Validation of nurse caring behaviours in residential aged care

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Keywords

caregiving, long-term aged care, caring behaviour inventory (CBI), nursing

Abstract

Background

The nursing literature suggests there are gaps in our knowledge about nurse caring behaviours. In particular there is incongruence between nurses' and patients' views of caring, a lack of emphasis on caregiving in aged care, and there are few validated tools available that measure caring behaviour.

Aims

This study aimed to identify the dimensions of nurse caring behaviours by identifying and comparing the responses of registered nurses (RNs), assistant nurses (ANs) and older residents to the Caring Behaviour Inventory (CBI).

Methods

Data was collected using the CBI from RNs (n= 7), ANs (n=19) and residents (n=31).

Results

Although there were differences between the three participating groups there were no statistically significant differences between their perceptions of nurse caregiving behaviour. The study raises some interesting questions in relation to disempowerment and the possibility that residents were not adequately able to discriminate between the different levels on the CBI scale.

Background

Health statistics show that people are living longer and although the majority of older people are in good health and live independently in the community, approximately 20% of people aged over 70 years in Australia receive long-term care support (Nay, Garratt, & Koch, 1999). The need for quality and efficiency in the nursing care of older people in acute and long-term care is paramount given that poor quality of care may be associated with a decline in health and dependency (Covinsky et al., 1998). Since 1997, the Australian aged care sector has faced massive change that has impacted on staffing, skill mix and the provision of care. For example, minimum staffing ratios have been removed from the aged care regulations and the introduction of *ageing in place*, which "relates to the provision of responsible and flexible care in line with each individual's changing care needs in a familiar and appropriate environment" (Commonwealth Department of Health and Ageing, 2002, p.4) has resulted in a blurring of boundaries between the care needs of residents in high and low care.

Furthermore, changes have occurred in the acute care setting. Advances in technology have helped to shape acute care services. The number of hospital bed days of health care clients has diminished and greater numbers of clients are supported within the community, rather than within an acute care facility. In addition, the health and wellbeing of people accessing aged care services has also changed. For example, greater numbers of frail aged, people with dementia and/or requiring palliative care, respite and rehabilitation are seeking aged care services (AIHW, 2004). Despite the frailty of this population there is an increasing perception that older people only require supportive care, in a home-like environment and from ANs rather than RNs (Nay, 2004). Changes in aged care services as outlined above have resulted in a changing role for aged care RNs who spend the majority of their time documenting care plans and giving out medications (Moyle, Skinner, Roe & Gork, 2003). In addition aged care RNs are frequently too busy attending to administrative procedures to ensure that the care being given meets the needs of residents. The provision of care is further complicated by the majority of aged care attendants having limited or no training in aged care (Hsu, Moyle, Creedy & Venturato, in press; Nay, 2004). Thus, there is a need to consider whether the provision of care is meeting the needs of residents in long-term care. One way to do this is to compare the care orientation of RNs, ANs and residents to inform practice and policy development about the expectations of older people.

Nurses as caregivers

Throughout modern nursing's history nurses have been seen as caregivers and caring has been described as the very essence of nursing and the central, unifying focus for nursing practice (Leininger, 1988). Florence Nightingale for example, wrote that the goal for nursing is "to put the patient(s) in the best condition for nature to act upon them" (Nightingale, 1970 edition, p.133). Even though RNs in aged care are spending less time in face-to-face care of residents, under the Nurses Act they are responsible for ensuring that ANs provide quality of care for residents.

In line with the importance of caring and nursing practice there is a vast amount of nursing literature relating to caregiving. However, the majority of it is about acute care, the same emphasis has not been given to aged care. Much of the literature stems from North America and generally involves nurses' or patients' qualitative perspectives of care. However, it is clear that the content and meaning of important nurse caring behaviours in practice remain poorly illuminated with some incongruence between nurses and patients'/residents' views of caring (Hancock, Chang, Chenoweth, Clarke, Carroll & Jeon, 2004; Rosenthal, 1992; Watson, 1979).

Three studies were uncovered that explored caregiving in long-term care. Aventuro (1991) interviewed 120 older adults in a private, long-term care institution. The participants perceived that they were cared for when the nurses cared about them as individuals and not just for their physical needs. They felt their psychological and spiritual needs were as important as their physical needs. Marini (1999)

interviewed 21 nursing home residents and found that participants focused on the importance of the nurses' technical competency in caring for them, with expressive (humanistic) caring being the second most important indicator of care. Hutchinson and Bahr (1991) interviewed and observed 20 nursing home residents. They identified four properties of caring: protecting; supporting; confirming; and transcending. The participants expressed the importance of caring to their personal identity and sense of value. Interestingly none of these studies explored nurses' perceptions of caregiving, whereas the majority of research outside aged care focuses on nurses' perceptions of care. Examples include an investigation of RNs' descriptions of their meaning of care (Clarke & Wheeler, 1992); an exploration of the experience of caring (Forrest, 1989); an analysis of caring in nursing practice (Morrison, 1990); dimensions of nurse caring (Plowden, 1996) and patterns of nursing behaviour when attending to patient care (Bottorff & Morse, 1994). These studies acknowledge that the RN places a major focus on interpersonal aspects of care, such as being supportive and communicating with patients and others.

Reports of patients' perspectives of caregiving are not so common and, until recently, patient satisfaction questionnaires were the most common form of identifying patients' satisfaction with their hospitalisation experience. To date the majority of studies involving patients and the provision of care have been based on studies of the services provided within the hospital or on patients' physical needs rather than on their views of caregiving. A recent study (Hancock et al., 2004) however, aimed to investigate older acutely ill hospitalised patients' perceptions of nursing needs as well as the satisfaction levels of patients (n=232), family (n=99) and nurses (n=90). It is concerning that patients, carers and nurses perceived that carrying out doctors' orders was the most important aspect of nursing care. Nurses and carers rated physical and psychosocial care and discharge planning higher than the patients. Carers' and patients' ratings of physical care were lower than nurses' ratings of opportunities to provide care.

There are a number of weaknesses in the research on care and caregiving. Firstly, they emphasise acute care settings rather than long-term care. Changes in this sector have been occurring in the frailty of people accessing these services as well as changes in skill mix of staff. Secondly, the paucity of research carried out in long-term care concentrates on residents' perceptions. There is no assessment as to whether this care is actually being provided or whether nurses have similar perceptions.

In comparison, the majority of acute care research focuses on caregiving from the nurses' perspective. This research suggests that nurses know what patients want and that caregiving is universal and does not involve cultural aspects of care. Consequently there are gaps in our knowledge about caring behaviours and, in particular, about what older people perceive as appropriate caregiving behaviours. Because the size of the older population is increasing and there is a paucity of gerontological educated workers and direct care workers, such as ANs, are providing the majority of care, it is important that this area is researched. The results of such research could help to ensure that the care provided is appropriate to meet resident needs. Finally, if people in aged care settings are to have their needs met it is imperative that the care provided meets older peoples' needs rather than organisational needs.

The study

A non-experimental survey design was used to address the following research questions.

1. What are the older residents' perceptions of caring behaviours exhibited by nurses in the prior month at their setting?
2. What are the RNs' and ANs' perceptions of the caring behaviours exhibited by RNs and ANs in the prior month at their setting?
3. To what extent are RNs' and residents' perceptions of caring behaviours exhibited by nurses in the prior month congruent?
4. To what extent are RNs' and ANs' perceptions of caring behaviours exhibited by themselves in the prior month congruent?

Sample

Following ethical approval, managers of two urban Queensland, private (for profit) residential aged care settings were invited by written invitation to participate. These settings are owned and operated by the one provider. Information sessions were organised at each facility for the researchers to discuss the research and to answer any questions that residents, staff or families had.

Residents

Residents were asked to participate if they were 60 years and older, cognitively aware, living for at least one month in one of the two chosen facilities and able to give informed consent. Out of 130 residents in the two settings, 75 were eligible for selection and, of the 75 approached 31 (41.3%) agreed to participate. A number of participants seemed hesitant to participate, a number were put off by the lengthy information/consent package and the three-page questionnaire, and several residents stated that their eyesight precluded them from being able to read, and they declined one of the researchers reading the package to them.

Nurses/care assistants

Permanent staff were asked to participate if they were a registered or an assistant nurse. Out of 19 RNs and 60 ANs, seven (36.8%) RNs and 19 (31.6%) ANs agreed to participate.

Data collection

Data were collected in 2004 using the Caring Behaviour Inventory (CBI). The CBI was developed by Wolf (1994) for use in the acute care sector and has been used in other clinical areas, such as mental health (Leslie, 1989) and perioperative care (Coogan, 1998). To complete the scale participants rate 42 items on the extent that a nurse or nurses made caring visible. Responses are recorded on a six-point Likert-like scale. Responses rate the nurse from never does the item listed to always does the item listed. The internal consistency of the CBI has been investigated in several studies of nurse and patients samples outside aged care settings. These studies reveal acceptable Cronbach alpha statistics: 0.948 (Coogan, 1998), 0.98 (Wolf et al., 1998). The CBI has been validated by a number of studies (Plowden, 1996; Wolf et al., 1998; Wolf, 1997, 1991, 1986). A strong positive correlation between patients' reports of nurse caring and satisfaction with nursing care has been found (Wolf et al, 1998). Wolf uncovered five dimensions or subscales of nurse caring: respectful deference to other; assurance of human presence; positive connectedness; professional knowledge and skill; and attentiveness to other's experience.

Because the CBI was developed in North America, a panel of five Australian aged care nurse experts were asked to review the inventory to ensure face and content validity to ensure its appropriateness for the Australian context. Although the panel found a number of questions repetitive they found they were relevant to Australian aged care and were not culture specific.

Nurses were asked to complete the CBI in their own time and to return it to the chief researcher or to place the completed instrument in an envelope, which was then placed in a locked drawer for the researchers to retrieve. Residents completed the CBI alone, with assistance from a family member, or with assistance from one of the researchers. Residents' completed instruments were placed in an envelope and either given directly to the chief researcher or placed in a locked drawer for the researchers to retrieve.

Results

Descriptive statistics

Participants were residents (n=31, 54.4%) and nurse/carers (n=26, 45.6%) from two private (for-profit) residential care facilities in Brisbane, Australia. Facility 1 provides care for 70 high-care residents and facility 2 provides care for 60 low-care residents. Table 1 provides a breakdown of participant type by care facility, and also of nurse/carers by category and facility.

Table 1. Participant type by category and facility.

Participant type	Facility or nursing home		Total
	Facility 1	Facility 2	
Resident	18	13	31
RN	6	1	7
AN	13	6	19
Total	37	20	57

Of the 57 participants, 49 (86%) were female, and 8 (14%) were male. Gender statistics by facility and category are shown in Table 2.

Table 2. Gender by facility and category.

Facility	Gender	Participant type		Total
		Resident	Nurse	
Facility 1	Female	14	19	33
	Male	4	0	4
	Total	18	19	37
Facility 2	Female	9	7	16
	Male	4	0	4
	Total	13	7	20

All participants except one spoke English and had English as their first language. Table 3 provides a breakdown of participant ethnicity by facility and category.

Table 3. Ethnicity by facility and category.

Facility	Ethnicity	Participant type		Total
		Resident	Nurse	
Facility 1	Australia	16	9	25
	Asia	0	1	1
	New Zealand	0	3	3
	England	2	4	6
	USA	0	1	1
	Other	0	1	1
	Total	18	19	37
Facility 2	Australia	12	7	19
	England	1	0	1
	Total	13	7	20

Participants' educational backgrounds were varied. A breakdown of the highest educational qualification achieved by participants, listed by facility and category, is shown in Table 4.

Table 4. Highest educational qualification by facility and category.

Facility	Educational Qualification	Participant type		Total
		Resident	Nurse	
Facility 1	Primary school	4	0	4
	Secondary school	8	8	16
	Certificate/diploma	1	7	8
	Bachelor degree	2	2	4
	Postgraduate	0	1	1
	Other	3	1	4
	Total	18	19	37
Facility 2	Primary school	7	0	7
	Secondary school	4	6	10
	Certificate/diploma	1	0	1
	Bachelor degree	1	0	1
	Postgraduate	0	1	1
	Total	13	7	20

Participants had been associated with their respective facilities from two months to 33 years, median two years (mean=6 years, SD=7.8 years).

The following findings are presented in relation to the study's research questions.

Research question 1

What are the older residents' perceptions of caring behaviours exhibited by nurses in the prior month at their setting?

The following statistics were obtained from the sample of residents (n=17) who had completed all 42 CBI items: (CBI total score) M=215.29, SD=25.76. While the mean score observed in our sample of residents is slightly higher than that obtained in the Wolf et al. (1998) study (M=203.92, SD=34.35), there is marginally less variance in our sample. Nonetheless, residents' mean perception of caregiving behaviour scores obtained here are within 1 standard deviation of the mean of the normative data.

Research question 2

What are the RNs' and ANs' perceptions of the caring behaviours exhibited by RNs and ANs in the prior month at their setting?

A sample of RNs and ANs from both facilities (n=21) completed all 42 CBI items, CBI total score: M=207.62, SD=25.262.

Inferential statistics

Factor structure

The factor structure of the CBI has been investigated in several previous studies (see for example, Wolf et al., 1998). These studies reveal a five-factor structure. The data collected in the present research were investigated for suitability for confirmatory factor analysis/principle components analysis. The distributions of all variables were examined and found to be non-normal, with all variables except one exhibiting considerable negative skew. Transformations of raw scores were carried out in an effort to render each distribution more acceptable for principle components analysis, however both square root and logarithmic transformations failed to normalise the distributions. In light of this the data were deemed by us to be not amenable to exploratory principle components analysis, therefore we were unable to provide further investigation of the factor

structure of the CBI. Interested readers are referred to Wolf et al. (1998) for further information about the factor structure of the instrument.

Group differences

The data were investigated prior to analysis in order to investigate appropriateness for parametric analysis. Distributions were non-normal, with most possessing considerable negative skew. Transformations of non-normal variables failed to bring about normalisation. Given that parametric tests assume normality, these data were deemed by us to be unsuitable for parametric analysis. Non-parametric tests were therefore utilised to investigate the research questions.

Research question 3

To what extent are nurses' and residents' perceptions of caring behaviours exhibited by nurses in the prior month congruent?

This research question was addressed by the (non-parametric) Mann-Whitney U Test, with separate analyses performed for CBI total scores and each of the five previously identified factors (see Table 5).

Table 5. Tests of differences in perceptions of caring: nurse and resident groups.

Factor	Result
1. Respectful deference to other	z= -.155, p= .877 (two-tailed)
2. Assurance of human presence	z= -.613, p= .540 (two-tailed)
3. Positive connectedness	z= -1.659, p= .097 (two-tailed)
4. Professional knowledge/skill	z= -.267, p= .798 (two-tailed)
5. Attentiveness to others' experience	z= -1.070, p= .285 (two-tailed)
CBI total score	z= -.954, p= .340 (two-tailed)

Research question 4

To what extent are RNs' and ANs' perceptions of caring behaviours exhibited by themselves in the prior month congruent?

This research question was addressed by the (non-parametric) Mann-Whitney U Test, with separate analyses performed for CBI total scores and each of the five previously identified factors (see Table 6).

Table 6. Tests of differences in perceptions of caring: RN and AN groups.

Factor	Result
1. Respectful deference to other	z= -1.220, p= .222 (two-tailed)
2. Assurance of human presence	z= -.871, p= .384 (two-tailed)
3. Positive connectedness	z= -1.145, p= .252 (two-tailed)
4. Professional knowledge/skill	z= -.931, p= .352 (two-tailed)
5. Attentiveness to others' experience	z= -1.261, p= .207 (two-tailed)
CBI total score	z= -.866, p= .386 (two-tailed)

Discussion

There is considerable research on the burden of caregiving from family caregivers' perspective (see for example Lindgren et al., 1999; Hooker et al., 1998; Collins et al., 1993). There is a paucity of research exploring caregiving from the perspective of the nurse caregiver and the individual experiencing the care. This study adds to the gap in the literature because the main aim of the study was to compare residents', RNs', and ANs' perceptions of caregiving. Given the increased demand on aged care services because of the ageing population, it is important to know if there are differences in the perceptions of caregiving between these three groups. In current aged care practice it is the AN who carries out the majority of the direct care needs of residents. Therefore it is important to know if care staff have different perceptions of their caregiving role. Furthermore, because residents experience the care it is important to know if they are satisfied with nurses' caregiving.

The findings demonstrated that a statistically significant difference was not found between the three groups. Mean resident ratings of their perceptions of nurse/carer caregiving behaviours are within one standard deviation above the mean of the normative data, showing that the residents of the aged care facilities sampled by us are generally happy with the standard of care provided by the nurses/caregivers. Furthermore, residents' mean ratings are marginally higher than those observed in the nurse/carer sample, whose ratings of their own caregiving behaviours are also slightly above the mean of the normative sample. This latter point is worthy of note, residents' ratings of their perceptions of nurse/carer caregiving behaviours are higher than those of the nurses/caregivers themselves, although not to a statistically-significant extent. Thus, although residents perceive they are being provided with higher quality care than the nurses/carers themselves believe they are providing, the difference is not statistically reliable.

No differences between nurses' and ANs' perceptions of caregiving behaviours were evident in this study. Thus, the perceptions of the nursing and AN group members about their own caregiving behaviours are congruent.

The small difference identified between residents' and nurse/caregivers' perceptions is curious, and there may be several factors involved here. When asked about their perceptions of nurse/carer caregiving, several residents stated: 'We know that the nursing/carer staff are busy and that they would be spending more time with us if they were able'. Therefore, residents may not have been providing accurate perceptions of the actual caring behaviours exhibited by nurse/carers but, instead, speaking about an idealised state, therefore introducing bias to the results. It may be that the real difference in residents and nurse/carer ratings of caregiver behaviour is quite different from that identified here.

Our sample consists of residents of two facilities operated by a company renowned for its high quality of care. It is likely that given the degree of variability in the quality of care provided in the aged care industry, our results might not be representative of the industry in general.

Because the study sample was small, a study with greater numbers of participants is required. However, one of the strengths of this study is that it provides a positive view of aged care in that the staff and residents were in overall agreement with the provision of nursing care.

It is of interest to note the attention given to the study by families of resident participants. A number of families contacted the chief investigator to enquire if they could complete the survey for their family member. They felt they would be more readily able to make discriminatory comments, whereas they believed that their family member would not be able to be objective. Given this interest, in any further exploration a comparison might be made of four groups; residents, RNs, ANs and family caregivers.

Demographics

This study supports the view that the majority of aged care staff are female because in our study all participants were female. The majority of residents were also female (n=23, 74.1%). This raises the question of how male residents feel about the lack of male care staff, an issue worthy of further exploration.

The findings support the premise that nurses working in aged care have a limited educational background (Nay, 2004); three out of the seven RNs (42.8%) had a degree, two of whom had postgraduate qualifications. Because we didn't ask about postgraduate qualifications we don't know if these qualifications were in aged care. A recent study investigating aged care nurses' knowledge (Hsu, Moyle, Creedy &Venturato, in press) found that the RN participants held postgraduate qualifications in midwifery rather than gerontology. Education of care staff has been identified as being an important variable in quality of care provided (Moniz-Cook,

Millington & Silver, 1997). Thus, it is important that this is kept in mind when exploring quality of care and when registered staff role descriptions include education of care staff.

The two aged care facilities seem unusual in that all but one staff member and all residents were from Australia or an English speaking country. Such a dominance of English speaking participants needs to be borne in mind when considering the findings.

Limitations and the implication of carrying out this type of research

Methodological shortcomings, such as the small number of participants who chose to participate in this study and use of two facilities of the same organisation, contribute to the lack of validity and generalisability of the results. However, the difficulty of encouraging larger numbers of residents to complete the CBI is worthy of comment. This research raises the question of the possibility of disempowerment among older people who are living in long-term care and the effect this has on their being able to make a statement about the care being provided. A number of residents voiced concern that they felt that if they made negative comments about their care that this could result in a negative retribution from staff. However, this seemed to be more a fear that some residents felt than an actual occurrence because the research team saw no examples of this.

Another limitation relates to residents not wanting to make negative comments about nurses who provide close care for them. For example, residents would frequently state that although nurses did not do the things they would like them to do, they felt that nurses wanted to meet resident's needs and would have if more staff were available. Thus, rather than indicating that nurses never or occasionally undertook a particular care, some of the residents indicated that nurses always or nearly always completed this care because the resident assumed this was what nurses wanted to do if they had the time. Several residents stated that there was not enough staff to provide the type of care they would have liked. They indicated that they didn't like to complain because they felt that when staff were not around that they would have been with someone else who needed the staff member more than they did. Such comments raise the possibility that residents may not have been able to discriminate between the different levels on the CBI scale.

The difficulty in gaining access to large numbers of cognitively able residents in aged care is obvious as residents' frailty increases but also greatly reduces the number of research participants. A large number of residents reported difficulties with their sight and hearing, commenting that they would not be able to complete the survey even if the researcher read each question. As the number of physically frail people in long-term care facilities and with dementia and mental illness are increasing it is important to consider how this group might be included in future research in order to investigate their perceptions of care.

Conclusion

Although the findings did not demonstrate anything of statistical significance, this study provides another means of understanding aged care processes that takes into account the views of those receiving and giving care. The findings suggest that older residents may feel uncomfortable about reporting on caregiving and raises a number of implications that need consideration in carrying out research of this nature with this population. While it may be easier to ask family caregivers to complete survey data on behalf of the resident this will not encourage the voice of the resident to be heard. Although the difficulties in gaining access to large numbers of residents can be challenging it is imperative that researchers continue to involve older people in research rather than resorting to secondary sources such as family members. Further studies exploring such issues will lead to an increase in the body of knowledge relating to perceptions of caregiving from the perspective of those who give care and those who receive care.

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