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Title:
An observational study of older patient specialling in acute hospital settings

Running title:
Older patient specialling in acute hospital settings

Abstract

Background: During hospitalisation, older people can quickly become disoriented and agitated. In these instances, 'specialling', involving close monitoring and observation of the person to prevent accidents, injuries and clinical deterioration is often required. Despite the widespread practice of older patient specialling, there is no evidence of the best model, or any clear guidelines around the essential requirements for this practice.

Aim: This study aimed to examine specialling practices for hospitalised older patients in acute aged care wards.

Method: Quantitative and qualitative data were obtained in an observational study of specialling practices for hospitalised older patients. Two validated observational tools were used to collect data on nursing care provided during specialling and patient responses to specialling over a three-month period.

Findings: 58 observations were undertaken of specialling practices for 12 hospital patients aged 65 years and over in four acute aged care wards. Delirium was the most common reason for older patient specialling. Most specialling was undertaking by Assistants in Nursing. Specialling interactions and responses were mainly positive. Positive specialling practices occurred when the staff special was familiar with the older patient and the ward in which specialling occurred. Specialling practices differed in relation to, the type of care required, the presence of the patients' personal possessions in their immediate surroundings, the presence of medical devices, patient acuity and general ward busy-ness.

Conclusion: These findings suggest that specialling practices differ according to patient need and that the staff member's familiarity with the ward and their patients are important factors in positive older patient specialling. The specialling role needs much clearer definition, including the type of educational preparation and workload support that is appropriate to ensure safe and quality care.

Summary Statement of Implications for Practice

1. **What does this research add to existing knowledge in gerontology?**

- The research complements the body of evidence on older patient specialling.

- This research addresses a knowledge gap on the specialling of older patients in acute hospital settings.

2. **What are the implications of this new knowledge for nursing care with older people?**

- The largely positive interactions and responses from older patients involved in this study suggest that specialling is a worthwhile nursing practice for preventing harm to older people in acute hospital settings.

- Important considerations when allocating staff to the specialling role include the staff's previous experience in specialling older patients and their familiarity with the ward in which the specialling is undertaken.

- The environment is an important consideration in achieving positive older patient specialling.

3. **How could the findings be used to influence policy or practice or research or education?**

- Findings from this study can be used to support the development of the Assistant in Nursing (AIN) role in specialling older patients in acute hospital settings.

- Findings from this study can be used to promote improved orientation and education of staff who conduct specialling in acute hospital settings.

- Findings from this study suggest that specialist teams for specialling in acute hospital wards are worthy of consideration.

Introduction

Specialling is a term commonly used in the UK, Australia and New Zealand to describe more intensive staffing for a patient (Wood, Vindrola-Padros, Swart, McIntosh, Crowe et al., 2018). Specialling involves close monitoring and observation to prevent accidents and injuries to patients, and to ensure timely recognition and response to clinical deterioration (Schoenfisch, Pompeii, Lipscomb, Smith, Upadhyaya et al., 2015; Wood et al., 2018). However, evidence from the literature reflects the lack of consensus concerning the terminology on patient specialling. The terms 'specialling' and 'special nurse' are colloquial descriptors of the role (Carter 2016; Wood et al. 2018). In the literature the terms used include: '1:1 nursing' 'close', 'maximum', 'continuous', 'constant observation', 'special observation', 'constant observer', 'constant companion', or 'cohort nursing 'therapeutic companion' and 'sitters' (Carr 2013; Dewing, 2013; Goldberg 1989; Feil & Wallace 2014; Harding 2010; Lang 2014; Nadler-Moodie et al. 2009).

Specialling the older person in hospital has increased over recent years for 'at-risk' patients to prevent them from sustaining injuries from falling, disorientation to their environment, causing interference with other patients and reacting negatively to care and treatment (Portelli, White, Wand, Haber & Glozier, 2016; Rape, Mann, Schooley & Ramey, 2015; Schroeder 2016). The increase is likely due to more hospital admissions of patients over 65 years of age with complex health care requirements, who are now the major consumers of acute health services (Australian Institute of Health and Welfare [AIHW] 2017). The Australian Commission on Safety and Quality in Health Care (ACSQHC) (2017) estimates that one in five people over the age of 65 years admitted to hospital will present with an underlying delirium and many of them will develop delirium on admission. This can be due to sensory deficits and/or underlying cognitive impairment such as dementia. In these circumstances the older person can become disorientated and agitated by the busy-ness and unfamiliarity of the hospital environment.

Hyperactive delirium is a common condition in older patients for which specialling is often initiated (Carr, 2013; Rape et al., 2015; Portelli et al., 2016; Schroeder 2016) and is an important non-pharmacological intervention to ease symptoms before pharmacological treatment is considered (ACSQHC, 2016). Specialling provides staff with the necessary time to manage the risks associated with delirium such as unintentional injury from a fall, leaving the ward unattended, dehydration and pressure injury. There is also an opportunity for the special to engage more intensively with the patient to prevent and reduce the escalation of delirium by helping to orient the person to the ward environment, and to mobilize, toilet, feed

and hydrate the person. Paying attention to these basic human needs also helps to reduce agitation and anxiety in people with cognitive impairment (Dewing, 2013).

While the incidence of specialling the older patient has increased in recent times, (Portelli et al. 2016), there remains a lack of evidence in regards to its effectiveness in patient outcomes (Dewing, 2013). The decision-making process in commencing specialling varies considerably (Wood et al., 2018) and there is a lack of clarity and formal policy on the requirements, conduct and oversight of specialling (Carr, 2013). There are specialling request forms, flows charts and algorithms available to guide the use of specialling (Spiva, Feiner, Jones, Hunter, Petefish et al., 2012), however few guidelines exist for initiating and discontinuing specialling (Feil & Wallace, 2014). Mental health settings have clearly identified 'special observation' models, although Dewing (2013) cautions against adapting these models to general hospitals, especially in consideration of the unique care needs for the older person with delirium. In acute care settings, specialling often occurs as an unplanned event in response to patients' additional care requirements, giving rise to an ad-hoc approach to both the initiation and discontinuation of specialling. In regard to the care of older people at risk of developing delirium and other iatrogenic harms, the ad-hoc use of specialling can be problematic, even more so when specialling is undertaken by personnel with non-professional healthcare qualifications. Registered Nurses (RNs) and Enrolled Nurses (ENs) can assume the specialling role (Feil & Wallace, 2014), although how these staff are assigned is contentious, as nurse specials may be recruited from existing ward staff and replacement staff not provided (Portelli et al., 2016). This can adversely affect patient-staff ratios, as remaining nurses are left responsible to care for larger numbers of patients (Portelli et al., 2016). Due to both the potential for this occurring and the high staffing costs associated with specialling individual patients, it is commonplace for a non-licensed member of staff, such as an Assistant-in-Nursing (AIN) to be given this role (Dewing, 2013; Rape et al., 2015; Schoenfisch et al., 2015; Schroeder, 2016). At times hospital security guards, ward clerks, kitchen-hands and housekeeping staff have assumed the role of patient special (Wood et al., 2018).

Specialling usually entails one-on-one supervision and care, although cohorting (i.e., one staff member allocated to special two or more patients) is also practiced. This tends to occur when patients with similar risk factors, e.g., propensity to fall, are grouped in one section of the ward (Donoghue, Graham, Mitten-Lewis, Murphy & Gibbs, 2005; Lang 2014). To date, there is no evidence to support the benefits of single patient specialling over cohort specialling for older people, or which approach is most commonly practiced. As there are no

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guidelines, procedures or regulations for the specialling role (Schoenfisch et al., 2015), there are varying role expectations.

Current specialling processes raise safety concerns for both staff and patients (Carr 2013). First, the aforementioned lack of formal guidelines on patient specialling make it difficult to assess its benefits regarding patient outcomes, thereby ensuring that the practice is based on evidence of safe and effective patient care. Second, staff training for the specialling role is ad-hoc (Carr, 2013). Portelli et al. (2016) and Schoenfisch et al. (2015) note the absence of research focused on the health and wellbeing of specialling staff, especially in relation to managing physical aggression from patients with a cognitive impairment for which the special is insufficiently educated to prevent. This reiterates the need for clearer guidelines for specialling the older patient with a propensity for aggression, or other forms of agitation arising from a cognitive impairment.

In an effort to reduce costs, a number of alternatives to staff specialling are suggested (Wood et al., 2018). These alternatives include technological measures such as use of video cameras and audio monitoring e.g., alarm cushions that react to changes in body pressure for high falls-risk patients attempting to stand without staff assistance (Skowronsky, Bena & Albert, 2015). Environmental modifications include having beds that lower close to the floor and use of special non-slip socks for patients at risk of slipping on a shiny floor surface (Lang, 2014). Extended visiting hours and adopting family rosters to sit by the older patient have also been implemented in an effort to reduce the need for staff specials of older at-risk patients (Adams & Kaplow, 2013). Research on the effectiveness of these interventions has focused largely on specialling efficiency, rather than on patient outcomes (Lang 2014; Schoenfish et al. 2015; Wood et al., 2018).

In summary, despite the anecdotal widespread practice of older patient specialling in acute hospital settings, there is no clear evidence of the best model or any evidence-based guidelines on the essential care practices required in the specialling role (Cook, Palesy, Lapkin & Chenoweth, 2018; Dewing, 2013; Schroeder, 2016; Wood et al., 2018). From both a human resource and a patient outcome perspective, the important questions that need answering include what specialling entails for older people, what essential care is required and what benefits accrue to the older person from being specialled in an acute hospital setting. This study aims to answer some of these questions by identifying the characteristics, requirements and provision of specialling to older patients in one Australian hospital.

Methods

Study design

A prospective observational study was conducted to examine specialling practices for hospitalised older patients in four acute aged care wards. Complementary quantitative and qualitative data were obtained in a single phase over a 3-month period (Creswell & Creswell, 2017).

The nature and type of interactions observed between the patient and specialling staff were recorded simultaneously on two validated observation tools: the Quality of Interactions Schedule (QUIS) (Dean, Proudfoot & Lindesay, 1993) and the Emotional Responses in Care Assessment (ERIC) (Fleming, 2005). Concurrent data were obtained with the QUIS and ERIC tools. Specialling interactions (QUIS) and patient responses (ERIC) were complemented by qualitative data recorded as field notes during QUIS/ERIC observations. Patient demographic data and the reason for commencing specialling were also documented, along with the qualifications and experience of the staff undertaking the specialling role.

Setting and participants

The study was conducted over a three-month period (July – October 2017) in four aged care wards at a large principal referral and teaching hospital in Sydney, Australia. These wards were selected because they routinely had a high proportion of older patients requiring specialling. At this particular site, policy dictated that determining the need for specialling was the responsibility of a senior nurse e.g., Clinical Nurse Consultant (CNC), Nurse Unit Manager (NUM), and/or initiated by a medical officer. The policy also stated that patient specialling must be carried out by RNs, ENs or AINs recruited from the existing ward staff, the hospital's casual staff pool, or from a nursing agency, and that it be undertaken as either one-to-one or through cohorting.

Potential older patient study participants were identified by the hospital's Aged Care CNC through an online report which identified all patients requiring specialling. To be eligible for inclusion, patients needed to be aged ≥ 65 years, identified as requiring specialling and able to provide informed consent (either personally, or provided on their behalf by their guardian or next of kin if lacking capacity). Over the 3-month study period twelve patient participants met these criteria, comprising seven males and five females.

In addition, a total of 28 staff involved in specialling patient participants were included in the study. These staff members comprised 18 AINs, 6 ENs and 4 RNs, and were employed as regular, casual or agency staff in the hospital.

Procedure

This study followed the principles outlined in the Declaration of Helsinki (2013). Ethical approval was obtained from both the University and the participating Hospital's Human Research Ethics Committee (HREC) prior to the study commencement. Permission to recruit both patients and staff was obtained from the hospital executive. An arms-length approach was used to recruit all participants. General information about the study for patients, their guardians or next of kin, and nursing staff was disseminated on the aged care wards by way of posters on ward notice boards. Interested persons were provided with the relevant participation information statement and consent form by a staff member nominee. Prospective participants were given time (without the staff nominee's presence) to consider their involvement and/or seek further information before consenting to or declining participation in the study. Verbal and written consent were obtained from participants prior to commencement of specialling observations.

Data Collection Procedure and Instruments

To obtain first-hand data on specialling practices, direct observation of the interactions between specials and patients, and the patient's responses to these interactions were obtained using validated observation tools. The QUIS (Dean et al., 1993) was used to collect data on staff-patient interactions during care provision, while the ERIC (Fleming, 2005) was used to obtain data on the patient's reactions during staff-patient interactions in care delivery. To further explain and gain a comprehensive understanding of specialling practices, contextual qualitative field note data such as type and location of specialling, qualifications and experience of the staff member, type of duties and care provided and busy-ness of the ward were hand-recorded by the observer. Data were also obtained on the demographics and clinical characteristics of the older patients being specialled.

Observational data were collected by the primary researcher, an experienced aged care nurse whose clinical role extends to reviewing specialled patients on aged care wards. Acting as a participant-observer, the researcher obtained data on specialling practices from different staff, the staff/patient interactions occurring during specialling and the responses of patients being specialled. Observation periods were planned for different shifts (morning, night and afternoon and shift cross-over) to capture a wide variety of conditions in which specialling occurred. Start and stop times of the observations were recorded. Consistent with observation studies conducted in clinical settings, a 'serious error' protocol was implemented, allowing

the researcher/observer to intervene if they witnessed any incident that was potentially dangerous to a patient, visitor or staff.

Quality of Interactions Schedule (QUIS)

The QUIS was initially developed as a research instrument for evaluating the quality and quantity of staff-patient interactions in residential care, however a recent study by McLean, Griffiths, Mesa-Eguiagaray, Pickering and Bridges (2017) established the validity and reliability of the QUIS as a measure of the quality of staff-patient interactions in the acute care setting. This tool defines categories for measuring and rating the quality of staff-patient interactions and care as positive social, positive care, neutral, negative protective, or negative restrictive (Dean et al., 1993). 'Positive social' comprises staff-patient interactions where productive conversations and companionship take place in the care process. This can be observed when an explanation of care goals and encouragement are given. 'Positive care' involves verbal interactions between staff and patient when giving personal care such as toileting, bathing, administration of medication and treatment. 'Neutral care' comprises brief indifferent interactions occurring with minimal staff engagement with the patient in care provision. 'Negative protective' interactions are those initiated by staff in a resistive manner without explanation e.g., applying oxygen therapy to a patient agitated by the presence of an oxygen mask/nasal prongs without considering alternative methods. 'Negative restrictive' interactions are usually negative reactions from staff to a patient's movements or behavior e.g. focusing primarily on fall prevention by restraining the patient, such as keeping them in bed (Dean et al. 1993). Hand-written qualitative data are recorded on the QUIS data collection form to describe the context, circumstances and events occurring during each observation and to provide reasons for the codes allocated in defined observation periods.

Emotional Responses in Care Assessment (ERIC)

The ERIC (Fleming, 2005) is an observation tool that quantifies care experiences based on the patient's emotional responses to care, categorized as three positive and/or three negative emotional responses. The categories are 'pleasure', 'affection', 'helpfulness', 'anger', 'anxiety' and 'discomfort'. A 'neutral' response reflects a patient sleeping/resting or sitting and showing no emotional response during a care interaction. Hand-written qualitative data are recorded on the ERIC to describe the context, circumstances and events occurring with patient responses to care interactions, and to provide reasons for ERIC codes allocated in defined observation periods. This approach has been successfully used by Chenoweth,

Forbes, Fleming, King, Stein-Parbury et al., (2014) to measure outcomes for older people in residential care by observing the resident's emotional responses to care given by staff. The appropriateness of employing the QUIS and the ERIC in care observations for this study was assessed through pretesting and feedback from experienced nurses and researchers.

Quantitative data analysis

Data cleaning and crosscheck were carried out by the primary researcher and one other member of the research team prior to data analysis. Microsoft Excel spreadsheets were used for data entry and analysis. Descriptive (frequency, percent, mean, standard deviation, and tables) were employed for summarizing participant demographics and other patient and staff characteristics. Observational data were classified according to the descriptors established on the QUIS (Dean et al., 1993) and the ERIC (Fleming, 2005). The number of codes under each descriptor were counted and expressed as frequencies and percentages. When multiple codes were generated from the same participant, only one was counted so that one participant's experience was not over-represented in the findings.

Qualitative data analysis

The qualitative data that were obtained during the QUIS and ERIC observations were analyzed using a general inductive approach (Thomas, 2006). Segments of data on the common factors occurring in the care context were identified by the primary researcher. This occurred by initially identifying the events, circumstances and other relevant features of the care interactions and patient responses that were recorded during QUIS and ERIC observations. Consensus on the common contextual factors of patient specialling was achieved through independent analysis and discussion among the research team. Inferences were made through comparisons and integration of the different components of the observational data (Creswell & Plano Clark, 2011).

Results

Quantitative results

Patient demographics

A total of 58 observations of specialling practices involving 12 patients were completed during the study period. The age range of patients who were specialled was 65-98 years (Mean: 84.33, SD = 10.24), with the majority being male (n= 7, 58.3%). Delirium (n =10,

83.3%) and falls (n =2, 16.7%) were the reasons documented as the main reason for commencing specialling.

Observed specialling practices

The observation session varied in length from 10 to 15 minutes (Mean = 12.81, SD= 5.75) with the majority (n = 26, 44.8%) occurring during the morning shift. Staff qualified as AINs (n= 45, 77.6%), predominantly from nursing agencies, undertook most of the specialling, followed by ENs (n = 9, 15.5%). The RNs who undertook specialling roles were either regular staff or staff redeployed from another ward within the hospital. The most commonly used specialling approach was one staff to one patient (n= 52, 89.7%). One-on-one specialling, as well as undertaking additional duties, such as caring for the other patients in the room, occurred in 22.4% (n= 13) of the observations. Except for one patient who required barrier nursing, all specialled patients were located in four-bedded wards.

(Insert Table 1 here).

Quality of Interactions Schedule (QUIS)

Positive care practice (n = 25, 43.9%) was the most frequent descriptor observed. This involved positive verbal interactions between staff and patient during the delivery of appropriate, person-centred care, for example providing explanations and answering questions about care procedures. Care provided included toileting, bathing, administration of medication and treatment. Positive social (n = 20, 35.1%) was the second most interactions observed and comprised of positive interactions where productive staff-patient conversations and companionship took place   This was observed when an explanation of care goals and encouragement was given to the patient to be included in care decisions, and when the staff member read the newspaper to a patient. One observation included a special staff brushing a patient's hair whilst engaging with her about her past occupation. Prior to this engagement the patient was pacing and seeking a way to exit the ward. Neutral care (n= 5, 8.8%) occurred when special staff were observed to have brief interactions with minimal/no emotional engagement with the patient. This occurred when the special provided indifferent responses to a patient while attending to other patients, or provided care without any verbal interaction. Negative Protective practice (n =3, 5.3%) constituted care that was given without explanation and concern for the patient's well-being, for example staff continuing to give oxygen therapy to a patient who was agitated by wearing the oxygen mask/nasal prongs.

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Another example of Negative Protective practice was administering intravenous therapy to a distressed patient, without any attempt to provide reassurance or comfort to them. Negative Restrictive practice (n =1, 1.8%) involved interactions where staff did not give adequate explanations for care, or unnecessarily restricted the movements of patients. This was observed when an agitated patient flagged as having a risk of falling continued to stand up unaided. The special reacted by telling the patient to sit down continually without giving an explanation to the patient for the restrictions placed on their movements, and made no attempt to identify why the patient was agitated, e.g. discomfort/pain, needing to toilet, or feeling cold or thirsty.

(Insert Table 2 here).

Emotional responses in care (ERIC)
'Helpfulness' (n = 25, 43.1 %) was observed when a patient responded by helping the staff provide care for them such as a bed sponge or being cooperative when being mobilized to the toilet by the special. 'Pleasure' (n =7, 12.3%) and 'Affection' (n = 7, 12.3%) were recorded when a patient responded emotionally to care being given by special staff such as by smiling at the special and showing pleasure through their positive body language. One example of this was when the special staff assisted a male patient to shave. The 'Neutral' response (n = 9. 15.5%) to the care situation was observed when a patient was lying or sitting quietly, did not show any reaction to the staff when care was being provided, or took no notice when the special was assisting other patients in the room. This category was frequently observed during periods when the ward was very busy. The strength of the responses overall was 'Strong' (54.4%).

(Insert Table 3 here).

Qualitative results
The qualitative data obtained when recording the QUIS and ERIC data codes provided insights about the contextual aspects of specialling older patients in the acute hospital setting. Tables 4 and 5 present the most commonly occurring factors associated with specialling practices and patient responses. For both the QUIS and the ERIC, the most common factors included: (a) the special's familiarity with older patients; (b) the special's familiarity with the ward in which specialling occurred; (c) the type of patient care being provided at the time of

observation; (d) the patient's personal possessions in their immediate environment; (e) the presence of medical devices and (f) the general busy-ness of the ward.

<mark>(Insert Tables 4 & 5 here).</mark>

Discussion

This observational study provides insights into nurses' specialling practices for hospitalised older patients in acute aged care wards. Quantitative study results provided general patterns of older patient specialling practices and patient responses to this care. The qualitative data obtained during QUIS and ERIC observations provided insight to the contextual factors associated with older patient specialling. This integration of quantitative and qualitative observation data provides a more comprehensive and wider understanding of the processes through which older patient specialling occurs in acute care settings.

Quantitative findings showed that delirium (83.3%) was the major indication for specialling. This is consistent with other studies that have identified specialling as a common strategy for management of older patients with delirium (Dewing, 2013; Kratz, Heinrich, Schlauß & Diefenbacher, 2015; Wood et al., 2018). While early recognition and management of both predisposing and precipitating risk factors is vital, the regular monitoring of behavioural/cognitive changes and clinical deterioration afforded by specialling is an important non-pharmacological intervention to reduce the incidence of delirium (ACSQHC, 2016).

Further examples of non-pharmacological interventions for older people with delirium were identified during QUIS and ERIC observations. Specialling practices associated with positive social and positive care interventions included staff-initiated conversation and interactions with patients (e.g., talking to patients about their life histories, reading to patients, general conversation with the patient and their family members). Other positive QUIS scores were associated with patient reassurance (e.g., making cups of tea for them, regularly reorienting them to the care situation as a means of deterring patients from leaving the ward, encouraging the presence and care provision by family members), and giving sufficient attention to care needs, such as timely attention to personal hygiene, toileting and mobilization both within the ward and out in the hospital grounds. These specialling practices elicited positive responses such as pleasure, affection and helpfulness from the patients specialled in this study. Caring for older patients in these ways has proven to be effective in managing delirium-associated risks such as falls, increased lengths of hospital

stay, institutionalization and death (ACSQHC, 2016; Kratz et al., 2015; Hshieh, Yue, Oh, Puelle, Dowal et al., 2015; Rape et al., 2015; Portelli et al., 2016; Schroeder 2016). Moreover, factors related to specialling practices that elicited positive emotional responses from patients included making use of personal objects in the patients' immediate environments to help them feel more secure, such as personal grooming items, clothing and newspapers. The presence of personal possessions is considered to be an important component of person-centred care, assisting older people with/out cognitive impairment to feel orientated and less agitated in unfamiliar environments such as hospitals (Brooker 2007).

AINs (77.6%) undertook most of the older patient specialling in the acute care wards in this study. This is consistent with studies that report unlicensed staff undertaking specialling due to the high cost of nursing care (Adams & Kaplow, 2013; Wilkes, Jackson, Hohan & Wallis, 2010; Moyle, Borbasi, Wallis, Olorenshaw & Gracia, 2010). Overall the staff interactions and responses while specialling older patients were positive for all staff observed i.e., RNs, ENs and AINs. This is an important finding, considering that concerns have been raised regarding the ability of junior or unlicensed staff such as AINs to perform the specialling role. The contextual data obtained during QUIS and ERIC observations indicates that whatever the staff special's qualifications, it is their familiarity with the ward routine, pace and patient requirements that correlates with the type and quality of care provided and patient's responses to that care.

Despite the general positive care identified with the QUIS, the contextual data revealed more details regarding negative staff-patient interactions. Negative care was seen when staff, regardless of qualifications, were unfamiliar with the ward and older patients (i.e., agency staff, casual pool). New staff were observed to be sitting alone while specialling. They were not engaging with others, including the patients, nor were they approached by regular staff during their shifts. Due to the busy-ness of the wards and high patient acuity, some casual specials failed to alert regular staff for assistance when they needed it. Two of the AINs observed were new to the hospital and as it was their first time on the ward, they looked to the researcher/observer for guidance and support. This response raises concerns around staff's lack of educational preparation for the specialling role, lack of orientation to the ward for new/casual staff and the exclusion of the special in clinical handover.

The specialling role is often unpopular, due to staff anxiety about managing challenging behaviours in older adults, such as agitation during a delirium episode, while endeavouring to provide person-centred care (Flynn, Prescott & Jinks, 2016). However, confidence and job satisfaction levels in undertaking specialling duties can improve when

senior staff provide the special with an orientation to the ward policies and procedures, provide them with training in communication skills when caring for people with a cognitive impairment, give information on reasons for confusion and agitation in these patients and provide clear advice on management of extreme agitation, de-escalation strategies and diversional activities (Ayton, O'Brien, Treml, Soh, Morello et al., 2017; Bateman, Anderson, Bird & Hungerford, 2016; Flynn et al., 2016). Patient outcomes such as reduced hospital stay, improved pain management and fewer falls have been reported when specials are supported by appropriate training and when they are recruited from a pool of existing hospital staff who are familiar with the ward routines, policies and procedures (Bateman et al., 2016).

Negative responses by older patients to specialling practices care were also observed when they were tethered by medical devices e.g., urinary catheters, intravenous (IV) therapy and oxygen masks. Although these devices may be necessary for appropriate clinical care, they also make it difficult to provide other necessary care for the patient, such as mobilization during toileting. Moreover, restrictive medical devices have been associated with increased rates of delirium and falls, and often remain in place far longer than needed (Mattison, Marcantonio, Schmader, Gandhi & Lin, 2013). The risks and benefits should be carefully weighed up before burdening older patients with tethering devices, and alternatives e.g., IV fluid boluses, should be considered (Mattison et al., 2013).

The clinical and unfamiliar environment of the hospital ward also evoked negative responses by older patients to their care. The absence of personal objects and familiar people in hospitals can undermine older peoples' identity, especially when they are experiencing cognitive impairment (Clissett, Porock, Harwood & Gladman, 2013). The use of personal belongings and meaningful objects are helpful conversation and activity starters, assisting both the nurse in reminding them of the uniqueness of each older patient, and the older person in feeling more included and valued as an individual (Clissett et al., 2013)

In fully occupied, four-bedded rooms where most of the specialling was conducted, additional tasks undertaken by the special included medication administration, toileting and feeding other patients. This was especially evident when the ward was busy or short-staffed, patient acuity was high and specials were allocated from those already working on the ward (i.e., an additional staff member was not recruited for specialling). All RN specials were observed to assume care for all patients in the four-bedded rooms. This is reflected in the ERIC where RNs featured prominently with patients' responses of 'helpfulness' but not at all with responses of 'pleasure' or 'affection'. Additional duties undertaken by specials occurred with the small number of QUIS positive social (n=5) and positive care (n=8) entries, and

were related to high overall patient acuity and ward busy-ness. Our results suggest that the ward acuity/busy-ness was a prominent factor for inconsistent care quality during specialling, which suggests there is a lack of clarity, training and support for the specialling role. This is consistent with Wood et al's (2018) scoping review of one-to-one specialling in acute care, which identified that variations in specialling practice lead to inconsistent care provision.

Implications for Practice and Research Priorities

The findings from this observational study have key implications for clinical practice and research priorities regarding older patient specialling in acute hospital settings. Activities that support delirium management for older patients observed in this study are consistent with recommendations (ACQHC, 2016). What is unknown, however, is how these activities are enacted (e.g., through specialling or as part of a general patient load) and whether they have any impact on patient outcomes such as prevention, or a reduction in delirium. Therefore, further research is needed to measure and compare patient outcomes in both of these situations. AINs in this study were observed to be providing mostly positive care to their older patients however, this occurred more frequently when they were part of the ward team. This finding suggests that while AINs are appropriate for the specialling role, this is best achieved when they are regular staff. Therefore, more research is required to establish the most effective team approach to older patient specialling in acute care settings. In addition, the specialling role needs much clearer definition, including type of workload support that is required to ensure safe and quality care, e.g. staff allocation and whether undertaking additional duties for other patients are appropriate while specialling one or more patients,. Further education and the development of guidelines and tools are needed around how specialling should be conducted e.g., when to commence and cease specialling, strategies to minimise harm to both patients and staff specials and the types of interactions that constitute positive care, including family member perceptions of specialling requirements and quality. Other suggestions for future research include comparisons of specialling types, e.g. one-to-one vs. cohorting, comparisons of nurse specialling with alternatives approaches, e.g. sensor technology, monitored beds etc., and research which measures both short and long-term patient outcomes (e.g. length of stay, morbidity and mortality) of specialling. Recruiting larger numbers of patients and staff specials with different qualifications and levels of experience, and undertaking longer observation periods are also recommended for further research.

Study Limitations

The small, convenience sample of older patients (n = 12) and study sites (n = 4) limit the generalisability of the study findings, even though this patient cohort and setting are reflective of the care requirements of older people who require specialling in the Australian non-intensive acute care setting. In view of the setting and sample limitations, trialing and honing of the data collection tools ensured that comprehensive data were collected from each participant. The findings are also limited by the very small number of observations undertaken (n = 58), the short observation timeframes, and the disproportionate number of observations on morning shifts. Usually, observations using the QUIS and ERIC tools are recorded over longer periods of time, up to 8-10 hours of observation per individual undertaken over 3-4 hour periods at different times (Chenoweth et al., 2014). The findings here also represent only one observer's perspective, as the data were collected by a single researcher who, nevertheless, had extensive aged care nursing experience. Participating nurses may have changed their specialling practices because they were being observed, affecting the external validity of the study (Norman & Streiner, 2008). The use of validated observation tools, augmented by qualitative data relating to the care context, helped to minimize these biases (Creswell & Creswell, 2017). Considering the range of positive, negative and neutral staff-patient interactions occurring and the wide range of patient responses observed during the study, it is likely that staff specials were not unduly influenced by the presence of the researcher and that the results do reflect routine older patient specialling practices. Nevertheless, the findings of this unique and small-scale study should be viewed as tentative and exploratory.

Conclusion

To the best of the authors' knowledge, this is the first study designed to document the actual care practices undertaken when specialling older patients in acute care settings. All older patients in this study were specialled because of having a delirium and/or a falls risk. The majority of specialling was undertaken by AINs. Observed interactions and responses were largely positive, however this was dependent on factors such as the special's experience with older patients and the ward setting, patient acuity, busy-ness of the ward, and the presence of artifacts in the patient's surroundings such as medical devices and patients' personal possessions. The results highlight the need for clearer articulation of what the specialling role entails when caring for older people and the importance of staff training and orientation for older patient specialling. Support and recognition of the specialling role, associated with

appropriate workload allocation, is recommended. Further research could include the impact of specialling on patient and care outcomes, including patient and family members' experiences of specialling. More work could be undertaken around characteristics of staff who special, including the efficacy of a ward team approach to older person specialling in acute care settings. Future studies could involve larger cohorts of older patients, more staff, and compare different hospitals/settings in an effort to produce more reliable and generalisable results.

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Table 1: Observed Specialling Practices

Observed specialling practices	Frequency	Percent (%)
Staff providing specialling		
AIN	45	77.6
EN	9	15.5
RN	4	6.9
Reason for specialling		
Delirium	10	83.3
Falls risk	2	16.7
Type of specialling		
1 to 1	52	98.7
Cohort	6	3.1
Nature of specialling		
Specialling only	45	77.6
Specialling plus additional duties	13	22.4
Time of observation		
Morning Shift	26	44.8
Afternoon Shift	22	37.9
Cross over - morning and afternoon shifts	7	12.1
Night Shift	3	5.2

Table 2: QUIS Results

	Frequency	Percent
Positive Social: interaction principally involving "good, constructive, beneficial" conversation and companionship, e.g. greeting directed to individual take out explanation	20	35.1
Positive Care: interactions during the appropriate delivery of physical care, e.g. general explanation of procedure, but no general conversation	25	43.9
Neutral: brief, indifferent interactions not meeting the definitions of the other categories e.g. putting plates down without verbal or non-verbal contact	5	8.8
Negative Protective: providing care, keeping safe or removing from danger, but in a restrictive manner, without explanation or reassurance	3	5.3
Negative Restrictive: interactions that oppose or resist residents' freedom of action without good reason, or which ignore resident as a person	1	1.8
Interactions with Others (not staff)	4	6.9
Total	58	100.0

Table 3: ERIC Results

	Frequency	Percent
Pleasure: the person smiles, laughs, makes happy noises or expresses pleasure in words	7	12.1
Affection: the person shows or verbally expresses a liking or affection to some one or responds with liking or affection when approached	7	12.1
Helpfulness: the person attempts to assist someone with a task or to assist someone trying to help him/her.	25	43.1
Anger: the person glares, clenches teeth, shouts, curses, insults, pushes, threatens to be, or is aggressive.	2	3.5
Anxiety: the person has a furrowed brow, is restless, makes repeated or agitated movements, sights, withdraws from a person or situation, trembles, has tight facial muscles, calls repetitively, wrings hands, jiggle legs, has wide open eyes.	5	8.6
Discomfort- Discomfort The person grimaces, yells, moans, or groans, has noisy laboured breathing, a rigid body, fists clenched or knees pulled up.	3	5.1
Neutral- No Sign The person shows no emotional response to the situation, may be withdrawn or simply looking on with no apparent feeling about what is going on.	9	15.5
Total	58	100.0

Table 4: Factors related to ERIC scores

Category	Theme	No. of times noted	Supporting observations/notes
Positive responses to care i.e., pleasure, affection, helpfulness	Staff familiar with ward and older patients	39	24 instances of AINs, 11 instances of ENs and 4 instances of RNs undertaking specialling were familiar with ward routine and older patient requirements
	Personal possessions in immediate environment	28	Personal grooming items, newspapers and other reading material, fiddle mats which could be used as props in care
	Ward not busy	14	General patient acuity high however ward appeared to be adequately staffed and did not appear busy. RNs and ENs noted to be performing nursing duties for staff other than their specialled patient, within the four-bedded ward in which the specialling occurred
	Conversation and interaction	13	Conversations about older patients' life histories, general conversation, presence of family members
	Attending to personal hygiene/grooming	11	Showering, bathing, brushing hair, shaving
	Reorientation and reassurance	9	Reorientation to prevent patients from leaving confines of ward, holding patients' hands, making cups of tea
	Assisting with mobilisation	5	Assisting patients to walk around the ward or in the hospital grounds
Negative responses to care i.e., anger, anxiety, discomfort	Ward busy	10	General patient acuity high, staff appeared to be rushed and ward appeared understaffed. RNs and ENs noted to be performing nursing duties for staff other than their specialled patient, within the four-bedded ward in which the specialling occurred
	Presence of medical devices	6	Patients anxious about presence of IV lines, urinary catheter, TED stockings and wanting to remove same; staff attempting to apply medical devices such as warming blankets
	Staff familiar with ward and older patients	5	5 instances of AINs undertaking specialling were familiar with ward routine and older patient requirements, all attempting to provide reassurance to specialled older patients who wanted to go home or were anxious about presence of medical devices, or appeared agitated.
	Staff unfamiliar with ward and older patients	2	2 of the 3 instances of AINs undertaking specialling were unfamiliar with ward routine and older patient requirements, both attempting to provide support to patients who appeared agitated, in pain, or who were clinically deteriorating
Neutral responses to care	No interaction between staff and patient	8	Patient drowsy, sleeping or staring into space; family present and conversing but ignoring patient; staff member wearing PPE (mask, gown and gloves)
	Staff unfamiliar with ward and older patients	8	8 of the 9 instances of AINs undertaking specialling unfamiliar with ward routine and older patient requirements

Table 5: Factors related to QUIS scores

Category	Theme	No. of times noted	Supporting observations/notes
Positive specialling practices i.e., 'positive social' and 'positive care'	Staff familiar with ward and older patients	45	32 instances of AINs, 9 instances of ENs and 4 instances of RNs undertaking specialling were familiar with ward routine and older patient requirements
	Reorientation and reassurance	25	Cups of tea made for patients to decrease agitation, presence of family members, reorientating to prevent patients from leaving the confines of ward
	Conversation and interaction	23	Reading newspaper to patient, general conversation, assisting a patient to set up a table for a meeting
	Personal possessions in immediate environment	23	Newspapers and other reading material, photos of family and/or pet on locker, photo album in top drawer, patients wearing favourite items from home e.g., bed jackets, quilt from home on patient's bed
	Attending to personal hygiene/grooming	15	Showering, bathing, brushing hair, shaving, redressing patient after removal of clothing
	Additional duties	13	General patient acuity high, ward appeared busy. Additional duties undertaken for other patients *within* the four-bedded ward
	Assisting with mobilising	10	Assisting patients to walk around the ward or in the hospital grounds
Negative specialling practices i.e., 'negative protective' and 'negative restrictive'	Staff unfamiliar with ward and older patients	4	All 4 instances of AINs undertaking specialling were unfamiliar with ward routine and older patient requirements, trying to prevent patients from removing medical devices (e.g., IV, oxygen masks), telling patient to sit down while agitated
	Presence of medical devices	4	Patients anxious about presence of IV lines and oxygen masks and wanting to remove same; staff attempting to keep patient's oxygen mask on
	Ward busy	4	General patient acuity high, staff appeared to be rushed and completing many tasks
	Hospital-like environment	1	Personal possessions absent from patient's immediate environment
	Ward busy	5	General patient acuity high, staff appeared to be rushed and completing many tasks
	Staff unfamiliar with ward and older patients	4	4 of 5 instances of AINs undertaking specialling were unfamiliar with ward routine and older patient requirements, standing or sitting at bedside and not interacting with patient
	Hospital-like environment	1	Patient barrier nursed in single room. Personal possessions absent, staff member wearing PPE (mask, gown and gloves)