


Challenging situations and competence of nursing staff in nursing homes for older people with dementia

Paula Piirainen RN, MSc, PhD candidate¹  | Hanna-Mari Pesonen RN, PhD, Principal Lecturer² | Helvi Kyngäs PhD, Professor³ | Satu Elo PhD, Docent, Principal Lecturer⁴

¹Research Unit of Nursing Science and Health Management, University of Oulu, Oulu, Finland

²Centria University of Applied Sciences, Kokkola, Finland

³Research Unit of Nursing Science and Health Management, University of Oulu, Oulu, Finland

⁴Lapland University of Applied Sciences, Kemi, Finland

Correspondence

Paula Piirainen, Research Unit of Nursing Science and Health Management, University of Oulu, Oulu, Finland.
Email: paula.j.piiirainen@gmail.com

Funding information

the Finnish Nurses Association; the Scholarship Fund of the University of Oulu; The Finnish Nursing Education Foundation sr

Abstract

Background: Dementia causes behavioural changes in people that often lead to earlier placement in a nursing home. Staff can find these behavioural changes challenging and require specific competencies to support and care of people living with dementia. However, there is little information regarding the competencies nurses require in dementia care. Thus, the aims of this study were to determine the prevalence of challenging situations in nursing homes of older people with dementia, characterise the nursing staff's responses to such situations and contribute to a model outlining competences that dementia care nurses require.

Methods: Data were collected using mixed methods in a cross-sectional survey of views of nursing staff ($n = 106$) in two nursing homes in Finland during May to June 2018 using a structured questionnaire including open-ended questions. Quantitative data acquired were analysed statistically, and responses to the open-ended question were analysed using content analysis methodology.

Results: Most nurses (98%) reported that challenging situations occurred daily or weekly. The most common reported forms of challenging behaviour were as follows: wandering, restlessness, constant leaving, repeated inquiries and requests and opposition to treatment (mentioned by 95%, 90%, 85%, 83% and 83% of respondents, respectively). Five key competencies were identified from their responses: practical knowledge, theoretical knowledge, therapeutic use of self, social competence and self-management. They also indicated significant correlations between leadership and both the impact of challenging behaviour on coping at work and use of physical restraints on older people with dementia.

Conclusion: Challenging situations in nursing homes of older people with dementia are very common. There is a need to identify specific competencies for caring for people with dementia in addition to updating official guidelines to handle such situations. The support of supervisors and competencies related to therapeutic use of self in nursing are highly important for nurses providing care for people with dementia.

Implications for practice: Understanding the importance of management style and its impact on nursing staff's courses of action in challenging situations are essential.

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2021 The Authors. *International Journal of Older People Nursing* published by John Wiley & Sons Ltd.

KEYWORDS

behavioural and psychological symptoms, challenging behaviour, competence, dementia, nursing home

1 | INTRODUCTION

Globally, numbers of older people, and those living with dementia, are rising (Livingston et al., 2020). Dementia prevalence increases rapidly with age (Organisation for Economic Co-operation & Development, 2017), according to a recent report by the World Health Organization (WHO, 2019) there are approximately 50 million people with dementia globally, and almost 10 million new cases are reported each year. Moreover, the number of people with dementia in Europe is expected to double by 2050 (Alzheimer Europe, 2020). In Finland alone, almost 200,000 people have some form of memory disorder, more than 14,000 new cases of dementia are reported every year, and a third of the older people in Finnish nursing homes have dementia (Finnish Institute for Health & Welfare, 2019).

One or more behavioural symptoms appear in up to 90% of people with dementia (Ballard & Corbett, 2010; Current Care Guidelines, 2017; Feast et al., 2016). Moreover, a set of these behaviours are commonly regarded as 'challenging', as they are defined as expressions of 'distress in an individual with dementia or others in the environment, such as staff arising from physical or psychological unmet need in the person with dementia' (Moniz-Cook & James, 2017). Common challenging behaviours include the following: wandering, repetitive questioning, sleep problems, agitation, aggression and a wide range of other inappropriate behaviours that are common reasons for placement in a nursing home (Kales et al., 2015; Margallo-Lana et al., 2001). Over 80% of older people with dementia in nursing homes express at least one form of these challenging behaviours (Bessey & Walaszek, 2019; Zwijsen et al., 2014). Similarly, Wetzels et al. (2010) found that 97% of older people with dementia in nine Dutch nursing homes monitored during a 2-year prospective cohort study presented at least one challenging behaviour. Challenging behaviour of persons with dementia can have both individual impacts on morbidity and mortality, but they also have much broader, global implications for health human resource use and care of older people (Legere et al., 2018). It should be noted that the term 'challenging behaviour' has been widely misused, usually euphemistically for aggressive and violent behaviour or in educational settings for disobedient and defiant behaviour. Partly for this reason, various professionals are applying other terms, such as 'behaviour of concern' (Cubit et al., 2007). However, we retained use of the term 'challenging behaviour', as defined above, because it was a key element of the conceptual background of the questionnaire applied in the study.

One of the primary goals in care for older people with dementia is to detect and address challenging situations (World Health Organization, 2019), but maintaining their personhood is also important (Kitwood, 1997). Therefore, caring for older people with dementia requires specific competencies, including knowledge of the emotional, cognitive and functional changes accompanying

What does this research add to existing knowledge in gerontology?

- The study increases information about challenging situations in the care of older people with dementia and nursing staff's responses to them.
- It enhances understanding of competencies required for caring for older people with dementia in long-term care.

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

- It highlights the importance of management style and its impact on nursing staff's courses of action in challenging situations.
- It also clearly indicates a correlation between leadership and the impact of challenging behaviour on coping at work.

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

- They can be potentially used in the development of training courses for nursing staff in the care of older people with dementia.
- They can be used in formulation of guidelines or recommendations for handling challenging situations in the long-term care of older people with dementia.
- They can be potentially used in the further studies such as to address the views of older people living with dementia and their family members.

dementia, so appropriate training of nursing staff is a crucial element of dementia care (Testad et al., 2010). In this paper, competencies are defined as complex combinations of knowledge, performance, skills, values and attitudes (Cowan et al., 2005), although generally the competencies needed for nursing older people are not well defined (Koskinen et al., 2015).

Hence, the WHO (2017) recommends that nursing homes for older people with dementia should develop the competencies of basic and specialised nursing staff to perform evidence-based, cultural- and human rights-oriented health and social care. According to Bing-Jonsson et al. (2016), a goal in nursing homes should be to ensure that staff can mutually strengthen each other's competencies so the sum of collective competence exceeds the amount of individual competence. However, there is limited information on experience of caring for older people with behavioural and psychological symptoms of dementia in nursing homes (Ostaszkiwicz et al., 2015). Moreover, Traynor et al. (2011) found no dementia competency

framework that is applicable across care settings or levels of practice, and we are not aware of any that have been subsequently published. However, an ability to respond to challenging situations has been identified as an important competence in gerontological nursing (Tohmola et al., 2020). Thus, the overall objective of this study was to increase understanding of both the challenges that arise in the context and the competencies required to address them and ultimately contribute to the development of a competency model.

2 | THE STUDY

2.1 | Aims

To address the lack of appropriate frameworks mentioned above, the aims of this study were as follows: to determine the prevalence of challenging situations in nursing homes of older people with dementia, characterise the nursing staff's responses to such situations and identify competencies that dementia care nurses require.

A questionnaire was formulated to address the following specific questions:

1. How often do challenging situations occur in nursing homes for older people with dementia?
2. What are the nursing staff's responses to such situations?
3. What kind of competencies do dementia care nurses require?

2.2 | Method

Data were collected using mixed methods in a cross-sectional survey of views of nursing staff in two nursing homes in Finland using a structured questionnaire, called 'Encountering a person with dementia in the nursing home' during May and June 2018. The structured questionnaire included open-ended questions, and it was distributed to a total of 127 nursing staff members. The participants included registered nurses ($n = 6$), who have completed a degree in nursing, and licenced practical nurses ($n = 121$), who have completed a vocational training in social and health care. In total, 178 older people lived in the nursing homes at the time of the study, they were all older than 65 years, and most had dementia.

Finnish nursing homes provide nursing services for people who can no longer afford the services they require at home. They are tenants and pay for the services and medicines themselves. There are generally several units in nursing homes: a short-term unit and varying numbers of long-term units. Older people stay in short-term units temporarily during times such as respite breaks for caregivers, and permanently in long-term units. Most of the nurses in the homes are licenced practical nurses, and staff are available 24 h a day.

The questionnaire and analysis of the acquired data are described in the following sections.

2.3 | The questionnaire

The questionnaire (Appendix A) was developed specifically for this study, based on a previous literature review by the present authors (Piirainen et al., 2020) in addition to earlier studies (Hynninen et al., 2016). The questionnaire contained 20 questions, concerning: background information (7 items), prevalence of challenging situations (1 item), forms of challenging behaviour (1 item), responses to challenging situations (1 item), competence (3 items), suitability of facilities (1 item), physical limitations (1 item), leadership (1 item), the impact of challenging behaviour on coping at work (1 item) and general nursing issues (3 items.)

Most (85%) of the questions in the questionnaire are from previous surveys, which have addressed validity issues (Hynninen et al., 2016; Saarnio et al., 2009). In this study, the content validity of the questionnaire was verified, following standard protocols for such instruments (Pittman & Bakas, 2010), by an expert panel consisting of four senior work experts with both training and practical work experiences of the nursing of older people and people with dementia.

The experts evaluated the questionnaire using an evaluation form inviting Likert-type responses and providing opportunities to add comments in free text. The content validity was found to be good, with a content validity index of 1.

A paper questionnaire was used in efforts to maximise the response rate. One of the authors submitted the questionnaires to the nursing home supervisors, who distributed them to nursing staff. Up to 3 weeks was allowed for completion and return of the questionnaires, and the total response rate was 83% ($n = 106$).

2.4 | Data analysis

IBM SPSS Statistics for Windows 25 was used to calculate descriptive statistics of the quantitative data and for both cross-tabulation and chi-square tests of relationships among the reported variables. Relationships of two continuous variables (working experience in nursing care of people with dementia and working experience in the present department) with the Likert scores were explored by Spearman's correlation analysis. Thresholds for significance and high significance were set at $p < .05$ and $p < .001$, respectively.

Responses to the open-ended question were subjected to inductive content analysis following Elo and Kyngäs (2008), using a word or concept as the unit of analysis. While reading the material, it was considered in relation to the research questions. Statements to the same effect were combined into sub-categories and given a descriptive name. The sub-categories were combined into generic categories and further into main categories. Numbers of times matter assigned to each category were recorded, and the results were quantified in terms of frequencies (f) that words and concepts assigned to sub-categories, generic categories and categories were mentioned in the participants' responses (Elo & Kyngäs, 2008).

2.5 | Ethical considerations

This study was conducted according to ethical recommendations in the World Medical Association Declaration of Helsinki. In addition, approval for the study was received from the Ethical Committee of The Northern Ostrobothnia Hospital District (approval no. 104/2016). Participation in the study was voluntary and the nurses responded to the questionnaire anonymously. All participants provided written informed consent and were aware that they could withdraw from the study at any time.

3 | RESULTS

3.1 | Demographics of sample

Most respondents working in the nursing homes were female (96%, $n = 106$), and their average age was 45 (range 63–18) years. Most (88%) were licenced practical nurses. On average, they had 11 years of working experience in dementia care and 4 years of working experience in their current department. Most (83%) were permanently employed, 78% worked in the long-term unit of their nursing home and the others in the short-term unit.

3.2 | The prevalence and forms of challenging behaviour

Most of the respondents (98%) reported that challenging situations occurred at their workplaces daily or weekly. The most common forms of challenging behaviour were wandering, restlessness, constant leaving, repeated inquiries and requests and opposition to treatment. These occurred 'very often' or 'often' according to 95%, 90%, 85% and 83% of the participants, respectively. Self-harm behaviours, such as people beating or biting themselves, occurred sometimes or seldom according to 70% of respondents. Inappropriate sexual behaviours also sometimes or seldom occurred according to 80% of respondents (Table 1). These were defined as specific sexual behaviours marked by apparent loss of control or intimacy-seeking that is misplaced in the social context or directed towards the wrong target, including behaviour that is sexually suggestive rather than sexual in form (de Medeiros et al., 2008).

More than half (56%) of the respondents reported that challenging behaviours of older people with dementia have a very strong or strong impact on coping at work. A third (30%) reported a moderate impact on coping at work. The chi-square test detected a significant association between leadership and the impact of challenging behaviour on coping at work ($\chi^2(5) = 13.357$; $p < .020$). Almost half (46%) of the participants indicated that the way their work unit is managed encourages them to carry out nursing work that takes into account needs of the older people with dementia. A very similar proportion (48%) indicated that the management style does not encourage them to engage in dementia care.

TABLE 1 The prevalence of challenging behaviours in the nursing homes for older people with dementia

Form of challenging behaviour	Very often or often % (n)	Sometimes or seldom % (n)	Never % (n)
Walking and wandering	95.3 (101)	4.7 (5)	0.0 (0)
Restlessness	89.7 (95)	10.4 (11)	0.0 (0)
Constant leaving	84.9 (90)	15.1 (16)	0.0 (0)
Repeated inquiries and requests	83.0 (88)	17.0 (18)	0.0 (0)
Opposition to treatment measures	83.0 (88)	16.9 (18)	0.0 (0)
Loud shouting	67.9 (72)	32.1 (34)	0.0 (0)
Transportation or violation of goods	66.0 (70)	33.0 (35)	0.0 (0)
Linguistic aggression (naming, intimidation, swearing)	64.1 (68)	34.9 (37)	0.0 (0)
Physical aggression (hitting, kicking, biting)	56.6 (60)	43.4 (46)	0.0 (0)
Suspiciousness	50.9 (54)	49.0 (52)	0.0 (0)
Bedtime difficulty	43.4 (46)	54.8 (59)	1.9 (2)
Spitting (including with food)	37.7 (40)	55.7 (59)	6.6 (7)
Passivity, withdrawal	33.1 (35)	65.1 (69)	0.0 (0)
Faecal messing	29.3 (31)	64.1 (68)	6.6 (7)
Improper dress or undressing	23.5 (25)	73.6 (78)	1.9 (2)
Inappropriate sexual behaviour	7.5 (8)	80.2 (85)	12.3 (13)
Self-harm (beating, biting, scratching, plucking)	4.7 (5)	69.8 (74)	25.5 (27)

3.3 | Nursing staff's responses to challenging situations

Primary nursing in nursing homes aims to take into account the life history and active daily life such as music, exercise and reminiscence of older person with dementia. Nearly all respondents (95.3%) reported that very often or often when older people with dementia present challenging behaviour they ask, What is wrong?, and organise activities for them, such as watching TV or listening to music (Table 2). They also reported that very often or often in such challenging situations they give time, talk, touch and are

close to the older person (97.2%). Respondents who reported asking older people with dementia what is wrong in challenging situations also generally reported spending time with them ($p = .016$, $r = .234$).

Several significant correlations between background variables and the nursing staff's responses in challenging situations were detected. According to Spearman's correlation analysis, the likelihood of nurses reporting that they asked older people with dementia What is wrong? in such situations was positively correlated with both the length of their work experience in caring for older people with dementia ($p = .037$, $r = .205$) and length of experience in their current department ($p = .031$, $r = .214$). Nurses were also less likely to give orders or forbid a person to do something if they had long work experience in dementia care ($p = .001$, $r = -.321$), or long experience in their current department ($p = .007$, $r = -.264$).

In nursing homes, a doctor is responsible for residents' medication and any restraint of their right to self-determination, such as a belt, should always be approved by the doctor. Approximately a third of respondents (37%) reported that physical restraints, such as belts and locked doors, are used very often or frequently in their work unit, and about a third (35%) reported that physical restraints are used sometimes. We detected significant negative correlations between leadership and both use of physical restraints ($p = .019$, $r = -.281$) and overall rating of the work currently performed by the work unit for older people with dementia ($p = .00$, $r = -.474$). Leadership that encourages caring for an older person with dementia taking into account the needs of the person apparently reduces use of physical restraints. Respondents who reported encouraging leadership in their work unit generally rated their work unit's care of older people with dementia more highly than other respondents. There was a significant negative correlation between taking older people with dementia into their own room and use of physical restraints ($p = .001$, $r = -.321$). Respondents who reported taking an older person with

dementia in challenging situations to their own room also reported more use of physical restraints than other respondents.

There were significant correlations between departments and both sedative medication use ($p = .011$, $r = .249$) and revision of treatment plans ($p = .038$, $r = .203$). Respondents who worked in the short-term unit gave sedative medications to older people with dementia in challenging situations and reviewed instructions for treatment plans more often than nurses working in the long-term unit. Respondents who reported not doing anything in challenging situations also reported giving sedative medications more often than other respondents ($p = .044$, $r = .201$).

3.4 | Competence of nursing staff in the care of older people with dementia

Three quarters of the respondents (76%) reported that they have very good or good communication competence in nursing care and co-operative skills (85%) with the family of an older person with dementia. Less than half (42%) reported having average or passable competence in utilising the life history of an older person with dementia in nursing care. A third (31%) reported that they have average or passable competence in handling challenging situations in nursing care of older people with dementia.

Respondents evaluated (on a scale of 1–10) their own competence in nursing care of older people with dementia at 7.70 ± 0.87 . Age correlated positively with the assessment of competence in nursing care ($p < .05$, $r = .214$). Work experience in caring for older people with dementia ($p < .001$, $r = .334$) and work experience in the current department ($p < .000$, $r = .361$) also correlated positively with the assessment of competence in nursing care. In contrast, there was a significant negative correlation between age and self-reported communication skills ($p = .004$, $r = -.276$). Respondents

TABLE 2 Nursing staff's responses in challenging situations

Response	Very often or often % (n)	Sometimes or seldom % (n)	Never % (n)
I'm present for the patient; touch, speak and listen	97.2 (103)	1.9 (2)	0.0 (0)
I ask what is wrong	95.3 (101)	3.8 (4)	0.0 (0)
I organize activities for her/him, for example, switching on the TV in the room	87.7 (93)	12.3 (13)	0.0 (0)
I use humor	32.1 (34)	51.9 (55)	12.3 (13)
I tolerate the behavior because s/he has the right to become angry	31.1(33)	61.3 (65)	4.7 (5)
I take her/him to her/his own room	29.3 (31)	66.0 (70)	2.8 (3)
I check the patient's record for information about her/his background and possible instructions	16.9 (18)	67.0 (71)	15.1 (16)
I give orders to her/him	8.4 (9)	65.1 (69)	25.5 (27)
I give sedative medication to her/him	5.7 (6)	74.5 (79)	17.9 (19)
I do nothing	0.0 (0)	45.3 (48)	51.9 (55)

who rated their own interaction skills good in nursing were generally younger than other respondents.

Respondents were also asked the following open-ended question about the competencies required for caring for older people with dementia: 'What kind of competencies does caring for an older person with dementia require from you? In my opinion, it requires the following types of competencies'. In total, 96 responses were received. Content analysis of these responses identified five competencies that nursing staff working in nursing homes for older people with dementia apparently require. These are as follows: practical knowledge, theoretical knowledge, therapeutic use of self, social and self-management competence. The results indicate that nurses' competent therapeutic use of self is particularly important in caring for older people with dementia (Table 3). Aspects of nurses' own personality and behaviour mentioned as being important in interactive situations included genuine presence, patience and situational awareness. Various aspects related to competence in interactions, and methods for enhancing them, were also mentioned.

4 | DISCUSSION

Policy and practice guidelines recommend person-centred care to support people to live well with dementia in long-term care (Griffiths et al., 2019), and understanding a person's biography is an important aspect (Kitwood, 1997). According to Holle et al. (2017), assessment of the multitude of causes of challenging behaviour and linking the assessment to individual interventions in a meaningful way are needed. As already noted, the use of the term challenging behaviour has been criticized, because of negative nuances it has acquired. However, it was retained here, as defined by Moniz-Cook and James (2017) because it was a major element of the survey's conceptual background.

The results of this study show that challenging situations commonly occur in the care of older people with dementia residing in Finnish nursing homes: daily or weekly, in accordance with previous findings (Ballard et al., 2001; Selbæk et al., 2013). The most common forms of challenging behaviour participants reported in this study were wandering, restlessness, constant leaving, repeated inquiries and requests, and opposition to treatment. Similarly, Livingston et al. (2017) found that agitation is common among residents of nursing homes, especially those with moderate or severe dementia. Agitation, which includes immoderate psychomotor activity such as restlessness, dressing and undressing, and emotional distress, is continuous and may increase as dementia progresses (Kales et al., 2015).

Several correlations between nurses' work experience in caring for older people with dementia and their responses to challenging situations were found. Experienced staff appear to be more likely to determine the emotional state of an older person with dementia displaying challenging behaviour than less experienced nurses and less likely to give orders or forbid a person to do something. NICE

(2018) recommends a structured assessment to seek possible reasons for challenging situations and identify clinical or environmental causes before starting treatment. However, evidence suggests that the current management of behavioural and psychological symptoms of dementia in general practice is sub-optimal (Jennings et al., 2019).

Approximately a third of the participating nursing staff reported that physical restraints are used very often or often, and about a third reported that physical restraints are used sometimes. Although many countries have legal rules concerning the use of physical restraints, they are widely used in nursing homes (Hofmann et al., 2015). Finland is currently preparing a law on the restriction of the right to self-determination in the care of older people. We detected correlations between leadership and use of physical restraints, the impact of challenging behaviour on coping at work and overall rating of the work currently performed by the work unit for people with dementia. Jakobsen and Sørli (2016) also found a correlation between nursing staff's experience of being in difficult situations and nursing home leadership and that their choices of action strongly depend on their competence, together with social and professional leadership. Moreover, Schmidt et al. (2012) found that challenging behaviour is a significant workplace stressor in nursing homes and clearly affects nurses' ability to work. Thus, careful attention should be paid to nurses' well-being in their workplaces and coping from a leadership perspective.

Results of this study indicate that nurses working in the short-term unit gave sedative medications to older people with dementia in challenging situations and reviewed instructions for their treatment plan more often than nurses working in the long-term unit. This may be at least partly because nurses in short-term units have less time to become acquainted with the older people they care for. According to Nowak et al. (2018), pain can be a major cause of behavioural symptoms and to avoid excessive use of sedatives, actual pain assessment and management are important. Antipsychotics should only be used when safer interventions are not working or the older person with dementia endangers him/herself or surroundings, or the symptoms cause stress to either the older person with dementia or the nursing staff (Masopust et al., 2018).

We found correlations between our participants' self-assessed competence in nursing care with their age, work experience in dementia care and work experience in their current department. Wang et al. (2020) also found that nursing competence of dementia nursing staff was positively associated with their work experience and educational level. In contrast, we detected a significant negative correlation between age and communication skills. Nurses who rated their own communication skills in nursing as good tended to be younger than other nurses.

Our results highlight the importance of competence related to nurse's therapeutic use of self, including apparent requirements for perseverance, empathy, situational awareness and the ability to be present in the care of older people with dementia. However, despite the significant role of nursing staff in caring for older people with dementia, according to Evripidou et al. (2019)

TABLE 3 The competencies required for caring for an older person with dementia (f = frequency of mentions)

Main category	Generic category	Sub-category
Practical knowledge (f = 59)	Daily nursing (f = 40)	Basic care competence (f = 10)
		Gentle care (f = 1)
		Rehabilitative work (f = 6)
Theoretical knowledge (f = 37)	Pharmacological treatment (f = 19)	Acting in challenging situations (f = 14)
		Recreational activities (f = 3)
		Control competence (f = 4)
Competence relating to the nurse's therapeutic use of self (f = 141)	Occupational competence (f = 26)	Palliative care (f = 1)
		Pain management (f = 1)
		Knowledge of pharmacotherapy (f = 19)
Competence relating to the nurse's therapeutic use of self (f = 141)	Maintaining occupational competence (f = 11)	Knowledge of memory disorders (f = 26)
		Continuing education (f = 2)
		Knowledge (f = 9)
Social competence (f = 87)	Unhurried (f = 72)	Peacefulness (f = 31)
		Perseverance (f = 17)
		Patience (f = 20)
Social competence (f = 87)	Genuine presence (f = 69)	Genuine presence (f = 4)
		Humour (f = 13)
		Empathy (f = 25)
Self-management competence (f = 25)	Social interaction with others (f = 50)	Respect (f = 4)
		Situational awareness (f = 22)
		Imagination (f = 2)
Self-management competence (f = 25)	Methods to enhance interaction (f = 37)	Positive thinking (f = 1)
		Discretion (f = 1)
		Valuation (f = 1)
Self-management competence (f = 25)	Physical well-being at work (f = 3)	Competence of encounter (f = 27)
		Interpersonal competence (f = 14)
		Co-operation with family of a person with dementia (f = 5)
Self-management competence (f = 25)	Mental well-being at work (f = 4)	Co-operative skills (f = 4)
		Managing one's feelings (f = 1)
		A feeling of security (f = 2)
Self-management competence (f = 25)	Autonomy at work (f = 18)	Touch (f = 1)
		Eye contact (f = 1)
		Encouragement (f = 1)
Self-management competence (f = 25)	Physical well-being at work (f = 3)	Repeating (f = 1)
		Clarity (f = 1)
		Knowledge of life history (f = 9)
Self-management competence (f = 25)	Mental well-being at work (f = 4)	Addressing individual needs (f = 8)
		Conversation (f = 8)
		Listening competence (f = 5)
Self-management competence (f = 25)	Physical well-being at work (f = 3)	Good physical condition (f = 3)
		Good mental health (f = 1)
		Coping (f = 1)
Self-management competence (f = 25)	Mental well-being at work (f = 4)	Managing work stress (f = 1)
		Self-care as well as maintaining well-being at work (f = 1)
		Decision-making ability (f = 1)
Self-management competence (f = 25)	Autonomy at work (f = 18)	Creativity (f = 2)
		Application (f = 1)
		Methodical organisation (f = 4)
Self-management competence (f = 25)	Physical well-being at work (f = 3)	Flexibility in changing situations (f = 8)
		Anticipation (f = 2)

there is little information regarding nurses' knowledge and attitudes towards care for older people with dementia and associated problems. Kiljunen et al., (2018) found that family members of older people with dementia believe that nursing staff in care homes should have an individual, person-centred approach and evidence-based practice competencies. They also found that

multifarious competence is required for nursing older people in care homes, and some care home nursing professionals' competence is not adequate. To meet expectations and demands of professionals, the public and relevant policy it is essential to take into account the human rights of older people with dementia to live meaningful dignified lives with appropriate care that meets

their individual needs. Thus, there are clear requirements for continuing education that improves the knowledge, competence and practical experience of nursing staff (Hsieh & Chen, 2017). The results of this study may help efforts to meet these expectations, demands and requirements.

4.1 | Limitations of the study

This study provides new knowledge regarding the prevalence of challenging situations and information about responses of nursing staff to them, obtained using a questionnaire that was validated by an expert panel. It adds to the existing body of knowledge regarding the competencies needed in dementia care. However, it has some limitations, including a small sample size, and restriction to assessment of views of the nursing staff of two nursing homes in Finland. The views of older people living with dementia and their family members were not addressed, so there is clear need to address them in further research. In addition, the questionnaire (developed for the study) appears to have high content validity, but its construct validity was not tested and warrants attention. The possibility of self-reporting bias in the results and their reliability must also be acknowledged, with the associated need for cautious generalisation of the findings. The self-assessment elements of the questionnaire have the limitations associated with any self-assessment, so complementary information was sought through an open question. However, triangulation of the findings using observational techniques would be valuable.

5 | CONCLUSIONS

In care homes for older people with dementia, challenging situations that occur on a daily basis significantly affect the nursing staff's coping at work. The support of management and supervisors is highly important in handling these situations. Leadership that encourages personalised nursing and takes individual needs into account appears to reduce the use of physical restraints in the care of older people with dementia. Competence related to the nurse's therapeutic use of self also seems to have high importance. Thus, factors related to social interaction should be carefully considered when formulating or updating training programmes to improve nursing staff's ability to cope with challenging situations in the care of older people with dementia in nursing homes.

CONFLICT OF INTEREST

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

DATA AVAILABILITY STATEMENT

Research data are not shared.

ORCID

Paula Piirainen  <https://orcid.org/0000-0002-2514-0662>

REFERENCES

- Alzheimer Europe (2020). *Dementia in Europe*. The Alzheimer Europe Magazine. Issue 32. (consulted February 20, 2020). <https://www.alzheimer-europe.org/Publications/Dementia-in-Europe-magazines>
- Ballard, C., & Corbett, A. (2010). Management of neuropsychiatric symptoms in people with dementia. *CNS Drugs*, 24, 729–739. <https://doi.org/10.2165/11319240-000000000-00000>.
- Ballard, C. G., Margallo-Lana, M., Fossey, J., Reichelt, K., Myint, P., Potkins, D., & O'Brien, J. (2001). A 1-year follow-up study of behavioral and psychological symptoms in dementia among people in care environments. *Journal of Clinical Psychiatry*, 62(8), 631–636. <https://doi.org/10.4088/jcp.v62n0810>.
- Bessey, L. J., & Walaszek, A. (2019). Management of behavioral and psychological symptoms of dementia. *Current Psychiatry Reports*, 21, 66. <https://doi.org/10.1007/s11920-019-1049-5>.
- Bing-Jonsson, P. C., Hofoss, D., Kirkevold, M., Bjørk, I. T., & Foss, C. (2016). Sufficient competence in community elderly care? Results from a competence measurement of nursing staff. *BMC Nursing*, 15(5), 1–11. <https://doi.org/10.1186/s12912-016-0124-z>
- Cowan, D. T., Norman, I., & Coopamah, V. P. (2005). Competence in nursing practice: A controversial concept—A focused review of literature. *Nurse Education Today*, 25, 355–362.
- Cubit, K., Farrell, G., Robinson, A., & Myhill, M. (2007). A survey of the frequency and impact of Behaviours of Concern in dementia on residential aged care staff. *Australasian Journal on Ageing*, 26, 64–70. <https://doi.org/10.1111/j.1741-6612.2007.00217.x>.
- Current Care Guidelines (2017). *Memory disorders. The Finnish Psychogeriatric Association and the Finnish Association of general practice*. : The Finnish Medical Society Duodecim (consulted February 5, 2020). www.kaypahoito.fi
- de Medeiros, K., Rosenberg, P. B., Baker, A. S., & Onyike, C. U. (2008). Improper sexual behaviors in elders with dementia living in residential care. *Dementia and Geriatric Cognitive Disorders*, 26(4), 370–377. <https://doi.org/10.1159/000163219>.
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>.
- Evripidou, M., Charalambous, A., Middleton, N., & Papastavrou, E. (2019). Nurses' knowledge and attitudes about dementia care: Systematic literature review. *Perspectives in Psychiatric Care*, 55(1), 48–60. <https://doi.org/10.1111/ppc.12291>.
- Feast, A., Orrell, M., Charlesworth, G., Melunsky, N., Poland, F., & Moniz-Cook, E. (2016). Behavioural and psychological symptoms in dementia and the challenges for family carers: Systematic review. *British Journal of Psychiatry*, 208(5), 429–434. <https://doi.org/10.1192/bjp.bp.114.153684>.
- Finnish Institute for Health and Welfare (2019). *Muistisairauksien yleisyys*. <https://thl.fi/fi/web/kansantaudit/muistisairaudet/muistisairauksien-yleisyys>
- Griffiths, A. W., Surr, C. A., Creese, B., Garrod, L., & Chenoweth, L. (2019). The development and use of the assessment of dementia awareness and person-centred care training tool in long-term care. *Dementia*, 18(7–8), 3059–3070. <https://doi.org/10.1177/1471301218768165>.
- Hofmann, H., Schorro, E., Haastert, B., & Meyer, G. (2015). Use of physical restraints in nursing homes: A multicentre cross-sectional study. *BMC Geriatrics*, 15, 129. <https://doi.org/10.1186/s12877-015-0125-x>.
- Holle, D., Halek, M., Holle, B., & Pinkert, C. (2017). Individualized formulation-led interventions for analyzing and managing

- challenging behavior of people with dementia – An integrative review. *Aging & Mental Health*, 21(12), 1229–1247. <https://doi.org/10.1080/13607863.2016.1247429>.
- Hsieh, P. L., & Chen, C. M. (2017). Long term care nursing competence and related factors among Taiwanese nurses: A national survey for those who completed the LTC training course. *Geriatric Nursing*, 38(3), 192–198. <https://doi.org/10.1016/j.gerinurse.2016.10.010>.
- Hynninen, N., Saarnio, R., & Elo, S. (2016). Care practices of older people with dementia in the surgical ward: A questionnaire survey. *SAGE Open Medicine*, 4, 1–9. <https://doi.org/10.1177/2050312116676033>
- Jakobsen, R., & Sørli, V. (2016). Ethical challenges: Trust and leadership in dementia care. *Nursing Ethics*, 23(6), 636–645. <https://doi.org/10.1177/0969733015580810>.
- Jennings, A., Dhuny, S., & Foley, T. (2019). 74 GPs' knowledge of and attitudes towards the management of behavioural and psychological symptoms of dementia: A descriptive cross sectional study. *Age and Ageing*, 48, 17–65.
- Kales, H. C., Gitlin, L. N., & Lyketsos, C. G. (2015). Assessment and management of behavioral and psychological symptoms of dementia. *British Medical Journal*, 350, h369. <https://doi.org/10.1136/bmj.h369>.
- Kiljunen, O., Kankkunen, P., Partanen, P., & Välimäki, T. (2018). Family members' expectations regarding nurses' competence in care homes: A qualitative interview study. *Scandinavian Journal of Caring Sciences*, 32(3), 1018–1026. <https://doi.org/10.1111/scs.12544>.
- Kitwood, T. (1997). The experience of dementia. *Aging & Mental Health*, 1(1), 13–22.
- Koskinen, S., Salminen, L., Stolt, M., & Leino-Kilpi, H. (2015). The education received by nursing students regarding nursing older people: A scoping literature review. *Scandinavian Journal of Caring Sciences*, 29, 15–29.
- Legere, L. E., McNeill, S., Schindel Martin, L., Acorn, M., & An, D. (2018). Nonpharmacological approaches for behavioural and psychological symptoms of dementia in older adults: A systematic review of reviews. *Journal of Clinical Nursing*, 27, e1360–e1376.
- Livingston, G., Barber, J., Marston, L., Rapaport, P., Livingston, D., Cousins, S., Robertson, S., La Frenais, F., & Cooper, C. (2017). Prevalence of and associations with agitation in residents with dementia living in care homes: MARQUE cross-sectional study. *BJPsych Open*, 3(4), 171–178. <https://doi.org/10.1192/bjpo.bp.117.005181>.
- Livingston, G., Huntley, J., Sommerlad, A., Ames, D., Ballard, C., Banerjee, S., Brayne, C., Burns, A., Cohen-Mansfield, J., Cooper, C., Costafreda, S. G., Dias, A., Fox, N., Gitlin, L. N., Howard, R., Kales, H. C., Kivimäki, M., Larson, E. B., Ogunniyi, A., ... Mukadam, N. (2020). Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. *Lancet (London, England)*, 396(10248), 413–446. [https://doi.org/10.1016/S0140-6736\(20\)30367-6](https://doi.org/10.1016/S0140-6736(20)30367-6).
- Margallo-Lana, M., Swann, A., O'Brien, J., Fairbairn, A., Reichelt, K., Potkins, P., Mynt, P., & Ballard, C. (2001). Prevalence and pharmacological management of behavioural and psychological symptoms amongst dementia sufferers living in care environments. *International Journal of Geriatric Psychiatry*, 16, 39–44. [https://doi.org/10.1002/1099-1166\(200101\)16:1<39:aid-gps269>3.0.co;2-f](https://doi.org/10.1002/1099-1166(200101)16:1<39:aid-gps269>3.0.co;2-f).
- Masopust, J., Protopopová, D., Vališ, M., Pavelek, Z., & Klímová, B. (2018). Treatment of behavioral and psychological symptoms of dementias with psychopharmaceuticals: A review. *Neuropsychiatric Disease and Treatment*, 14, 1211–1220. <https://doi.org/10.2147/NDT.S163842>.
- Moniz-Cook, E., & James, I. (2017). Behaviour that challenges in dementia care: An update of psychological approaches for home and care home settings. *Psychology of Older People: The FPOP Bulletin*, 140, 43–49.
- NICE National Institute for Health and Care Excellence (2018). *Guideline 97. Dementia: Assessment, management and support for people living with dementia and their carers*.
- Nowak, T., Neumann-Podczaska, A., Deskur-Śmielecka, E., Styszyński, A., & Wieczorowska-Tobis, K. (2018). Pain as a challenge in nursing home residents with behavioral and psychological symptoms of dementia. *Clinical Interventions in Aging*, 13, 1045–1051. <https://doi.org/10.2147/CIA.S157246>.
- Organisation for Economic Co-operation and Development (2017). "Dementia prevalence", in *health at a glance 2017: OECD indicators*. OECD Publishing. https://doi.org/10.1787/health_glance-2017-76-en.
- Ostaszewicz, J., Lakhan, P., O'Connell, B., & Hawkins, M. (2015). Ongoing challenges responding to behavioural and psychological symptoms of dementia. *International Nursing Review*, 62(4), 506–516. <https://doi.org/10.1111/inr.12180>.
- Piirainen, P., Pesonen, H.-M., Kyngäs, H., & Elo, S. (2020). Henkilöstön koulutusinterventtioiden vaikutukset muistisairaiden henkilöiden haasteellisen käyttäytymisen esiintyvyyteen - systemaattinen kirjallisuuskatsaus. *Hoitotiede*, 32(1), 16–29.
- Pittman, J., & Bakas, T. (2010). Measurement and instrument design. *Journal of Wound, Ostomy and Continence Nursing*, 37(6), 603–607. <https://doi.org/10.1097/WON.0b013e3181f90a60>.
- Saarnio, R., Isola, A., & Laukkala, H. (2009). The use of physical restraint in institutional care of older people in Finland: Nurses' individual, communal and alternative modes of action. *Journal of Clinical Nursing*, 18, 132–140. <https://doi.org/10.1111/j.1365-2702.2008.02383.x>.
- Schmidt, S. G., Dichter, M. N., Palm, R., & Hasselhorn, H. M. (2012). Distress experienced by nurses in response to the challenging behaviour of residents – Evidence from German nursing homes. *Journal of Clinical Nursing*, 21(21–22), 3134–3142. <https://doi.org/10.1111/jocn.12066>.
- Selbæk, G., Engedal, K., & Bergh, S. (2013). The prevalence and course of neuropsychiatric symptoms in nursing home patients with dementia: A systematic review. *Journal of the American Medical Directors Association*, 14(3), 161–169. <https://doi.org/10.1016/j.jamda.2012.09.027>.
- Testad, I., Ballard, C., Brønnick, K., & Aarsland, D. (2010). The effect of staff training on agitation and use of restraint in nursing home residents with dementia: A single-blind, randomized controlled trial. *The Journal of Clinical Psychiatry*, 71(1), 80–86. <https://doi.org/10.4088/JCP.09m05486oli>.
- Tohmola, A., Saarnio, R., Mikkonen, K., Kyngäs, H., & Elo, S. (2020). Development and psychometric testing of the Gerontological Nursing Competence (GeroNursingCom) instrument. *Journal of Advanced Nursing*, 77(2), 1070–1084. <https://doi.org/10.1111/jan.14609>.
- Traynor, V., Inoue, K., & Crookes, P. A. (2011). Literature review: Understanding nursing competence in dementia care. *Journal of Clinical Nursing*, 20(13–14), 1948–1960. <https://doi.org/10.1111/j.1365-2702.2010.03511.x>
- Wang, Y., Liu, Y., Tian, J., Jing, M., & Zhang, K. (2020). Analysis on nursing competence and training needs of dementia caregivers in long-term care institutions. *International Journal of Nursing Sciences*, 7(2), 198–205. <https://doi.org/10.1016/j.ijnss.2020.03.003>.
- Wetzels, R. B., Zuidema, S. U., de Jonghe, J. F. M., Verhey, F. R. J., & Koopmans, R. T. C. M. (2010). Course of neuropsychiatric symptoms in residents with dementia in nursing homes over 2-year period. *American Journal of Geriatric Psychiatry*, 18(12), 1054–1065. <https://doi.org/10.1097/jgp.0b013e3181f60fa1>.
- World Health Organization (2017). *Global action plan on the public health response to dementia 2017–2025*.
- World Health Organization (2019). *Dementia*. <https://www.who.int/news-room/fact-sheets/detail/dementia>

Zwijssen, S. A., Smalbrugge, M., Eefsting, J. A., Twisk, J. W. R., Gerritsen, D. L., Pot, A. M., & Hertogh, C. M. P. M. (2014). Coming to grips with challenging behavior: A cluster randomized controlled trial on the effects of a multi disciplinary care program for challenging behaviors in dementia. *Journal of the American Medical Directors Association*, 15(7), 531-541. <https://doi.org/10.1016/j.jamda.2014.04.007>.

How to cite this article: Piirainen P, Pesonen H-M, Kyngäs H, Elo S. Challenging situations and competence of nursing staff in nursing homes for older people with dementia. *Int J Older People Nurs*. 2021;16:e12384. <https://doi.org/10.1111/opn.12384>

APPENDIX A

Encountering a person with dementia in the nursing home

Questionnaire for nursing staff

Dear Respondent

Your service supervisor has given permission to carry out the survey in your work unit. The survey is personal, and your participation is of paramount importance for the development of nursing. The information is confidential; they are not used for any other purpose or released for use by non-researchers. It takes about 15 min to complete the questionnaire.

The purpose of the study is to develop a model for training for nursing staff to meet a person with dementia. The aim is also to assess whether the model of training of nursing staff can influence the prevalence of challenging behaviour of people with dementia.

In the study, the second nursing home serves as an experimental group that participates in the training. The second nursing home serves as a control group in the study.

During the study, the questionnaire is filled in three times: before the training and after 3 months and 12 months of the training. You can suspend your participation in the study at any time without penalty.

We kindly ask you to return the completed questionnaire in a sealed envelope.

If you have any questions regarding the survey, you can call or email. Contact information is below.

STAFF SURVEY**ANSWER INSTRUCTIONS**

Please answer the following questions either by choosing the option that best describes your situation or by writing your answers in the space provided.

1. Age in years

2. Gender

- 1 Female
- 2 Male

3. Vocational education

- 1 Nurse, year of graduation _____
- 2 Nurse or primary caregiver, year of graduation _____
- 3 Student, estimated year of graduation _____
- 4 Other which _____, year of graduation _____

4. Work experience in nursing people with dementia?

year month

5. Work experience in this unit?

year month

6. What is your employment relationship like?

- 1 Permanent
- 2 Full-time, part-time work
- 3 Fixed-term
- 4 Other, which _____

7. Your current job is in

- 1 Long-term unit
- 2 Short-term unit

8. How do you currently rate your own competence in nursing people with dementia on a scale of 1-10? Circle the number corresponding to your estimate.

1 2 3 4 5 6 7 8 9 10

9. What kind of competence does caring for a person with dementia require from you?

In my opinion, requires the following types of competence:

10. How do you rate your own competence in the following areas? Select the appropriate option for each item.

	Very good competence	Good competence	Satisfactory competence	Sufficient competence	I don't have any competence
Theoretical knowledge of dementia					
Challenging behavior of people with dementia					
Interaction skills in nursing					
Cooperation with the relatives of a person with dementia					
Consideration of the environment in the care of people with dementia					
A person with dementia life history utilization in nursing					

11. Do I think the physical environment of the work unit is suitable for people with dementia?

1 Yes, because

2 No, because

3 I can not say

12. How often do people with dementia experience challenging behavior in your work unit?

- 1 daily
- 2 weekly
- 3 i can not say
- 4 monthly
- 5 never

13. How important do you think the following situations are? Select the appropriate option for each item.

	Completel y agree	Partly agree	Neither agree nor disagree	Partly disagree	Completely disagree
Relatives are actively involved in care planning					
Relatives are involved in care-related decision-making					
Relatives are in regular contact with the nursing home					
Relatives are helpful in caring a person with dementia					
The presence of relatives calms a person with dementia					
The relatives act as the person's advocate for the person with dementia					

14. How often do people with dementia in your unit experience the following types of challenging behaviors? Select the appropriate option for each item.

	Very often	Often	Sometimes	Seldom	Never
Restlessness					
Walking and wandering					
Constant leaving					
Transportation or violation of goods					
Improper dress or undressing					
Loud shouting					
Linguistic aggression (naming,intimidation,swearing)					
Repeated inquiries and requests					
Suspiciousness					
Physical aggression (hitting,kicking,biting)					
Opposition to treatment measures					
Abnormal sexual behavior					
Self-harm (beating,biting,scratching,plucking)					
Bedtime difficulty					

Passivity, withdrawal					
Fecal messing					
Spitting (including with food)					

Else, what?

**15. What do you do when a person with dementia behaves challengingly?
For each point, select the option closest to your experience.**

Response	Very often	Often	Sometimes	Seldom	Never
I take her/him to her/his own room.					
I ask what is wrong.					
I do nothing.					
I use humor.					
I check the patients's record for information about her/his background and possible instructions.					
I tolerate the behavior because s/he has the right to become angry.					
I organize activities for her/him, for example, switching on the TV in the room.					
I'm present for the patient; touch, speak and listen.					

I give sedative medication to her / him.					
I give orders to her/him.					

Do you act in some other way, how?

16. What impact does the challenging behavior of a person with dementia have on your ability to cope with your work?

- 1 very strong impact
- 2 strong impact
- 3 moderate impact
- 4 low impact
- 5 very little impact
- 6 no impact at all

17. How often are physical restraints used in your work unit?

- 1 very often
- 2 frequently
- 3 sometimes
- 4 rarely
- 5 never

18. Does the leadership encourage me to carry out nursing that takes into account the needs of a person with dementia? Circle the option you think is appropriate and justify the answer.

1. Yes, how?

2. No, why not?

19. What do you think about the following statements? For each item, select the option that you think is appropriate.

	Completely agree	Partly agree	Neither agree nor disagree	Partly disagree	Completely disagree
My work is motivational.					
There is good atmosphere in our workplace.					
I do valuable work.					
I want to be active develop my ways of working.					

20. What overall rating (0-10) would you give to your work unit for nursing people with dementia at the moment? Circle the number corresponding to your grade.

0 1 2 3 4 5 6 7 8 9 10

Thank you for your answer!