

## Nursing home staff attitudes towards residents with dementia: strain and satisfaction with work

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**Nursing home staff attitudes towards residents with dementia: strain and satisfaction with work**

**Background.** Occupational and resident characteristics affect levels of staff stress and satisfaction in nursing homes, and levels of staff turnover are high. Working with more cognitively impaired residents, especially on day shift, is associated with high levels of stress in nursing home staff. Workload is highly predictive of the experience of burden and job pressure, while these outcomes vary according to whether staff work full- or part-time.

**Aims.** To investigate the attitudes of nursing home staff towards residents, strain related to dementia care and satisfaction with work and their associations with demographic, occupational and behavioural disturbance in the home.

**Methods.** A cross-sectional design was adopted, using a self-completion questionnaire survey of 253 nursing home staff from 12 nursing homes in Sydney's eastern suburbs, and behavioural assessment of all 647 residents from 11 of the 12 homes. Staff attitudes and strain were measured using the Swedish Strain in Nursing Care Assessment Scale and satisfaction using the Swedish Satisfaction with Nursing Care and Work Assessment Scale.

**Results.** Staff members' five most prevalent perceptions of residents with dementia were that they are anxious, have little control over their difficult behaviour, are unpredictable, lonely and frightened/vulnerable. The five attributes staff found most difficult to cope with were being aggressive/hostile, having little control over their difficult behaviour, being stubborn/resistive, deliberately difficult, and unpredictable. Although 91% of staff reported that they were happy in their job, a quarter reported that residents provided no job satisfaction. The five satisfaction statements most agreed with were 'The patients/residents at work nearly always receive good care', 'It is important to try and enter into the way patients experience what happens to them', 'Relatives are given enough information about care and treatment',

'I enjoy my current work situation' and 'Our work organisation is good'. There were significant differences between homes in levels of strain related to dementia care that were not accounted for by the level of behavioural disturbance.

**Conclusions.** Nursing home staff tended to perceive residents in more negative than positive ways. Staff were generally satisfied with their work. Factors other than resident behavioural disturbance are important influences in nursing staff strain.

**Keywords:** strain, satisfaction, behavioural disturbance, nursing home staff, dementia care, nurses

## Introduction

Annual turnover of nursing home staff ranges from 40% to 96% in the United States of America (USA) (Cohen-Mansfield 1997). As there is a significant correlation between nurses' occupational stress, turnover and job satisfaction (Hinshaw & Atwood 1993), a better understanding of nurses' strain and satisfaction in nursing homes may help in designing interventions or policy development to decrease turnover. However, one study found no association between staff emotional wellbeing and turnover (Margallo-Lana *et al.* 2001).

Occupational and nursing home population characteristics affect staff stress and satisfaction. High levels of stress in nursing home staff are associated with working with more cognitively impaired resident populations, especially on day shift (Everitt *et al.* 1991, Novak & Chappell 1996), while greater satisfaction is reported when working with less cognitively impaired residents (Novak & Chappell 1996). An increase in nurses' stress is significantly related to higher levels of resident aggression, especially if the behaviour is perceived as threatening (Rodney 2000). Further, nurses express more frustration, anxiety and anger towards vocally disruptive residents and a desire to distance themselves from them (Draper *et al.* 2000). Staff stress may also be associated with resident abuse and neglect (Goergen 2001).

Workload is highly predictive of the experience of burden and job pressure (Chappell & Novak 1992). Nurses working full-time are reported to have lower levels of strain than those working part-time (Hallberg & Norberg 1995). Training in the care of cognitively impaired patients has been found to alleviate the burden felt by nursing assistants (Chappell & Novak 1992), improve staff attitudes and caring behaviours and, over time, resident well-being (Lintern *et al.* 2000). The implementation of systematic clinical supervision combined with individualized patient care decreased staff burnout and strain, and increased satisfaction (Hallberg & Norberg 1993, Berg *et al.* 1994, Hallberg *et al.* 1994).

## The study

### Aim

The aims of this study were (a) to investigate nursing home staff strain related to dementia care and satisfaction with work, and to describe in particular the resident characteristics that staff find most difficult and aspects of work that they find most satisfying, and (b) to investigate associations between these variables and job and individual characteristics of nursing staff, and levels of behavioural disturbance in nursing homes.

### Sample

A survey of 12 eastern Sydney nursing homes was undertaken during 1996–1997 as part of a study of the treatment of depression and psychosis in people with dementia (Brodaty *et al.* 2003). Nursing homes were selected to cover the range of small (under 60 beds), medium (60–90 beds) and large (over 90 beds) homes and to be geographically dispersed over the area.

### Methods

Residents from 11 homes ( $n = 647$ ) were assessed by use of case record audit and observer rating scales. One nursing home declined to participate in the resident part of the survey. For all residents, sociodemographic data were obtained from the nursing home records. Nursing staff also completed behavioural rating scales on all residents. For the present study, consent was not obtained from nursing home residents. Direct or proxy informed consent was obtained from residents, from their family members and from their general practitioners for the treatment study (Brodaty *et al.* 2003). Participation by nurses was voluntary and there were no inclusion or exclusion criteria. Thus the survey sample comprised a convenience sample of willing staff working in the nursing homes.

Questionnaires on nurses' strain and satisfaction were distributed by the director of nursing of each home to their

staff for completion. Directors of nursing were not asked to keep a record of the number of questionnaires distributed. A coversheet was attached introducing the study and requesting demographic information such as age, gender, position, dementia specific training, hours worked per week, and length of experience in nursing homes.

### Instruments

Staff strain in relation to dementia care was measured using an English translation of the Swedish Strain in Nursing Care Assessment Scale (SNC) (Hallberg & Norberg 1995). The Swedish version of the SNC was demonstrated to be valid and reliable (Hallberg & Norberg 1995). This version of the scale has 36 items representing actions or emotions preceded by the heading: 'In daily care, people with dementia often...' For each statement, respondents indicate on two 4-point Likert scales how much they agree, from completely (0) to not at all (3), and how they cope, from easily (0) to with difficulty (3). Of the 36 items on the strain scale, 15 were positive attributes and 21 were negative. Agreement responses on items 4, 5, 6, 8, 10, 11, 12, 16, 23, 24, 26, 27, 28, 33 and 34 were reverse coded and all items were summed to produce a total attitude subscale score with higher scores indicating more negative attitudes. Scores on items reflecting difficulty coping were summed to produce the total strain subscale score with higher scores reflecting greater strain.

The reliability of the subscales as measured by their internal consistency resulted in Cronbach alpha values of 0.747 and 0.961 for attitude and strain subscales, respectively. The SNC was chosen because it is the only instrument we knew of specifically designed to measure both nursing home staff attitudes towards residents and their reactions to them.

Staff satisfaction was measured using an English translation of the Swedish Satisfaction with Nursing Care and Work Assessment Scale (SNCW) (Hallberg *et al.* 1994). The Swedish version of the SNCW was demonstrated to be valid and reliable (Hallberg *et al.* 1994). The scale consists of 35 items covering domains such as cooperation, development, quality of care, workload and knowledge of patients. Staff responded on a 5-point scale with 1 representing complete agreement and 5 representing complete disagreement. Eight of the 32 statements on the satisfaction scale were negative, the others were positive. Items 4, 6, 12, 13, 21, 22, 23 and 24 were reverse coded. Items were summed with higher total satisfaction score reflecting greater satisfaction. Cronbach's alpha was 0.857. The SNCW was chosen because it was specifically designed to measuring nursing home staff satisfaction with their work.

All 647 residents were rated using the Behavioural Pathology in Alzheimer's Disease Rating Scale (BEHAVE-AD)

(Reisberg *et al.* 1987). The BEHAVE-AD, a 26-item observer rating scale, was used to measure behavioural and psychological symptoms of dementia (BPSD) over the previous 2 weeks. Each item was rated on a 4-point scale (0–3) and each subject was rated separately by morning shift and evening shift nursing staff. Levels of BPSD were determined by taking the mean of morning and afternoon raters. The BEHAVE-AD is the original behavioural rating scale for Alzheimer's disease and was based on chart review of 57 AD patients. It has demonstrated internal consistency, inter-rater reliability and validity (Patterson *et al.* 1990, Sclan *et al.* 1996) and is one of the most widely used instruments for the measurement of behavioural disturbance in dementia.

### Ethical considerations

The Directors of Nursing and proprietors of the participating nursing homes gave their permission for the involvement of their facility in the project. Approvals were obtained from the New South Wales Guardianship Tribunal, the Ethics Committees of the South-Eastern Sydney Area Health Service and the University of New South Wales. A meeting was also held with staff to go over any queries they might have regarding the questionnaires.

### Analyses

Nurse strain and satisfaction questionnaires had to be at least 90% complete to be included in the analyses. Statistical analyses were performed using SPSS version 9.0 (Norussis 1996). A 5% level of significance was set for all tests. Associations between nurses' attitude, strain, satisfaction and demographic variables were investigated using *t*-tests and Pearson's product moment correlations. One-way parametric ANOVA models were used to analyse differences between homes on total attitude, strain and satisfaction scores. As there were insufficient power to perform multilevel analyses, mean levels of strain and behavioural disturbance in each nursing home were examined graphically.

### Results

A total of 253 staff returned the questionnaires. Of these, 234 (92.5%) staff completed the attitudes to dementia care, 209 (82.6%) completed the strain because of dementia care and 241 (95.3%) the satisfaction with work scales sufficiently for analysis. Not all respondents completed the demographic information (Table 1). A description of the residents in the nursing homes and levels of behavioural disturbance has been published (Brodaty *et al.* 2001).

**Table 1** Characteristics of sample ( $n = 253$ )

Age – years, mean/SD	40.43 ± 11.39 (range 18–65)
Gender – female (%)	205 (91.5)
Education	
Registered Nurse (%)	77 (38.2)
Nurse's aide (%)	116 (57.8)
Enrolled nurse (%)	4 (2.0)
Diversional therapist (%)	4 (2.0)
Number of hours worked per week	
Hours, mean/SD	31.5 ± 10.81 (range 5–71)
Experience in nursing homes	
Median no months	72 (range 1–420)
Dementia training	
Yes (%)	81 (53.6)
No (%)	70 (46.4)

Attitudes towards residents and strain in relation to dementia are presented in Table 2. The five most prevalent perceptions of people with dementia were that they are anxious, have little control over their difficult behaviour, are unpredictable, are lonely and are frightened/vulnerable. Each of these were partly or completely agreed to by over 88% of respondents. The mean percentage of staff agreeing (completely or partly) with positive items was 62.7%; the mean percentage agreeing with negative items was 66.6%. The five attributes staff found most difficult to cope with were residents being aggressive/hostile, having little control over their difficult behaviour, being stubborn/resistive, deliberately difficult and being unpredictable. Each of these was rated as difficult or quite difficult to cope with by over 64% of respondents.

**Table 2** Results for attitudes to and strain in Nursing Care Assessment Scale

	Completely or partly agree [attitude] $n = 234$ (%)	Difficult or quite difficult to cope with [strain] $n = 209$ (%)
In daily care, people with dementia often		
1. Seem to behave in a completely aimless way	199 (85.1)	105 (50.2)
2. Are anxious	214 (91.5)	117 (56.0)
3. Are unpredictable	204 (89.5)	127 (64.8)
4. Do things for a reason	105 (53.9)	88 (45.3)
5. Try to influence others in order to maintain control of their own lives	130 (43.7)	94 (46.7)
6. Are calm	115 (50.5)	68 (31.3)
7. Are apathetic/seem to have limited emotions	136 (58.4)	87 (43.1)
8. Are compliant/voluntarily co-operative	118 (49.1)	104 (49.5)
9. Are selfish	112 (47.8)	106 (51.5)
10. Are rewarding to work with	184 (78.3)	71 (35.2)
11. Are content/happy	102 (55.6)	69 (34.5)
12. Are not critical of the care they receive	92 (60.5)	89 (43.4)
13. Are paranoid	159 (67.9)	134 (53.4)
14. Complain about or react negatively to the care they receive	143 (61.2)	126 (60.3)
15. Are attention-seeking	178 (75.8)	111 (53.7)
16. Have meaningful lives	148 (35.3)	104 (51.5)
17. Are manipulative	137 (59.5)	107 (52.7)
18. Are anguished/full of emotional pain	178 (75.7)	132 (63.5)
19. Are frightened/vulnerable	209 (88.9)	114 (54.6)
20. Are lonely	210 (89.4)	106 (51.2)
21. Are submissive/give in to everything done to them	103 (50.7)	102 (49.3)
22. Have to concentrate exclusively on their own needs in order to survive	117 (48.8)	105 (51.2)
23. Have little control over their difficult behaviour	212 (89.9)	139 (67.2)
24. Are grateful	176 (74.9)	52 (25.6)
25. Are deliberately difficult	87 (37.6)	131 (65.5)
26. Try to maintain some independence	200 (84.8)	80 (38.7)
27. Know what they want and stand up for themselves	101 (42.8)	106 (51.0)
28. Seem to experience the normal range of emotions	90 (61.5)	91 (43.5)
29. Are ungrateful	95 (40.5)	101 (48.5)
30. Need someone close by all the time/are demanding	186 (79.2)	128 (61.9)
31. Give no job satisfaction	62 (26.7)	87 (43.1)
32. Have empty lives	123 (53.3)	106 (52.2)
33. Have patterns of behaviour you can foresee	188 (80.3)	91 (43.9)
34. Are friendly	204 (87.9)	135 (19.5)
35. Are stubborn/resistive	204 (87.9)	135 (65.8)
36. Are aggressive/hostile	208 (88.8)	161 (77.0)

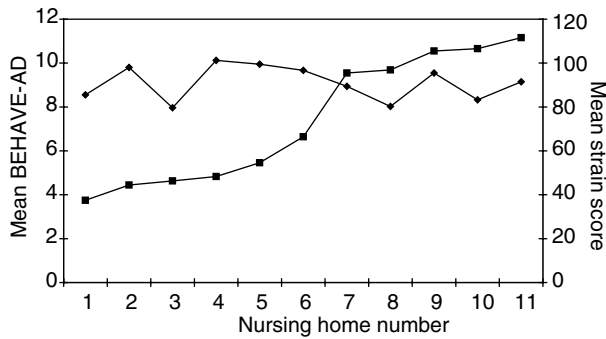
Satisfaction with work scores are presented in Table 3. The five statements on the satisfaction scale that were most agreed with were 'the patients/residents at work nearly always receive good care', 'it is important to try and enter into the way patients experience what happens to them', 'relatives are given enough information about care and treatment', 'I enjoy my current work situation' and 'our work organisation is good'. These statements were partly or completely endorsed by 90% of staff or more. The mean percentage of staff agreeing with the positive items was

82.4%; the mean percentage agreeing with negative items was 53.2%.

Age was not significantly correlated with attitude scores, but was significantly and positively correlated with total strain and negatively correlated with satisfaction ( $r = -0.079$ ,  $P = 0.249$ ;  $r = 0.165$ ,  $P = 0.022$ ;  $r = -0.137$ ,  $P = 0.041$ , respectively). Experience in nursing homes correlated significantly with total strain scores ( $r = 0.213$ ,  $P = 0.003$ ), but not with attitude or satisfaction. There were no significant associations detected between attitude, strain

**Table 3** Results for the Satisfaction with Nursing Care and Work Assessment Scale ( $n = 241$ )

	Completely or partly agree (%)	Doubtful (%)	Completely or partly disagree (%)
1. My duties at work are stimulating	204 (84.3)	20 (8.4)	15 (6.2)
2. My duties at work are varied	199 (84.4)	20 (4.2)	27 (11.4)
3. I am able to organise my working conditions so that I can work at a pace which is comfortable to me	187 (78.3)	17 (7.1)	35 (14.7)
4. I often find that I do not complete everything that I should in my job	104 (51.9)	10 (4.2)	123 (43.8)
5. My opinions are considered when changes are made at work	151 (66.1)	32 (13.9)	46 (20.0)
6. I worry that my own job situation will change because of changes to the organization	119 (50.0)	45 (18.9)	74 (31.0)
7. I am satisfied with the independence I have in my job	201 (84.2)	14 (5.8)	24 (10.0)
8. I am satisfied with the responsibility I have in my job	213 (89.2)	10 (4.2)	16 (6.7)
9. Our work organization is good	217 (90.9)	11 (4.6)	11 (4.6)
10. Our staff work well together	110 (87.5)	16 (6.6)	14 (5.8)
11. There is a friendly atmosphere at work	215 (90.0)	12 (5.0)	12 (5.0)
12. I often feel that I know too little about the patients'/residents' disease and treatment	85 (56.2)	20 (8.3)	134 (35.5)
13. I often feel that I know too little about the patients'/residents' personal background, habits and wishes	79 (57.7)	22 (9.2)	138 (33.0)
14. There are enough opportunities at work to discuss the psychological stress of the job	121 (50.2)	47 (19.5)	73 (30.3)
15. The patients/residents at work nearly always receive good care	233 (97.1)	5 (2.1)	2 (0.9)
16. The patients are given enough information about their disease	161 (68.2)	59 (25.0)	16 (6.7)
17. The patients/residents are given enough information before examinations and treatment	197 (81.2)	28 (11.7)	17 (7.1)
18. Newly admitted patients/residents are given enough information about the routine in the place where I work	206 (86.6)	20 (8.4)	12 (5.0)
19. Relatives are given enough information about care and treatment	217 (92.3)	11 (4.7)	7 (3.0)
20. It is important to try and enter into the way patients experience what happens to them	225 (94.9)	9 (4.7)	5 (3.0)
21. It is too much to expect that I can involve myself with every patient/resident	173 (72.4)	12 (5.0)	54 (22.6)
22. It is difficult to manage the job if you get too involved with the patients/residents	140 (59.1)	22 (9.3)	75 (31.6)
23. I seldom have time to try and understand what the patients/residents think about our care	139 (58.4)	16 (6.7)	83 (34.8)
24. It is boring to work with the same patients/residents every day	176 (18.5)	18 (7.6)	44 (74.0)
25. I enjoy my current work situation	220 (91.7)	10 (4.2)	10 (4.2)
26. I feel that I am developing a person from my work here	198 (83.5)	19 (8.0)	20 (8.4)
27. I feel that I am developing professionally from my work here	192 (81.0)	18 (7.6)	27 (11.4)
28. I often receive encouragement from others for the work I do	182 (76.1)	28 (11.7)	29 (12.2)
29. I often receive constructive (i.e. helpful) criticism about the work I do	174 (72.8)	33 (13.8)	32 (13.4)
30. My colleagues value what I do at work	197 (82.4)	22 (11.3)	14 (5.8)
31. My colleagues often ask me for information I can give about particular patients	193 (80.7)	28 (11.7)	18 (7.5)
32. We often discuss ways of improving the care we give (e.g. alternative care methods, setting care goals, changing the work routine)	204 (84.6)	18 (7.5)	19 (7.9)



**Figure 1** Strain in Nursing Care Assessment Scale and BEHAVE-AD scores for each nursing home. ■, mean BEHAVE-AD; ◆, mean strain.

and satisfaction scores and gender, qualifications, hours worked per week or having had dementia training.

Attitude was negatively correlated with strain and satisfaction ( $r = -0.440$ ,  $P \leq 0.001$ ;  $r = -0.192$ ,  $P = 0.004$ , respectively). In other words, nursing staff with more negative attitudes reported lower levels of strain and less job satisfaction. Strain and satisfaction total scores were weakly correlated ( $r = 0.141$ ,  $P = 0.046$ ). There was a significant overall difference between nursing homes on total strain relating to dementia care scores ( $F = 2.167$ ,  $df = 11,195$ ,  $P = 0.018$ ), but not on attitude towards residents or satisfaction with work scores ( $F = 1.200$ ,  $df = 11,224$ ,  $P = 0.288$ ;  $F = 1.178$ ,  $df = 11,229$ ,  $P = 0.303$ ). Mean BEHAVE-AD and strain scores for the 11 nursing homes where both were completed are presented in Figure 1. The graph suggests no association between strain and levels of behavioural disturbance in homes.

## Discussion

Staff were found to perceive residents more negatively than positively. The five most agreed to attributes were all negative. Behaviours that staff found most difficult to deal with were aggressiveness, unco-operativeness and unpredictability. Many staff believed behaviours were deliberate rather than a consequence of the dementia. A quarter of staff reported that residents provided no job satisfaction. Despite finding residents difficult to work with, staff thought they received good care and that it was important to try to understand them.

Most staff (91.7%) enjoyed their work situation and were happy with the responsibility (89.2%) and independence (84.2%) they had at work. However, half reported that they did not have enough time to complete their tasks and worried that their jobs would be affected by organizational changes.

There were significant differences between nursing homes and total strain scores which do not appear to be related to levels of behavioural disturbance. Difference in strain scores may result from many other factors such as differences between homes in culture of acceptance of resident behaviours and different leadership styles by the directors of nursing. Worse attitudes towards residents were associated with less strain and less satisfaction with work. Perhaps staff that viewed residents more negatively were less involved with their work, hence they felt less strain in relation to resident care, but also felt less satisfied with their jobs. In the current sample, being older was not associated with more negative perceptions of residents, but was associated with greater strain in relation to resident behaviour and less job satisfaction. Greater experience in nursing homes was also associated with more strain. Over 30% of staff reported that there were not enough opportunities at work to discuss the psychological stress of the job and over 55% felt they knew too little about the residents' disease and treatments. Future interventions to decrease turnover may include education and providing support and coping skills, and focus especially on staff who have worked longer in homes.

## Limitations

Lack of data on the representativeness of the sample, self-report biases and missing demographic data limited the analyses. Questionnaires were left with the director of nursing of each home to distribute to staff. A weakness in the study is that we have no information on the distribution rate, and cannot calculate the response rate. Staff may not have responded because they did not receive the questionnaires, were too busy, were uninterested or were protective of their own privacy; however, we have no information on non-respondents.

There were also limitations with instruments. The SNC only measures strain experienced through interactions with patients, and does not include strain related to workload, workplace relations, or management conflicts which also contribute to nurses' workplace strain (Wheeler 1998). The SNCW does not measure areas such as rewards and motivation that may influence staff satisfaction.

The validity and reliability of the English versions of the SNC and SNCW have not been established.

## Conclusions

Staff in this study were generally satisfied with their jobs, but perceived residents as having negative characteristics and being difficult to deal with. Many staff viewed

### What is already known about this topic

- Turnover in nursing home staff is high.
- Nursing home staff stress and satisfaction are associated with job and resident characteristics.
- Training and clinical supervision have been shown to decrease nursing home staff stress and increase satisfaction.

### What this paper adds

- Provides evidence that nursing home staff perceived residents in more negative than positive ways.
- Nursing home staff are generally satisfied with their work but a quarter reported that residents provided no job satisfaction.
- Significant differences between nursing homes in levels of nursing staff strain related to dementia care appeared to be unrelated to behavioural disturbance.

residents' aberrant behaviours as deliberate. There were differences between homes concerning how difficult staff found it to cope with residents. This difference did not appear to be related to level of behavioural disturbance in the home, suggesting other factors such as individual or job characteristics are important. Alteration of time pressure and organizational uncertainty and provision of education, training and more support to nursing staff may be helpful. Future studies may include measurement of such variables.

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### References

- Berg A., Hansson U.W. & Hallberg I.R. (1994) Nurses' creativity, tedium and burnout during 1 year of clinical supervision and implementation of individually planned nursing care: comparisons between a ward for severely demented patients and a similar control ward. *Journal of Advanced Nursing* 20, 742–749.
- Brodaty H., Draper B., Saab D., Low L.-F., Richards V., Paton H. & Lie D. (2001) Psychosis, depression and behavioural disturbances in Sydney nursing home residents: prevalence and predictors. *International Journal of Geriatric Psychiatry* 16, 504–512.
- Brodaty H., Draper B., Miller J., Low L.-F., Lie D., Sharah S. & Paton H. (2003) Randomized controlled trial of different models of care for nursing home residents with dementia complicated by depression or psychosis. *Journal of Clinical Psychiatry* 64, 63–72.
- Chappell N.L. & Novak M. (1992) The role of support in alleviating stress among nursing assistants. *The Gerontologist* 32, 351–359.
- Cohen-Mansfield J. (1997) Turnover among nursing home staff. *Nursing Management* 28, 59–64.
- Draper B., Snowdon J., Meares S., Turner J., Gonski P., McMinn B., McIntosh H., Latham L., Draper D. & Luscombe G. (2000) Case-controlled study of nursing home residents referred for treatment of vocally disruptive behavior. *International Psychogeriatrics* 12, 333–344.
- Everitt D., Fields D.R., Soumerai S.S. & Avorn J. (1991) Resident behaviour and staff distress in the nursing home. *Journal of the American Geriatrics Society* 39, 792–798.
- Goergen T. (2001) Stress, conflict, elder abuse and neglect in German nursing homes: a pilot study among professional caregivers. *Journal of Elder Abuse* 13, 1–26.
- Hallberg I.R. & Norberg A. (1993) Strain among nurses and their emotional reactions during 1 year of systematic clinical supervision combined with the implementation of individualized care in dementia nursing. *Journal of Advanced Nursing* 18, 1860–1875.
- Hallberg I.R. & Norberg A. (1995) Nurses' experiences of strain and their reactions in the care of severely demented patients. *International Journal of Geriatric Psychiatry* 10, 757–766.
- Hallberg I.R., Welander U.H. & Axelsson K. (1994) Satisfaction with nursing care and work during a year of clinical supervision and individualized care. Comparison between two wards for the care of severely demented patients. *Journal of Nursing Management* 1, 297–307.
- Hinshaw A.S. & Atwood J.R. (1993) Nursing staff turnover, stress and satisfaction: Models, measures and management. *Annual Review of Nursing Research* 1, 133–153.
- Lintern T., Woods B. & Phair L. (2000) Training is not enough to change care practice. *Journal of Dementia Care* 8, 15–16.
- Margallo-Lana M., Reichelt K., Hayes P., Lee L., Fossey J., O'Brien J. & Ballard C. (2001) Longitudinal comparison of depression, coping, and turnover among NHS and private sector staff caring for people with dementia. *BMJ* 322, 769–70.
- Norussis M.J. (1996) *SPSS for Windows, version 6.0*. SPSS Inc., Chicago.
- Novak M. & Chappell N.L. (1996) The impact of cognitively impaired patients and shift on nursing assistant stress. *International Journal of Aging and Human Development* 43, 235–248.
- Patterson M.B., Schnell A.H., Martin R.J., Mendez M.F., Smyth K.A. & Whitehouse P.J. (1990) Assessment of behavioral and affective symptoms in Alzheimer's disease. *Journal of Geriatric Psychiatry & Neurology* 3, 21–30.
- Reisberg B., Borenstein J., Franssen E., Salob S., Steinberg G., Chulman E., Ferris S.H. & Georgotas A. (1987) BEHAVE-AD: a clinical rating scale for the assessment of pharmacologically

- remediable behavioural symptomatology in Alzheimer's disease. In *Alzheimer's Disease: Problems, Prospects and Perspectives* (Altman H.J., ed.), Plenum Press, New York, pp. 1–16.
- Rodney V. (2000) Nurse stress associated with aggression in people with dementia: its relationship to hardiness, cognitive appraisal and coping. *Journal of Advanced Nursing* 3, 172–180.
- Sclan S.G., Saillon A., Franssen E. & Hugonot-Diener L. (1996) The Behavior Pathology in Alzheimer's Disease Rating Scale (BEHAVE-AD): Reliability and analysis of symptom category scores. *International Journal of Geriatric Psychiatry* 11, 819–830.
- Wheeler H.H. (1998) Nurse occupational stress research 5: sources and determinants of stress. *British Journal of Nursing* 7, 40–43.