Food for thought
Residents with dementia who require assistance with eating and drinking

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Abstract
There is presently limited understanding of the ways in which the delivery of food and fluids impacts on residents with a diagnosis of dementia who resides in aged care facilities and require assistance with eating and drinking. This article presents one facet of a qualitative study involving 24 residents with dementia who required assistance with the oral intake of food and fluids. This article focusses on the non-participant observation of mealtimes involving the residents participating in the study and the relatives and staff who assisted. Themes were identified from the analysis that provided evidence of problems in everyday practices involved in assisting the residents with dementia to eat and drink. The themes centred around the involvement of relatives, the importance of education, a task orientation focus and the role of the Registered Nurse. As a result of the study changes that were deemed necessary by nursing and personal care staff and management were implemented to improve practices.

Introduction
The importance of mealtimes for the wellbeing, quality of life and health of residents with dementia in residential care settings is an under acknowledged area of nursing practice. The ways in which social interaction, nutritional intake and care opportunities are enhanced during mealtimes are explored and identified. During this study excellent examples of best practice in this area were demonstrated, however, there were also areas which highlighted the challenges associated with caring for residents with dementia that are common in all aged care facilities.

Because of the economic constraints in the present climate, nurses and careworkers are faced with many difficulties when attempting to address the nutritional and hydration needs of residents with dementia. The challenge is for nursing and personal care staff to be aware of the potential to undertake the activity of assistance at mealtimes with knowledge, commitment and sensitivity being paramount, especially within the time constraints associated with the staffing levels and skillmix presently in place. The outcomes of the research have changed practices within the organisation in relation to mealtimes and nutrition of residents with dementia based on education of staff, appropriate assessment and practical interventions. This population is a somewhat under-researched area of nursing, despite the vital need for research-based practice.

Literature review
Nursing which promotes mental health and optimal well being demands the maintenance of dignity and independence of residents. Intimacy, person centred care, relevant knowledge, good communication and a degree of advocacy are important elements in this process. This becomes apparent when someone assists another with feeding. Yet management of and assistance given to residents with dementia who may or may not be experiencing feeding difficulties, is an area of nursing care in which intervention is frequently inadequate, at times casual and in some cases, potentially life-threatening for the resident (Kayser-Jones and Schell, 1997; Porter et al, 1999).

Many residents with dementia are unable to feed themselves and require partial or full assistance for oral intake to meet their nutritional needs. Residents with dementia are a vulnerable and isolated group and have been identified as being nutritionally at risk (Kayser-Jones 1996; Riviere, Gillette-Guyonnet,
Nourhashemi & Vellas 1999). When a resident does not take food and fluids being offered for no apparent reason, then that resident is at risk of complications from malnutrition with the associated suffering and resultant health care costs. An inadequate nutritional intake puts any nursing home resident at risk of undernourishment and all the ensuing complications which exist from poor nutrition. However, nurses and caregivers are faced with many difficulties when attempting to address nutritional needs of residents with dementia.

There is evidence that needs are not being met at mealtimes in residential care settings for many different reasons (Pierson, 1999; Kayser-Jones and Schell, 1997; Kayser-Jones 1996), but specific research is needed as to the possible factors influencing the nutritional status of residents with dementia, who are reliant on nurses and caregivers for their oral intake.

In a recent study, Lipski (1997) reports that well over two thirds of residents in aged care in Australia are undernourished. Riviere et al (1999) found that "... loss of independence, orientation impairments, disordered eating behaviour, and weight loss" became more apparent with the progression of dementia. In severe stages of the disease, nursing practice is challenged by the difficulty in managing nutritional and feeding problems, because even when residents are spoon fed, many will avoid or fail to accept offered nutrition and hydration through various behaviours that prevent food from entering the mouth or by failing to chew or swallow (Riviere et al., 1999; Schell & Kayser-Jones, 1999).

Athlin and Norberg (cited in Van Ort & Phillips, 1995) felt that assignment of a specific caregiver to a patient would provide consistency in behaviours in both and thus improve interaction, sustaining feeding-related interpersonal contact. Their findings demonstrated that consistent interaction can improve feeding behaviour. Consistent interaction with the same caregiver can be difficult bearing in mind the different shifts and the relative shortage of staff in aged care today.

The purpose of Athlin and Norberg's (1998) field study was to illuminate the interaction between patients with severe dementia and caregivers during feeding, when the delivery system was changed from a task-assignment to a patient-assignment care system. By using an assessment scale, which divides the condition for interaction into variables like sensitivity to cues, responsiveness, cognitive and social-emotional stimulation, questions about the importance of these variables have been brought to light. Their findings highlight the fact that the condition for positive interaction between patients and their caregivers improved when the organisation of care changed from a task-assignment to a patient-assignment system (holistic anticipatory care rather than task-based reactive care). This change in care facilitated continuity during feeding and improved the communicative abilities of patients with severe dementia in the interaction with a highly responsive caregiver who was able to interpret communicative cues, provide compassionate, empathetic and imaginative care as opposed to task-oriented care in a mechanistic manner and importantly, promote the patient's integrity.

Van Ort and Phillips (1995) used an experimental design for their field study to test the efficacy of two nursing interventions, one contextual (or environmental) and the other behavioural, designed to promote functional feeding and maintain adequate nutritional status of a sample of elderly with dementia in a long-term care setting.

Many residents in aged care have energy and nutrient intakes far below present recommendations (Elmstahl, Persson, Andreu, & Blabolil 1997). Another study by Lipski (1993 cited in Tierney 1996) concluded from an assessment of 92 elderly residents in long-term care in Australia that they were 'grossly undernourished and their dietary intake did not satisfy ... metabolic demands'. In a more recent study, Lipski (1997) reports that well over two thirds of residents in aged care in Australia are undernourished.

Untreated protein-energy malnutrition (undernutrition) profoundly influences physical health and is associated with anthropometric changes and increased morbidity and mortality (Whitehead 1998; Elmstahl et al 1997; Lipski 1997); the impairment of muscle function, reduced respiratory drive and decreased cardiac function (McCormack 1997); increasing levels of disability (Whitehead, 1998); deterioration of immune function (Whitehead 1998; Elmstahl et al 1997); increasing risk of infections, skin ulcers and falls (Riviere et al 1999; Whitehead 1998); wound dehiscence, fatigue, impaired body heat protection, fractured neck of femur, depression, drug interactions altering nutrient status, and drug toxicity (McCormack 1997; Patenaude 1996; Tierney 1996); and pressure sores (Lipski 1997; Tierney 1996). Deficiencies in protein, vitamin C, vitamin D, potassium, magnesium and zinc could have considerable negative impact on a variety of body systems (Lipski 1997; McCormack 1997). If the nutritional depletion that has occurred is not reversed a vicious circle of anorexia and malabsorption may continue and consequently, impacts in a devastating way on the quality of life for residents with dementia (Riviere et al 1999; McCormack 1997).

Iggyulden (1999) places great emphasis upon the insidious nature of dehydration for elderly people and recognises hypernatraemia as the most common form of dehydration among the elderly for which the effects can be devastating. Armstrong et al (1996 cited in Iggyulden 1999) argues that confused or cognitively impaired people, those who were incontinent or highly dependent were more likely to receive less fluid intake than others with greater ability.

In Australia, the maintenance of nutritional intake by staff is often done at the expense of usurping the resident's autonomy and ignoring the resident's remaining abilities. In short, in the residential care setting, as the residents' dementia progresses, feeding tends to become increasingly non-functional. Therefore, it is worth noting, that Van Ort and Phillips (1995) found the behavioural interventions in their study extended the time needed for mealtimes.

The study

In this paper we report on a study which explored the issues associated with the oral intake of food and fluid, from the
perspective of the resident and/or carer. The participants in the study were purposefully selected residents/clients with a documented diagnosis of dementia who required full or partial assistance to eat and drink. The setting was a large metropolitan Adelaide not-for-profit residential care facility with 68 high and low care residents. Twenty-four participants and/or their guardians consented to be part of this study, as well as nursing and personal care staff who were observed as part of the non-participant observation.

Of those residents who participated, the majority were women, with an age range between eighty five and ninety five, with the majority being in end stage dementia. All participants had Resident Classification Scale categories of 1 and 2. The level of nutritional assistance varied within this group but most of the participating residents needed moderate to full assistance with any eating and drinking. Moderate assistance included prompting and some physical assistance.

In the overall study, the methodology generated both quantitative and qualitative data with the following methods being utilised:

- A nutritional assessment which included demographic and nutritionally focussed information and history.
- A 24 hour food and fluid intake chart which also included various activities associated with mealtimes.
- Non-participant observation of each resident and the person assisting with eating and drinking, for one mealtime.

This last method of data collection (the non-participant observation of mealtimes) and the consequent analysis of the qualitative data, is the focus of this article. This non-participant observation of each resident at a mealtime involved the researcher observing the complete environment of care and encompassed:

- observing the resident and the person’s assisting (whether that be a staff member or family person);
- the preparation and setting up involved, the content and quantity of food and fluid taken;
- the equipment and utensils utilised;
- all interactions including the physical activities of assisting, and verbal/ non-verbal communication;
- and lastly, how the mealtime was actually concluded for the resident.

Observations were also made of the immediate environmental factors impacting on each resident’s mealtime, including interruptions and distractions, personal hygiene needs, and aspects around clearing up after the meal.

Fieldnotes were undertaken during the mealtime observation and then these were transcribed and expanded soon afterwards. These transcriptions formed the basis of the qualitative analysis and the extrapolation of themes or issues. The results focus on a number of factors centred around the registered nurse role and the approach of nursing and personal care staff to the nutrition of residents with dementia. The experience and educational qualifications of the careworkers observed varied, but the profile would be similar to most Australian aged care facilities. This aged care facility did, however, embrace multiskilling of their nursing and personal care staff. This interpretive study yielded results that are qualitative in nature arising from the thematic analysis of the expanded field notes by the researchers. Different staff members were observed during the 24 observation periods but no count was made of the number as the resident was the focus under observation.

**Resultant themes**

**Approach and attitude of staff**

Each of the six units within the residential care facility demonstrated a particular ethos or culture which seemed to be related to those working in the unit, which appeared to be strongly influenced by the team leader who was generally a senior carerworker. From the data, the approach and attitude of the staff assisting with mealtimes impacted significantly on the intake of nutrition. If the approach was task orientated, mechanistic, routinised and lacked verbal interaction (prompts and cues), the residents’ intake was noticeably less with some residents having difficulty and/or refusing to eat eg walking away from the table.

On the other hand, if the approach of the carerworker was one that displayed a resident focus and sensitivity, including knowledge of that particular resident and dementia, interacting with the resident both verbally and non-verbally — it was a different picture. The nutritional intake was markedly increased and the mealtime was a positive social experience for the resident and the carerworker.

If the carerworker lacked an holistic understanding or did not have a focus or knowledge of dementia care, interactions were rushed and task oriented with an interest in getting the meal over and done with, and then concentrating on cleaning up. In some cases cleaning up during or after the meal seemed to be the priority. The mechanistic approach was compounded by time constraints and staffing levels at mealtimes, however, when best practice was observed by committed staff the mechanistic routine was overcome and the outcomes were positive for the resident.

**Commitment to dementia care**

From the observations it became obvious that the different approaches by carerworkers were paramount to the appropriate nutritional intake of residents with dementia.

Those staff who approached the resident with a real commitment did so by displaying attention to the resident’s needs and ‘being there’ with the resident, with the ultimate aim of ensuring the resident had a good nutritional intake and also a positive social experience, despite a rushed and busy environment. This display of best practice demonstrates that care does not have to be dominated by time and staffing constraints. A major determining factor in the outcome of the mealtime experience included the person assisting with the meal having:

1. a knowledge of dementia;
2. a commitment to the relationship with the resident;
3. the ability to interact with the person in an appropriate way maintaining and restoring dignity; and
4. taking that extra step in the care process.

**RN supervision and support**

During the non-participant observations it became apparent that Registered Nurse supervision was of paramount importance. The assessment of difficulties experienced by the resident was often out of the scope of the careworkers in attendance. Often a Registered Nurse intervened during mealtimes to address problems with eating, swallowing, inadequate intake, oral care and an incident of potential aspiration. On two occasions it was noted that a registered nurse, who was not directly involved in the unit, intervened to provide assistance to residents and their careworkers. These two episodes involved a separate aspiration incident and a choking episode. This emphasised the importance of nursing knowledge in the assistance of eating and drinking for residents with dementia.

An area where registered nurse assessment was required involved the provision of inappropriate foods or texture of foods to residents who required a modified diet due to swallowing difficulties. Other incidents where a Registered Nurse role was seen to be paramount included the assessment of non-verbal communication from residents, not responded to appropriately by careworkers because of knowledge deficits. Further Registered Nurse assessment in a number of cases included changes in seating, positioning, environment and approach.

The Registered Nurse interventions in these instances were instrumental in changing the practice of the careworkers, highlighting the importance of professional assessment and knowledge in the area of dementia care and nutrition.

In one particular unit where data collection occurred, it was evident that the Registered Nurse was instrumental in raising staff morale. This was evident through inspiring staff to be interested in their work and wanting to be the best at what they do for the residents. This support by the Registered Nurse, the researcher believed, not only contributed to the ethos of the unit and to the attainment of best practice at mealtimes but also demonstrated the importance of professional leadership.

**Resident family, visitors and volunteers**

It was obvious during the research that the residential care facility concerned encouraged relatives, volunteers and friends to become involved in the mealtine culture of the facility. Relationships were established and nurtured whereby family, friends and volunteers were actively involved and welcomed during mealtimes. Family members assisted with the intake of nutrition for the resident and together with the volunteers participated in the actual preparation, cooking and cleaning up after meals.

Those family members who assisted with eating and drinking did not have the same time constraints or task orientation placed upon them as did the careworkers. Although their knowledge base and assessment skills were minimal in most cases, the fact that they were concentrating on ‘being there’ with their relative made a difference to the nutritional intake and social interaction the resident experienced. The question arises as to where does exploitation start, given the commitment of some family members towards the care and support of their relative in the present residential care climate. In one particular case, the interaction of the daughter and her mother during mealtimes was the only way love and needing to be involved in care could be expressed.

**Role models**

The Registered Nurse demonstrated through direct and indirect supervision of mealtimes the importance of optimising the residents’ independence and nutritional intake.

This was undertaken through:
1. understanding non-verbal communication;
2. assessment and anticipation of difficulties with handling of food and intake, swallowing, aids, positioning and acting promptly and appropriately;
3. reducing the many distractions around mealtimes;
4. prompts and cues to the residents and the careworkers; and
5. demonstrating how a resident can be guided to be more aware of their meal and the eating and drinking process.

The demands of the role of Registered Nurses in aged care settings does not necessarily allow their presence during all mealtimes. However, it was observed that when the Registered Nurse entered the area, there was often an assessment made and a change of practice recommended and initiated immediately.

Registered Nurses were not the only role models. In a number of instances a careworker with the right attitude, knowledge and approach demonstrated positive role modelling to other careworkers. Also, in this particular setting the Director of Nursing was often involved in mealtimes and provided an excellent role model for the staff through appropriate assessment and her approach to assisting residents with meals and fluids. This was most obvious when she was approached by staff who were experiencing problems and were concerned about a particular resident’s difficulty with intake. She was able to demonstrate a thorough assessment of the situation and make necessary changes during the meal and to the future plan of nutritional care.

**Discussion**

This study and others point out the need for more education — education that promotes sensitivity to needs and the ability to create an atmosphere that facilitates communication in all its’ dimensions, so that care is person-focused. The importance of individualised care in this sense has been emphasised (Kayser-Jones 1996). The preliminary results of this study suggest that careful attention to communication will enhance understanding and facilitate the development of resident-focused interventions, thus resulting in better care outcomes for all concerned.
Unfortunately, the effect of the organisational context and particularly staffing levels on eating behaviour shows that inadequate staffing leads to hurried, mechanistic care (Kayser-Jones 1997; Kayser-Jones & Schell 1997). This level of care demands a resident/staff ratio, a necessary skill level and most importantly the time to put into practice and maintain. All of which are in serious jeopardy in aged care at the present time. As long as 'mass production' working conditions exist, against their will, nurses and caregivers cope with their workload by prioritising tasks, being as mechanically efficient as possible, and by using task-oriented methods in order to meet the basic physical needs of their residents (custodial/maintenance care versus therapeutic care).

Inevitably this environment hinders holistic care and continuity of care, whilst nurse-resident/caregiver-resident interactions diminish. Kayser-Jones and Schell (1997) noted that the staff/resident ratio was higher on day shifts where the ratio at lunchtime was about 1:3.5. By comparison, in the evening, two caregivers had full responsibility for feeding or assisting 10–14 residents, yielding a 1:5 to 1:7 ratio. These authors point out that without supervision and overwhelmed by the magnitude of their daily task, the caregivers coped with the situation in the best way they could. In order to finish feeding residents within an hour, they developed mechanistic, assembly line strategies.

A crucial factor appears to be the number of different staff feeding individual residents over a period of time and the fact that mealtimes are often task rather than resident-centred in order to save time (Athlin & Norberg, 1998; Osborn & Marshall 1993; Osborn & Marshall 1992). Pierson (1999) found in her study, that although there were no set time limits for the length of meals and no instructions to feed residents for one hour only, most feedings she observed did not last more than one hour. Maintaining mealtimes of no more than one hour seemed to be an unwritten rule among the staff. Pierson (1999) also found that rarely was there a change in the location of residents during meal times, although there was great variation in caregivers assisting residents.

The time-limited nature of mealtimes is clearly detrimental to the care of the resident, as caregivers' tenseness and hurry are communicated to them. Kayser-Jones and Schell (1997) observed that residents' subsequent anxiety may cause them to cough and experience difficulty in swallowing and this study supports this. The use of force-feeding was the most disturbing finding of research by Kayser-Jones and Schell (1997) and Porter, Schell, Kayser-Jones and Paul (1999). They found that because caregivers wanted residents to consume most of their food within a set time, they often resorted to feeding methods (caregivers gave residents large spoonfuls of food and forced them to take huge swallows of the mixture) that were ethically questionable and dangerous, especially for residents with dysphagia. Kayser-Jones and Schell (1997) found that although the residents were too impaired to explain why they resisted being fed, their observations indicated that one reason some dysphagic residents turned their heads to the side when being fed was because they may have been protecting themselves from being fed too quickly. These researchers emphasise the need for staff to understand that feeding residents forcefully against their wishes places them at great risk for aspiration or incomplete feeding.

When residents are eating-dependent their nutritional care is profoundly dependent on the interactional skills and abilities of the caregivers (Schell & Kayser-Jones, 1999). As this study suggests it takes skill and patience to communicate with a cognitively impaired person and while the caregivers observed in this study tried to overcome the obstacles to communication that existed, they were not always successful. Caris-Verhallen, Kerkstra, and Bensing (1999) suggest that one of the solutions in this area would be the establishment of more staffing. However, simply employing more staff does not necessarily lead to better communication and improved quality of care, as studies by Pool (1983), Liebbroe and Visser (1986), and Wilkinson (1991 cited in Caris-Verhallen et al., 1999) have found.

Outcomes

As a result of this study, the residential care facility involved has become even more aware of the importance of the issues around the nutritional intake of residents with dementia. In line with the best practice initiatives already evident in this facility, practices have been reviewed and changes implemented in the following areas as a direct result of the issues raised and in line with the standard 2.10, which refers to nutrition and hydration.

- The development of a dietary guidelines document including information on what constitutes an adequate diet for residents with dementia.

- Workshops for careworkers to raise the awareness of staff about nutrition and dementia and the associated issues.

- Extra staff to be employed to cover mealtimes.

- More information is to be given to families about what the facility can supply and the dietary needs of the resident through the induction booklet for new residents.

- A mission statement encompassing the nutritional needs of residents with dementia be developed for inclusion in the catering manual.

- Implementation of a model of care centred around the nutritional needs of residents.

Conclusion

The economic constraints in the present aged care climate means that nurses and careworkers are faced with many difficulties when attempting to address the nutritional and hydration needs of residents with dementia.

In aged care, staff are challenged by a health care system that imposes many time constraints, especially through the ever increasing documentation requirements for funding. A reduction line mentality lends itself to poorly managed care and fails to meet the needs of residents with dementia. It is difficult, in this climate, to implement the most basic interventions in an holistic manner for the residents in our
care. This raises the question as to whether we are conforming to the chaos and constraints, rather than striving to alter them.

The importance of mealtimes and all that it encompasses to the person with dementia cannot be underestimated, and it is often the only enjoyment these people experience. Because of this, there is an urgent need to grasp hold of the opportunities provided during mealtimes to enhance the overall care provided. While to go further requires a change in the focus from activities centred on personal hygiene (and that is what it has become), to a change of focus that revolves around mealtimes instead, encompassing social interaction and lifestyle endeavours.

Observations recorded through this study reveal that understanding and management of nutritional assistance is complex, however, there is an urgent requirement for increased awareness through education of both Registered Nurses and care workers. It is important for nursing and personal care staff to develop their own understanding and care philosophy, so necessary in this area of practice. Improved interactions that maintain and restore dignity, and care opportunities that could enhance the mealtime activity for residents with dementia are attainable.

The challenge for nursing staff is to be aware of the potential to undertake the activity with knowledge, commitment and sensitivity within the time constraints associated with the staffing levels and skill mix presently in place.

Current experience and observation has revealed that the types of practices criticised in the literature such as task oriented care, which causes stress in both residents and staff and inadequate resident care continues (even with the emphasis on improving care standards). As does a failure to recognise the importance of mealtimes/nutrition in the dementia care process and a failure to grasp hold of the opportunities provided during this time to enhance care provided. Furthermore, observations revealed that understanding and management of nutritional assistance was less than adequate and that there was an urgent requirement for increased education and training for all staff who are providing nutritional assistance to this vulnerable population.

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References


