Other **Special Issues and / or important habits** (likes, dislikes, rituals, ways of doing things etc:)

....

....

....

....

....

....

....

....

....

....

Name & relationship of person completing the form:

BINDING MARGIN
DO NOT WRITE

APPENDIX M

[illegible]

4 October 2007

Ms J Poole
Department of Aged Care and Rehabilitation
Royal North Shore Hospital, Pacific Highway
St Leonards NSW 2065

Dear Ms J Poole,

Re: **Protocol 0711-206M(R) - J Poole**
An Evaluation of a ' Person-Centered Approach' to Care of People with Dementia, or Causes of Disturbed Behaviour, In the Acute Care Sector

The **HAWKESBURY** Human Research Ethics Committee (HREC) of Northern Sydney Central Coast Health (NSCCH), has reviewed your **Medical Records Research Request** and I am pleased to inform you that approval has been given for you to proceed with your study.

The study has been assigned a protocol number **(0711-206M)** and we ask you to quote this number whenever you contact this office about matters relating to the study.

In order to comply with the Guidelines for Good Clinical Research Practice (GCRP) in Australia, and in line with NSH HREC policy, may I remind you that it is the chief investigator's responsibility to ensure that:

1. A report is provided to the HREC at the completion of the study.

2. The HREC is notified as soon as possible of any changes to the protocol. All changes must be approved by the HREC before continuation of the research project. This includes notifying the HREC of any changes to the staff involved with the protocol.

Yours sincerely,

Production Note:
Signature removed prior to publication.

Professor Stewart Dunn
Chairperson
HAWKESBURY HREC
NORTHERN SYDNEY
CENTRAL COAST HEALTH

RESEARCH OFFICE
Level 4, Vindin House, Royal North Shore Hospital, Pacific Hwy, ST Leonards NSW 2065
Telephone 02 9926 8106; Facsimile 02 9926 6179

APPENDIX N

POST STUDY PROGRESS AT JUNE 2009

Twelve months after the completion of the after-intervention measurement period and following the Facilitator's six month absence from the work place, progress with the recommendations has been made as follows

- **The large staff name badges** were regularly supplied and maintained until March 2009 when an Area Health instruction in response to the Garling Report required all staff to replace their identification badges with new ones with slightly larger printing. These are to be worn clipped to clothing instead of the lanyard that impeded infection control processes but provided a convenient attachment place for the badges. Although some staff then abandoned the special large badges, others continue to request and wear them.
- **The Delirium Risk Assessment Tool (DRAT)** was further developed and ratified by the Area Health New Forms Committee.

– This DRAT was trialled in two orthopaedic wards, a respiratory ward and a medical ward. Uptake was varied and an early staff satisfaction survey found that 31 of the 37 staff had used the tool and 29 found it easy to use. In an audit of 84 consecutive patient files, 33 patients were over 70 years of age and all were found to have a DRAT sticker in their notes. Thirteen (39%) of these patients had a diagnosis of delirium, all of which were coded in the AR-DRG codes. Before and after-intervention audits have not been possible at this stage due to resource constraints.

– A quality project to evaluate the effect of the DRAT on documented delirium diagnosis and coding is under way in the acute aged care ward.

– The DRAT has been printed on a number of patient care plans and in the Medical Assessment Form used in the Emergency Departments of the PCC study hospital.

– A project to roll out local delirium guidelines based on the Melbourne Health (2006) Delirium Guidelines is planned to commence in July 2009. These local guidelines have included a recommendation for the use of the DRAT and the Communication and Care Cues form with copies provided in the appendices.

– Requests for permission to use the DRAT have been received from a number of other Area Health Services in the NSW.

- **The Communication and Care Cues (CCC)** form was ratified by the Area Health New Forms Committee and recommended by the Area Health Carers' Network group.

– The CCC was used by 11 of the 37 staff on the orthopaedic wards. Satisfaction survey comments included *"excellent help", "puts relatives at ease" and "good for non-English speaking patients"* (Poole et al., 2008). .