Implementing the Rating Scale for Aggressive Behaviours in the Elderly: Can it make a difference to nursing management of aggressive behaviours in elderly patients with dementia?

by

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ABSTRACT

Aggressive behaviour is the most common clinical and nursing management problem for patients with dementia. Many elderly patients with dementia show sexual, physical, and verbal aggressive behaviours that complicate their management and make day-to-day nursing care difficult. These behaviours include yelling, hitting, swearing and verbal abuse. Despite this there is no consistent use of rating scales for assessing aggressive behaviour in this population. Nurses in the inpatient setting are often the main target for this aggression and without a rating scale the assessment of the behaviour is open to interpretation of the individual. While aggressive behaviours can be the most difficult behaviours for nursing staff to manage, these behaviours can also disrupt the milieu on inpatient psychogeriatric settings and frequently distress other patients, visiting families/whanau and friends.

The Rating Scale for Aggressive Behaviours in the Elderly (RAGE) is a twenty-one item rating scale, designed specifically to measure aggressive behaviours in the elderly in the psychogeriatric inpatient setting. The purpose of the scale is to qualify the aggressive behaviour, note any changes in the behaviour, and record intervention and/or treatments. This study combines both qualitative and quantitative methods with exploratory and descriptive designs to explore nurses' experiences of using a consistent tool for monitoring, measuring and managing aggressive behaviours.

Data gathered over a three month period of implementing RAGE will provide a 'snapshot' of the prevalence, extent and type of aggressive behaviours within the inpatient setting, providing evidence to nurses in developing strategies for the management of aggression. Focus group interviews were used to enable nurses to discuss their experiences of utilising a clinically validated tool in their practice and how this made a difference to their practice.

Findings from this research indicate that nurses within the setting found that RAGE is a consistent tool with which nurses can record, measure and monitor aggressive behaviours. Responses from nurses' experiences of utilising RAGE in their practice were varied, with some being unable to articulate how RAGE had made a difference to their practice. Despite this there was an overwhelming positive response for the continued use of RAGE within the setting as a clinically validated tool by which to measure, record and manage aggressive behaviours.

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One person can lift a stone, two can lift a rock, four can lift a boulder;
It is with the help of many hands that the heaviest weight is made lighter.
(Kali Ducre, personal communication, 2005)

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CHAPTER 1 INTRODUCTION

This thesis is about how nurses define measure and manage aggressive behaviours in the elderly patient with dementia. Without an effective rating scale by which to measure the aggressive behaviours that often accompany the progression of dementia, the interpretation of these behaviours is often an individual one. This can result in nursing and clinical management that can be inconsistent, therefore potentially reinforcing the behaviour viewed as undesirable, or being ineffective.

This research project explores how the utilisation of the Rating Scale for Aggressive Behaviours in the Elderly (RAGE) by nurses to measure aggressive behaviour in an inpatient psychogeriatric setting, may make a difference to how they define measure and manage these aggressive behaviours.

The thesis begins with an overview of the study. It backgrounds my interest in the research topic and sets the scene for the development of the thesis. It introduces the background and development of the RAGE.

THE RESEARCHER

Having already married with three children, I was considered by some as a late starter into the nursing profession – graduating in 1998 at 39 years of age with a Bachelor of Nursing Degree. During my three years as a student and being exposed to a variety of placements, it was the area of mental health that appealed to me. After graduating I commenced full time employment as a community mental health nurse with a Non - Government Organisation (NGO) in the lower North Island, providing community-based residential and rehabilitation services for people with long-term psychiatric disabilities. My responsibilities were mainly overseeing the physical and mental wellbeing of these people. It was during this time, that I was encouraged to pursue my interest in ongoing education, and it was with some trepidation I enrolled, as a distance student in the Post Graduate Certificate Advanced Nursing (Mental Health) at Victoria University of Wellington. While this was an exciting year for me, it was also one filled with challenges. On a personal level I had entered into a new relationship and had had another child. On a professional level the restructuring and involvement in the accreditation process within the NGO left me with feelings of lack of guidance, support, and without further opportunities for professional growth and development.

I commenced fulltime employment as a Registered Nurse for a large District Health Board (DHB) in Psychogeriatric Services. The transition from NGO to DHB was not without its challenges. I was (and still remain) passionate and proactive in all areas of nursing, in particular policies and procedures (how and why we do things), and quality improvement (can we do this differently to provide better patient outcomes?). As a new person coming to an area where there was an experienced skill mix of both Registered and Enrolled Nurses who have had close working relationships with each other over the many years, I discovered that the commitment, passion and views towards involvement in policies and procedures, quality improvement and ongoing professional development, for some were not similar to my own.

THE BEGINNINGS OF A THESIS

Searching for a topic to research for this project began when completing a research methods paper, where I examined the use of hormone replacement therapy as treatment for elderly men with dementia exhibiting aggressive behaviours, and the ethical considerations around using this type of treatment. Through my practice working in a psychogeriatric unit, I had observed the use of hormone replacement therapy (Oestrogen in the form of Estraderm Patches) being used to manage aggressive behaviours in elderly men with dementia. Questioning my colleagues about why Estraderm Patches were being used on these men met with responses such as ‘oh we have always used it’ or ‘because that’s what works best’. The more I questioned the use of Estraderm Patches the more interested I became in ‘how did we know if the Estraderm Patch was effective in managing aggressive behaviours’ when often the patches were being used in conjunction with a mood stabiliser, such as Sodium Valproate.

Searching for literature on this type of treatment indicated that there had been some overseas studies advocating the use of Estraderm Patches as a treatment to reduce or manage aggressive behaviours. However, there was little evidence or discussion to suggest whether or not this treatment could be seen as a type of chemical restraint as a way of altering or attempting to change behaviours for ease of management. There have been no studies undertaken in New Zealand using this type of treatment and the use of Estraderm Patches was not licensed by pharmaceutical companies in New Zealand as a treatment in managing aggressive behaviours. Despite my findings, and

the continued use of Estraderm Patches I found myself becoming proactive in ensuring that if Estraderm Patches were going to be used then the processes around the implementation of the patch needed to be reviewed.

Completing a research methods paper further broadened my knowledge base on aggressive behaviours and how as nurses we manage and measure aggressive behaviours, not only within the research setting, but with a large group of vulnerable people such as the elderly, in particular those with dementia who are exhibiting aggressive behaviours. Approaches to senior medical staff to obtain support to further pursue the use of Estraderm Patches being used to manage aggressive behaviours in the elderly with dementia was not well supported. Also the use of Estraderm Patches to manage aggressive behaviours was suspended as there had been no clinical studies to validate its effectiveness. The focus for my thesis then evolved to how nurses in an inpatient psychogeriatric setting define and manage aggressive behaviours in elderly patients with dementia.

AGGRESSIVE BEHAVIOURS

The literature reviewed supported my own experiences in that the admission of patients with aggressive behaviours related to dementia is frequent in the psychogeriatric inpatient unit, with patients often exhibiting verbal, physical and sexually inappropriate behaviours, as a result of the dementia. These behaviours can include hitting, spitting, yelling, biting, wandering, pacing, using foul language, public masturbation and inappropriate voiding and defecation. Nurses in the inpatient setting are often the main targets of these behaviours, and it is often the aggressive behaviours, that in my judgement constitute a significant problem in the management of the elderly psychogeriatric inpatient.

Working with this client group as a Registered Nurse, I have observed these behaviours and the reactions to them. I have often spoken with my nursing colleagues when they have reported that they have been hit, scratched, kicked or punched and discussed their interpretation of what had occurred and their reactions to it.

Nurses will ‘warn’ each other about a patient’s behaviour and report or suggest the use of restraint or as required (PRN) medication to control such behaviours. There does not seem to be a common understanding of what behaviour is classified as aggressive or inappropriate between the different staff members. Behaviours labelled abusive, aggressive, and inappropriate, are frequently noted and documented without further definition and elaboration. These variations of interpretation and approach can often lead to nursing and clinical management that is inconsistent and therefore potentially reinforcing of the behaviour viewed as undesirable.

Often I have found that others’ experiences with a particular patient are significantly different to my own, and that similar behaviours would be managed in a variety of ways. Reporting of behaviours occurs through verbal reports at shift handovers and informally through the shift, and in the written clinical notes. Notes often include statements such as ‘patient restrained and given PRN medication due to aggressive behaviour,’ or ‘patient attempted to hit nurse this duty, restrained to help settle.’ While these reports record the actions of the nurse, and sometimes the behaviour of the patient, there is little in the way of detail that enables analysis of what actually occurred, before, during, and following the incident.

In the area of psychogeriatric nursing, the nurse encounters many forms of behaviour associated with psychiatric disorders, emotional disturbances, stress, crisis and conflict. Nursing staff in inpatient hospital settings are consistently confronted with a spectrum of behaviours that are classified vaguely as ‘management problems’. It is vital that nurses learn about and understand the dynamics of such behaviours; learn and be able to employ methods of appropriate and successful interventions; and understand the rationale behind the use of such intervention techniques. Behavioural disturbances, such as aggression, are some of the most difficult problems to manage in the elderly population. Despite this, there is a large gap in clinical knowledge of both the characteristics of the behaviours and the methods for its assessment.

Nurses in the inpatient setting are often the main targets of this aggression and without a rating scale the assessment of the behaviour it is open to interpretation of the individual clinician in clinical decision-making. It has been a result of my own

experiences and observations on aggressive behaviours in the elderly inn an inpatient setting, and lack of a consistent tool to measure these aggressive behaviours that has led me to explore not only what is available to measure aggressive behaviours, but how aggression is defined. For all these reasons it is important that an effective means to measure aggressive behaviours be developed, so that misinterpretation of the behaviours is avoided enabling appropriate and effective treatment or management for the patient.

RATING SCALES

In my work setting, apart from the individual nurse's interpretations of aggressive behaviours there are two rating scales used to measure aggression. These rating scales are not specifically designed for the psychogeriatric inpatient, nor are the scales used regularly by staff. The definitions of aggression accompanying these rating scales are very broad, which often adds to the confusion and misinterpretation by nurses completing them, to accurately record and measure the aggressive behaviours.

These rating scales are the Confusion Rating Scale (CRS), (Williams, 1991), and the Queen Elizabeth Behavioural Assessment Graphical System (QEBAGS), (Prodger, Hurley, Clarke & Bauer, 1992). However I believe that these rating scales are inadequate for measuring aggressive behaviours in the elderly patient with dementia. This is because, the CRS only allows for recording the presence or absence of the four behavioural dimensions of confusion. These behaviours are rated at the beginning and end of each shift as per the definition as set out on the scale, for example; disorientation, inappropriate behaviour, inappropriate communication and hallucinations/illusions. The QEBAGS rating scale utilises three categories of behavioural disturbances that may occur in isolation or may co-exist and are documented on a graphical plot across a 24 hour time span.

The use of both of these rating scales raises two concerns; one is that both the CRS and QEBAGS lack a clear definition of aggression, which often results in the nurse's individual interpretations of the aggressive behaviour. Individual interpretation can lead to inconsistency in the use of these rating scales, for example where the nurse perceives the patient's behaviour has not changed, or the interpretation of aggression is different to that of another nurse who has cared for the patient. In a busy inpatient setting there may be more emphasis placed on completing other required

documentation, rather than a rating scale that is perceived as having little relevance for the individual nurse.

The aggressive behaviours may be a combination of several reasons; a result of the severity or progression of the dementia, a result of illness, for example, uncontrolled diabetes, stroke, and the natural aging process. It is also possible that the behaviours exhibited by the patient are being misinterpreted by nursing staff, due to their own definition of aggression and lack of a suitable tool by which to measure the behaviour. It is evident there is no one clear, consistent definition of aggression or a suitable tool in which to measure aggressive behaviours,

Searching for a validated rating scale to consistently measure aggressive behaviours, lead me to the Rating Scale for Aggressive Behaviours in the Elderly (RAGE) developed by Patel and Hope (1992a). This is a 21 item rating scale, designed specifically to measure aggressive behaviours in the elderly in the psychogeriatric inpatient setting, and is designed to be completed by inpatient nursing staff. The purpose of the scale is to qualify the aggressive behaviour, note any changes in the behaviour, record intervention and/or treatments and effects, and any other factors that may influence the behaviours. As previously mentioned there is a lack of a clear definition as to how to define aggression, and inconsistency as to how these behaviours are measured. The decision to implement RAGE for this research project was based on the clear definition of aggression, the broad range of behaviours that were included and the time taken to complete the tool (five minutes).

THE AIMS OF THE THESIS

The purpose of this research project was to implement the use of RAGE, for a three-month period in a psychogeriatric inpatient setting to explore nurses' experiences of using a consistent tool for monitoring, measuring and managing aggressive behaviours. This research combined both qualitative and quantitative methods with exploratory and descriptive designs. RAGE was implemented only by nursing staff that had consented to participate in the study. As part of this study participants also attended a focus group, in which discussions centered on the nurses' experiences of using RAGE during the three months and whether this made a difference to their clinical practice.

The specific aims of this research were to;

- Implement RAGE enabling nurses to utilise a consistent tool for assessing, managing and monitoring aggressive behaviours,
- Determine the range, types and prevalence of these behaviours across a three month period, and
- Explore nurses' experiences of using RAGE in clinical practice.

The expected outcomes of undertaking this research were to utilise a validated tool that is effective in enabling nursing staff to measure, record and document aggressive behaviours in a consistent manner, to assist in clinical decision making in regards to appropriate treatment or interventions to manage patients with aggressive behaviours, and to increase nurse's knowledge and awareness in assessing and managing aggressive behaviours. It was hoped that consistent measurement and management of aggressive behaviours would potentially reduce the distress to the patient and their families associated with these types of aggressive behaviours, as well as providing evidence for nurses' in clinical practice that would contribute to evidence-based knowledge. This is supported by Vaughan and Fitzgerald (as cited in Hsu, Moyle, Creedy & Venturato, 2005) who suggest that knowledge underpins the nurse's ability and confidence in decision making and increases their own personal growth.

BACKGROUND TO DEVELOPMENT OF RATING SCALE FOR AGGRESSIVE BEHAVIOURS IN THE ELDERLY (RAGE)

Aggressive behaviour is the most common management problem in dementia, and the availability of this rating scale is aimed at providing more information into the nature, severity, aetiology (causation) and treatment of aggressive behaviour. In a study to determine range, types and prevalence rates of aggressive behaviour in a population of inpatients in a psychogeriatric setting, Patel and Hope (1992a) developed the RAGE (Appendix 1) to enable research to be carried out on the effects of potential treatments of aggressive behaviour and on the relationships between aggressive behaviour and other factors. One of the main purposes of the RAGE is that it is designed to be a monitoring device for behaviour problems in routine settings, such as inpatient psychogeriatric wards.

The range of behaviours indicated on the RAGE is broad with an emphasis on the problems of nursing a psychogeriatric group, such as being uncooperative, resisting

help, shouting or being antisocial. Patel and Hope (1992a) suggest that to maintain a high degree of reliability it is essential to be objective in the reporting and the necessity of not overlooking 'minor' behaviour as the nurse is not being asked to judge the intention of the patient. Thus if a severely demented patient hits a nurse while being helped in dressing, this should be rated even if it is doubtful whether that person could form any intention to hurt the staff member. Patel and Hope note that the term 'aggressive' does not connote any desire or intent to hurt, after all, many cognitively impaired patients are unaware of their behavioural disturbance and it is difficult to judge the presence of any motive to the behaviour. Therefore, RAGE has also been designed in such a way, that the term 'aggression' is not used in any of the items. All items on the RAGE are purely objective behaviours and the rating system is based on how often these behaviours have occurred over the previous three days. For this reason, one of the criteria for completing RAGE is that it needs to be completed by nursing staff who have been on duty for at least two shifts over a three-day period.

Aggressive behaviour has been defined by Patel and Hope (1992) and it is their definition that has been widely used by various authors conducting research into aggressive behaviours. They define aggressive behaviour as an *act, involving the delivery of noxious stimuli to (but not necessarily aimed at) another object, organism or self, which is clearly not accidental (p.212).* It is also their definition that has been used for the purposes of this research and their definition will be further discussed within Chapter 3.

Many cognitively impaired patients are unaware of their behavioural disturbances and it is difficult to judge the presence of any motive to the behaviour (Patel & Hope, 1992a). The RAGE is a twenty-one item rating scale; seventeen items on the scale are concerned with specific kinds of behaviour, for example, kicking; three items enquire about the consequences of the aggressive behaviour, and one item asks the rater to make an overall assessment of aggressive behaviour using a four-point scale of zero to three.

While RAGE was developed for use in an inpatient population, reliability has not yet been established in community settings. However, RAGE has been demonstrated by

Patel and Hope to possess high inter-rater reliability and test-retest reliability; it is sensitive to change, is internally consistent, and has clinical reliability.

An inter-rater reliability study (two or more trained observers watch an event simultaneously and score it independently) was conducted under two conditions by Patel and Hope (1992a). This consisted of two groups of nursing staff. One group of nursing staff used RAGE relying on their own observations, while the other group used RAGE plus a ward checklist as an additional source of information. (The checklist contained names of patients and individual behaviours). The authors found that although the checklist increased reliability considerably, there were questions as to whether or not this was a spurious increase. However they strongly recommend the use of a ward checklist in conjunction with the RAGE as this considerably improves inter-rater reliability.

Test-retest reliability (the correlation between scores from the same subjects tested at different times) was measured at three different time intervals: six hours, seven days and fourteen days. Reliability for most individual items for the total RAGE score was high; however the most striking feature was the similarity in reliability as measured at all three time intervals.

In determining sensitivity (the ability of an instrument to make discriminations of the fineness needed for the study) of RAGE, Patel and Hope were faced with the problem that there was no standard measure against which to compare the performance of RAGE. This was overcome by asking an independent nurse to rate overall aggressiveness. Twenty-one patients took part in a 7-day and 14-day study and were considered by the independent nurse to have changed in their overall aggressive behaviour between the two rating periods. The results showed that these two measures correlated highly with each other, suggesting that the rating scale total score is likely to be sensitive to much lesser change.

Patel and Hope found that external validation (the findings can be applied to the generalised, or applied, to the population) of the RAGE posed a problem due to lack of any other suitable measure of aggressive behaviour with which to compare it. A comparison was carried out on an adapted version of the rating scale with the results of direct observation. The RAGE performed well as tested by this method but

because direct observation studies are time consuming the study was limited in a number of ways. Firstly, the direct observation method itself was not subjected to tests of reliability and validity; secondly the number of patients (16) was small; and thirdly, the observation period was limited to one nursing shift.

More recently, RAGE has been translated into a Chinese version by Lam, Chui and Ng (1997). The Chinese Rating Scale for Aggressive Behaviours in the Elderly (CRAGE) was implemented in a cross-sectional study to examine the tool's validity in comparing the pattern of aggressive behaviour among residents of different elderly institutions. In a randomised controlled trial between 1998 and 1999, RAGE was implemented by Hall, Keks, and O'Connor (2005) to measure aggressive behaviour in investigating the efficacy and tolerability of Oestrogen patches for the adjunctive treatment of aggressive behaviours in male patients with advanced dementia. RAGE has also been used in a small number of other studies, with results that support its reliability and validity.

The researcher wishes to acknowledge the developers of RAGE: Doctor Vikram Patel and Doctor Tony Hope, for their consent (Appendix 2) for RAGE to be implemented in this research project.

RAGE was implemented in a psychogeriatric inpatient setting for a three month period to explore nurses' experiences of using a consistent tool for monitoring, measuring, and managing aggressive behaviours in this population. The collection of data over this time provided a snapshot of the prevalence, extent and type of aggression. This provided nurses and the multidisciplinary team with data for developing strategies for the management of aggression.

STRUCTURE OF THE THESIS

Chapter 1 has covered the background to the development of my interest in how we as nurses define and interpret aggressive behaviour in the elderly.

Chapter 2 will briefly look at dementia, how dementia is defined and the aggressive behaviours that may be exhibited by the patient with dementia.

Chapter 3 explores literature published that relates to aggressive behaviours within the elderly population, in particular those with dementia. Within this chapter defining, managing and measuring aggressive behaviour will also be discussed.

Chapter 4 explores the importance of nursing and research. The chosen study design, methodology and method will also be discussed. Also outlined will be the data collection and analysis, rigour and validity, and strengths and limitations of using the chosen method.

Chapter 5 will discuss and describe the research process. This chapter outlines the process for obtaining ethical approval to undertake the research, the selection of participants as well as issues around confidentiality and minimisation of harm. Included within this chapter is the implementation of RAGE, analysing the data collected, and findings, and concludes with a brief reflection of implementing RAGE.

Chapter 6 presents the findings from the focus groups. It outlines the background to focus groups and selection of focus group participants. Two themes are identified; professional relationships, and nurses' experiences of utilising RAGE in clinical practice.

Chapter 7 concludes the thesis. The overall aims of the thesis will be reviewed. It discusses implications for nursing and recommendations in utilising RAGE, drawn from participants' observations as well as my own observations of utilising RAGE.

By utilising a clinically validated tool by which to effectively define, measure and record aggressive behaviours in elderly patients with dementia, it is hoped that this research project contributes to nursing by informing nurses' clinical practice and decision-making to improve nursing management and patient outcomes.

CHAPTER 2. WHAT IS DEMENTIA?

Dementia is a clinical syndrome characterized by global deterioration of intellect occurring in clear consciousness, and the progressive degeneration of the brain. Dementia, a decline of memory and other cognitive functions is the most disabling psychiatric disorder of adulthood (Stuart & Laraia, 2001). It also invloves the loss of intellectual function and memory of sufficient severity to cause dysfunction in daily living. Dementia affects people in three domains, the cognitive, the functional and the behavioural. Cognitive impairment, memory loss and failure to attend to their personal care always occur in dementia, which has a deteriorating, progressive course (Melding, 1997). Dementia does not simply affect the person who has it, but it profoundly changes the lives of those family members and friends who are close to that person.

In New Zealand the World Health Organisation definition of dementia (as cited in the Ministry of Health, 2002) is used;

> *a syndrome due to disease of the brain, usually of a chronic progressive nature in which there is a disturbance of multiple higher cortical functions, including memory, thinking, orientation, comprehension, calculation, learning capacity, language and judgement. Consciousness is not clouded. Impairments of cognitive function are commonly accompanied and occasionally preceded by deterioration in emotional control, social behaviour or motivation. This syndrome occurs in Alzheimer's disease, in cerebrovascular disease and in other conditions primarily or secondarily affecting the brain. (p.11).*

Perkins (2004, p.24) notes that while there are many forms of dementia, the more common ones are:

- Alzheimer's disease which accounts for 50-60 % of all dementias;
- Vascular dementia which accounts for10-20 % of dementias:
- Mixed Alzheimer's disease and vascular dementia which accounts for less than 10 % of dementias:
- Lewy body dementia which accounts for 10-20 % of dementia: and,
- Frontotemporal dementia which accounts for less than 10 % of dementias.

Accompanying dementia are often behavioural disturbances; in particular physical aggression. Aggressive behaviours are one of the most serious behavioural disturbances associated with a dementing illness and are a common cause of referral or admission to psychogeriatric services (Margo; Clarke; Reisberg as cited in Patel and Hope,1993). Behavioural disturbances, especially aggressive behaviour, constitute a significant problem in the management of elderly psychogeriatric patients (Patel & Hope, 1993), and occur more frequently in demented patients (Aarsland, Cummings, Yenner & Miller, 1996). The behaviours are also positively associated with the extent of cognitive impairment (Keene, Hope, Fairburn, Jacoby & Gelding, 1999).

Ryden (as cited in Neville & Byrne, 2001) suggests aggressive behaviour in dementia can be broadly classified into four categories: verbal aggressive behaviour, (shouting, yelling and screaming, demanding, sarcasim; physical aggressive behaviour, (pushing, hitting, spitting, pinching, and destroying property), sexual aggressive behaviour, (public masturbation, disrobing); and self - abusive behaviour (attempting to self-harm). For nursing staff these behaviours can generate extreme embarrassment, making management of the patients' care difficult as well as becoming a source of distress not only to the patient but to others in the environment. Melding (1997) suggests some aggressive behaviours are simply the result of misinterpretation of environmental stimuli because of lowered cognitive functioning. Some are the result of disinhibited personality traits, and some are results of psychotic stimuli such as hallucinations or delusions.

Aggressive behaviour also affects the caregivers of dementia patients, leading to chronic mental distress, depression, injury, and patient abuse. Patel and Hope (1992a) report that although aggressive behaviour is the most single common cause of referral to psychiatric services, up to 20% of the families of people with dementia also report physical violence as a 'serious' care problem. Levels of aggressive behaviour as indicated by Shah (as cited in Bahareethan & Shah, 2000) can be divided into three groups; (i) the clinical demographic, social and biological characteristics of patients, (ii) patterns of usage of the hospital, including admission rates, bed occupancy, length of stay, discharge rates and mortality rates; and (iii) the nature of the environment,

including staffing levels, staff attitudes and perceptions, and the character of the staff-patient ratio.

Dementia predominantly affects people over 65 years and becomes more common with advancing age. The Ministry of Health (2002), reports that while 12 % of New Zealand's population is over the age of 65 years, by 2051 this number will increase to 25 percent. They also report the most common dementia, Alzheimer type, is more common in women at advanced ages (presumably because life expectancy of women is greater resulting a more a greater chance of developing the disorder, rather than the disease itself having a gender predilection). On the other hand, vascular dementias are more common in men and tend to occur at a younger age than dementia of the Alzheimer type. Melding (1997) also reports that the ageing of the population applies to all racial groups in New Zealand, including Maori and Pacific people, whose elderly populations are expected to increase by 9% and 8 % respectively. This growing number and increasing proportion of elderly means that disorders affecting older people will have a greater impact on society.

Most dementias are progressive and irreversible, and are often accompanied by psychiatric symptoms like depression, anxiety, paranoia and hallucinations and these often lead to stressful and challenging behaviours. These symptoms often result in patients with dementia experiencing difficulties receiving, processing and responding to environmental stimuli, and these difficulties are the direct result of the progressive deterioration in cognitive, affective and functional abilities that accompany dementia.

The key features of dementia are deterioration from a previous level of functioning and no disorder of alertness. Loss of memory (usually the retrieval and storage functions) is an important symptom, but by itself memory loss is not enough to make a diagnosis. Perkins (2004) suggests it is not always possible to diagnose exactly which form of dementia a person is suffering from and further that diagnosing dementia may depend on the background of the person making the diagnosis; for example, a general practitioner, geriatrician, psychiatrist or neurologist. According to Perkins the most common criteria for defining and diagnosing dementia is produced by the American Psychiatric Association, Diagnostic and Statistical Manual of Psychiatric Disorders (DSMIV-TR, 2000). This manual defines dementia as an impairment of memory, and one or more of the following: language disturbance

(aphasia), trouble carrying out motor activities (apraxia), failure to recognize or identify objects (agnosia), trouble with planning, organising things, making judgements (executive function).

These disturbances need to have interfered with work, social activities or relationships and there must be a decline in the person's functioning. Other physical and mental conditions that can look like dementia have to be excluded, such as delirium (acute confusion), depression, excess alcohol, head injury and medication side effects. Having briefly discussed how dementia is diagnosed and defined the following section will discuss aggressive behaviours in dementia and the impact these behaviours may have not just for the patient with dementia but for those who care for them.

AGGRESSIVE BEHAVIOURS IN DEMENTIA

Aggressive behaviour in dementia as suggested by Brodaty and Low, (2003) is one of the most serious and challenging behaviours that may exist independently or in conjunction with other disturbances, and poses a major management problem for nurses and clinicians. Aggressive behaviour in dementia may start when, with increasing cognitive impairment, people misinterpret the environment, for example perceiving intimate care, such as personal hygiene as a threat.

The term behavioural and psychological symptoms of dementia (BPSD) encompasses a diverse cluster of these behavioural disturbances and it is these symptoms such as restlessness, aggression, shouting, psychiatric symptoms including, delusions, hallucinations and anxiety that are extremely common in patients with dementia (Ballard, Lowry, Powell, O'Brien & James, 2000). Approximately 83 % of people with dementia suffer one or more BPSD (through the course of their illness) – of this 60 % will experience delusions, 20 % will experience hallucinations, 33 % will experience verbal outbursts, 35 % will experience anxiety, 40 %t will have mood disorders (usually depression), and 13 % will exhibit aggressive behaviours (International Psychogeriatric Association, 1998).

However, others put the percentage with aggressive behaviours much higher. Teri, Larsen and Reifler (1988), report at least 90 % of people with dementia will exhibit challenging behaviours such as aggression. In a 10 year longitudinal, prospective

study conducted by Keene et al (1999) they reported that 96 % of subjects with Alzheimer's disease (AD), vascular dementia, or mixed dementia (AD plus vascular dementia), demonstrated severe or persistent aggressive behaviour at some time during the course of the dementia.

Aggressive behaviour poses severe and complex problems in caring for people with dementia as the form the behaviour takes, and the reasons for the aggression, are varied. One of the reasons for the complexity is the nurse's own interpretation of the meaning of the behaviour and the situation, as well as the individual patient.

It is not only the behaviour but also the interpretation of that behaviour that is of importance in the successful management of aggression (Keene, et al, 1999). For example, the patient with dementia may be encouraged to do something unfamiliar or that is unclear to them, and continued insistence from the carer or nurse may lead to aggressive behaviours. Or, as reported by Gormley, Lyons and Howard, (2001), the likelihood of aggressive behaviour is also increased by coexisting psychopathology. Delusional beliefs have been shown to increase the risk of aggressive behaviour in patients with dementia, perhaps by increasing the likelihood that environmental factors, such as the approach of the nurse or carer being perceived as threatening.

The behavioural disturbance which causes the greatest impact on those with dementia is aggression (Patel & Hope, 1993) and despite carers playing a vital role in providing direct care for people with dementia in their own homes, the carer's absence or stress can be a major predictor of early admission to residential care. The Ministry of Health (2002) reports that dementia not only presents a challenge for those with the condition, but for those responsible for their care, and that challenging behaviour such as aggression can impact on the quality of life, both for the person with dementia and their carers. It is BPSD that has the greatest impact on carers, often resulting in a need for continual supervision, personal damage both emotional and physical to the carer, and an increased risk of abuse directed towards the person with dementia.

While behavioural disturbances are one of the leading causes of admission to psychogeriatric inpatient settings, often this results in the patient with dementia becoming exposed to an unfamiliar environment and, as a result of this, the aggressive behaviour may worsen. Often a change in living circumstances such as

moving from home where the environment and carers were familiar, to being admitted to hospital, mean the patient with dementia has to adapt to changes such as noise levels, access to outside, or location of the toilet. Often these changes increase the aggressive behaviour.

In addition, the inpatient environments are often busy and noisy. The constant sound of telephones and call bells, other patients, visitors, health care professionals talking back and forwards, and numerous unfamiliar staff, can be overwhelming for the patient. Patients are also exposed to changes in daily routines and social milieu, and to periods of time where activity fluctuates between over stimulation and sensory deprivation.

For the patient adapting to this environment, extreme stress may be experienced resulting in behaviour that is aggressive or disruptive. The patient with dementia may not understand what is happening to or around them, and may strike out in an attempt to protect their space, or personal belongings. Aversive (difficult or hostile) environmental stimuli can also lead to aggressive behaviour in elderly patient with dementia. The patient may see no need to maintain personal hygiene and respond aggressively to attempts to encourage bathing, changing clothes, or moving from one place to another (Raskind, 1999).

Nurses who are familiar with the hospital environment may not even be aware of the excessive stimuli the patient is receiving. Studies by Patel & Hope (1995) have demonstrated that assaults resulting from aggressive behaviour are more likely to occur when nurses are in close proximity to the patient, such as when prompting the patient to eat, dress, and accept medication, bath/shower, reposition or move from one area to another. Campbell (2005) suggests patients with Alzheimer's disease and other types of dementia can exhibit disruptive behaviours that contribute to staff stress and the incidence of aggression and violence by patients towards nursing staff is often a major stressor for employees.

Managing these behaviours is a priority for nurses as they struggle to deliver care, facilitate recovery and prevent complications such as infection, constipation, malnutrition and functional decline. Despite the significance of the problems caused

by aggressive behaviour, there are gaps in our knowledge about the characteristics of the behaviour and the methods for its assessment (Cohen-Mansfeild & Billing; Nilsson, Palmstierna, and Wistedt, (as cited in Patel and Hope, 1992b) suggest to date, the primary treatments focus on the management of the symptoms and behavioural manifestations associated with dementia.

CONCLUSION

This chapter has discussed and defined dementia and the associated behaviours that may occur as a result of the dementia. Most dementias are progressive and irreversible, and are often accompanied by psychiatric symptoms like depression, anxiety, paranoia and hallucinations and these often lead to stressful and challenging behaviours. The term BPSD encompasses a diverse cluster of these behavioural disturbances, in particular aggression. It is this behavioural disturbance that is not only a leading cause of admission to inpatient psychogeriatric settings, but one of the most difficult behaviours to manage in that setting.

While behavioural disturbances such as aggression, can pose a severe and complex problem in their management, not only is the management of these behaviours a priority for nurses, but it is the nurse's interpretation of the behaviours, that will determine successful management of that behaviour.

Chapter 3 examines literature reviewed by the researcher on defining, managing and measuring aggression, and how rating scales can play an important part in assisting nurses with appropriate management of aggressive behaviours.

CHAPTER 3: LITERATURE REVIEW

Introduction

Conducting literature searches into aggressive behaviours in the elderly with dementia were undertaken by me in 2004 through to 2005. Despite there being a large amount of overseas literature on measuring and managing aggressive behaviours in the elderly, such research and literature is limited in New Zealand. It is for that reason that some secondary sources have been used within this research project. The following review will discuss relevant literature around these issues.

The initial literature search was conducted on the World Wide Web. The following key words were used *aggression in elderly, psychogeriatric patients, dementia in the elderly, psychogeriatric, Alzheimer's, and rating scales to measure aggression.* As a result of using these keywords the following databases offered a broad range of literature on aggressive behaviours; Pubmed, Blackwell Synergy and British Medical Journals.

While the initial literature searches were undertaken by me from my home computer, not being financially registered to access the above mentioned sites, meant I was not able to access literature that would be relevant to my research. As a result of this I sought the assistance from library staff at the MidCentral Health Clinical library. They were able to access the following databases; Medline, CINAHL, PsychInfo, Blackwell Synergy, British Medical Journals. References to literature that were of interest to me were given to library staff to conduct further literature searches.

One article in particular that was of interest to me supported the use of a clinically validated rating scale used to measure aggressive behaviours in the elderly patient in a psychogeriatric inpatient unit (Patel & Hope 1992a). This rating scale was titled, Rating Aggressive Behaviours in the Elderly (RAGE) As well as this article being mentioned by various authors in the literature I reviewed, it was also the recommended article to review by Patel and Hope (1992a). This article was also recommended by Patel and Hope in their acknowledgment of the use of the RAGE for this thesis. With the exception of this article being made available to me at a cost of $22, all other articles that I retrieved as a result of the literature searches were free of charge from the clinical library. From the literature reviewed, the following provides

an overview of how aggression is defined, managing aggression, and measuring aggressive behaviours.

DEFINING AGGRESSION

One of the problems encountered in identifying and evaluating aggression in elderly patients, or any other patient, is that disagreement exists between not only nurses, but within the psychogeriatric community, as to how aggression is defined and distinguished (Raskind, 1999). Patel and Hope (1992a) suggest definitions of behaviour can either be functional or topographical in that topographical definitions emphasise the observable behaviour whereas functional definitions emphasise and the purpose and consequence of the behaviour.

Despite aggressive behaviour in dementia being defined in various ways, most definitions of aggression include the notion of intention. Patel and Hope (1993) note that the concept of 'aggression' is problematic in cognitively impaired people because it is unclear whether the intention to harm can be formed or reliably assessed. While they suggest aggressive behaviour covers a range of different types of behaviour, other authors include broader views. Cohen-Mansfield, Marx and Rosenthal (1989) include aggression under the broader concept of agitation, which includes excessive walking, shouting and floccillation (repeated plucking, picking at clothing or bedclothes). Ware et al, and Wistedt et al, (as cited in Keene et al., 1999) include some verbal abuse as aggression. Whereas, Gilley et al., and Miller (as cited in Keene et al, 1999) concentrate on physical aggression alone.

From the literature reviewed, there appears to be a broad range of defining aggression or aggressive behaviour and a sample of these definitions are given below. However, it is the definition of Patel and Hope (1993) that has been widely supported within the literature as being the most comprehensive definition for defining aggression. Their definition has also been included within this section.

Moyer (as cited in Patel & Hope, 1993) defines aggressive behaviour as an *"overt behaviour including intent to inflict noxious stimulation or to behave destructively towards another organism" (p. 212).*

Kreigh and Perko (1979) define aggressive behaviour as:

> *forceful self-assertion which tends to be destructive in nature, it is attack behaviour which evokes retaliatory or defensive responses, the individual resorts to aggressive behaviour when he/she perceives there is no other form of adaptation available when exposed to excessive stimulation*
>
> *(p 224).*

Cohen-Mansfield, et al, (1989) define aggression *as "hostile action directed towards objects, others or self" (p. 45),* while Norman and Ryrie (2004) suggest aggressive behaviour is a *"disposition to inflict harm which may be verbally expressed in threats to harm people or objects or result in actual harm"* (p. 730).

Patel and Hope (1993) recommend that in the setting of dementia it is most appropriate to focus assessment on aggressive behaviour. Their definition of aggression is the most widely used in the literature reviewed for this project:

aggressive behaviour is an overt act, involving the delivery of noxious stimuli to (but not necessarily aimed at) another object, organism or self, which is clearly not accidental (p.458).

The key elements in the Patel and Hope (1992a) definition are:

> ***Overt:*** *The behaviour must be observable and should require minimal subjective interpretation.*
>
> ***Delivery of noxious stimulus:*** *the noxious stimulus could be either physical or psychological and can therefore include verbally as well as physically aggressive behaviour.*
>
> ***Not necessarily aimed at:*** *this is to specify that the delivery of the noxious stimulus need not have been aimed at the target, for example the presence or absence of intent or a goal is not relevant to the definition.*
>
> ***Organism, object or self:*** *Thus a behavior delivered to other organisms (such as kicking someone), object (such as destroying property) or oneself (such as self mutilation) all qualify as aggressive behaviour.*

> ***Not accidental**: This involves a certain degree of subjective judgment; however it is an essential component, in order to exclude behaviour such as falling and hurting oneself or others accidentally*
>
> *(p 458)*

Patel and Hope (1993) conclude that although their definition does not solve all problems as to which types of behaviour are to be included and excluded, they do suggest that in carrying out empirical work it is necessary to identify a range of specific types of behaviour which are to be incorporated into the assessment. They also found the most difficult boundary problem is concerned with verbally aggressive behaviour and a decision would need to be made as to whether verbal abuse is a sufficiently noxious stimulus to be included. However, Patel and Hope suggest that in their definition and that of others such as, Wistedt, Rasmussen, Pedersen, Malm, Traskman-Bendz, Wakelin and Bech (1990), verbal abuse is included as aggressive, but there is room for disagreement.

Having looked at how aggression is defined the question of what to count as aggressive behaviour is by no means straightforward. A lack of a clear definition on how nurses define aggression may lead to ineffective care and treatment for the patient with dementia. The following section will look at how aggressive behaviour is managed and the impact that the aggressive behaviour can have on those who care for that patient.

MANAGING AGGRESSIVE BEHAVIOUR

Dr Seuss tells children that they can choose their own companions (Kikuta, 1991) however in the real world, nurses cannot always choose, and they often have to work with aggressive patients, particularly in the psychogeriatric inpatient ward. Nursing staff in hospital settings are consistently being confronted with a spectrum of behaviours that are classified vaguely as ‘management problems”. It is vital that nurses learn and understand the dynamics of such behaviours and are able to employ appropriate and successful interventions, and understand the rationale behind the use of such interventions.

Aggressive behaviour in dementia frequently causes extreme stress for nurses (Rabins et al., Colerick & George, as cited in Patel & Hope 1993), to the point of even

provoking an aggressive response from the nurse, (Pillemer & Suitor, Ryden, and Hamel et al., as cited in Keene, et al., 1999). While the behavioural disturbance which causes the greatest impact on sufferers and those who care for them is aggression, Patel and Hope (1993) report those who have been abused by patients are more likely to direct abusive behaviour back towards the patient in their care (Coyne, Reichman, Berbig, as cited in Gormley, Rizwan, & Lovestone, 1998).

Most aggressive behaviour tends to be directed to carers, rather than objects or to self. However, Patel and Hope (1993) report that despite the high overall prevalence of aggressive behaviour, the frequency of injuries sustained by victims is low. Their analysis of the types of aggressive behaviour reveals that being uncooperative or resisting help is the most common type of behaviour observed. Verbal aggressive behaviour is much more frequently encountered than physical aggression (Cohen-Mansfield, Hamel et al., Patel & Hope, as cited in Patel & Hope, 1993). Aggressive behaviour tends to be more common in the day time and especially in the morning perhaps because this is when intimate caring activities are most frequent (rather than time of day per se). Aggressive behaviour occurring during intimate care could also be a defensive reaction to threatening intrusions of personal space and independence.

In a direct observation study of a group of dementia patients, Bridges-Parlet, Knopman and Thompson (1994) found that the majority of aggressive episodes occurred during personal care or patient redirection, while only 13 % of episodes occurred without an identified precipitating factor. The latter percentage may be why acts of aggression in dementia sufferers are frequently described by carers as unpredictable.

Bridges-Parlet et al (1994) also suggest that intrusion into personal space is a frequent antecedent of aggression, and support the view that aggressive behaviour in patients with dementia is more frequently a defensive response to perceived threats rather than an expression of anger. They also suggest it is likely to be the presence of paranoid delusions increasing the probability that the approach of a carer is misinterpreted as a threat. As well as the clinical and social factors underlying aggression, the individual's specific situation has to be considered.

The person with dementia may have (or perceive that they have experienced) personal criticism, restriction or control, unfair treatment, frustration of intentions or the irritating behaviour of others such as other patients or nursing staff. Aggressive behaviour often occurs in the context of interpersonal interactions and may partly be due to the misinterpretations of the actions of the nurse and can result in the nurse becoming irritable and aggressive themselves, which in turn can worsen the behavioural problem (Ryden, as cited in Keene, et al., 1994).

Lack of understanding of aggressive behaviours in this population may lead to inappropriate care and frustration for both the patient and nursing staff. For example, the nurse's approach may be subtly adversarial. The nurse may exhibit threatening postures directed at the patient, impose limits on the patient, or have inappropriate or negative attitudes towards the patient with aggressive behaviours. Wright (as cited in Norman & Ryrie, 2004) observed that stressors may include staff behaviours resulting in violent incidents to be more likely when there is aversive stimulation from staff in terms of imposing limits or frustrating requests.

Often regarded as socially unacceptable, aggressive behaviour is often viewed as a psychiatric problem that is best managed by physical or chemical restraints. Studies have documented the increased use of physical restraints in elderly persons exhibiting cognitive or behavioural impairments, particularly behaviour that disturbs other patients or staff (Kikuta,1991). Nurses, therefore need to be aware of what is happening both within the ward in general and for the patient in particular, and what may be contributing to the patient's aggression. Nursing approaches in inpatient psychogeriatric settings can consist of ignoring the patient or relying on a few restricted strategies. These approaches may include physical or chemical restraints which are initiated to minimise or eliminate aggressive behaviours. Conversely these interventions may reflect an overall ignorance in regards to the needs of the elderly patient with dementia.

Teri, Hughes and Larsen (as cited in Brodaty & Low, 2003) found that while the prevalence of aggression in dementia varies with the severity of the condition, those patients with dementia who display aggressive behaviours were more likely to be given antipsychotic medication or physically restrained than those who are nonaggresive.

Kikuta (1991) is concerned that the increased use of physical restraints in elderly patients exhibiting cognitive or behavioural impairments, particularly behaviour that disturbs other clients or staff, are only partially effective and often places the elderly person at high risk of serious side effects. Some potential risks of the physical restraint of the elderly patient include functional decline, injury from falls, emotional isolation, skin abrasions and breakdown, disorganized behaviour, and increased mortality. Physical restraints continue to be used in acute care despite the overwhelming evidence of their negative consequences, which include increases in nursing workload, patient mortality. Too frequently nurses apply restraints while keeping the patient in a highly stimulating environment, thereby placing the patient at risk for injury (McCloskey, 2004).

From my own observations while working in an inpatient psychogeriatric unit, often these behaviours need to be managed rapidly. The use of physical and chemical restraints is often one of the main management strategies used by nurses to manage these behaviours. The management of these patients exhibiting aggressive behaviour often results in physical restraint and/or the patient is given medication to control the aggressive behaviour. As previously mentioned Oestrogen patches have also been used as an intervention in managing these behaviours. Often this management is done without an assessment of precipitating factors, such as, why the patient is exhibiting the behaviour, (are they wet, hungry), environmental factors (noise, other patients behaviours), or medical illness.

With adequate knowledge regarding dementia and aggression within this population, nurses can better respond to their patient's needs. The attitude and manner in which the nurse approaches the patient can impact on the patient's response. People with dementia are extremely sensitive to the non verbal cues of those around them and mirror others affective behaviour. The patient may sense a nurse's apprehension and respond negatively, or conversely may emulate the nurse's patience and calmness and remained relaxed (McCloskey, 2004).

Having reviewed how aggression is defined and ways of managing aggressive behaviour the following section discusses how aggression is measured and how the use of ratings scales can assist nurses in the measurement of aggressive behaviours.

MEASURING AGGRESSIVE BEHAVIOUR

Patel and Hope (1993) raise the question of what counts as aggressive behaviour in the setting of dementia is by no means straightforward. They found in the early stages of developing RAGE, considerable disagreement among nurses was common in the ratings they made. They suggest a major reason for this was that different nurses understood different things by the term 'aggressive behaviour'. Some nurses would rate a behaviour as aggressive only if they thought the demented person had intended to harm, whereas other nurses rated harming behaviour even when the person was too cognitively impaired for the concept of 'intention' to be meaningful.

Despite the measurement of aggressive behaviour being undertaken by a variety of methods, much of the current literature on aggressive behaviour in dementia is handicapped by the lack of a reliable and valid method for assessing the behaviour (Cohen-Mansfield & Billing, Nilson, et al., as cited in Patel & Hope, 1993).

Although an increasing number of instruments have been developed in recent years, aggression in dementia is usually measured from informant reports and these measurements of aggression are included in many general behavioural and psychiatric rating scales (Brodaty & Low, 2003). Bertilson (as cited in Patel & Hope, 1993) describes four ways of assessing aggressive behaviour: individual case studies; personality assessment; interviews; and behavioural assessment. The methods which can be used to assess include clinical assessment, self report inventories, interviews, observation-based rating scales, and direct observation. While Patel and Hope (1993) report unstructured clinical assessments have been the most frequently used method in published treatment studies, Lion, Snyder, and Merrill (1981) have shown that such unstructured observations document five times fewer aggressive episodes than structured daily ward reports.

It has been suggested throughout the literature reviewed that rating scales, (a form of self report) are the most precise means of measuring phenomena. Burns and Grove (2001) suggest that rating scales are the crudest form of measure using scaling techniques, in which the rating scale lists an ordered series of categories of a variable, assumed to be based on an underlying continuum with a numerical value assigned to each category.

Polit, Beck and Hungler (2001) suggest rating scales used as a tool, require the observer to rate some phenomena in terms of points along a descriptive continuum, in

which the observer may be required to make ratings of behaviour at intervals throughout the observation, or to summarise an entire event after observation is complete.

Important characteristics of rating scales that should be considered include their purpose, conceptual basis, setting for use, constructs tapped, informants, content, length, scoring methods, availability, and evidence of reliability and validity. Nurses, having the most responsibility for 24-hour care of patients are often the logical choice of administrators to use behavioural rating scales. In a study of disturbances of behaviour, (Woods as cited in Patel & Hope, 1993), rating scales completed by an observer, such as a nurse, were proven to be reliable and valid methods of obtaining information. This is supported by Blessed and Woods (as cited in Patel & Hope, 1992) who note that this method has proved to be a reliable and valid means of obtaining information about elderly patients.

This is especially true in old age psychiatry where scales are a frequently used method for assessment. In particular, observation-based rating scales designed to be completed by carers are less time consuming to administer than semi structured interviews. Despite a wide range of rating scales being available for the assessment of behavioural problems in the elderly, most of them are global functioning scales and are not designed primarily for the assessment of specific problems like aggression. It has been suggested by Shah (1999) that such behaviours in the elderly have been a neglected area of research, partly due to an absence of a clear definition, coupled with the paucity of suitable measurement instruments. Consequently in recent years, a plethora of instruments to measure aggressive behaviour in a variety of settings has emerged.

The choice of a suitable rating scale is often difficult because many have been designed for highly specific purposes. Patel and Hope (1993) report that the most widely used measure of aggression to date has been the Buss Durkee Hostility Inventory (BDHI) (Buss & Durkee, as cited in Patel & Hope 1993). They report that despite the BDHI being one of the most earliest and reliable rating scales to measure hostility and its wide use in research studies, it is of little value in the assessment of aggressive behaviour in dementia because the cognitive impairment precludes the patient cooperating in completing self-report inventories.

While global rating scales such as the Geriatric Rating Scale (Plutchik, Conte, Liebermann, Baker, Grossman & Lihrman, 1970) and the Psychogeriatric Dependency Rating Scale (Wilkinson & Graham-White, 1980) have been widely used in studies of dementia, Patel and Hope (1993) suggest that while these scales contain some items on aggressive behaviour, they are generally too few for the scales to be useful in studies which focus on the behaviour.

In recent years a number of observer rating scales, specifically designed for measuring aggressive behaviour have been developed, and a sample of these are given in Table 1 (p. 29). Patel and Hope (1993) caution that there are variances in their usefulness in measuring aggression in the elderly. Despite these global rating scales being most valuable in assessing overall ability, with a view to choosing the appropriate care setting Kendrick (1987) and Montgomery (1998) (as cited in Patel & Hope,1992a) suggest they are unreliable indicators of specific behavioural problems, such as measuring aggressive behaviours in the elderly.

The RAGE scale has been designed specifically by Patel and Hope (1992a) for use in the inpatient setting to measure aggressive behaviours in the elderly with dementia. The range of behaviours on the RAGE are broad, with an emphasis on the problems of nursing a psychogeriatric group, such as being uncooperative, resisting help, shouting or being anti-social. RAGE was designed in such a way, that the terms ‘aggression’ or ‘aggressive’ are not used in any of the items. Patel and Hope (1992a) have used terms that do not connote any desire or intent to harm. Therefore all items on the RAGE are purely objective behaviours and measure the behaviour preceeding the last three days. RAGE can be completed in five minutes by ward staff, and has been proven to be a clinically validated and reliable rating scale.

Table 1. Examples of observer rating scales used to measure aggression

Name of Rating Scale	**Purpose of Rating Scale**
Buss Durkee Hostility Inventory (BDHI) Buss & Durkee (1957)	designed as a self-rated multidimensional scale of hostility, the respondent is asked to rate how often he/she behaves during a week using categories: assault, indirect hostility, negativism, resentment, suspicion and verbal hostility.
Overt Aggression Scale (OAS), Yudofsky Silver, Jackson, Endicott Williams, (1986)	designed as an objective rating of verbal and physical aggression specifically to quantify the severity of the aggression and to distinguish those with chronic hostility from those with episodic outbursts.
Ryden Aggression Scale (RAS), Ryden, (1988)	an informant - completed scale designed to measure aggressive behaviour in community-based persons with dementia.
Staff Observation Aggression Scale (SOAS), Palmstierna & Wistedt,1987	does not measure aggressive behaviour over a given period of time, rather it provides an analysis of an individual episode.
Social Function and Aggression Scale (SFAS), Wistedt et al 1990	designed to cover the total range of mild to moderate and severe aggressiveness, and unlike other scales it is rated by psychiatrists presumably on the basis of interviews with nursing staff.

CONCLUSION

This chapter has reviewed literature about aggression, in particular defining, managing and measuring aggression in the elderly with dementia. While it appears that there is no published material available in New Zealand on rating scales designed specifically to measure aggressive behaviours in the elderly with dementia, there is a vast amount emerging from overseas.

There are various opinions on what aggression is and how it is defined within the literature, and what has emerged is the need to have a definition that is specifically centered on the behaviours that are frequently exhibited by patients with dementia. Literature reviewed would suggest that Patel and Hopes' (1992a) definition would best meet the criteria. The literature also shows that as well as the clinical and social factors underlying aggression, a lack of understanding of aggressive behaviours within this population may led to misinterpretation of the behaviour by nurses, resulting in inappropriate care or treatment, as well as frustration for both the patient and nursing staff. With adequate knowledge regarding dementia, and the behaviours associated with dementia, nurses can better respond to their needs.

While the literature suggests that the measurement of aggression in dementia may be undertaken by a variety of methods such as clinical assessments, self-report inventories and observation-based rating scales, there is strong support for the use of observation-based rating scales as the most precise means of measuring aggressive behaviours.

Within the literature there is an increasing awareness of the importance of how to effectively measure aggressive behaviour in people with dementia, and the need for such rating scales to accurately and reliably measure this behaviour. The literature also suggests that nurses are in the best position to sample a wide range of behaviours related to patients with dementia, and the use of rating scales to assist with the management of these behaviours is strongly supported.

The RAGE (Patel & Hope, 1992a) is a clinically validated and reliable rating scale, which meets the criteria as being designed specifically for measuring aggressive behaviours in the elderly in an inpatient setting. This was evident by the amount of literature that supports the use of RAGE as an effective rating scale to measure aggressive behaviours in the elderly patient with dementia.

The range of behaviours indicated on the RAGE is broad with an emphasis on being objective. It can be completed within five minutes by ward based nursing staff, and measures behaviours over the preceeding three days with a rating of zero to three.

Having reviewed and discussed the literature available the following chapter will describe the research study design, methodology and method, used to implement RAGE for a three month period, in an inpatient psychogeriatric setting thus enabling nursing staff to measure, record and document aggressive behaviours.

CHAPTER 4: STUDY DESIGN, METHODOLOGY and METHOD

INTRODUCTION

Research methodology is the philosophical framework, or the fundamental assumptions and characteristics of a particular research perspective. Methodology has been variously described as a plan of action, an overall strategy, and a guide to meet overall outcomes or goals of any particular project (Crotty, 1998). A qualitative descriptive method with an exploratory approach has been used to guide this research project. The purpose of this research is to implement the RAGE, for a three month period in a psychogeriatric inpatient setting and to explore nurses' experiences using a clinically, validated tool for monitoring, measuring and managing aggressive behaviours.

NURSING AND RESEARCH

Nursing research is a systematic process of investigating phenomena of interest, the general purpose of which is to add to the body of knowledge about the practice of nursing and about health in humans (Roberts & Taylor, 1998). Nursing research is an essential element in improving nursing practice; it provides a sound basis for the approaches and techniques used in nursing. Stewart and Price (as cited in Papps, 2002) suggest that without research, there is a risk of practice remaining based on unexamined traditions that do not offer patients best possible outcomes. Nursing research is essential for the development of scientific knowledge that enables nurses to provide evidence-based health care.

Nursing is accountable to society for providing quality cost effective care and for seeking ways to improve that care (Burns & Grove, 2001). Research enables nurses to describe the characteristics of a particular nursing situation, about which little is known; to explore phenomena that must be considered in planning nursing care; to predict the probable outcomes of certain nursing decisions; to control the occurrence of undesired outcomes; and to initiate activities to promote desired patient outcomes.

Nurses are increasingly expected to adopt an evidenced-based practice (EBP) approach which is broadly defined as the use of the best clinical evidence in making patient care decisions (Polit & Beck, 2004). Nursing research, like all research, can be either basic or applied. Basic research develops fundamental knowledge and tests theory; applied research concerns the application of knowledge to specific situations,

and addresses problems, such as the best way to practice nursing (Roberts & Taylor, 1998). It is hoped that this research project will provide evidence for nurses in clinical practice that will contribute to evidence-based knowledge.

RESEARCH METHODOLOGY

All research is interpretive and is guided by a set of beliefs and feelings about the world and how it should be understood and studied (Denzin & Lincoln, 2000). In particular, these beliefs shape how the qualitative researcher views the world and acts in it. These views or perspectives are often referred to as a world view or paradigm.

Qualitative research is non-positivistic, meaning; insights are interpreted rather than uncovered. Truth is considered to be relative to its context, not absolute. Craig and Smyth (2002) state qualitative research is inductive as opposed to deductive: the research proceeds from the ground up and begins with observations of phenomena, constructs, explanations or understandings, building towards generating theories.

Using a holistic approach, qualitative researchers gather data on multiple aspects of the setting under study, in order to assemble a comprehensive and complete picture of the social dynamics, of a particular situation or programme under study. Craig and Smyth (2002) suggest this differs from the logic and procedures of many quantitative approaches where independent and dependent variables are identified and isolated, and then statistically manipulated. These statistical findings are then used to draw inferences about relationships between the measured variables.

Qualitative research is underpinned by the post-positivism paradigm, which is inductive in its approach and develops theory from themes and results that emerge from the data. The only reality is that which the individuals are involved in the research situation construct, the researcher and the subject have an interactive relationship. Denzin and Lincoln (2000) believe the qualitative researcher uses inductive analysis, which means categories, themes and patterns arise from the data, and that the categories emerge from field notes, documents, and interviews and are not imposed prior to data collection. With regards to the results of research, positive researchers talk of certainty in their data interpretation whereas, post positivists discuss probability. Qualitative research involves finding out about the changing (relative) nature of knowledge, which is seen to be special and centered in the people,

place, time and conditions in which it finds itself, that is unique and context-dependent (Roberts & Taylor, 2002). According to Munhall and Boyd (1999) qualitative research is a systematic interactive subjective approach used to describe life's experiences and give them meaning. It focuses on discovery and understanding of the whole, an approach that is consistent with the holistic philosophy of nursing. Qualitative research is often exploratory, seeking to describe a situation, or to provide an understanding of a series of events, and enables others to make sense of that reality.

Creswell (as cited in Gillis and Jackson, 2002) defines qualitative research as an enquiry process of understanding based on distinct methodological tradition of inquiry that explores a social or human problem. The researcher builds a complex, holistic picture, analysing words, reports detailed views of informants, and conducts the study in a natural setting. Qualitative methods can be divided into two types: human-to-human and artefactual (documents, letters, reports) methods. Human-to-human methods include interviewing, participant and non-participant observation, and focus groups.

The goal of a qualitative approach is understanding rather than prediction, emphasising the subjective dimensions of human experiences, generally associated with the interpretive approach which is discovery oriented, explanatory, descriptive, and inductive in nature and in which broader statements can be made about the topic under investigation. Researchers using qualitative approaches explore the behaviour, perspectives, feelings and experiences of people and what lies at the core of their lives. Sandelowski (2000) notes this is in contrast to a quantitative design which has pre-set confines which limits what can be learned about the meanings people give to events.

Qualitative research is well suited to many nursing investigations in which the goal is to develop a deep understanding of human experiences and the meanings that participants attribute to these experiences. Burns and Grove (2001) note that currently the most predominant nursing research method used is quantitative, as researchers

believe that this approach provides a sounder knowledge base to guide nursing practice rather than a qualitative method. The quantitative approach is a formal, objective, systematic process in which numerical data are used to obtain information about the world.

Gillis and Jackson (2002) suggest that many nurses are now focusing on qualitative perspectives to enhance understanding of the human experience of health and illness and subsequently to improve practice. This may be as a result of some questions that just cannot be answered quantitatively. Qualitative research can inform clinical practice by being able to examine the kinds of questions that cannot be answered using experimental methods alone (Craig & Smyth, 2002). However by combining qualitative with quantitative approaches, the ability to produce applicable clinical evidence is greatly increased.

Field and Morse (as cited in Burns & Grove, 1997) suggest one of the important differences between quantitative and qualitative research is the nature of the relationships between the researcher and the individual being studied. The nature of these relationships has an impact upon the data collected and its interpretation. In many qualitative studies, the researcher observes social behaviour and may participate in social interactions with those being studied.

A qualitative descriptive with exploratory approach, I believes best suits this study because the research base is confined to a context-dependent unit from which I wish to gather as much information as able that will allow for the exploration of nurses experiences using a clinically, validated rating scale to measure, and manage aggressive behaviours. Having described the methodological assumptions behind the chosen framework for this study, the following describes the research method used to explore nurses' experiences using a clinically validated tool.

STUDY DESIGN

The qualitative approach best suits this study as it is centered around people and the conditions it finds itself in (context dependent). Qualitative descriptive research is the exploration and description of phenomena in real life situations, with the goal to generate new knowledge about concepts or topics that have limited or no research (Burns & Grove, 1997). Qualitative research that is descriptive provides a way of

explaining and understanding an experience and is designed to gain more information about characteristics within a particular field of study, with the purpose of providing a picture of situations as they naturally happen. Descriptive designs may be used for the purpose of developing theory, identifying problems with current practice, or justifying current practice.

This approach for this research project allows for the interpretation of the data collected, which seeks to describe patients' behaviours and nurses' experiences over a three month period within the research (context dependent) setting. The study was carried out in the psychogeriatric inpatient setting using a qualitative descriptive exploratory approach.

Following ethical approval, data collection commenced using participant observation and focus group interviews. Participant observation, in the context of this study means that I also participated in implementing RAGE for a three month period, observing and recording behaviours.

DATA COLLECTION AND ANAYLSIS

Qualitative data comes in various forms and in many nursing studies this data consists of interview transcripts from open ended, focused, and exploratory interviews. Data collection in qualitative studies is typically directed toward discovering the, who, what and where of events or experiences, or their basic nature and shape, and is generally characterised by the simultaneous collection and analysis of data, whereby both mutually shape each other (Thorne, 2000). The findings from qualitative studies are unique to that study, and it is not the intent of the researcher to generalise the findings to a larger population. Understanding the meaning of a phenomenon in a particular situation is useful for understanding similar phenomenon in similar situations. While the focus of this study is qualitative, in that it explores participants' experiences of implementing RAGE over a three month period, it is also underpinned by quantitative data in which observations will be made by implementing a validated tool (RAGE), which has been lacking within the research setting. The process of data collection and analysis was simplified by the development of a Microsoft Excel spreadsheet. This enables data to be graphically presented, calculation of relevant statistical measures (such as average, mean and mode), and allows for a comparison of the data.

The focus group data will be assessed using thematic, content and context analysis. Content analysis is a procedure for analysising qualitative data by establishing categories. Thematic analysis is a form of analysis which has the theme or category as its unit of analysis, and which looks across data from many different sources to identify themes (it is similar in this way to content analysis). Context analysis is similar, in that, the whole phenomenon is under study and approached holistically as a complex system.

The collection of data over the three month period of implementing RAGE provided a 'snapshot' of the prevalence, extent and type of aggression to provide evidence to nurses and managers in developing strategies for the management of aggression. The observations made during the three month period not only informed and supported nursing staff and management of patients with aggressive behaviours, but provided an area of further research to determine how common certain aggressive behaviours are compared to others.

RIGOUR AND VALIDITY

Rigour in qualitative research is to not only accurately represent study participants experiences, but is required to prevent error of either a constant or intermittent nature. In qualitative research the assumptions, experiences and perspectives of the researchers influence the findings of the research (Denzin & Lincoln, 1994). For this reason the value of the concepts of reliability (that a study must be replicable) and validity (that the study measures that which it purports to measure) as criteria for rigour in qualitative studies has been debated for many years. Denzin and Lincoln (2000) suggest validity in qualitative research has to do with the description and explanation and whether or not the explanation fits the description. This means is the explanation credible?

Measures for ensuring validity in qualitative research involve asking the participants to confirm that the interpretations are correct, so that they are confirmed as representing, faithfully and clearly, what the experience was like for the people who are the sources of information in the research. Reliability is often not an issue in qualitative research, as it is based on the idea that knowledge is relative and is

dependent on all of the features of the people, place, time and other circumstances (context) of the setting. People are valued as sources of information and their expressions of their personal awareness (subjectivity) are valued as being integral to the meaning that comes out of the research. Rather than saying something can be claimed as being statistically significant, qualitative research makes no claims to generate knowledge that can be confirmed as certain (absolute) (Roberts & Taylor, 1998). In considering rigour and reliability in this research project, I have implemented a tool that has been clinically validated. During the three month period of data collection consistency in educating and supporting participants on the use of RAGE has been maintained by myself. The consistency of participants, their knowledge of the population and setting has also been maintained. All attempts have been made not to deviate from Patel and Hopes (1992a) original research of the tool. There were no validation measurements undertaken for this research.

STRENGTHS AND LIMITATIONS

Burns and Grove (2001) note that although qualitative and quantitative research complements each other because they generate different kinds of knowledge that are useful in nursing, both have their strengths and limitations. A major strength of qualitative research is the validity of the data it produces. Collecting data by means of in-depth interviews and participant observation in natural settings means that, the participant's true feelings are more likely to be reflected in the rich descriptions that result than would be reflected in data collected in settings using a quantitative method. Because qualitative methods focus on the whole of the human experience they provide nurses with deep insight into experiences that would not be possible using quantitative methods exclusively.

The major limitation of qualitative research is its perceived lack of objectivity and generalisability. Gillis and Jackson (2002) suggest this is argued because qualitative researchers become the research tools, becoming intimately involved with the data collection and therefore cannot be objective.

CONCLUSION

The main purpose for undertaking this research is to implement for three months a validated rating scale (RAGE) to provide nurses with a consistent tool for assessing,

measuring, and monitoring aggression, in a psychogeriatric inpatient setting. The purpose of the scale is to quantify the aggressive behaviour, note any changes in the patients' behaviour, record intervention and/or treatments and effects, and any other factors that may influence these behaviours. At the end of the three month implementation of RAGE', participants participated in a focus group to explore their experiences of using the tool. Therefore the specific aims of this research were to;

- implement RAGE enabling nurses to utilise a consistent tool for assessing, managing and monitoring aggressive behaviours,
- determine the range, types and prevalence of these behaviours across a 3 month period and,
- explore nurses' experiences of using RAGE in clinical practice.

The purpose of this research is to utilise a validated tool that is effective in enabling nursing staff to measure, record and document aggressive behaviours in a consistent manner, and to assist in clinical decision making in regards to appropriate treatment or interventions to manage patients with aggressive behaviour. It is also anticipated that the RAGE will provide nurses with a consistent interpretation of aggressive behaviours to measure, record and manage these behaviours. It is also hoped that utilising RAGE will potentially reduce the distress to the patient and their families associated with these types of behaviours, as well as increasing nurses' knowledge and awareness in assessing and managing aggressive behaviours. Having described the methodology chosen as the framework for this study the following chapter will describe and discuss the research process followed prior to implementing the RAGE tool.

This chapter will also include relevant discussion on ethical approval and ethical considerations prior to the research, responsibilities of the researcher, confidentiality of data, Treaty of Waitangi and minimisation of harm or risk to participants. This is then followed by describing to the reader the research setting, recruitment of participants, education for participants prior to implementing RAGE, variations made to the RAGE tool, for the purpose of this research, implementing RAGE, the collection and collating of RAGE data as well as presenting the findings of implementing RAGE during a three month period.

CHAPTER 5: RESEARCH PROCESS

INTRODUCTION

This study began as a result of my own experiences and observations on aggressive behaviours in the elderly on an inpatient setting. I further saw there was a lack of a consistent tool to measure these aggressive behaviours. In discussing this further with nursing colleagues on how they defined aggression it was apparent, that nurses own individual interpretations of the behaviour were recorded and that there did not appear to be a common understanding of how or what is classified as aggressive or inappropriate behaviour. Behaviours such as abusive, aggressive, and inappropriate are frequently used without further definition or elaboration. Often these variations of interpretation and approach can lead to management that is inconsistent and therefore potentially reinforces the behaviour that is viewed as undesirable.

As well as the lack of a clear definition of aggression there is also lack of a consistent measuring tool to record and measure these behaviours within the setting. It is lack of both a clear definition and consistent measuring tool that has lead me to undertake this study. The purpose of this study is to implement a validated rating scale (RAGE) which includes a widely used definition of aggression that enables nurses to consistently measure and record aggressive behaviours.

RAGE was implemented for a three month period in a psychogeriatric inpatient setting to explore nurses' experiences of utilising a consistent tool for monitoring, measuring and managing aggressive behaviours. The collection of data over this time provided a 'snapshot' of the prevalence, extent and type of aggression to provide evidence to nurses and multidisciplinary team in developing strategies for the management of aggression.

This chapter also discusses the ethical considerations of the researcher, and the ethical processes, required to undertake the project. This includes implementation of RAGE, the setting, participant selection, responsibility of the researcher and minimisation of risk of harm to participants. The chapter concludes with my reflection on the project.

ETHICAL CONSIDERATIONS PRIOR TO RESEARCH

Prior to undertaking this research project I was aware that there would be some ethical considerations that would arise, not only with the submission of the National Application Form for Ethical Approval of a Research Project. A key consideration

was how I would manage my roles as a researcher, registered nurse, and colleague in a small workplace environment where most of the staff have had close working relationships with each other over many years and where I had been employed for two and a half years. I was also concerned that there might be some resistance from colleagues, as in the past, discussions with colleagues surrounding ongoing education there had been negative and/or entrenched attitudes towards being proactive in this area. While these statements were disheartening (and may have been made in jest) they gave me an insight into those colleagues who would be prepared to support this research project.

Prior to undertaking this research project I also considered the issue of myself as a registered nurse, who is proactive in challenging policies and procedures, questioning why and how we do things, active in ongoing education, and who is relatively new to the workplace, being responsible for introducing and managing a research project, especially as this was going to be a new experience and challenge for all.

This could have been viewed by some as possible conflict or bias to occur, or the potential abuse of authority or misunderstanding of my intentions (particularly over the Enrolled Nurses) for example, as I was the researcher, and a Registered Nurse working alongside Enrolled Nurses providing direction, delegation and supervision, and also a colleague.

It was important to me, as the researcher to look at how I could manage any negative attitudes, not only to enable me to complete the research project, but to promote research as an exciting and rewarding experience for nurses. So how did I manage to overcome these issues?

Firstly, to successfully implement and manage the research project and prior to submitting the ethics application, I felt that obtaining the support from the multidisciplinary team members (from the proposed research setting) such as the Charge Nurse, Team Leader, Psychogeriatrican, Psychiatrist and Clinical Nurse Educators would be essential. Meeting with them all personally allowed me the opportunity to discus and outline my proposed research project, my role in the research project, and also the role of the participants. It was hoped that colleagues

would feel more comfortable about participating in a research project knowing that senior staff members were also supportive of the project.

Secondly, the process of completing and submitting the ethics application was a rather lengthy process. Interested colleagues who were aware of my intended research project and were keen to participate often questioned me on how this was proceeding. Despite this being a somewhat frustrating experience for me, I took these opportunities to discuss with colleagues the ethical process, and why we have to have ethics approval before commencing a research project and also what was required in the application. Discussing and sharing my frustrations with colleagues I felt was a way where I could remain in the researcher role, keep colleagues enthused about participating in a research project, and potentially reduce any conflict or abuse over authority when in the role of researcher.

Thirdly, by acknowledging to colleagues that implementing a nursing research project into this setting would be a new and challenging experience for all and for some a step outside their comfort zone, participation was voluntary and there would be no adverse effects on any colleague if they did not wish to participate.

Attending to these ethical considerations prior to commencing the research project allowed potential participants to get used to the idea of a research project being implemented in their setting. This resulted in some colleagues regularly asking "when will it start, we are really keen to get involved"?

ETHICAL APPROVAL PROCESS

Legal rights and ethical aspects have to be considered in all research methods, be they quantitative or qualitative. Researchers in nursing apply the principles that protect participants in the research from harm or risk, and follow professional and legal rules. In New Zealand these are set out by the New Zealand Public Health and Disability Act (2000).The process for obtaining ethical approval to undertake this research begins by completing the National Application Form for Ethical Approval of a Research Project and then forwarding this to the Central Regional Ethics Committee.

Following this, the committee replied by post querying two points. One particular point being that the committee was concerned about the storage of data, requesting that 'study data should be stored for 10 years not three, and study data should be kept

in a secure location at Victoria University not your home'. My response was as follows:

'Victoria University of Wellington is reviewing the long-term storage issue of student data, and that for the interim while the study is underway research data will be securely stored at the researchers' private address, and, all data obtained from the research would be held for 10 years not 3 years' (B. Lidiard, personal communication, 2005).

On the basis of this response ethics approval to undertake this research was given on the 13 July, 2005 (refer Appendix 3). A copy of the ethics approval was also submitted to the Team Leader and Charge Nurse of the research setting.

RESPONSIBILITIES OF THE RESEARCHER

Roberts and Taylor (1998) describe ethics in nursing research as that which "concerns moral questions and behaviour in nursing research" (p.187). Beneficence (doing good) in the nursing research context means that the research aims should be to produce results that will ultimately benefit society or individuals through better treatment. The researcher may often have personal agendas for doing research and it is important that these are declared.

It is also important that the researcher disseminates any findings. Researchers who act ethically must ensure no harm comes to any individual involved in the research and should also ensure that those who use the findings, especially in relation to patient care, can use them with confidence as the researcher can guarantee the findings as valid (Roberts & Taylor, 1998).

MINIMISING RESEARCHER BIAS

Gillis and Jackson (2002) define research bias as the systematic distortion of research conclusions and this bias can influence most phases of a project from problem selection, to developing measurement, to collecting and analysising data and in interpreting the results. Bias can be a significant problem in qualitative research unless researchers recognize and incorporate it into the structure of the study (Brockopp & Hastings-Tolsma cited in Gillis & Jackson, 2002). While the data collection during this research project occurred within the workplace setting and I was also a participant, it was inevitable that the implementation of RAGE would generate

discussion between the researcher, participants and medical staff. Often these discussions were centered on participants approaching the researcher with questions or apprehension on how they should rate a patient's particular behaviour on the RAGE, particularly for those participants who may have been struggling to remain objective when rating patient behaviours.

During these times, as well as attending multidisciplinary team meetings (when rostered on to work) in regard to patients' progress, observations were made by the researcher that during these meetings medical staff often referred to the patients RAGE scores to assist them to help determine appropriate treatment and interventions. While I acknowledge at times it was difficult to remain impartial and not let any bias influence the findings of this phase of the research, there were times that this could have potentially occurred. I consciously and regularly reminded myself of this potential.

I was also aware that as a result of data that had been previously collected to date, my own previous experiences (when caring for patients in the setting and rating their behaviours) as well as my own interpretations of aggressive behaviour', could possibly differ to participants or influence how participants rated patient's behaviour.

To minimise researcher bias and to support participants to remain objective in rating patients behaviours, I referred them back to the information of the RAGE scale, encouraged them to read patients notes, and to discuss it with other nurses who may have cared for that patient during the last three shifts or 'with the Charge Nurse. When attending multidisciplinary meetings and being aware that medical staff had access to and were accessing RAGE scores to help to determine treatment and interventions or to gauge a patients' progress (particularly if they were exhibiting aggressive behaviours). I felt it was entirely up to them whether or not they used RAGE for these purposes.

I also felt that given why RAGE was being implemented, and its purpose, and the context in which RAGE was being implemented, this could not be totally controlled by me. However, I believe that the measures taken were effective in minimizing researcher's bias towards this phase of the research project.

CONFIDENTIALITY OF DATA

All data related to this study was stored on my home-based computer (secured with a pass word). Backup copies of all computer files, transcripts and audio tapes have been securely stored in a locked cabinet. As a requirement of ethics approval to undertake this research all data will be held for 10 years after which time paper data will be shredded and computer and audiotapes will be erased. Until this time I will be responsible for the safekeeping of this data.

TREATY OF WAITANGI

People of different cultures hold differing basic beliefs, have different value systems and regard differing modes of behaviour as acceptable (Guidelines on Ethics for Health Research, 2002). Cultural consideration was given to participants who identified as Maori. They acknowledged to me that they had no issues with the intended research and their participation and were aware of who to contact should they have any issues regarding the research project. Admissions of elderly Maori are lower in proportion to that of non-Maori. There were 186 admissions to the inpatient psychogeriatric ward from 01 February 2004 to 13 January 2005. Of these admissions only 2 (1.08%) identified as Maori, compared to 159 (85.48%) who identified as Pakeha. When elderly Maori are admitted with aggressive behaviours it is often because they have exhausted whanau resources.

This research recognizes equivalent health benefits for Maori and Pakeha (Article Two – tino rangatiratanga recognizes iwi and hapu authority over their people being involved in research, Article Three – relates to equivalent health status for Maori and Pakeha). It is intended that findings and recommendations from this research will be shared with Maori Health Services with the mutual aim of improving health outcomes for elderly Maori who present with aggressive behaviours related to dementia. A letter outlining the proposed research was forwarded to the District Health Board (DHB) Maori Health Advisor. This resulted in a face-to-face meeting between the researcher and the Maori Health Advisor; from this meeting their support was given.

MINIMISATION OF HARM OR RISK TO PARTICIPANTS

Prior to the commencement of the research potential participants were given the information form (refer Appendix 4) and had an opportunity to discuss the research with either the researcher, academic supervisor, or Charge Nurse from the setting. There was no anticipated risk or harm involved for participants completing RAGE. I was also available as a resource person in regards to implementing the RAGE tool.

Included on the information sheet were details of how I might be contacted during and outside working hours if participants had any issues or concerns. The Charge Nurse was also available if participants felt they could not approach the researcher. Included on the information sheet were details of how participants could access the services of the Employment Assistance Programme (EAP), provided through the DHB, which offers support and counseling if participants wished to access this avenue. All participants were made aware that there participation was voluntary (their choice) and that they could withdraw at any time.

SETTING

The study took place from July 2005 to the end of October 2005 in an inpatient psychogeriatric setting. Services of Treatment, Assessment and Rehabilitation within the District Health Board (DHB) provide specialist services for people over the age of 65 years. The service combines both geriatric (physical and cognition conditions in older age) and psychiatry of old age (focusing on mental illness and the behavioural and psychological symptoms of cognitive impairments such as dementia) throughout the DHB.

Integrated psychogeriatric inpatient services are provided including a 15 bed open ward with 6-8 beds provided in a secure environment, for specialised management of aggressive behaviours. Patients 65 years plus are admitted to the ward that present with suspected or have a known diagnosis of dementia or aggressive behaviours related to dementia; or there is evidence from prior knowledge of previous diagnosis; or present with strong indicators or similar behaviours. Patients who are under 65 years of age who do not met the criteria for services provided are excluded.

The setting consists of a multidisciplinary team including; 21 nurses, who are employed on a full- time or part- time rostered basis. Of these nurses 3 are fulltime Registered Nurses and 1 full time Enrolled Nurse. The remainder of the nurses work

part time on a rostered basis. Five care assistants are also employed on a full time and parttime rostered basis. These nurses have wide experience in long-term psychogeriatric care, rest home and intellectual services, childcare and medical backgrounds. The average age of Registered Nurses within the research setting is 46, while the average age of Enrolled Nurses in the research setting is 50. Other team members include Charge Nurse, Psychiatrist, Psychogeriatrican, Psychiatric Registrar, House Surgeon, Clinical Nurse Educator, Occupational Therapist, and a Social Worker and Ward Clerk. Access to medical or Allied Health Services (such as, radiotherapy, dietary, physiotherapy, speech language) is by way of referral.

Admission to the setting is either direct from the community, or from the patients home, (under consultation or liaison from the Community Psychiatric Nurse and/or psychiatrist), or a transfer from a medical ward. For those patients who are not able to consent to an admission or accept treatment while on the ward then an admission is made under the Mental Health (Compulsory Assessment and Treatment) Act, (1992), or via an Enduring Power of Attorney (EPOA), under the Protection of Personal Property and Rights Act (1988). The average length of stay is 28 days. Admissions between February 2004 and January 2005 were 186; of these 77 were male admissions, and 109 were female admissions; 36 of these admissions were as a result of aggressive behaviours or aggressive behaviours related to dementia.

RECRUITMENT OF PARTICIPANTS

Inclusion criteria

All Registered and Enrolled Nurses employed in Services of Treatment, Assessment and Rehabilitation within the DHB.

Exclusion criteria

All ward staff who are not Registered or Enrolled Nurses. Casual nursing staff employed by Staff Bureau. These nurses are employed on a fulltime or casual basis to cover all wards across the DHB when nursing staff are on sick leave. They are often not familiar with the type of patient and routine of the research setting and may only work one shift.

Student Nurses were exclued. While it is acknowledged the research setting provides clinical placement opportunities for student nurses, they are working alongside the nurse. It was also felt that their knowledge base and experience in this area of nursing did not meet the inclusion criteria.

Initially it was my intention to recruit only Registered Nurses because of their experience and knowledge base within the area of psychogeriatric nursing. However, as the Enrolled Nurses within the research setting form a large part of the workforce, and are required to take patient loads under the direction, delegation and supervision of the Registered Nurse, and a need to be practical to ensure continuity for implementing RAGE, a decision was made by me to include Enrolled Nurses. This was also seen by myself as potentially avoiding any conflict or authority over roles between me and participants.

As potential participants had been aware of the proposed research project commencing once ethical approval was obtained, due to the timeframe and delays in obtaining ethical approval I was not able to present collectively to potential participants. As a result all potential participants were invited to participate in the research by way of an information sheet (refer Appendix 4) and consent form (refer Appendix 5) being placed in their mail boxes. Information placed in mail boxes included purpose of the study, participant's right to decline participation without any adverse effect to them, guidelines for the storage of data collected and a copy of the RAGE tool, which included instructions and advice on how to record RAGE. To avoid staff feeling coerced there was a two week period in which staff could consider whether to participate prior to data collection commencing.

Those who were interested in participating were asked to sign the consent form and return to my mailbox within two weeks and should they have any questions about the research project they were asked to direct them to myself, my supervisor, or to the Charge Nurse. Eleven potential participants acknowledged the offer of participation within one week of placing information in their mailboxes. Week two saw consents to participate from a further 8 nurses. The remaining potential participants were on annual leave during this period and to ensure all potential participants were given the opportunity to participate the two week period was extended by three days. After this

three day extension all 21 nurses within the research setting had consented to participate.

All nursing staff that consented to participate in this research also consented to participate in a focus group to be held shortly after the completion of the three month data collection period. The purpose of the focus groups was to explore the experiences of the nurses using the RAGE tool. Focus groups involve the explicit use of the group interaction to produce data and insights that would be less accessible without the interaction found in a group (Morgan, 1995).

Audio tape recordings were taken during the focus groups and these were be transcribed verbatim by an experienced transcriber. Data from the focus group was collated as group data and did not identify any participants. From the focus groups a qualitative thematic analysis was undertaken to elicit the key issues identified by the nurses in using RAGE.

EDUCATION PRIOR TO IMPLEMENTING RAGE

A brief training education session was held for participants three days prior to the implementation of RAGE. This not only allowed participants to become familiar with the RAGE, the behaviours that were to be scored and the actual rating of RAGE, but to discuss any questions or concerns they may have. One question that participants did raise was confidentiality of the patients. Participants were reassured that while patients National Health Index (NHI) was required to be placed on the RAGE (this was because the data collected would remain on the patients file indefinitely), it was patients' behaviour that was being observed and scored on the RAGE, and that any samples used in the final data analysis would be identified only by patients age.

From this session participants made three important observations with regards to the RAGE. Firstly, despite the photocopying department having used half blue paper and half white to photocopy the RAGE instead of white (as I had originally asked for) participants quickly acknowledged they preferred the blue paper as they felt it stood out and was easier to see, so a decision was made to continue with blue paper.

Secondly, participants felt that they wouldn't remember the days that RAGE was to be completed but didn't want to be saturated with sticky notes left around the ward or in the nurse's office. So in consultation with participants it was decided that the word

RAGE would be written in the daily workbook as a reminder, on each day RAGE was to be completed. The workbook is provided as a written guideline, as to the delegation of areas, tasks and any special events that each nurse will be assigned to for the particular day or shift; all duties are covered in this workbook.

Thirdly, participants observed that although there was no provision on the RAGE to indicate which shift RAGE was being completed they felt that by being able to indicate the shift would help them to see that RAGE had not only been completed for the shift, but would also give an indication of how previous shifts had been scored. They felt this was important as RAGE only tells when it was completed, with no where to indicate when the aggressive behaviours occurred. Initially I had wanted to include some reference of indicating what shift RAGE was being recorded on as I felt it may be valuable or of interest in determining when collating the RAGE scores of which shift the aggressive behaviours were more likely to occur.

However, I also had some reservations as I felt that if indicating the shift was included some participants may have felt threatened or felt they would be put under scrutiny by myself if they had not completed the RAGE. However, I took onboard what the participants observed and it was not my intention to put any participant under scrutiny or to make them feel threatened for not completing RAGE. It was decided that three small boxes would be added to indicate the shifts RAGE was being recorded on (for example, morning, afternoon, night).

VARIATIONS MADE TO IMPLEMENTING RAGE

While all attempts were made not to deviate from the original research undertaken by Patel and Hope (1992) some modifications were made from the original development of the RAGE for this research. This was because I felt that for participants the project needed to be kept simple and non-threatening. The rationale for some of these modifications has been explained in previous chapters.

A ward checklist was used by Patel and Hope (1992a) in the development of the RAGE, as another source of information for the rater. The checklist consisted of graph paper placed on the staff notice board on which the names of the patients in the study were written, as well as the individual types of behaviour. A checklist was not used during the implementation of RAGE in my research project as the physical size

of the staff area in the research setting is small and has very large windows that would not allow for privacy. Patel and Hope (1992) strongly recommended that during the observation period, RAGE, could be implemented by any member of the ward staff who is involved in the day-to-day care of the patient and who is on duty for at least two nursing shifts (about 8 hours per shift). While this was the intention for this to happen for the three month data collection, it was not always possible.

As previously mentioned there are only 3 full time Registered Nurses and 1 fulltime Enrolled Nurse in this setting, with the remaining nurses working on a part time rostered basis. This meant that often there were some nurses working consistent shifts during the three day observation periods and some nurses working either one shift or none. Patel and Hope (1992a) indicated an area on the RAGE for the name of the staff member completing RAGE. In a response by Dr. Patel when asked why they had included this request he indicated "this was for reference only, for example in case we needed to refer ratings back to the original rater" (Dr. V. Patel, personal communication, August 14th 2005).

Names of participants implementing RAGE were not asked for during the data collection. Firstly as I did not want participants to feel they would be criticised or questioned for not implementing RAGE, and secondly, if there was a need to refer back to the rater this could be done by checking the workbook to ascertain which nurse was on duty. Generally it was felt that most participants would be comfortable enough to approach me or the Charge Nurse to clarify any concerns about how they should rate a particular behaviour.

While it is unclear if Patel and Hope (1992a) included additional information and advice while implementing RAGE, for the purposes of this research additional information and advice was included on the reverse of the RAGE. This I believe was helpful, not only as a reminder for participants on the definition of aggressive behaviour that was being used for the research project, but also as a reminder for participants that all behaviours needed to be noted and recorded to be thorough and representative of the patients' clinical state.

IMPLEMENTING RAGE

The Rating Scale for Aggressive Behaviours in the Elderly (RAGE) was implemented for a three month period from July 20th 2005 to 18th October 2005.

RAGE is a 21 item scale for measuring aggressive behaviour in psychogeriatric inpatient settings and is designed to be completed by inpatient nursing staff. The implementation of RAGE was incorporated into routine nursing practice of assessment and documentation. The purpose of the scale is to qualify the aggressive behaviour, note any changes in the behaviour, record intervention and/or treatments and effects, and any other factors that may influence the behaviours.

RAGE was utilised by participants for 5 minutes every 3rd day for 3 months. Participants were required to rate the patients behaviour on the RAGE over the preceding 3 days, on a scale of 0 to 3. The shifts that RAGE was to be utilised were morning (7am – 3pm), afternoon (3pm – 11pm) and night (11pm – 7am).

DATA COLLECTION

Within this research project the collection of data was a two phase process. Firstly the collection, collation and analysis of RAGE data gathered over the three month period was analysed by the researcher using a Microsoft Computer spreadsheet programme to determine the RAGE's clinical validity as an effective tool for measuring aggressive behaviours in the elderly in a psychogeriatric inpatient setting. Firstly, RAGE data collated during the three months is graphically presented accompanied by a written interpretation to show average RAGE scores across all duties for three months and RAGE scores for all patients for three months. This is then followed by three randomly selected samples whose RAGE scores will be graphically presented showing their RAGE score across the three month period. Following on, these samples have been clustered into groups and are then graphically presented to show the prevalence of aggression over the three duties being recorded.

Secondly, the data collected from the two focus groups held in which nurses share their experiences of utilising RAGE in clinical practice, was thematically analysised to provide key themes on their experiences of using RAGE. The analysis of the focus group data will be discussed in the following chapter.

A copy of the RAGE tool was located in the nurse's office and participants were required to retrieve a copy of the RAGE on the corresponding day it was to be implemented. I took responsibility for ensuring there were plenty of copies available during the three months. The RAGE scale was printed on one side of blue A4 size paper and to assist participants on the reverse information and advice was printed such as instructions and advice on how to rate the behaviour. Once RAGE was completed participants were asked to place the completed RAGE in the front of patients clinical notes in the plastic sleeve provided.

By placing the completed RAGE in the front of the patients' notes meant that RAGE was visible and hoped it would make access easier for me when collecting the completed RAGEs for collation. National Health Index (NHI) numbers were used during the collection and analysis of RAGE. This was for ease of keeping track of patients admitted and for entering RAGE scores on a weekly basis.

Commencing the RAGE during the first week by participants was not without a few minor hitches. I made myself available on the first day to oversee the first of the RAGE being completed. Being in attendance was beneficial to me and the research process as it enabled me to actively support and guide participants through the process

The initial collection of the RAGE data I found a little frustrating, in that participants had either not completed a RAGE for the relevant shift or had not dated or totaled the score. There was a large volume of data to collate weekly and having to go through each RAGE (45 RAGEs every three days) it was a little frustrating. To help overcome this for the next round of collating, a memo was placed in the communication book to acknowledge the participation of all participants and to remind them of the need to complete all details on the RAGE. This not only resulted in further weekly collating of the RAGE being dated, shifts indicated and totaled but the remainder of the collation went relatively smoothly.

While the remainder of this part of the research period went relevantly smoothly I did make two observations; firstly, I observed that as participants became more familiar with the RAGE, they began to share their thoughts with other participants on using a

consistent tool to measure aggressive behaviours. Secondly, I found that on days I was rostered to work that were RAGE days, my presence possibly acted as a prompt for participants completing RAGE. On days I was not rostered to work there could be less completion with a noticeable decline in compliance of RAGE scores when collating data.

COLLATING AND ANAYLSISING THE PATIENT DATA

The aim of implementing RAGE was to provide nurses with a 'snapshot' of the types, prevalence and extent of aggressive behaviours over a three month period. RAGE data was collected on a weekly basis by myself. All RAGE data was removed from the patients file, photocopied, with the original RAGE being returned to patient file where it was to stay indefinitely. RAGE data collected was then entered into a Microsoft Excel Spreadsheet computer programme.

To obtain that snapshot the data from the RAGE was collated by using a Microsoft Excel spreadsheet computer programme. Using a spreadsheet programme allowed for the counting, collating, calculation of averages scores and graphical data to be presented. It is to be acknowledged that while this could have all been done manually the use of a spreadsheet programme allowed this to be done more quickly and efficiently.

RAGE scores were collated by myself on a weekly basis. The completed RAGE was removed from the patients file and collated into order of date completed. This was necessary as once completed some participants did not place them in order of date but just randomly back in the plastic sleeve. Once collated, the RAGE was then photocopied and the original returned to the patient's clinical file. Patients NHI numbers were entered onto the spreadsheet, which also had the corresponding date (that RAGE was being implemented on) and the corresponding shift (morning, afternoon, and night). The RAGE score relating to patient NHI, date and shift was then entered onto the spreadsheet. Once the RAGE score had been recorded all photocopied RAGE sheets were then placed in the secure destruction bin.

Over the period of implementing RAGE, a total of 53 patients were admitted to the inpatient unit (research setting). From the period July 2005 to October 2005 (13 weeks) there were 1350 scores made on RAGE and 91 occasions where no RAGE

was completed. Where no RAGE score was recorded this was entered as minus one (-1). This was done because it was necessary to be able to distinguish between a zero score and an occasion when the RAGE tool had not been completed. A score of -1 was chosen for such an occasion, in order to minimise any possible distortions or errors when collating data. This may have occurred if the reader was to confuse a zero score for an occasion when RAGE wasn't used.

From analysising the data collected over the period, I was then able to divide these 53 patients into three groups; those who were admitted directly with aggressive behaviours as a direct result of their dementia, those who were admitted exhibiting no aggressive behaviours prior and during their stay and those who exhibited aggressive behaviours at some stage during their stay. Of the 53 patients, 29 were females and 14 were males. The average age of all patients admitted to the research setting was 78. From these 53 patients, 20 patients (12 females and 8 males) were admitted as a result of exhibiting aggressive behaviours related to their dementia. The remaining 23 patients were admitted for various reasons such as, recurring falls, depression, confusion, bipolar disorder, paranoia and bowel obstructions.

The purpose of these distinctions is to show the reader that although RAGE was implemented on all patients during the three month period, not all of these patients were admitted as a result of aggressive behaviours. The age and gender of the patients are also similar to those patients that were used in Patel and Hope (1992) study when implementing RAGE to determine the range, types and prevalence of aggressive behaviour in a population of inpatients under psychogeriatric care.

Having collated and analysed patient data from the three month implementation of RAGE, the following section will graphically present average RAGE scores across duties and the average RAGE score for all patients during the three month implementation period. Figures 1 to 5 have been scaled to enable improved visual impact, and for ease of interpretation by the reader and no comparison has been drawn. Figures 6 to 8 have been scaled identically to enable a comparison between the graphs to be made. Each graph is accompanied by a written interpretation.

AVERAGE RAGE SCORES ACROSS DUTIES July 2005 - October 2005

Figure 1 (p.57) shows average RAGE scores across the three duties (morning, afternoon, night) during the three month period of implementing RAGE indicate that during the afternoons (3-11pm) 42% aggressive behaviours occurred, 37% of aggressive behaviours occurred in the mornings (7am -3pm) and the remaining 21% of aggressive behaviours occurred during the night (11pm -7am). Comparing these findings to Patel and Hope's (1992b) study of 90 patients, they found no clear relation of time of day to maximum occurrence of aggressive behaviours in the majority of those patients. However, they indicated that in 10 % of those patients the aggression was confined mainly to the mornings, and purely nocturnal behaviour was rarely seen.

While this sample shows a slightly higher increase in aggressive behaviours in the afternoon this may not only be a result of the sample size of (53 patients) compared to Patel and Hope's (1992a) sample of 90 patients. There may also have been other contributing factors, such as staff mix, increase in visitors, noisy patients.

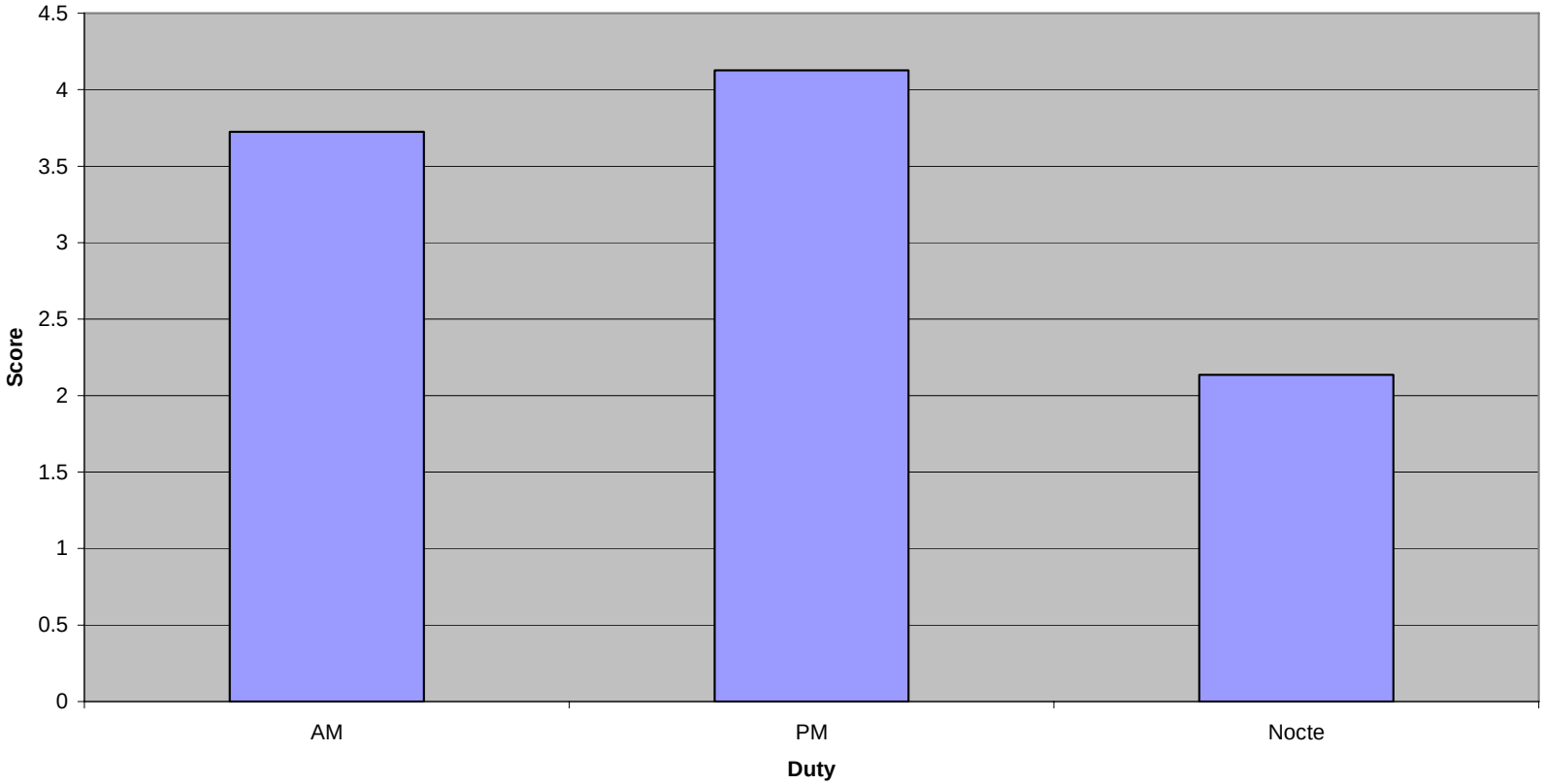

FIGURE 1 - Average RAGE scores by duty – July-Oct 2005

AVERAGE RAGE SCORE FOR ALL PATIENTS

Figure 2 (p.59) shows the average RAGE score for all patients during the three month period. These were obtained by using the number of patients (53) who were admitted to the setting during the period. The average RAGE score for all patients during the period was 2.3.

Possible reasons for patients who were given minus one (-1) as a RAGE score may have included a participant's failure to acknowledge RAGE day, time management due to the pressures of completing other nursing documentation, demanding or heavy workloads, or personal opinions of participants. As this was not a DHB research project but that of an individual nurse, some participants may not have seen completion of RAGE as important. Also RAGE does not form any part of the current armamentarium (equipment, medications and techniques that a medical practitioner has at their disposable) within the inpatient unit so may have been overlooked.

Patel and Hope (1992b) found that half of their sample 45% were considered to be at least mildly aggressive over the three day period and this figure included fifteen percent of the patients who were moderately or severely aggressive.

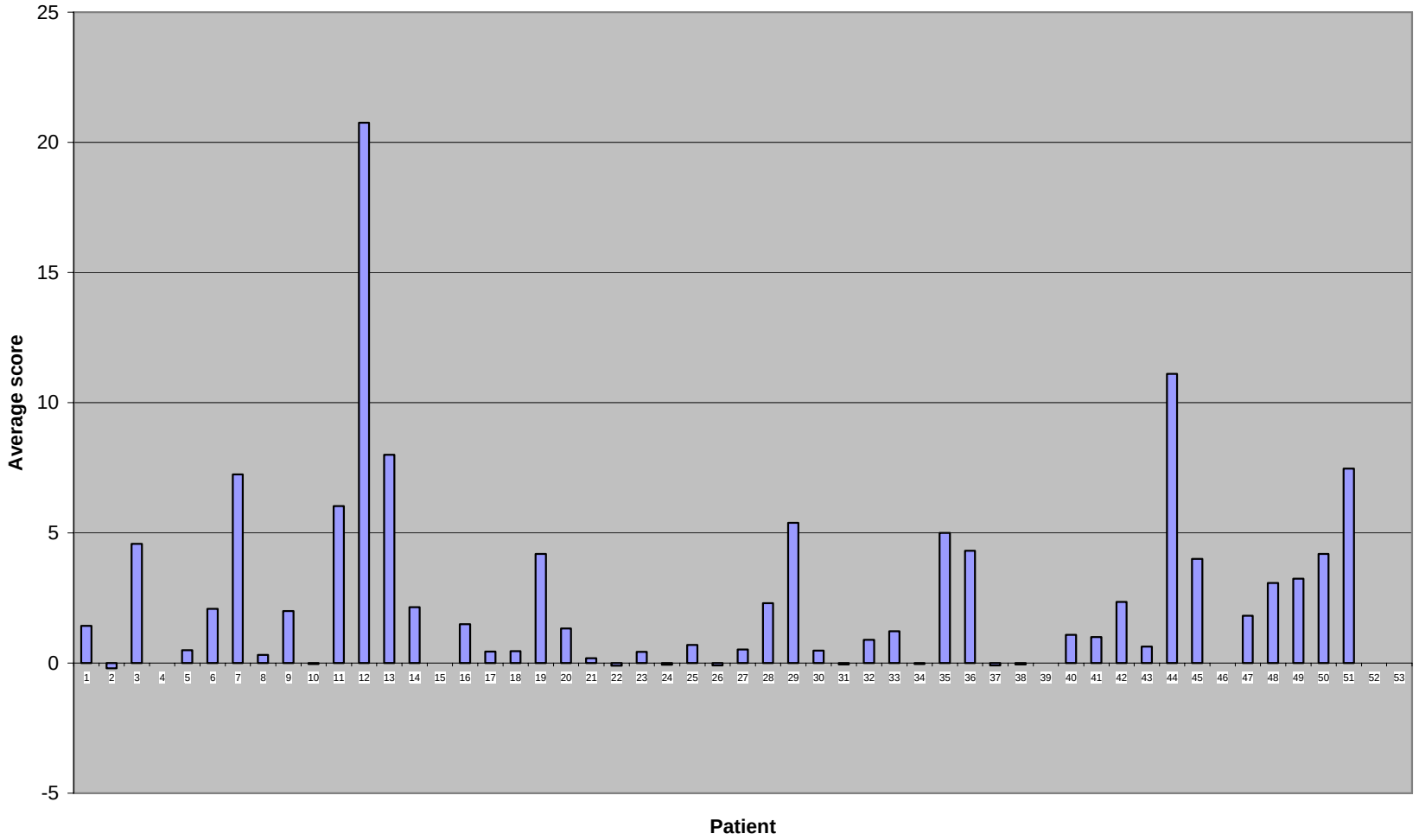

FIGURE 2 - Average RAGE score of all patients admitted – July-Oct 2005

PREVALANCE OF AGGRESSIVE BEHAVIOURS

To assist in examining prevalence of aggressive behaviours, for this study, of elderly psychogeriatric inpatients, three examples will be presented. These examples were randomly selected and are typical of the type of behaviours exhibited by elderly patients with dementia in the inpatient setting. Each example discussed is identified by age and gender only, for example, female (F) 81. The examples will then be graphically presented to show the prevalence of their aggressive behaviours during their admission. The graphs are supported by general comments made by participants when scoring behaviours across the three duties (in the comments section of RAGE).

This qualitative aspect lends support to the quantitative data displayed in the graphs. While Patel and Hope (1992a) make no reference to the comments section on the RAGE, I have included the comments with the examples as this can allow the reader to more easily interpret nurses' observations and help determine the possible links to the exhibited behaviours. Note that in figures 2, 3, 4 and five, where the RAGE score is less than zero labels appear on white background to distinguish then from bars on the graph.

Patel and Hope (1993) suggest figures for the prevalence of aggressive behaviours are likely to be effected by the severity of dementia, with most of the evidence suggesting the greater, the degree of cognitive impairment, the more frequent, and more severe the aggressive behaviour. Using RAGE, in their studies, Burns, Jacoby, and Levy, (1990b) found an overall prevalence of 20 % of hospitalised psychogeriatric patients in their sample were mildly aggressive over a three day period, and fifteen percent of the sample were rated as showing either mildly or severely aggressive behaviour. In a survey conducted by Zimmer, Watson and Treat (1984) of nursing homes for the elderly they found that 22 % of the residents had 'serious' behavioural problems, including physical and verbal aggression, and resisting care.

Problems of aggressive behaviour are also common among community-based patients with dementia. Patel and Hope (1993) suggest the evidence contradicts the common assumption that the majority of these patients who are significantly aggressive are in institutional care. In Reisberg, Borenstein, Salob, Ferris, Franssen and Georgotas', (1987) sample of fifty-seven outpatients with a diagnosis of dementia, 30 % were 'violent', this being one of the most common behavioural disturbances observed.

Example 1. F 81.

Figure 3 (p.62) shows this person was admitted from home with severe aggressive behaviours (especially directed toward spouse and other family members) as a result of dementia. The graph shows the severity of these behaviours exhibited across all shifts by this patient. These behaviours were severe and occurring frequently for the majority of the admission. The graph shows there was a gradual reduction of the behaviours with occasional behaviours reoccurring in the afternoons.

Example of comments made on RAGE

> *continues to fluctuate between compliance and uncontrollable anger, grabbing, intrusive of other patients and staff, derogatory remarks about self and others, remains delusional, has illusions, hallucinations, responding to triggers (noise, voices, movement), challenging patient to look after, very angry at times, requiring frequent restraint, assaulted staff, can be extremely aggressive and abusive at times, uncooperative with cares.*

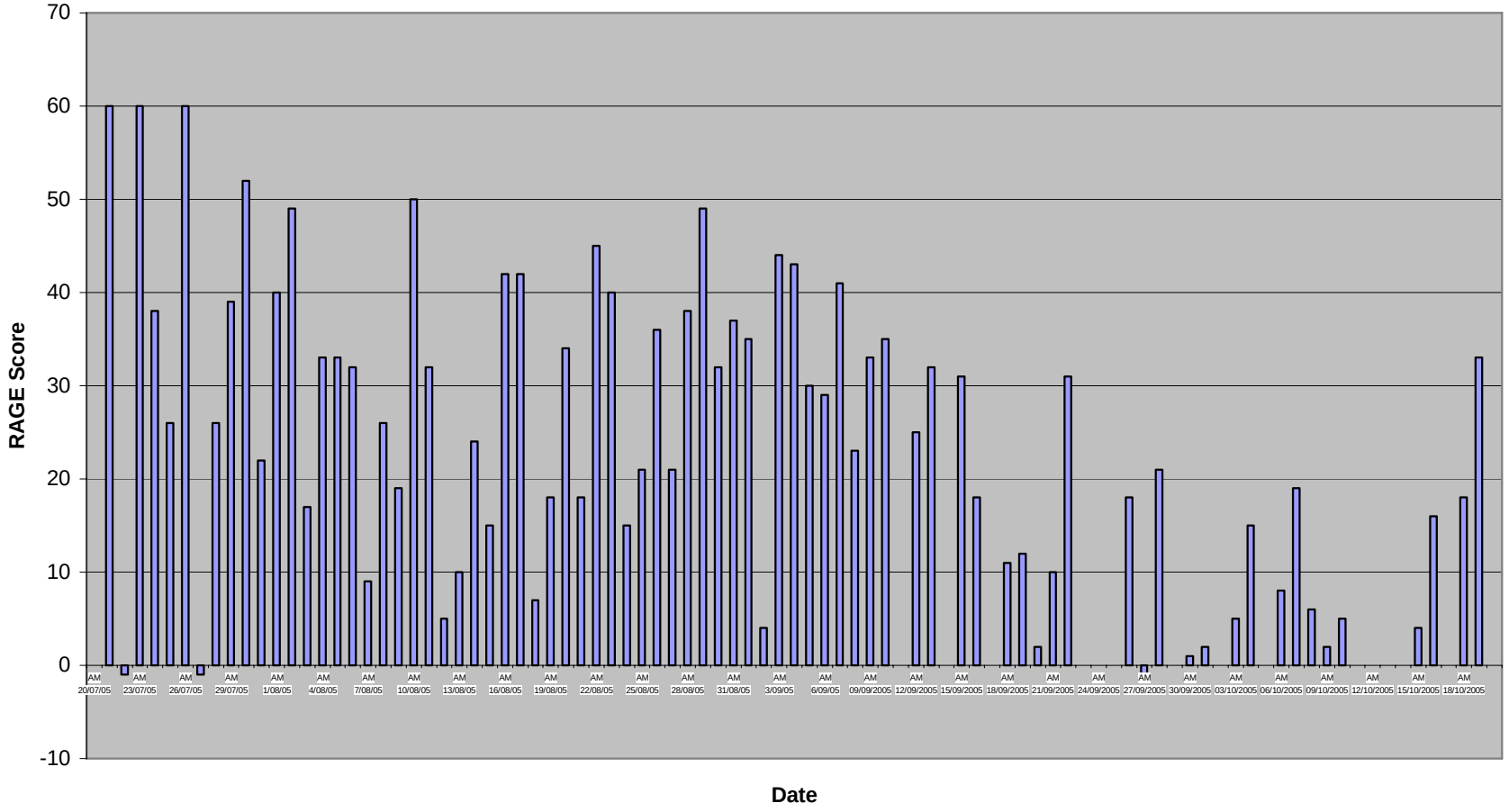

FIGURE 3 - RAGE Scores by duty (July-Oct 2005) – F81

Example 3. F 83

Figure 4 (p.64) shows this person was admitted from a rest home, after displaying aggressive behaviours in the afternoons. The graph shows there is a significant difference between RAGE scores across the shifts, with aggressive behaviours being rated consistently during the afternoons. Further investigations by nursing staff into these behaviours indicated the patient also had a severe urinary tract infection. Once treated the aggressive behaviours in this patient significantly reduced.

Example of comments noted on RAGE

admitted due to displaying aggressive behaviours usually in evening, changeable mood swings but not aggressive, irritable rather than aggressive, irritable, growling, laughing and talking to self, talking loudly, finds noise upsetting.

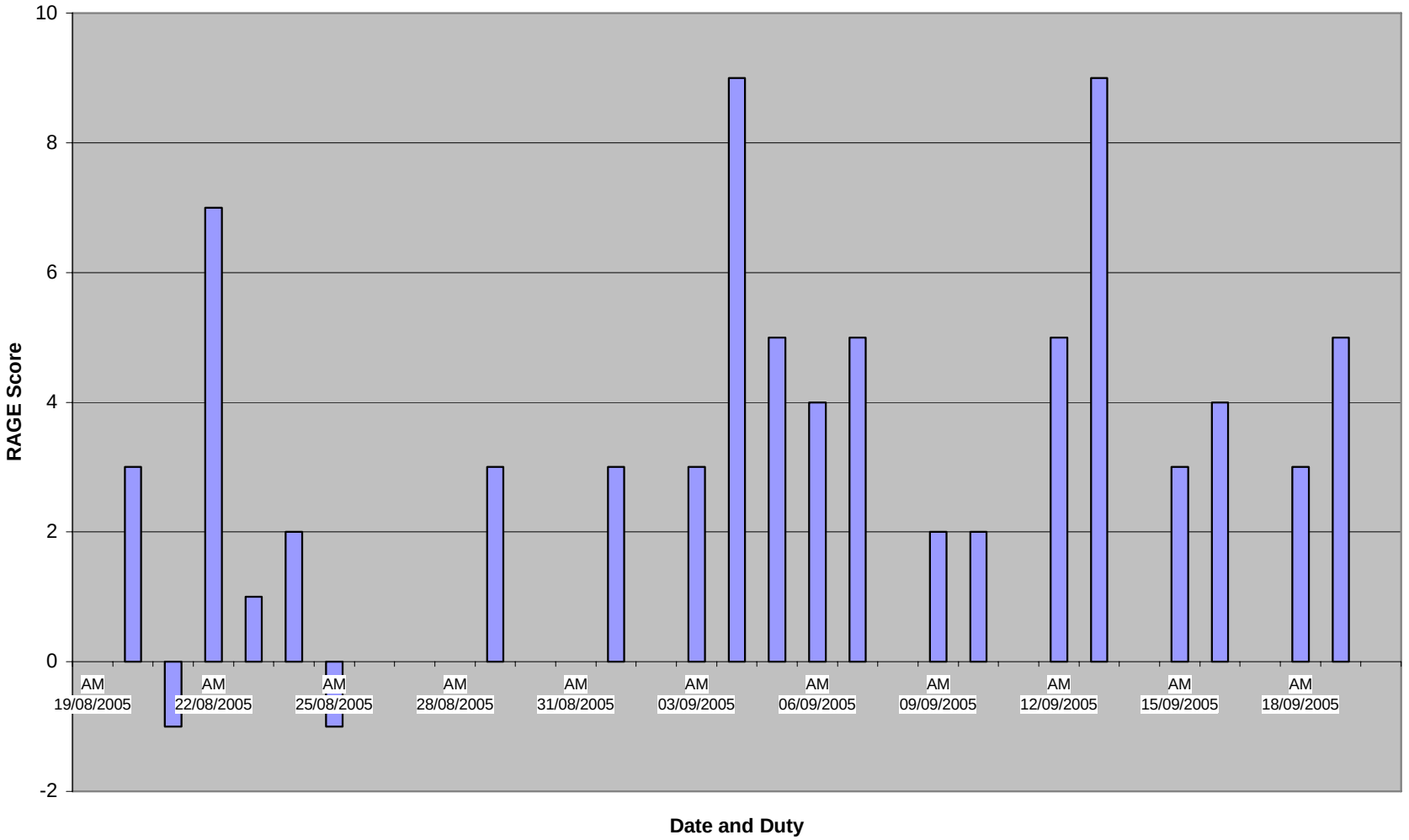

FIGURE 4 - RAGE Scores by duty (July-Oct 2005) – F83

Example 4. M 83

Figure 5 (p.66) shows this person was admitted from a rest home, as a result of becoming aggressive towards staff. The graph shows despite aggressive behaviours being exhibited early in the admission, these behaviours were exhibited for a short period, before a sudden increase in aggressive behaviours was recorded. While staff expressed concern that the increase in aggressive behaviours may have been as a result of the patient being informed he could not go back to the rest home, it was further investigations by nursing staff that indicated that this sudden increase was more likely due to the patient's low blood sugar levels. Once the patients low blood sugars levels were stable there was significant reduction in aggressive behaviours.

Example of comments noted on RAGE

patient currently has urinary tract infection, blood sugar levels fluctuating, resisted help from nurse – unprovoked verbal abuse, patient informed not able to go back to previous rest home.

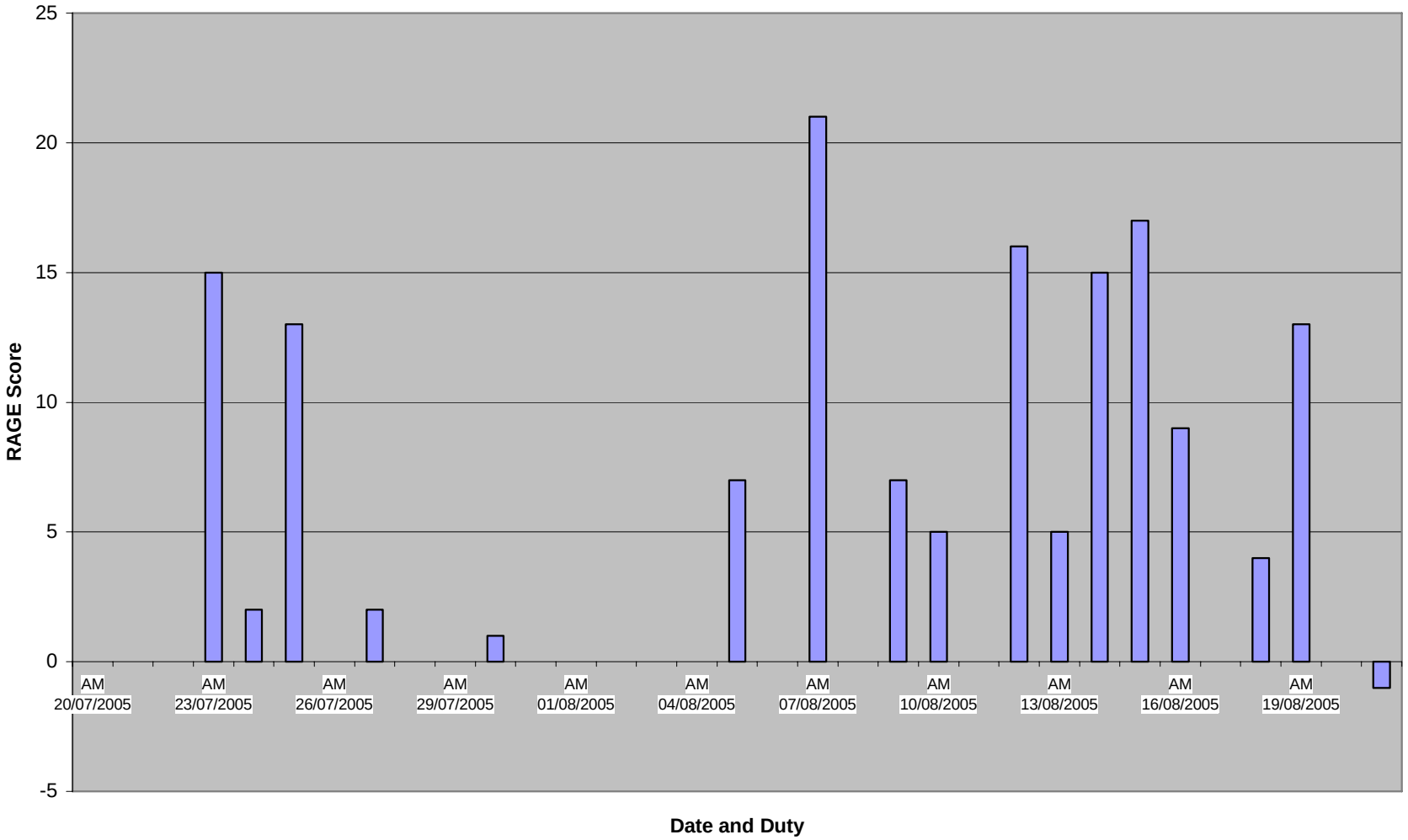

FIGURE 5 - RAGE Scores by duty (July-Oct 2005) – M83

GROUPS OF BEHAVIOURS

Table 2 (as shown on the following page), summarises the prevalence of aggressive behaviours of the three examples (M83, F81, & F83) for each type of behaviour occurring over the three month period. The clusters of behaviours are not necessarily numbered in numerical order. The numbers represent the number given to the behaviour on the RAGE tool. I have clustered the specific types of behaviours, in order to allow a snapshot of the frequency of the difference of behaviours occurring over the three shifts. The behaviours, have been clustered into groups that define those specific behaviours, for example, Group A is concerned with specific verbal aggression and its associated behaviours.

Clustering similar behaviours into groups allows those using RAGE to more easily attach more meaning to a group of behaviours rather than an individual number that signifies one specific behaviour. By clustering the behaviours into groups, I believe this may help to improve the interpretation of the RAGE score provided and potentially strengthen any findings.

Clustering these behaviours could also be used to improve the tools' use, as well as improve the implementation of RAGE in the workplace, for example, clustering the behaviours into groups may assist in highlighting the coincidence and occurrences of associated behaviours for nursing staff.

Table 2: Clustered groups of behaviours from RAGE examples

Group	Type of Behaviour	Behaviour Number	Behaviour Exhibited in past 3 days
Group A	Verbal Aggression	1	Demanding or argumentative
		2	Shouted yelled or screamed
		3	Sworn or used abusive language
		6	Generally in a bad mood, irritable or quick to fly off handle
		7	Critical, sarcastic or derogatory, saying some one is incompetent
		8	Impatient or angry if something does not suit him/her
		13	Been angry with him/herself
Group B	Uncooperative behaviour	4	Disobeyed ward rules e.g deliberately passed urine outside commode
		5	Uncooperative or resisted help whilst being given a bath
Group C	Physical Aggression (actual)	10	Indulged in antisocial acts e.g stealing food.
		11	Pushed or shoved others
		12	Destroyed property or thrown things around angrily
		17	Used an object (such as towel or walking stick) to lash out or hurt somebody
		18	Inflicted any injury on self
		19	Inflicted injury on others
Group D	Physical Aggression (threatened)	9	Threatened to harm or made statements to scare others.
		14	Attempted to kick anyone
		15	Attempted to hit others
		16	Attempted to bite, scratch, pinch or spit at others
Group E	Restraint/Isolation Or Sedation	20	Has the patient in the last three days been required to be placed under sedation, isolation or in physical restraints to control his/her aggressiveness.
Group F	Overall Rating of Aggression	21	Taking all factors into consideration do you consider the patients behaviour in the last three days to have been aggressive?

Example F81

Figure 6 (p.70) indicates all groups of aggressive behaviours that occurred across the three shifts. There was a higher occurrence of aggressive behaviours exhibited during the afternoons, slightly less occurring in the mornings and less frequent during the night. Groups A (verbal aggression) and C (actual physical aggression) were more prevalent across all shifts than groups than Group B (uncooperative behaviour) and Group D (threatened physical aggression). Frequency of restraint and sedation occurred over all three shifts. The overall rating of severity of aggression was rated high across all three shifts suggesting the patients frequently exhibited aggressive behaviours that were severe, physical, verbal and uncooperative. Clarification on group type and behaviour can be found on Table 2, (page 68) or by referring to RAGE **(**Appendix 1).

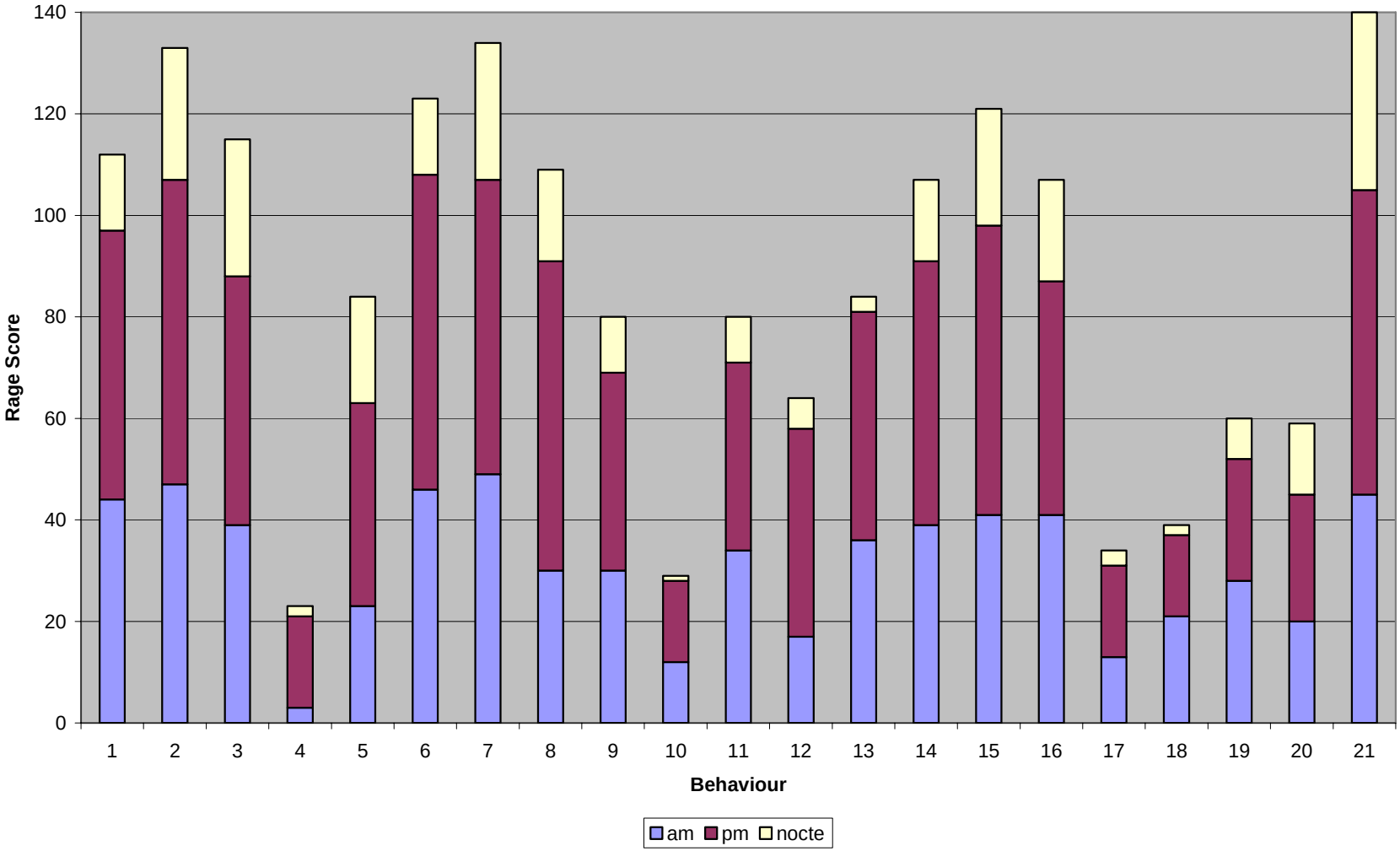

FIGURE 6 - Prevalence of aggressive behaviour across duties (Jul-Oct 2005) – F81

Example M83

Figure 7 (p.72) indicates the frequency of behaviours in groups A and D occurring frequently across all shifts. Behaviours in groups C and D were more noticeable early in the admission reducing significantly prior to discharge. Behaviours in group D across all shifts were low. Restraint or sedation of the patient occurred more during the afternoons than in the morning or night. The overall rating of severity of aggressive behaviours (Group D) would suggest the patient to be moderate to severely aggressive exhibiting more verbal and threatening aggressive behaviours than actual physical aggression. Clarification on group type and behaviour can be found by referring to Table 2, (page 68) or to RAGE (Appendix 1).

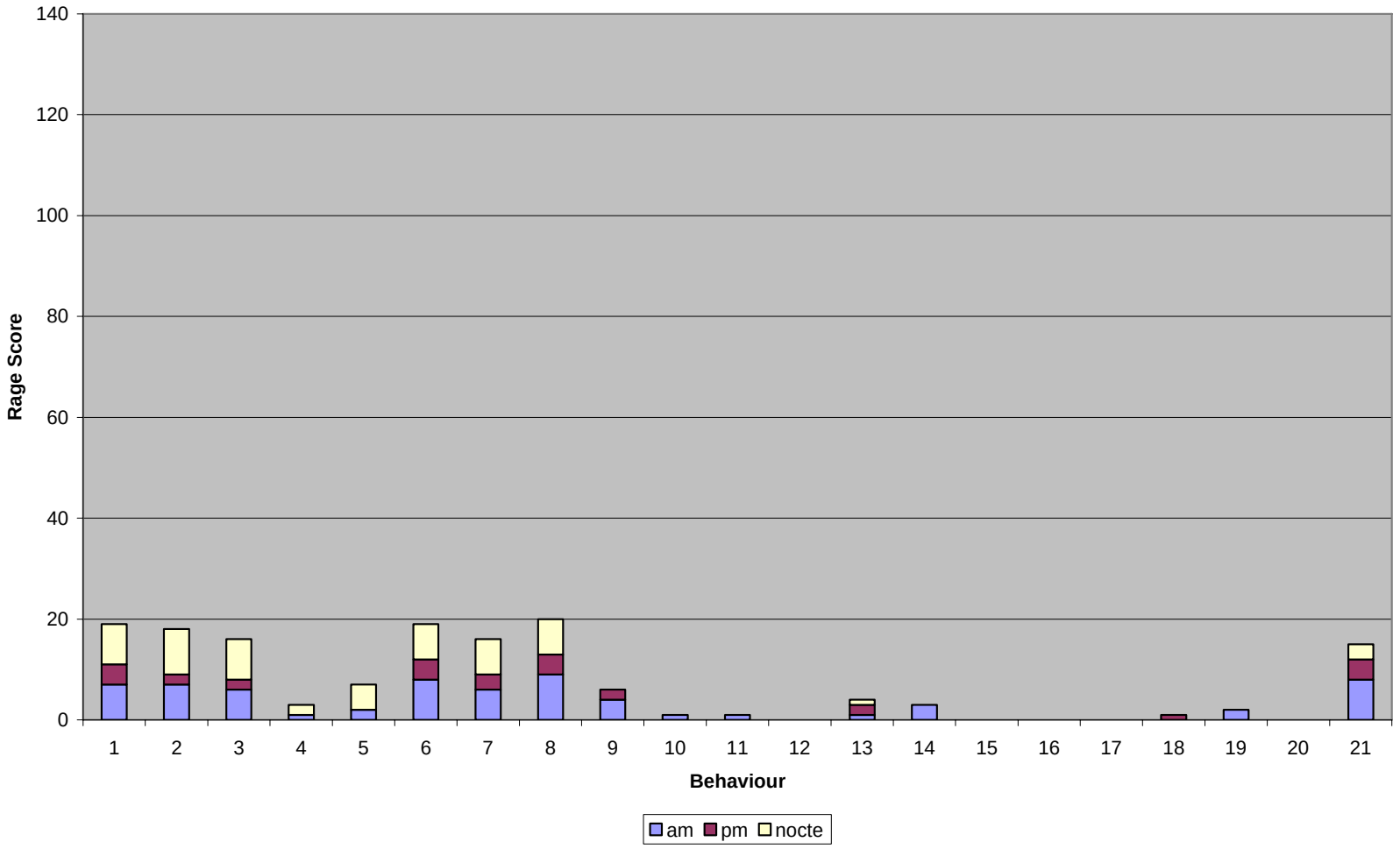

FIGURE 7 - Prevalence of aggressive behaviour across duties (Jul-Oct 2005) – M83

Example F83

Figure 8 (p.74) indicates that behaviours as identified in group A were frequent across all shifts early in the admission, significantly more frequent in the afternoons. While groups C and D (actual physical aggression and threatened physical aggression) were rated these were significantly lower than the rated behaviours in group A, suggesting this patient exhibited frequent verbal aggression rather than actual or threatening physical aggression. Restraint/isolation or sedation rated very low, with an overall rating of severity of aggressive behaviours being rated only in the morning and afternoon. This would suggest the patient to be more verbally aggressive than physically aggressive. Clarification on group type and behaviour can be found by referring to Table 2, (page 68) or to RAGE (Appendix 1).

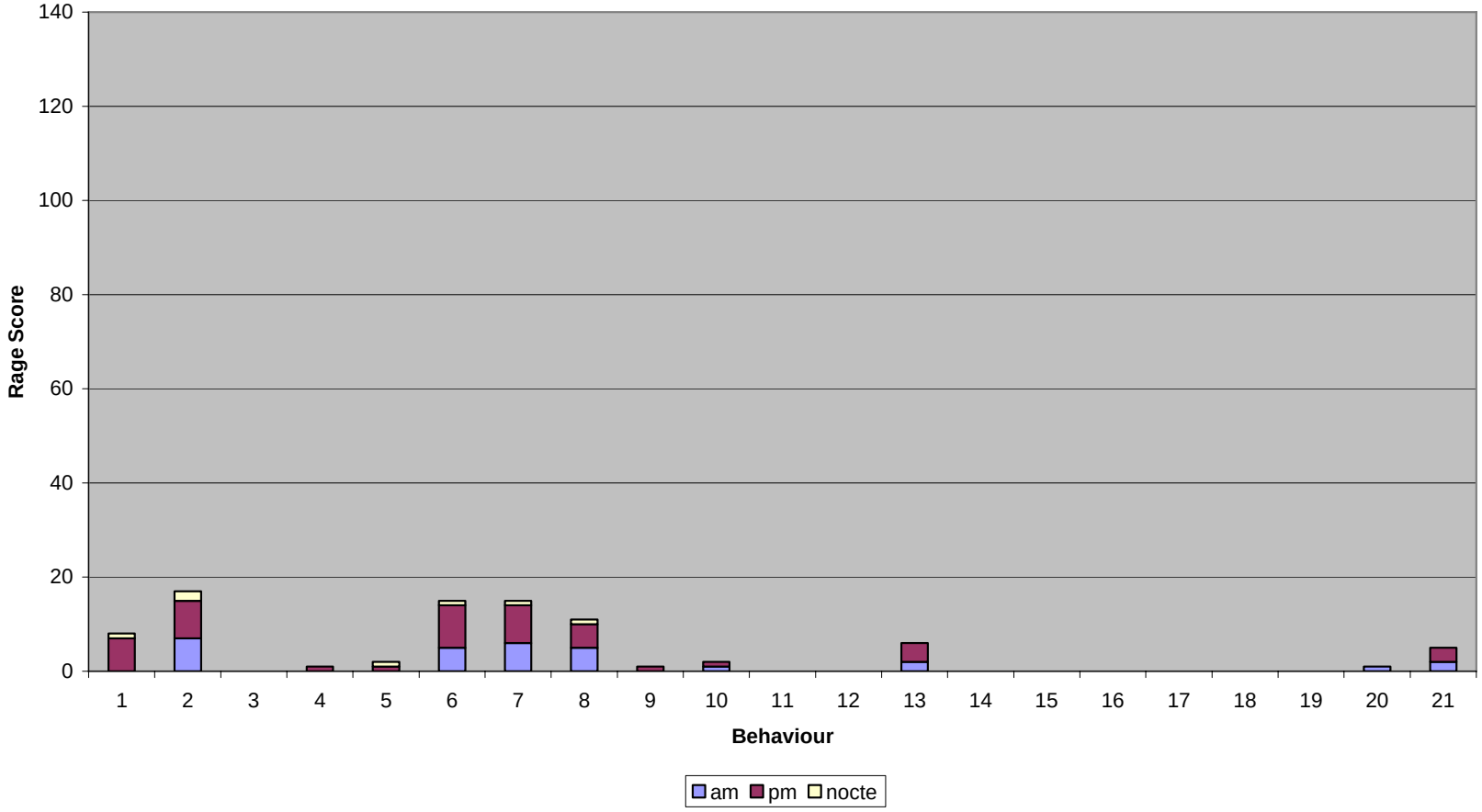

FIGURE 8 - Prevalence of aggressive behaviour across duties (Jul-Oct 2005) – F83

PREVALENCE OF BEHAVIOURS FROM SAMPLES M83, F83, F81

Figure 9 (p.75) shows the overall prevalence of the most occurring and least occurring aggressive behaviour from the three examples (M83, F83 and F81) during the three month period of implementing RAGE. Verbal aggression such as, shouting, and derogatory remarks were the most prevalent behaviour scored in the three examples, while self injury, lashing out with an object and disobedience were the least prevalent behaviours recorded. Despite this the rating for overall aggression has been rated high.

The behaviours noted on the graph have been abbreviated to allow for a more manageable size. A full description of the behaviour can be found in Table 2 (page 68) or by referring to RAGE (Appendix 1). Note also that as can be seen on the graph, overall aggression has been highlighted as this does not relate to any specific behaviour, but is the overall rating given when taking all factors into consideration in determining the patients' aggressive behaviour in the last three days.

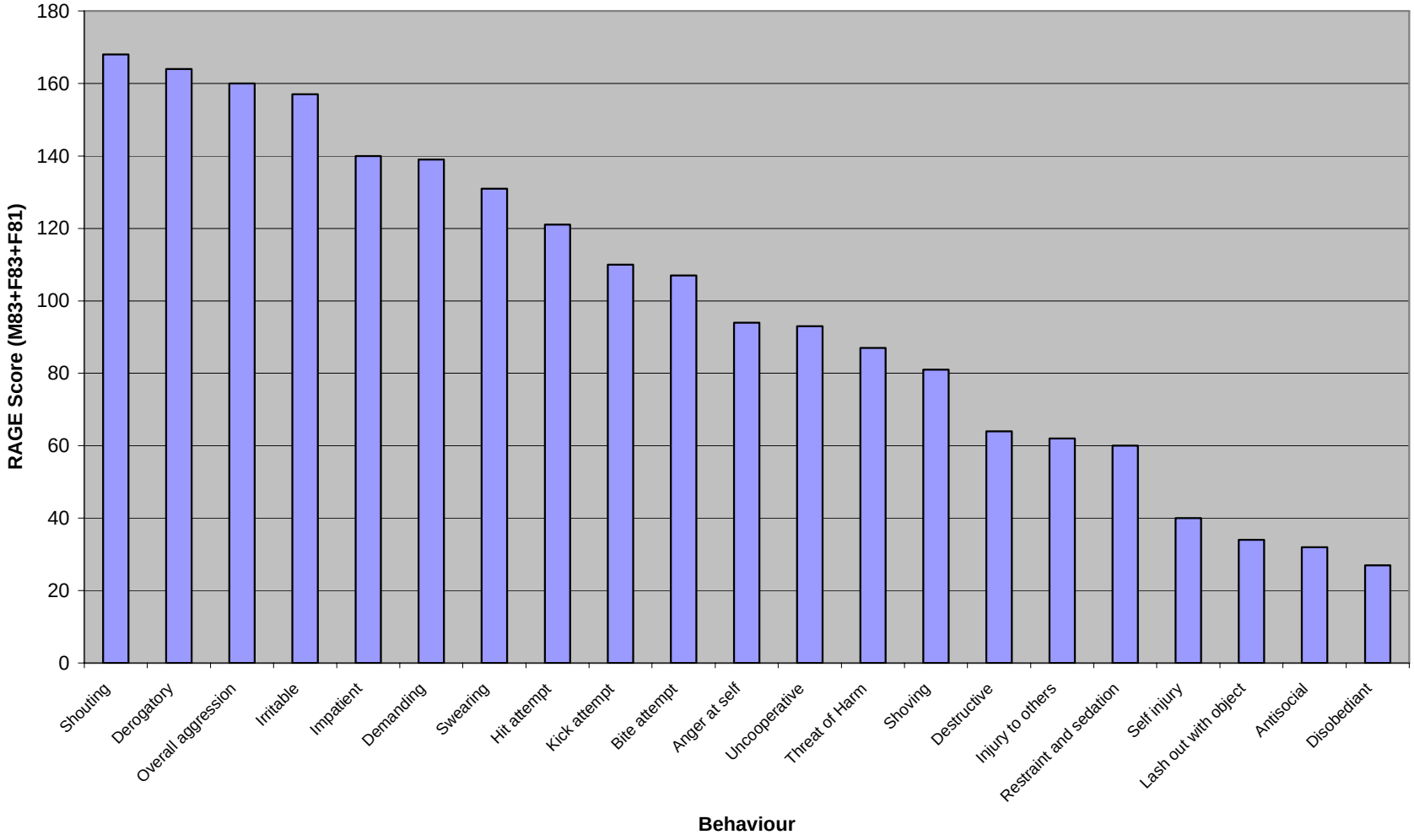

FIGURE 9 – Prevalence of behaviours

FINDINGS

The three examples (M83, F83, F81) used show during the three month period the overall prevalence of physical aggression was frequently rated higher, particularly in sample F81 than in samples F83 and M83. This is despite verbally aggressive behaviour being the most common behaviour exhibited across the three samples. These findings are similar to those of Patel & Hope (1992b) who also reported that while verbally aggressive behaviour was the more commonly aggressive behaviour observed rather than physical aggression, they found the most frequently observed behaviour was being uncooperative or resisting help. A typical situation may be when nursing staff are trying to help a patient with dressing or washing and the patient attempts to prevent this.

The findings from the three examples also show in this study these latter behaviours were rated low. One of the reasons why these behaviours maybe rated low, is possibly due to staff within the research setting, (being employed in this area for many years) having a higher tolerance to these behaviours therefore tending to accept these behaviours more readily. This is supported by Gormley, et. al., (1998) in that nursing staff in long stay wards are likely to have higher thresholds for reporting aggressive behaviours than the spouse of a demented patient living at home.

The behaviours in group B (disobeying ward rules for example, passing urine outside the commode) were also rated low, and this may be as a result of the inpatient unit having no clearly defined ward rules. Many of the patients behaviours some nurses might regard as normal, particularly for this population (and within the context of the setting), whereas other ward (medical/general) settings may regard this as disobeying their ward rules or expectations. Nurses expectations may also play a part in how this behaviour is rated, for example, a patient who may be permitted by some staff to urinate on the floor to avoid distress and/or aggression may not be allowed to by other staff, as they may find this totally unacceptable and not complying with the mores (customs or values) of society, or their own expectations. It is often these nurses' expectations to conform that result in aggressive behaviour from the patient.

Sedation or restraint was consistently used across all three shifts for sample F81. This patient has severe dementia and aggressive behaviours exhibited including: kicking, spitting, biting, pinching, and screaming). However sedation or restraint was either rarely used or rated low for the other two samples. Isolation did not occur in any of

the three samples (as there are no isolation facilities within the inpatient unit). While there is a secure area within the research setting to accommodate patients with more challenging behaviours, this area does not provide a low stimulus area such as an isolation room.

The low prevalence of aggressive behaviour occurring at night could possibly be as a result of environmental factors such as reduced lighting, minimal interaction with nursing staff, and/or patients being sedated (to aid in sleep) or patients being generally settled or exhibiting any aggressive behaviour at all.

While literature reviewed for this research suggests aggressive behaviours in patients with dementia occurs more frequently in the mornings (during or receiving intimate care) or in the afternoons, the data showed from the three months of implementing RAGE and analysing the data, aggressive behaviour was more common in the afternoons. This may of been as a result of sample F81, whose frequent aggressive behaviour (particularly afternoons) was the most common behaviour exhibited during the three month period. These findings could also suggest the afternoons having a higher prevalence of aggressive behaviours as being related to nurses' interpretations of the aggressive behaviours exhibited, management of the patients or other unknown environmental factors occurring at the time.

One of the limitations of implementing RAGE was the observation that while RAGE provides a clear definition of aggressive behaviours, there was no provision to indicate the actual time of day or night the aggressive behaviours actually occurred. While RAGE indicates the shift that the aggressive behaviours occur on, an indication of the time would be helpful in pinpointing the time of actual aggression which could help establish any patterns for the behaviour occurring.

The analysis of data collected has provided a snap shot of the types, prevalence and frequency of aggressive behaviours and has allowed nurses to investigate other possible reasons why the patient may be exhibiting aggressive behaviours. This can be seen in samples F83 and M83, in that while they were admitted into the setting exhibiting some type of aggressive behaviour, it was found that these behaviours were related to pathophysiological causes for example; low blood sugars and urinary tract infections.

REFLECTING ON IMPLEMENTING RAGE

On a personal level, undertaking the three month implementation of RAGE was at times challenging. Not only were there the ethical dilemmas of being a researcher, and work colleague, which have been discussed throughout this research but there were some other challenges faced along the way.

While it was apparent that there were some nurses who supported this research more than others, and felt it was very significant to their practice, their were some nurses who were not as supportive and this was often reflected in comments such as 'I didn't complete RAGE because I was far too busy to' or "oh I forgot'. It is also timely to acknowledge that my expectations were that participants would have the same attitude as me, 'a sense of ownership', and it was a challenge at times knowing that they did not value this research in the same way as I did.

While I acknowledge undertaking this research was a new experience for me, there were times when I felt uncomfortable coming in on my days off to collect RAGE for collating. Often I felt I was intruding in the workplace and would sense a great flurry of activity as staff hurriedly completed RAGE, and I worried about how this would impact on busy colleagues and the accuracy of the RAGE.

During the research period I was approached by two care assistants, expressing an interest in the RAGE. I acknowledged their interest and explained to them the current purpose of why RAGE was being implemented. While care assistants were not included in the implementation of RAGE, it was positive that they had shown an interest. This suggests that there is the potential for them to be included if RAGE is adopted into the inpatient unit, as often they are involved in the patients care and would be able to provide feedback on any behaviours to the nursing staff.

During the implementation of RAGE a very aggressive elderly woman was admitted to the setting. Her aggressive behaviours were severe, resulting in nursing staff being physically assaulted, or injured. As a result of these behaviours the DHBs' Health and Safety committee members were notified (this is part of the DHBs' policies and procedures). One participant who is the health and safety representative within the research setting felt that this patient's RAGE scores would be beneficial to show the

DHBs' Health and Safety committee just how aggressive her behaviours were and why staff were being assaulted. While I knew the patients' RAGE scores may have

been of some benefit in acknowledging just how severe the behaviours were, I felt that it was entirely inappropriate at this stage to disseminate any findings.

The participant was advised by me that during the research project any findings would not be disseminated, but should the Health and Safety Committee wish to discuss the purpose of the research then I was more than happy to be contacted. While this information is outside the context of the research, it illustrates to me that a tool such as RAGE, could be used as an audit for monitoring staff injuries related to aggressive behaviours.

The implementation period of RAGE also saw a nurse from a different setting (medical) viewing the clinical notes and RAGE scores for the same patient as mentioned above. When I questioned the nurse about this, the nurse replied "its for an assignment I am doing". While I acknowledge that the RAGE becomes part of the client's clinical documentation I felt this nurse could not just help herself. To prevent this from reoccurring, a memo was placed in the communication book, to remind participants about confidentiality and consent and if they were approached by any person with enquiries into the research could they direct those people either to myself, my researcher supervisor or Charge Nurse.

CONCLUSION

Chapter 5 has discussed the research process undertaken to implement RAGE. Also discussed were ethical aspects of undertaking research in nursing, such as, confidentiality, cultural safety and minimisation of risk to participants.

Having implemented RAGE for a three month period and supporting the findings with graphical data, I believe supports RAGE as a clinically validated tool that can be utilised by nurses to consistently measure, monitor and record aggressive behaviours. Not only do the findings show the effectiveness of RAGE in measuring, and recording the prevalence of aggressive behaviours, but has the potential to prompt nurses to investigate other possible causes for the aggressive behaviours. As has already been discussed these causes may be pathophysiological such as low blood sugars or urinary tract infections.

Chapter 6 discusses focus groups and how they are implemented as a way of generating information. Also discussed is why I have chosen to use a focus group as the best method to explore nurses' experiences of utilising RAGE in clinical practice.

CHAPTER 6: FOCUS GROUP

Introduction

This chapter begins with details of the place of focus groups in generating information in research, as it is second main method of data collection for this research project. Reasons for choosing a focus group method as a means of collecting data, as well as the advantages and disadvantages of focus groups will also be discussed. Participant selection, the role of the facilitator and reasons why I was not involved in the focus group are also discussed. Data from the focus groups will be transcribed by an independent transcriber. Transcripts of the focus groups were returned to participants for checking and make any amendments if needed. The data was then thematically analysed by myself. This process involves reading the data, identifying and searching for key words and phrases within the transcript, extracting these and the immediate context, and building theme files.

Initially it was my intention to survey participants after the three month implementation of RAGE, to find out about their experiences of using RAGE. However, I felt that this method may not produce the information I wanted on the nurses experiences. Surveys tend to use a sample of the population, those being surveyed generally respond to a series of questions posed by the researcher. Not only did I feel that this method would be a lengthy process but had reservations about its success in the setting.

A focus group was chosen as the best method to explore nurses' experiences of utilising the RAGE tool as it is felt that this method is well suited for convenience, ease of management, provision of rich data in a short time frame, and being able to complete the project reasonably quickly.

BACKGROUND TO FOCUS GROUPS

The idea of focus groups emerged in the 1920s as a strategy for examining the effectiveness of marketing strategies. It re-emerged during World War 2 with efforts to determine ways to improve the morale of the troops; however focus groups are a relatively recent strategy that began to be used in nursing studies in the late 1980's (Burns & Grove, 2001). The techniques of focus groups serve a variety of purposes in nursing research. Compared to many other research methods, focus groups are relatively fast, easy and economical. In addition, participation in a focus group

promotes investment and ownership and gives participants a voice and the opportunity to contribute (Krueger, 1994).

Focus groups are used in performing qualitative studies (Twinn, as cited in Burns & Grove, 2001), for assessing consumer satisfaction, evaluating the quality of care assisting in professional decision making; developing instruments, exploring patient care problems and strategies for developing effective interventions; and developing educational programmes (Burns & Grove, 2001). However, there are advantages and disadvantages to focus groups.

Various writers (Denzin & Lincoln, 1994; Polit & Beck, 2004; Burns & Grove, 2001), describe the advantages of focus groups. For example, the inexpensiveness, their ability to aid recall through such things as increased dialogue and opportunities for clarification between participants, thereby potentially leading to richer and deeper expressions of opinion.

Morgan (1995) states "focus groups involve the explicit use of the group interaction to produce data and insights that would be less accessible without the interaction found in a group" (p.12). This is supported by Burns and Grove (2001) who note the use of focus groups is that group dynamics can assist people to express and clarify their views in ways that are less likely to occur in a one-to-one interview and to obtain the participants' perceptions in a focused area in a setting that is permissive and non-threatening.

Burns and Grove (2004) further suggest focus groups may give a sense of safety in numbers to those wary of researchers or those who are anxious. Many forms of communication are used in focus groups, including teasing, arguing, joking, anecdotes, and nonverbal approaches of responding, such as gesturing, facial expressions, and other body language. However, focus groups have disadvantages; Polit and Beck (2004) suggest that one disadvantage is that some people are uncomfortable about expressing their views in front of a group. Another possible concern is that the dynamics of the session may foster a group culture that could inhibit individual expression. Other disadvantages include the considerable variation in terms of group comparability and cohesiveness necessitating considerable skill in

the interviewer, and the ability of the focus group to be easily biased by the facilitation and/or dominant individuals.

Facilitators (often called moderators or interviewers) play a critical role in the success of focus group interviews. The skills of the facilitator have been described as being very much the same as those considered beneficial for individual interviews, with qualities such as flexibility, objectivity, empathy and effective listening skills being important (Denzin and Lincoln, 1994). The group interview requires the facilitator to be able to mediate group dynamics in order to provide for the most representative flow of thoughts possible from the participants.

An important job of the facilitator is to solicit input from all group members (Polit & Beck, 2004), and not to let a few vocal people dominant the discussion. A successful facilitator will encourage participants to interact with one another and will formulate ideas and draw out cognitive structures, not previously articulated. Facilitators should remain neutral and nonjudgmental, and if the topic is sensitive, the facilitator needs to be able to put participants at ease. Burns and Grove (2001) comment that selecting effective facilitators is as critical as selecting appropriate participants; the facilitator must be successful in encouraging participants to talk about the topic. This goal may be accomplished by using a facilitator with characteristics similar to those of the group participants.

Both focus groups were facilitated by an independent facilitator who had no personal, line management or supervisory relationship with any of the participants. As previously mentioned the researcher did not attend the two focus groups, nor have any involvement with the facilitation of the two focus groups.

SELECTION OF FOCUS GROUP PARTICIPANTS

Participants who had signed a consent form, agreed to take part in the two distinct activities of the project; the first to utilise RAGE, and secondly to attend a focus group sharing their experiences of utilising RAGE.

Most focus groups should have 6-12 participants; small enough for the group members to share their views but large enough to get diversity in those views (Krueger, 1994). However, the number of participants will depend on the objectives of the research (Stewart & Shamdasani, 1990). Smaller groups as suggested by

Krueger of 4-6 people are preferable when the participants have a great deal to share about the topic or have had intense experiences with the topic of discussion. However, the dropout or no show rates are often as high as 50 percent, so a certain degree of over-recruiting is recommended.

I had originally intended to hold the focus groups three weeks after the conclusion of implementing RAGE. However, my wanting to keep participants' interested in the research project and with pending public holidays and some participants taking annual leave, as well as the time-frame to complete the research project, it was decided to hold the focus groups two days after the three month data collection period.

As the researcher, I did not attend the two focus groups, as I wanted to promote an environment that would allow for participants open and honest reflections of their experiences utilising RAGE. I felt that if I was in attendance this may not have occurred. Wanting participants to feel free in their opinion and discussion I felt being present or participating in the focus group, may have influenced how the participants responded to questions asked.

Due to the nature of the participants working rostered shifts, it was decided two focus groups would be held to allow for as many participants as possible to attend. The focus groups were held in another area away from the research setting to minimise any distraction and ensure participant comfort. Both focus groups were of one hour duration and light refreshments were made available.

THE FOCUS GROUPS

Research participants were reminded one week prior to holding the focus groups by way of a flyer posted in staff locker room, staff bathroom and communication book. The first focus group was attended by nine participants and the second focus group was attended by two participants. All participants were experienced female Registered and Enrolled Nurses within the research setting, who had utilised RAGE over the three month period and had consented to participate in this research project.

The focus group began with an introduction of group members, and the facilitator followed by the aims of the research project, which was to implement RAGE for a three month period and then to discuss nurses experience using RAGE. This was then

followed by a description of the process to be followed. Issues to do with confidentiality were also discussed, and agreement was sought by the facilitator in keeping the identity and any identifying details (for example patients names maybe made in reference in the discussion) confidential to those in the group.

According to Kreuger (as cited in Lewis, 2006) a focused group interview contains less than ten questions. Stewart & Shamdasani (1990) suggests questions must be carefully selected and phrased in advance to elicit maximum response by all participants and open-ended questions allow participants to answer from a variety of dimensions. The questions used by the facilitator where the same questions used for each of the two focus groups:

- *What was your experience of using RAGE*
- *In what ways did RAGE impact on your practice?*
- *What suggestions might you have for nurses using RAGE in the future, and*
- *Are there any other comments you wish to make about RAGE as a tool to assess, record and manage aggressive behaviours?*

Audio recordings were taken during the focus groups, and transcribed by an experienced transcriber, who as a requirement of the Central Regional Ethics Committee has signed a confidentiality statement. (refer Appendix 6).

ANALYSIS OF FOCUS GROUPS

The focus group discussions were audiotaped, transcribed and then subjected to thematic analysis. Thematic analysis is a way of seeing things, as well as a process for coding qualitative information (Holloway,1997).Thematic analysis involves the facilitation of reducing the data (paring and sieving) to communicate the findings simply and efficiently.

Analysis of the data began by searching and identifying key words and phrases within the first reading and reviewing the focus group transcripts in which key phrases and salient points were noted, enabling me to identify key words and phrases within the transcripts.

Two themes were identified; professional relationships and nurses' experiences of utilising RAGE in clinical practice. From the second reading of the transcripts and listening again to the audiotapes, the following subthemes were identified; the role of the nurse, nurses' sense of powerlessness, advocacy, being valued, communication and documentation, criteria for utilising RAGE, articulation of practice, reflective practice, and the nurses' experience of utilising RAGE in practice. The following discusses the findings from these themes and subthemes.

FINDINGS OF FOCUS GROUPS

Transcripts from the focus group interviews were analysed and thematically coded. An exploratory analysis of the transcripts resulted in the identification of a number of themes and sub-themes. These themes were discovered by searching and identifying key words and phrases within the transcripts, extracting these and the immediate context, and building theme files. Two main themes were identified, professional relationships and nurses experiences of utilising RAGE in clinical practice. From these two themes the following sub-themes emerged; the role of the nurse, nurses sense of powerlessness, being valued, advocacy, communication and documentation, articulation and reflective practice and nurses experiences of utilising RAGE in clinical practice.

Professional relationships

Being valued as nurses, the contribution nurses make within the multidisciplinary team (MDT) setting, documenting and communicating to others about aggressive behaviours, replacing other rating scales with RAGE, and how RAGE could support nurses' (within the context) in multidisciplinary team meetings were identified within the two focus groups. Participants' responses varied as to how they viewed their role and being valued as a nurse within the setting. While some participants felt it didn't matter what they said about a patient's behaviour, others felt that utilising RAGE would give them confidence and evidence of patients' behaviours, which could be presented to the MDT. Participants made comments such as:

> RAGE could support us (nurses) in the MDT, … you know because they (medical staff) totally accept that sort of data, as

> compared to just what we say, showing them on paper that they (the patient) are difficult would be really good.
>
> Well you can go into MDT and say this is happening and that's evidenced by (RAGE) and these are some examples, rather than go in saying things like 'my hunch is that' or 'I have a feeling that…

Participants' responses possibly suggest that there was a perceived sense of powerlessness for the nurses. Some participants felt that they had little control or influence over how patients were managed and felt the care they delivered was not valued, …we just don't get heard". A number of participants felt a lack of control and not being valued in their practice and felt "…it's what the doctors' do that makes a difference for our patients… when we have ideas it does not necessarily get heard by the doctors, and…we are a member in the MDT but not a key one". However, participants from both focus groups felt RAGE could provide them with evidence to support them when advocating for the patient, for example, if there was improvement or change in the behaviours:

> Maybe at MDT you can say well this persons RAGE score has been at this level for this long and you could illustrate that with some events and suggest to the team that maybe a change in management is required to help that behaviour, rather than just accept it as the norm.

However, despite some participants feeling this sense of powerlessness, both focus groups were very clear on how the RAGE might help other disciplines (such as medical staff) change or maintain their practice, and generally thought that the use of RAGE and its 'ownership' by nurses may assist in the improvement of nurses' status in the MDT.

While participants felt that clinical assessment was an ongoing process and that there is a need to be receptive to gaining information on patients with aggressive behaviours to provide effective management, there was general agreement from both focus groups that RAGE provides an accurate assessment of the behaviours, which would assist nurses with monitoring, measuring and recording aggressive behaviours. While participants agreed that documentation of the behaviours was

important they felt RAGE was specific to the setting, quick and easy to use and not as ambiguous as other tools currently used. One participant commented:

> RAGE clearly outlines what behaviour you are looking for whereas the others don't … they are very ambiguous, RAGE is a lot more specific, it breaks down the behaviours and it's much more suited to the ward.

Nurses experiences of utilising RAGE in clinical practice

Participants' responses varied in discussing their experiences of utilising RAGE in clinical practice. Participant discussion in both focus groups centered on the language used in the RAGE, behavioural statements that were specific to RAGE, determining the criteria for utilising RAGE, and the provision of RAGE to provide a quick reference to patients' behaviours. Participants also discussed the use of RAGE and other rating scales currently being used, as well as briefly reflecting on their practice.

There was a high degree of positivity for the tool in both groups, most felt it was quick and easy to complete (especially when compared to other tools currently in use). Typical comments were:

> "Very easy to use … descriptive and very specific of the types of behaviour we see and it's suited to the ward'

> "Using RAGE is really helpful and I can see it could make a huge difference, to measure aggressive behaviours".

There were some concerns raised about the language used in the RAGE, some participants felt that the language used on the tool was not consistent with language that would be used in the New Zealand; and while some participants suggested they would like to see some of the language changed, others saw it as unequivocal and quite liked it.

Despite these concerns, participants were positive about the ability of RAGE to provide a clear definition of aggressive behaviours, as well as a quick reference of patients' exhibited behaviours, particularly if they had not cared for the patient before. Participants also felt that often it is hard to interpret what other nurses have written in

clinical notes and that the definition provided in RAGE and ease of use was helpful in providing consistent measurement.

> If I came on and didn't know the patient… looking at RAGE was good, you knew what aggressive behaviours to be more aware of. Some times its… hard to know what others thought, different perspectives made it you know hard … when there wasn't much in the notes.
>
> …you know some people put a lot in (the notes) others just say aggressive or agitated … what do they mean by that? It was easier with RAGE when you came on (duty), you didn't have to read over a couple of shifts to find the behaviours.

Participants also found the behavioural statements on the reverse of the tool helpful in being able to determine the most accurate score for the given situation. Participants from both focus groups felt RAGE could be utilised every day, instead of every three days for aggressive patients. They felt utilising RAGE daily, would give a more accurate measurement of the behaviours, as going back through three days of clinical notes was seen by some as difficult and time consuming. It was also felt by some participants that rather than using RAGE on all patients in the setting (as had been for three months), there needed to be a criteria set around which patient that RAGE was implemented on.

> "Everybody's different, maybe if it was done every duty it might be more accurate … because you would be scoring the whole of what you are seeing".
>
> "On a selected group of people rather than blanket everybody. Looking at the RAGE score you got some people who have zero and they are always going to have zero… right from the beginning, their admission wasn't about aggression it was about something else".
>
> "We need to identify them as first being aggressive … we don't want to be doing the RAGE on everyone".

There was also suggestion by some participants that presenting RAGE graphically would be helpful in tracking progress of patient's behaviours as well as helping them (nurses) feel better that things may be improving for the patient

> "If you used a graph I don't think it would alter the way I looked after them … something I could validate. But I could see some people feeling like if the graph was going well and then the patient had a bad day you could question what was different about that day or shift."

> "A graph would be helpful when reporting to others, and when reporting amongst ourselves".

Despite focus group participants acknowledging that RAGE was a useful tool to measure, monitor and record aggressive behaviours, some participants had difficulty articulating how implementing RAGE had made a difference to their practice, for others utilising RAGE was a positive experience.

> "It made me write in more detail about behaviours, especially aggressive ones, and look for particular types/patterns of aggressive behaviour, it made a big difference to the way I communicated to others"

> " it allowed me to give them more detail and the importance of looking out for and reporting the behaviour … it allowed me to question more about a patient's behaviour".

> "RAGE kept me on my toes… not complacent or desensitised to behaviours …as in thinking oh that's what this particular patient always does… that's nothing, it means nothing. Often we become so used to particular behaviours that we can ignore or dismiss them to out patients' disadvantages".

Although participants acknowledged RAGE had made a difference to the way aggressive behaviours were defined, measured and monitored, there appeared to be some difficulty for participants in articulating their practice. One of the reasons for this is possibly the absence of clinical supervision within the setting, which has lead

to a situation where reflection of ones practice is not commonly practiced amongst participants. Another possible reason is that for some nurses there is a lack of personal motivation to grow and develop in a professional role.

DISCUSSION

There was a strong support from participants that utilising RAGE selectively for those patients who met a particular set of criteria for actual and potential aggression would be more beneficial than utilising RAGE on every patient. Participants felt that this would be more appropriate as some patients are not admitted as a result of aggressive behaviours related to dementia.

Participants felt that utilising RAGE daily, rather than every third day, would overcome the problem of interpreting other nurses' note writing, or trying to read between the lines. Some participants felt uncomfortable about making judgements and scoring retrospectively using others notes.

While participants felt that RAGE was very specific to the setting, providing a clear definition of aggressive behaviours and taking only a short time to complete. They felt RAGE could replace a number of other tools (for example QEBAGS, CRS) used within the setting therefore reducing the amount of paperwork currently undertaken. There was an overall positive response by nurses in that allowing RAGE to be graphically presented could validate the prevalence of aggressive behaviours. This was also seen by some nurses as enabling them to validate their own practice or to improve their status within the multidisciplinary team.

While some participants found the behavioural statements on the reverse of the RAGE, very helpful, some suggested the language used within RAGE was not consistent with language used in the Antipodes, most suggesting it as unequivocal and quite liked it.

However, despite some participants suggesting the language should be changed on the RAGE tool I believe this needs to be investigated further. While changing the language currently used in RAGE, may make the tool more familiar to nursing staff and assessment could be possibility be more accurate, there is also the possibility that changing the language may alter the original researcher's intention of the RAGE tool.

I would agree that RAGE could be applied selectively (for example, on those patients who meet a particular set of criteria for actual or potential aggression).

The utilisation of RAGE every day, as suggested by some participants, I believe warrants further consideration. While I would agree that there is the potential that RAGE could be used daily, I would have to question whether or not if RAGE was used daily, would it become just another piece of paper, would nurses give accurate scores due to other required daily documentation, and would there be some resent by nurses having to do it daily? While I acknowledge that it can be often difficult for some nurses to make a judgement from other nurses' clinical notes when trying to interpret aggressive behaviours, at this point I support the continued use of RAGE being utilised every third day.

Currently implementing RAGE every third day allows nurses to review the three previous duties to obtain a more accurate assessment of the behaviours, which, I believe gives a clearer picture of any improvement or change in presentation of behaviours. Patel and Hope (1992a) suggest when discussing the length of an observation period a compromise must be made, in that if the period is too short then the chance of missing important behaviour is high. If the period is long it is more likely staff would not accurately recall the behaviour.

Despite some nurses finding it difficult to articulate the benefits of RAGE to patients and their practice, there remained a high degree of positivity within both groups for RAGE be implemented in the setting and there would be disappointment from them if RAGE were not used in some way on the ward.

My own experiences of implementing RAGE were similar to those of my colleagues. I found RAGE to be an accurate tool for recording, measuring and monitoring aggressive behaviours. RAGE was quick and easy to utilise, providing a clear definition of the types of aggressive behaviours, allowing for consistency by colleagues when utilising RAGE for three months. This was a similar response from four nurses' who were asked to give their views on the simplicity and clarify of the rating scale. They all agreed that the scale was simple to use, required up to five minutes to complete and was very relevant to the nursing problems in the management of patients with dementia.

REFLECTION OF FOCUS GROUPS

As mentioned previously it was my intention to survey participants after the three month period of implementing RAGE. However, as surveys tend to use a sample of the population, I felt this would not be the best method to use to elicit the rich data that could be obtained by having a focus group. I also felt that having a focus group would not only bring the nurses together to share information and experiences, but would be less time consuming for them.

Personally, for me, despite participating in the implementation of RAGE for three months, not attending the focus groups and not knowing what they (participants) were saying about RAGE and their experience of implementing it for a three month period was an anxious time.

While it was somewhat disappointing not to have all twenty-one participants attend the focus groups, just over half did attend. However, I believe my non attendance at the focus groups promoted an environment that allowed for participants open and honest reflections of their experiences, without my presence maybe influencing how they responded.

The main intention of the focus groups was to discuss the nurses' experiences' of utilising RAGE within their clinical practice; therefore I do not believe that the low attendance at the focus groups had a significant impact on the findings. Over half of the participants who attended the focus groups acknowledged the continued use of RAGE in clinical practice.

CONCLUSION

This chapter has detailed the development of focus groups as a research method, including advantages and disadvantages, role of the facilitator and reasons why the researcher was not involved in attending the focus groups. Details of participants' selection have also been included. A brief discussion and reflection of the focus groups has been provided.

The aims of the focus groups were to allow nurses to discuss their experiences of utilising a clinically validated tool in their practice and if utilising this tool made a difference to their practice during a three month period. The responses from the

nurses where then transcribed by an independent transcriber. Transcripts and audiotapes were reviewed by me. Thematic analysis was used to elicit key themes; professional relationships and nurses' experience utilising RAGE in clinical practice, which have been discussed.

The focus group method was used to elicit rich data through the ability to provide a stimulating atmosphere, as well as, the ability to aid recall through such things as increased dialogue and opportunities for clarification between participants. Using a focus group as the main method of gaining data can be seen as being creative in bringing nurses together to share their experience of utilising RAGE in their clinical practice. I also considered that by having focus groups to obtain data, it would be less time consuming for participants and participants would be more amenable to this rather than having to sit down and reply to either a questionnaire or survey.

Participants' responses varied as to how they viewed their role and being valued as a nurse within the setting. While some participants felt it didn't matter what they said about a patients behaviour, others felt RAGE gave them confidence to discuss patients behaviours with other medical staff within the setting. When discussing their experiences of utilising RAGE in clinical practice, responses varied from the clear definition RAGE provided of aggression to determine an accurate score to how RAGE made a difference for some when communicating with others about patients who might be exhibiting aggressive behaviours

From the implementation of RAGE during a three month period and from participant responses from the focus groups held, would suggest that RAGE is clinically validated and effective tool for recording, monitoring and managing aggressive behaviours, particularly in the elderly with dementia. The implementation of RAGE has also provided nurses with a structured means of collating and documenting patient health status information as well as providing nurses in clinical practice evidenced-based knowledge.

The following chapter will discuss implications for nursing and recommendations of utilising RAGE in nursing practice.

CHAPTER 7 IMPLICATIONS and RECOMMENDATIONS for NURSING

INTRODUCTION

The main purpose for undertaking this research was to implement for three month a clinically validated rating scale (RAGE) to provide nurse with a consistent tool for assessing, measuring, and monitoring aggressive behaviours in the elderly with dementia in an inpatient psychogeriatric setting. The purpose of the scale is to quantify the aggressive behaviour, note any changes in the patients' behaviour, record intervention and/or treatments and effects, and any other factors that may influence these behaviours. Following the three month implementation of RAGE, participants where then invited to participate in a focus group to explore their experiences of using the tool. The specific aims of the research were to;

- implement RAGE enabling nurses to utilise a consistent toll for assessing, managing and monitoring aggressive behaviours,
- to determine the range, types and prevalence of these behaviours across a three month period and to,
- explore nurses experiences of using RAGE in clinical practice.

Based on the implementation and nurses experiences of utilising RAGE during a three month period, the completion of this research draws the following implications for nursing and recommendations.

IMPLICATIONS FOR NURSING

RAGE is an evidenced-based tool designed and developed specifically for measuring and monitoring progress or change in aggressive behaviours within the elderly population in a psychogeriatric inpatient setting. RAGE also demonstrates good evidence of reliability, validity and sensitivity to change, with the latter attribute being useful in evaluating the efficacy (intended result) of intervention strategies.

RAGE, is a clinically, validated tool that provides nurses with evidenced-based knowledge and a consistent method of measuring, monitoring and recording aggressive behaviours and can play an important part in enhancing the nurses' role in the care and management of elderly patients with aggressive behaviours. RAGE not only informs nurses but enables coordinated and integrated care by all members of the

nursing and multidisciplinary team, and has the potential to be implemented hospital wide to provide a consistent and cost effective measurement of aggressive behaviours.

While RAGE gives detailed information on a wide range of aggressive behaviours and has an overall severity score of the aggressive behaviours for the preceding three days, the training for nurses to utilise RAGE, to measure, and record aggressive behaviours takes no longer than ten minutes, and implementing RAGE takes no longer than 5mintues. I believe it is these factors that contribute to RAGE being a cost effective tool to provide consistent measuring of these behaviours.

RAGE has the potential to become computerized, as a more cost effective means of measuring and monitoring aggressive behaviour, by providing graphical evidence of the behaviours, thereby effectively reducing the amount of time and paperwork currently undertaken by nurses, to record aggressive behaviours. This graphical information may also assist in the planning and/or discharge of the patient as well as informing, and reassuring patients' families/whanau, and members of the multidisciplinary team of the progress and management of the aggressive behaviours.

RAGE has the potential to assist all nursing and multidisciplinary team members in identifying possible causes for the prevalence of aggressive behaviours and to provide appropriate treatment and management of aggressive behaviours in a timely manner, which appropriately meets the needs of the patient. By implementing RAGE into other nursing areas such, general and medical wards (where currently most of our admissions are from) would provide a valuable history of types and prevalence of any aggressive behaviour that the patient may be exhibiting. This would also allow for a smoother transition to the inpatient setting that often these patients find difficult.

RAGE also has the potential to be utilised in rest homes to enable nursing staff to examine possible causes of aggressive behaviours which may not be related to the progression of dementia, as well as providing a consistent record of behaviours.

The implementation of such a tool in rest homes, I believe, could significantly reduce admissions of patients into a psychogeriatric inpatient setting, whose behaviours are related to pathophysiological causes such as low blood sugars, urinary tract infections, dehydration or constipation that could be effectively treated and managed without an admission to an inpatient setting. Introducing RAGE into rest homes

would also provide inpatient nursing staff with a record of the behaviours being exhibited prior to admission of a patient. This information would ensure that the patient on admission to a psychogeriatric inpatient setting received appropriate treatment and/or management, in a short timeframe, effectively reducing the duration of admission.

Finally, I believe there is potential for RAGE to be implemented into the wider nursing community, for example community mental health nurses'. RAGE could be utilised by these nurses to evaluate and assess the patient in their own homes, or rest homes as well as those community patients residing in supported accommodation, who may be exhibiting aggressive behaviours that may result in admission.

Having discussed the implications for nursing the following section discusses the following recommendations to support the continued use of RAGE within the psychogeriatric inpatient setting.

RECOMMENDATONS

From the two focus groups held, participants recommended that a set criterion would be more helpful when utilising RAGE, as not all patients admitted present with or exhibit aggressive behaviours. Participants also recommended that RAGE be utilised on a daily basis rather than a three day basis in order to provide a more consistent measurement of the behaviour and to avoid the misinterpretation by nurses of the behaviour documented in clinical nursing notes.

The continued utilisation of RAGE is recommended by nurses as a tool that has been designed specifically for measuring aggressive behaviours in the elderly with dementia that is specific to the setting, is quick and easy to use, and allows for consistency in measuring, recording and managing aggressive behaviours. It is recommended that RAGE could be transferred to a computerized version to enable nurses to access graphical evidence of the patients' behaviour This would assist nurses in providing evidence to multidisciplinary team members (such as medical staff) and evidenced-based documentation to support the treatment and management of those behaviours.

A computerized version of the RAGE would also allow nurses to quickly locate RAGE and score behaviours, as well as reviewing any previous behaviour the patient

may have exhibited and at what time of day. The risk of losing any documentation would be reduced. While the literature reviewed does not offer suggestions of RAGE being developed into a computersied version, I believe there are advantages in supporting this recommendation. However, there is also the disadvantage that not all nurses would be or are comfortable using computers and would need to be supported in this area.

While the implementation of RAGE during this study was not specifically looking at certain aggressive behaviours this is an area for further research within the setting to determine how common certain aggressive behaviours are to others.

This chapter has discussed possible implications and recommendations for nursing by utilising RAGE, as a clinically validated tool for measuring, monitoring and recording aggressive behaviours in the elderly in a psychogeriatric inpatient setting. These recommendations and implications have been made in response to nurses utilising RAGE in their clinical practice for three months, and from the two focus groups that were held, allowing nurses the opportunity to discuss their experiences of utilising RAGE in clinical practice.

Having discussed implications and recommendations for nursing for the continued utilisation of RAGE within the inpatient setting based on nurses experiences of implementing RAGE, the following section will review the aims of this thesis and will conclude with my final thoughts on this research process.

The aims of this thesis was to explore nurses experiences of utilising a clinically validated rating scale for a three month period, as a consistent tool for measuring, recording and managing these aggressive behaviours.

This study combined both quantitative and qualitative methods with exploratory and descriptive designs. This allowed for the gathering of as much information as able toe explore nurses experiences using a clinically validated tool to measure and manage aggressive behaviours. RAGE was implemented for five minutes, every third day for a three month period by nursing staff who had consented to participate in the research. Using a sample of 53 patients during the three month period, the patient data was collated and graphically presented to provide a snapshot of the prevalence, extent and types of aggressive behaviours exhibited by these patients.

Following the completion of the three month implementation of RAGE, by nurses they were then invited to participate in a focus group (two were held) to discuss their experiences of utilising a clinically validated tool to assist them in the measuring, recording and managing of aggressive behaviours. Data from the focus groups were thematically analysed. From this data two themes were identified; professional relationships and nurses experiences of utilising RAGE in clinical practice.

While the nurses who consented to participate in the research were all very experienced nurses, and were positive in seeing RAGE continue within the inpatient setting, there was also the suggestion that the current tools used in the setting could be replaced by RAGE. Despite some nurses not seeing themselves as being valued or playing an important role in the care and management of their patient the validity and application of RAGE in practice is currently supported by them as well as medical clinicians within the research setting who are requesting that RAGE continues to be utilised on aggressive patients who are admitted to the inpatient setting.

As mentioned while the implementation of RAGE during this research was not specifically looking at certain aggressive behaviours it is possible that this is an area for further research within the setting to determine how common certain aggressive behaviours are to others.

FINAL THOUGHTS

This thesis evolved from my personal experiences, as a nurse, caring for patients with dementia exhibiting aggressive behaviours. Through my experiences and observations it became apparent that within the inpatient setting and amongst nursing colleagues, that not only was a lack of a consistent tool to measure these behaviours but also lack of a clear definition of how these behaviours are defined. Often these behaviours are interpretated by the individual nurse, which can increase the risk of inappropriate treatment or management of the behaviours. Aggressive behaviour in dementia can pose major management problems for those involved in their care. Management of these behaviours requires an effective approach by all members of the multidisciplinary team.

Completing this thesis was not with out its professional and personal challenges. However, despite these challenges, the undertaking of this research has been a worthwhile and rewarding experience for myself and has left me with a feeling of a sense of achievement. Not only has it provided me with an opportunity to contribute in a small way to the area of nursing, but it has allowed an opportunity to promote and practice evidenced-based care, as well as further developing my professional and personal growth. It has also allowed for nursing staff within the setting who to actively participate and witness the development of evidenced - based care and improved patient outcomes.

While this was a small descriptive, exploratory research project I believe it has the potential to make a contribution to nursing and nursing practice. It is my hope, that the findings and recommendations made as a result of implementing RAGE will be presented to a wider nursing audience and for nursing colleagues who may one day read this thesis and that they too will be inspired to pursue further education or research which may contribute to the area of nursing.

LIST OF APPENDICES

THE RATING SCALE FOR AGGRESSIVE BEHAVIOUR IN THE ELDERLY (RAGE)

Date: am pm n Patient details:

Has the patient in the past 3 days...

1	been demanding or argumentative?	0	1	2	3
2	shouted, yelled, or screamed?	0	1	2	3
3	sworn or used abusive language?	0	1	2	3
4	disobeyed ward rules e.g deliberately passed urine outside the commode?	0	1	2	3
5	been uncooperative or resisted help e.g whilst being given a bath?	0	1	2	3
6	been generally in a bad mood, irritable or quick to fly off the handle?	0	1	2	3
7	been critical, sarcastic or derogatory, e.g saying someone is incompetent?	0	1	2	3
8	been impatient or got angry if something does not suit him/her?	0	1	2	3
9	threatened to harm or made statements to scare others?	0	1	2	3
10	indulged in antisocial acts e.g stealing food or tripping someone?	0	1	2	3
11	pushed or shoved others?	0	1	2	3
12	destroyed property or thrown things around angrily e.g towels, medicines?	0	1	2	3
13	been angry with him/herself?	0	1	2	3
14	attempted to kick anyone?	0	1	2	3
15	attempted to hit others?	0	1	2	3
16	attempted to bite, scratch, spit at or pinch others?	0	1	2	3
17	used an object (such as towel or walking stick) to lash out or hurt someone?	0	1	2	3

In the past 3 days, has the patient inflicted any injury...

18	on him/herself?	0	1	2	3
19	on others?	0	1	2	3

0 no
1 mild e.g a scratch
2 moderate e.g a bruise
3 severe e.g a fracture

20	has the patient in the past 3 days been require to be placed under sedation or in isolation or in physical restraints, in order to control his/her aggressiveness?

0 no
1 yes

21	taking all factors into consideration, do you consider the patient's behaviour in the last 3 days to have been aggressive?

0 no not at all
1 mildly
2 moderately
3 severely

Total Score:

Any additional comments:

Reference: Patel V & Hope R (1992) – A Rating Scale for Aggressive Behaviour in the Elderly (RAGE) Psychological Medicine 22, 211-22

THE RATING SCALE FOR AGGRESSIVE BEHAVIOUR IN THE ELDERLY (RAGE)

Instructions and Advice

The aim of this scale is to measure aggressive behaviours in the elderly, ranging from simply being uncooperative or resisting help to actual physical violence. There are numerous explanations for such behaviours. However, we are **NOT** concerned with these reasons, but **ONLY** with the actual behaviour. Thus it is essential for you to be totally objective in your rating, taking care not to interpret the patient's motives.

The range of behaviours is broad with an emphasis on the problems of nursing a psychogeriatric group, such as being uncooperative or resisting help, shouting, being anti-social and so on. If any of these behaviours have been observed over the last 3 days, they should be rated accordingly.

Source of Information

This includes, besides personal observations, referral to ward notes, and discussions with other members of the ward staff.

It is important during the study period that ***all*** behaviours be noted and recorded to be thorough and representative of the patient's clinical state.

The Rating System

Most items are rated on a frequency basis, i.e. how often the individual behaviour occurred over the past 3 days as follows:
0 never
1 at least once in the past 3 days
2 at least once every day for the past 3 days
3 more than once every day in the past 3 days
Some of the items are rated differently, and in such cases, the scoring system is described along with the item.

Please answer the items by circling the appropriate number next to it.

Duration of observation: the past 3 days only

You are not being asked to judge the intention of the patient – thus if a severely demented patient hits a member of staff whilst being helped with dressing, this should be rated even if it is doubtful whether that person could form any intention to hurt the staff member.

Please note: that the term 'aggressive' does not connote any desire or intent to hurt. Many cognitively impaired patients are unaware of their behavioural disturbances and it is difficult to judge the presence of any motive to the behaviour.

Reference: Patel V & Hope R (1992) – A Rating Scale for Aggressive Behaviour in the Elderly (RAGE) Psychological Medicine 22, 211-22

Consent to use Rating Scale for Aggressive Behaviours in the Elderly.

From: "Vikram Patel"vikpat_goa@sancharnet.in
To: "Bernie Ducre"<metalmickey@xtra.co.nz
Sent: Saturday, 5 February 2005 11:31p.m.
Subject: RE: Research permission Rating Scale for Aggressive Behaviour in the Elderly.

Dear Bernadette
Thank you for this message. I am glad you wish to use the RAGE and you have my permission to do so, provided the original publication is appropriately cited. I am not sure about the use of RAGE in New Zealand, but do know it has been used for clinical trials and other clinical studies in the UK.
I hope you will share your experiences with the RAGE.

Regards
Vikram

Dr. Vikram Patel
Reader in International Mental Health
London, School of Hygiene & Tropical Medicine, Keppel Street, London WC1E7HT, UK (www.lshtm.ac.uk)
Tel (off, UK):+44-20-79588123
Tel (res, UK): + 44-20-82454154

Copied from electronic communication, sent to Bernadette Lidiard, 6 February 2005.

From: "Tony Hope" tony.hope@ethics-and-communication-in-health.oxford.ac.uk
To: metalmickey@xtra.co.nz
Sent: Monday, 7 February 2005 11:29p.m.
Subject: RAGE

Dear Bernadette
Many thanks for your email. You have full permission to use the RAGE – that is what we developed it for. It is many years ago that we did this and my memory is getting vague. Vikram did most of the work (as his Master's thesis) and I no longer work in the field. I am not aware of its uses in New Zealand. With good luck in your thesis and all best wishes.

Tony (Hope).

Copied from electric communication, sent to Bernadette Lidiard, 8 February 2005

Health and Disability Ethics Committees

Central Regional Ethics Committee
Ministry of Health
10th Floor, 180 Molesworth Street
PO Box 5013
Wellington
Phone (04) 496 2405
Fax (04) 496 2360

15 July 2005

Bernadette Lidiard
63 Makino Road
Feilding

Dear Bernadette

CEN/05/06/045 - IMPLEMENTING THE RATING SCALE FOR AGGRESSIVE BEHAVIOURS IN THE ELDERLY (RAGE): CAN IT MAKE A DIFFERENCE TO NURSING MANAGEMENT OF AGGRESSIVE BEHAVIOURS IN ELDERLY PATIENTS WITH DEMENTIA
Bernadette Lidiard
Palmerston North Hospital

Thank you for your letter of 1 July 2005 responding to the points raised in my letter to you of 22 June 2005.

As all outstanding issues have been satisfactorily addressed, the above study has been given ethical approval by the **Central Regional Ethics Committee.**

Accreditation
The Committee involved in the approval of this study is accredited by the Health Research Council and is constituted and operates in accordance with the Operational Standard for Ethics Committees, March 2002.

Final Report
The study is approved until December 2005. A final report is required at the end of the study and a form to assist with this is available from the Administrator. If the study will not be completed as advised, please forward a progress report and an application for extension of ethical approval one month before the above date. Report forms are available from the administrator.

Amendments
It is also a condition of approval that the Committee is advised of any adverse events, if the study does not commence, or the study is altered in any way, including all documentation eg advertisements, letters to prospective participants.

Please quote the above ethics committee reference number in all correspondence.

It should be noted that Ethics Committee approval does not imply any resource commitment or administrative facilitation by any healthcare provider within whose facility the research is to be carried out. Where applicable, authority for this must be obtained separately from the appropriate manager within the organisation.

Yours sincerely

Claire Yendoll
Central Ethics Committee Administrator

Email: claire_yendoll@moh.govt.nz

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MAUI
VICTORIA
UNIVERSITY OF WELLINGTON

Information Sheet for Participants

Research Title: Implementing the Rating Scale for Aggressive Behaviour in the Elderly (RAGE): can it make a difference to nursing management of aggressive behaviours in the elderly with dementia?

Researcher: Bernadette Lidiard, 63 Makino Road, Feilding. Phone Hm. (06)3233429 Wk. (06)3508492.

Position: Registered Nurse, Student MA (Applied) in Nursing, Graduate School of Nursing and Midwifery, Victoria University of Wellington, New Zealand.

Supervisor: Thelma Puckey, Lecturer, Graduate School of nursing and Midwifery, Victoria University of Wellington, Phone (04) 4635442.

You are invited to take part in a research project of implementing the Rating Scale for Aggressive Behaviours in the Elderly (RAGE). This research project is being undertaken to meet the requirements of a MA (Applied) in Nursing from the Graduate School of Nursing and Midwifery, Victoria University of Wellington.

The Study:

The RAGE is a reliable and clinically valid rating scale designed to measure aggressive behaviour in the elderly patient. Aggressive behaviour is the most common management problem in dementia, and this rating scale is used to provide information into the nature, severity, aetiology and treatment of aggressive behaviours. By implementing this rating scale it is hoped to consistently assess, measure and manage aggressive behaviours. RAGE will provide a consistent and standardized tool to assess, measure and mange aggressive behaviours.

The duration of this project will be 3 months. Participants taking part will be Registered and Enrolled Nurses as they are routinely involved in direct patient care. Participants will be asked to complete the RAGE tool every 3 days. This takes no longer than 5 minutes and will be incorporated into daily clinical practice. After the 3 month trial the participants attend a one hour focus group where you will have the opportunity to discuss your experiences of using the RAGE. The focus group will be will be audio-taped for use within the research project. You will receive a copy of the transcript of the focus group for your verification. The focus group will be facilitated by Keith Roffe, Clinical Nurse Educator, Inpatient Services Mental Health along with a note taker. It is anticipated that the focus group will be held 2-3 weeks after the 3 month trial of RAGE, a time and date will be advised prior to the completion of the trial.

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI
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CONSENT FORM

Research Project: Implementing the Rating Scale for Aggressive Behaviour in the Elderly (RAGE): can it make a difference to nursing management of aggressive behaviours in the elderly with dementia?

I have read and understand the information sheet dated provided for participants to volunteering to take part in the research project for implementing the Rating Scale for Aggressive Behaviours in the Elderly (RAGE) for a 3 month period.

I have had the opportunity to discuss this study and am satisfied with the answers I have been given.

I understand that my participation in this research project is voluntary (my choice), and that I may withdraw any time

I understand that my participation in this research project is confidential and that no material which could identify me will be used in any report on this study.

I have been informed of who I may contact if I require any further information or have further questions regarding this research project.

I understand that the focus group will be audio-taped and I will be given a copy of the transcript for verification as part of the research process, and prior to the publication of any findings.

I would like to receive a summary of the research findings once completed.
Please circle YES NO

I understand there is no risk of harm by participating in the research proposal.

I have had time to consider whether to take part.

I freely give my consent to participate in the project.

Signed.....Participant

Date

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI
VICTORIA
UNIVERSITY OF WELLINGTON

B. Lidiard
63 Makino Road
FEILDING
(06)3233429

Enoch Riordan
662a Himatangi Beach Road
Himatangi

27 October 2005

Dear Enoch

Thank you for agreeing to transcribe the enclosed two 1 hour focus group tapes for the following research: Implementing the Rating Scale for Aggressive Behaviours in the Elderly.

This research is being undertaken to meet the requirements of an MA (Applied) in Nursing, from the Graduate School of Nursing and Midwifery, Victoria University of Wellington. The Ethics Committee requires a record of your agreement to maintain confidentiality.

I, Enoch Riordan understand that the contents and final transcription of these tapes are confidential.

Signature  Date 27/10/05

Researcher  Date 27/10/05

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