Australian Journal of DementiaCare Research Focus

This section aims to provide a channel of two-way communication between researchers and practitioners in the expanding field of social, psychological and nursing research in dementia care, including all aspects of nursing and care practice, communication and the environment.

The Research Focus section of the *Australian Journal of Dementia Care* aims to keep readers up to date with the fast expanding field of social, psychological and nursing research in dementia care. By this we mean every aspect of person-to-person communication, nursing and care practice and organisation, and the influence of all aspects of the environment. The aim is to provide a channel of two-way communication between researchers and practitioners, to ensure that research findings influence practice and that practitioners' concerns are fed into the research agenda. We would like to hear from you, specifically with:

- notice of the publication (recent or imminent) of peer reviewed papers with practical relevance to dementia care;
- research reports available for interested readers;
- requests or offers for sharing information and experience in particular fields of interest.

What works to improve residential dementia care?

How can staff have the greatest impact on quality of dementia care and quality of life for people living with dementia in residential care? Researchers **Katrina Anderson** and **Annaliese Blair,** from the Southern NSW Local Health District Aged Care Evaluation Unit, explain

In response to the Royal Commission into Aged Care Quality and Safety, nearly $8 billion has been announced in the Federal Budget to transform residential aged care in Australia, with $229.4 million aimed specifically at people living with dementia (Australian Government Department of Health 2021).

There is vigorous public debate about how to ensure that these funds are targeted in areas most likely to improve care and quality of life. One thing is clear – residential aged care staff are at the centre of many of the suggested improvements, from increased care staff hours to increased training. While lived experience and expert opinion form an important part of the debate, it is also crucial to ask – what does the evidence say about where and how it is most effective to intervene with staff in order to improve residential dementia care?

To answer this question, we embarked on a series of studies aimed at identifying key factors relating to care staff that lead to good quality of care and quality of life for residents with dementia. Contrary to popular opinion, we found that increasing staff numbers and the amount of time Registered Nurses (RNs) spend with individual residents is not the whole solution.

More positive physical and verbal behaviour by staff to residents was a particularly influential aspect of improving quality of care.
Photo: www.freepik.com

In July 2020, we submitted the findings from these studies and our recommendations (outlined later in this article and in the Key Targets infographic on p32) to the Royal Commission into Aged Care Quality and Safety, some of which are reflected in the Royal Commission's *Final Report* (Commonwealth of Australia 2021).

Literature review

Firstly, in 2016 we conducted two systematic reviews of the published international scientific literature over the previous 20 years (1995-2015) with the aims of:

- Determining which aspects of residential care staff experience, practice, belief, or deployment it would be most beneficial to target in interventions aimed at improving residential dementia care and quality of life (Anderson *et al* 2016), and;
- Identifying interventions with staff that have successfully improved quality of dementia care and quality of life (Bird *et al* 2016).

The reviews indicated that for residents with dementia:

- When staff treat and interact empathetically and humanely in care, these staff behaviours are associated with better mood for residents, delayed functional dependence and better food intake (Amelia 1999; Chappell & Reid 2000; McGilton *et al* 2012; Sjögren *et al* 2013; Zuidema *et al* 2010).
- Where there are more RNs, there is lower use of psychotropic medications (Kim & Whall 2006; Kleijer *et al* 2014).

Staff	Facility	Quality of Care	Quality of Life	Control
Dementia qualifications	Facility provided training	Treatment for food intake	Overall QoL	Proportion with dementia
Education	PCA minutes per resident	Treatment for fluid intake	Frailty	Number of beds
Staff position	RN minutes per resident	Psychotropic medications	Depression	Environmental audit tool
Experience	Shift organisation	Restraint use	Pain	Carlson Comorbidity Score
Strain	Proportion permanent staff	Staff treatment (ratings)	Agitated behaviours	Age
Dementia knowledge	Manager experience	Staff treatment (observed)	BMI	Psychiatric co-morbidities
Restraint attitudes	Manager qualifications (RN)	Activities	Food intake	
Fall and pain attitudes	Structured activities	Adverse incidents	Fluid intake	
Recent training	Access external health professionals	Overall QOC	Mortality	
Time with residents		Assistance with meals	Positive expressions	
		Communicating about residents	Ease/ engagement with staff	
		Person-centred care		
		Usage other health professionals		

Table 1: A summary of the measures used by the authors in their research to identify which factors have the greatest influence on quality of dementia care and quality of life

- Empathy around the risk of residents falling or being in pain is not enough; staff also need to be educated about the dangers of restraint (Dever Fitzgerald *et al* 2009).
- There have been high-quality interventions that have improved the way staff interact with residents, including restraint reduction and improving personal care, with effects maintained after the intervention phase has finished (Dever Fitzgerald *et al* 2009). However, these interventions are intensive, requiring extensive on-site emotional and practical support.
- There were still many unanswered questions regarding how to assist staff to have the greatest impact on dementia care and quality of life (Anderson *et al* 2016).

Our study

Following these reviews, we conducted an observational longitudinal research project from 2017-2019 to identify which staff factors have the greatest influence on quality of dementia care and quality of life.

We have published comprehensive findings from this study (Anderson & Blair 2021) to guide clinicians and researchers to focus on the most useful targets for intervening with staff to improve the quality of care they provide; targets that are not simply subjective but are evidence-based. The results, published in the *Archives of Gerontology and Geriatrics*, are freely available at http://bit.ly/what-have-staff-got-to-do-with-it

Over a 10-month period, we followed 247 older adults with dementia from 12 not-for-profit residential care facilities, their families/care partners (n=225), managers (n=12) and staff (n=228). Facilities ranged in size from 10 to 137 beds and were located across remote, rural and metropolitan areas of NSW and the ACT. Data was collected over three time points using staff surveys, resident file audits, family member and resident interviews, resident and staff observations and organisational audits of staffing, skill mix and staff education.

Quality of care was broadly defined as anything done to or with the resident by the facility or staff, and quality of life as the resident's standard of health, participation in life and comfort. In order to encompass all aspects of these broad definitions, a large range of measures were chosen based on the systematic review articles. The table above is a summary of the measures used.

What did we find?

Overall, we confirmed that the quality of the care provided by staff is integral to the quality of residents' lives. The findings are grouped under four key areas: care, staff training and qualifications, organisational factors, and restraint use. The key findings are summarised below. Specific outcomes for each area are detailed in our published study (Anderson & Blair 2021).

Care

The quality of the care provided by staff is integral to the quality of residents' lives.

It has pervasive and consistent influences on multiple quality of life measures, such as pain, depression, agitated behaviours, resident ease and engagement with staff, and overall quality of life.

Particularly influential aspects of care for improving quality were: minimal or no psychotropic medication use; more positive physical and verbal behaviour by staff to residents; and better overall quality of care. As noted in the systematic review (Bird *et al* 2016), it is possible to successfully reduce psychotropic medication use and change staff behaviour but this requires intensive resourcing. It is not the work of a moment.

Providing greater assistance during meals is crucial to resident wellbeing.

Having more staff available to monitor, encourage and assist residents with dementia at mealtimes resulted in less pain, higher fluid intake and greater ease and engagement for residents.

The beneficial effects of skilled staff interacting with residents aligned with the overall findings of the systematic review; when staff treat and interact empathetically and humanely in care, there is a relationship with better resident affect, delayed functional dependence and better food intake (Anderson *et al* 2016).

Staff training and qualifications

The focus, timeliness and quality of the qualifications or training courses need to be scrutinised.

Greater dementia knowledge and more training that is seen by staff as relevant to their work was associated with better staff treatment of residents. In turn, this led to an increase in the number of residents with higher Body Mass Indexes (BMIs) and who were more at ease and engaged with staff.

But, prioritising formal qualifications in dementia, at least in their current form, did not necessarily lead to tangible improvements in the care, and therefore the quality of life, of residents.

Having vocational or higher qualifications and increased levels of training provided by the facility were all associated with more adverse incidents, including falls, hospitalisations, and pressure sores. We are unable to explain this finding and suggest further research is required.

The large amount of training required by accreditation and the large number of staff involved meant much training was conducted in a didactic manner (usually online) with little opportunity for engagement or hands-on learning to ensure quality outcomes (for example, learning how to shower a resident via an online learning course).

Managers must listen to staff about the training they need.

Staff ratings of the usefulness of training for their everyday work were associated with better staff treatment of residents, indicating that staff are well placed to tell their managers what training they require to improve care. It would also be helpful if those delivering the education have clinical experience at the care coalface.

Work with staff who are not RNs to increase communication around residents; and, work with RNs to implement structural changes to enhance behaviours towards residents.

Personal care assistants were more likely than RNs to provide empathic, warm care and were more likely to provide assistance during mealtimes; RNs, particularly more experienced staff, communicated more about residents than personal care assistants.

While recognising that RNs and care staff do perform different roles (Aged Care Workforce Strategy Taskforce 2018), there should be greater recognition of the value of all roles, ensuring that communication exists across roles and that all care tasks involving residents are carried out with empathy.

Organisational factors

Finding a balance between invigorating staff with rotating shifts and capitalising on the long-term relationships acquired through stable shifts could be an important consideration when looking to improve the quality of life of residents.

Rotating shifts, where staff rotate through various areas of the facility, rather than being permanently assigned to only one area, promoted greater mealtime assistance, more treatment of food and fluid issues and higher recreational activity engagement.

Permanent shifts led to improved overall quality of care. This could be explained by staff on rotating shifts being energised and predominantly engaged in the physical aspects of care, whereas permanent shifts allow staff to connect with residents in a more individualised, personal way.

Engaging residents in recreational activities is equally important as good physical care for improving quality of life.

The way facilities are staffed and organised had the greatest impact here: more experienced managers, greater access to external health professionals, rotating shifts, and higher RN-to-resident ratios but lower personal care assistant-to-resident ratios all promote more activity engagement.

Higher levels of dedicated activity staff did not necessarily lead to increased activity involvement for residents. Having all staff skilled to support meaningful and spontaneous occupation and activity is an alternative to dedicated activity staff (Morgan-Brown *et al* 2013).

Having a higher proportion of permanent staff is not the panacea.

This had a positive impact in terms of the overall care of residents, but at the expense of increased restraint and psychotropic use.

Overall, more experienced managers with a background in registered nursing promoted better quality of care.

Improving care is not as straightforward as increasing the amount of time each RN has to spend with each resident.

On the positive side, when RNs had more time to spend on care, restraint use appeared lower and activity levels were higher. On the negative side, more adverse physical incidents occurred and the quality of the care and treatment of the residents was reduced**.** This may be because time-poor RNs are too rushed to provide empathic care, with most facilities in our study allocating between five and 29 minutes of RN time per resident per day.

Simply increasing personal care assistant numbers is also not the whole solution.

Higher restraint use and lower activity levels occurred when personal care assistants had more time to spend with residents. These outcomes may be due to personal care assistants having less education about the dangers of restraint use, leading them to increase restraint and reduce activity in well-intentioned, but misguided, attempts to protect residents from falls.

Restraint use

Physical restraint is unequivocally damaging for residents.

Physical restraint led to more pain and depressive symptoms, lower food intake and BMIs, less ease and engagement with staff, and fewer positive expressions (eg, smiling) and more negative expressions (eg, pacing).

The use of psychotropic medications led to overall reduced quality of life and fewer positive verbal and physical expressions by residents. It increased resident depression, pain and agitated behaviours.

Reducing restraint is not as straightforward as having well-intentioned staff who care and are concerned about the residents.
When staff were more concerned about a resident falling or being in pain, they tried to reduce this risk in various ways. Some of these risk management strategies were well informed and helpful (eg, assistance with meals), while others led to greater harm (eg, increased use of psychotropic medications and restraint). Upskilling staff in the most helpful ways to respond to their concerns about pain and falling is crucial.

It is possible to effectively reduce restraint use over the medium- and long-term.
This is possible through basic staff education about the dangers of restraint and the alternatives to restraint, plus mentoring of the staff (Bird *et al* 2016). From our study, reliance on restraint use and psychotropic medications also appeared less prevalent when the facility manager was a RN.

Key recommendations

We submitted the findings summarised above, along with recommendations arising from our study (see Key Targets infographic below) to the Royal Commission into Aged Care Quality and Safety in July 2020. Some of these recommendations are reflected in the Commission's *Final Report* (Commonwealth of Australia 2021). Our recommendations are:

1. *Restraint reduction is an obvious target* when you look at the unequivocal harm caused by physical restraint use and the effectiveness of intervening in restraint use. This would not necessarily be difficult or expensive, given that it is possible to effectively reduce restraint use through basic staff education around restraint, plus mentoring of staff or similar support (eg, Gulpers *et al* 2011; Westbury *et al* 2018).
2. *During meals, increase the amount of monitoring, encouragement and physical assistance provided to residents by staff.* Specially-trained volunteers have successfully been used in acute hospital settings to provide assistance with meals and fluids for patients with cognitive impairment (Blair *et al* 2018, 2019).
3. *Support and upskill care staff so that they treat and interact empathetically and humanely with residents.* Whilst intense resourcing would be needed, with extensive, ongoing onsite emotional and practical support, this is at the heart of the quality of life of residents in residential aged care. For example, *Bathing Without a Battle* (Barrick *et al* 2008, https://bathingwithoutabattle.unc.edu/) provides practical approaches to supporting empathetic care and reducing anxiety for the person with dementia. A number of other education resources have been developed using this approach (Bird *et al* 2016).
4. *Increase recreational activities for residents* by training and involving all staff rather than only dedicated activity or lifestyle staff.
5. *Increase RN time whilst upskilling RNs in empathetic care* to allow them time to provide good quality care.
6. *Provide pathways for RNs to upskill and transition into management roles* as managers with a nursing background are more likely to promote better quality of care overall.
7. *More training and qualifications does not necessarily translate to better care.* To ensure relevance, care staff should be consulted about what training would be most useful in their day-to-day work, with training ideally provided by those with clinical experience. Training should be evaluated by its ability to be translated into both increased knowledge and changes in care.
8. *Reconsider the accreditation requirements around training.* Consider striking the balance between ensuring necessary legal and accreditation obligations (eg, work, health and safety) are covered and ensuring staff receive training that is relevant to how they provide empathic and humane care (eg, psychosocial alternatives to restraint use).
9. *The vocational and higher qualifications sector needs overhauling* to ensure that any qualifications in aged care or dementia care are relevant to the physical and emotional care that is actually required. Practical placements and observations of care provision are necessary to ensure that intellectual knowledge translates to humane care.

Conclusion

While the Royal Commission recommendations and subsequent funding for restraint reduction and increased staffing and training align with the findings of our research, the detail will be important. Simply increasing staffing will not solve all issues and may create others. Upskilling staff requires good quality, interactive training, ideally provided by clinicians who are then able to provide ongoing mentoring and support to ensure that knowledge is translated into practice.

Ultimately, any changes

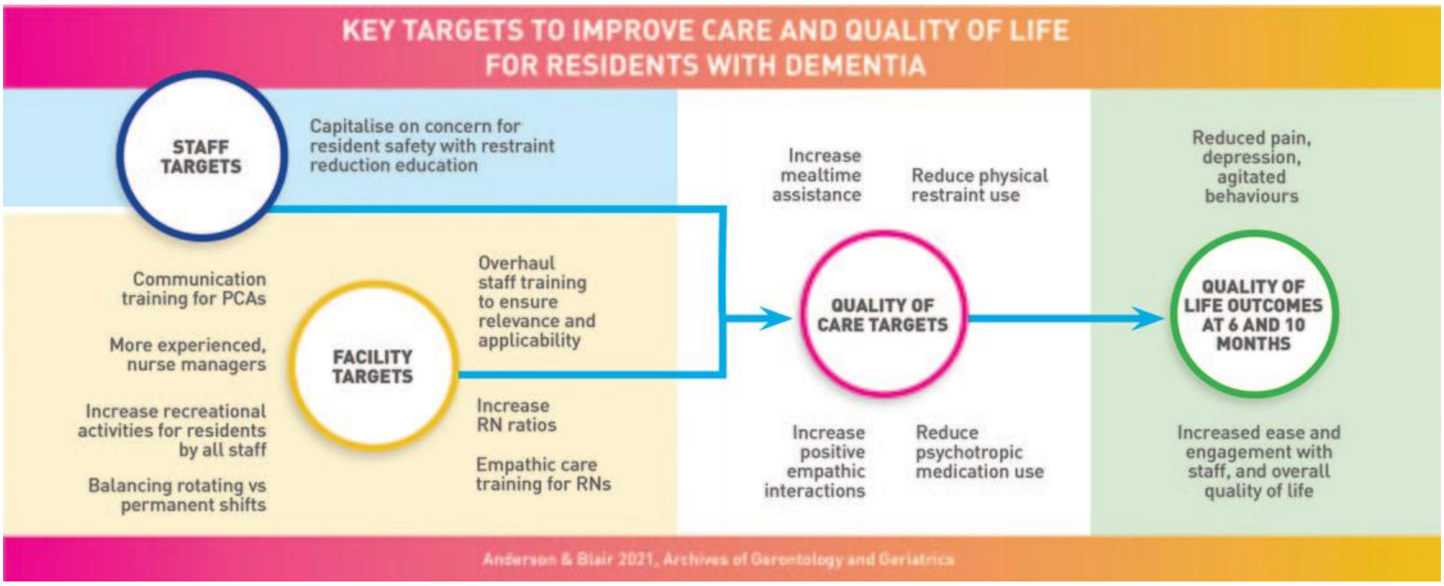

Image created by Katrina Anderson and Annaliese Blair. Reprinted here with their permission must be rigorously evaluated and adjusted for their effects on the most important goal: improved quality of life for people with dementia. ■

The full publication of the research discussed in this article is available via open journal access at: http://bit.ly/what-have-staff-got-to-do-with-it

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References

Aged Care Workforce Strategy Taskforce. (2018). *A Matter of Care: Australia's Aged Care Workforce Strategy*. Commonwealth of Australia. Available at: http://bit.ly/agedcare-workforce-strategy.
Amelia EJ (1999) Factors Influencing the Proportion of Food Consumed by Nursing Home Residents with Dementia. *Journal of the American Geriatrics Society* 47(7) 879-885.
Anderson K, Bird M, MacPherson S, Blair A (2016) How Do Staff Influence The Quality Of Long-Term Dementia Care and The Lives Of Residents? A Systematic Review of The Evidence. *International Psychogeriatrics* 28(8) 1263-1281.
Anderson K, Blair A (2021) What Have Staff Got To Do With It? Untangling Complex Relationships Between Residential Aged Care Staff, The Quality Of Care They Provide, and The Quality Of Life Of People With Dementia. *Archives of Gerontology and Geriatrics 94* 104378.
Australian Government Department of Health (2021) *Aged Care – Reforms to Support People Living With Dementia and Their Carers* (Budget 2021-22). Australian Government Department of Health. Available at: http://bit.ly/aged-care-reforms-dementia.
Barrick AL, Raider J, Hoeffer B, Sloane PD, Biddle S (2008) *Bathing Without a Battle: Person-Directed Care of Individuals with Dementia*. US: Springer Publishing Company.
Bird M, Anderson K, MacPherson S, Blair A (2016) Do Interventions With Staff In Long-Term Residential Facilities Improve Quality of Care or Quality of Life For People With Dementia? A Systematic Review of The Evidence. *International Psychogeriatrics* 28(12) 1937-1963.
Blair A, Anderson K, Bateman C (2018) The "Golden Angels": Effects of Trained Volunteers On Specialling and Readmission Rates For People With Dementia and Delirium In Rural Hospitals. *International Psychogeriatrics* 30(11) 1707-1716.
Blair A, Bateman C, Anderson K (2019) "They Take A Lot of Pressure Off Us": Volunteers Reducing Staff and Family Care Burden and Contributing To Quality Of Care For Older Patients With Cognitive Impairment In Rural Hospitals. *Australasian Journal on Ageing* 38(S2) 34-45.
Chappell NL, Reid RC (2000) Dimensions of Care for Dementia Sufferers in Long-Term Care Institutions: Are They Related to Outcomes? *The Journals of Gerontology: Series B* 55(4) S234-S244.
Commonwealth of Australia (2021) *Royal Commission into Aged Care Quality and Safety Final Report*: *Care, Dignity and Respect.* Available at: https://agedcare.royalcommission.gov.au/publications/final-report.
Dever Fitzgerald TG, Hadjistavropoulos T, MacNab YC (2009) Caregiver Fear of Falling and Functional Ability among Seniors Residing in Long-Term Care Facilities. *Gerontology* 55(4) 460-467.
Gulpers MJM, Bleijlevens MHC, Ambergen T *et al* (2011) Belt Restraint Reduction in Nursing Homes: Effects of a Multicomponent Intervention Program. *Journal of the American Geriatrics Society* 59(11) 2029-2036.
Kim H, Whall AL (2006) Factors Associated With Psychotropic Drug Usage Among Nursing Home Residents With Dementia. *Nursing Research* 55(4) 252-258.
Kleijer BC, van Marum RJ, Frijters DHM *et al* (2014) Variability Between Nursing Homes In Prevalence Of Antipsychotic Use In Patients With Dementia. *International Psychogeriatrics* 26(3) 363-371. Cambridge Core.
McGilton KS, Sidani S, Boscart VM *et al* (2012) The Relationship Between Care Providers' Relational Behaviors and Residents' Mood And Behavior In Long-Term Care Settings. *Aging & Mental Health* 16(4) 507-515.
Morgan-Brown M, Newton R, Ormerod M (2013) Engaging Life In Two Irish Nursing Home Units For People With Dementia: Quantitative Comparisons Before and After Implementing Household Environments. *Aging & Mental Health* 17(1) 57-65.
Sjögren K, Lindkvist M, Sandman P-O *et al* (2013) Person-centredness and Its Association With Resident Well-Being In Dementia Care Units. *Journal of Advanced Nursing* 69(10) 2196-2206.
Westbury J, Gee P, Ling T *et al* (2018) More Action Needed: Psychotropic Prescribing In Australian Residential Aged Care. *Australian & New Zealand Journal of Psychiatry* 53(2) 136-147.
Zuidema SU, de Jonghe JFM, Verhey FRJ, Koopmans RTCM (2010) Environmental correlates Of Neuropsychiatric Symptoms In Nursing Home Patients With Dementia. *International Journal of Geriatric Psychiatry* 25(1) 14-22.

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