

Attitudes, Stress, and Satisfaction of Staff Who Care for Residents With Dementia

Sheryl Zimmerman, PhD,^{1,2} Christianna S. Williams, PhD,^{1,3}
Peter S. Reed, PhD, MPH,⁴ Malaz Boustani, MD, MPH,⁵
John S. Preisser, PhD,⁶ Elizabeth Heck, MSW,⁴ and Philip D. Sloane, MD, MPH^{1,7}

Purpose: Considering the increasing proportion of residents in long-term care who have dementia, and the important influence that direct care providers have on resident quality of life, this study explores the dementia-related attitudes of residential care/assisted living (RC/AL) and nursing home staff, as well as their work stress and satisfaction. **Design and Methods:** Data were derived from interviews with 154 direct care providers from 31 RC/AL facilities and 10 nursing homes who participated in the Collaborative Studies of Long-Term Care. **Results:** Stress was more often reported by care providers who had been working for 1 to 2 years (compared with longer); in addition, those who had been working for 1 to 2 years were more likely to espouse hopeful or person-centered attitudes than those who had been working for a longer period of time. Also, a person-centered attitude related to satisfaction, and perceived competence in providing dementia care was consistently associated with dementia-sensitive attitudes and job satisfaction. **Implications:** Attending to the welfare and ongoing training of workers

who have demonstrated job commitment may lessen their tendency to become jaded over time or seek job opportunities elsewhere. Further, the attitudes the staff hold related to dementia and the training they receive to provide dementia care are important for their own well-being.

Key Words: Long-term care, Assisted living, Nursing home, Alzheimer's disease

Direct care providers in long-term care facilities have a difficult job. Nurse aides and personal care aides work long hours, are poorly paid, receive minimal benefits, and are prone to injury and depression (Deutschman, 2000; Mercer, Heacock, & Beck, 1993; Schrim, Uhman, & Barton, 1996). Ironically, concomitant with these challenges is the recognition that these workers are central to resident quality of life, and that the relationship between the resident and caregiver is a central feature of this quality (Bowers, Esmond, & Jacobson, 2000). Thus, the approaches exhibited and stressors experienced by nurse aides and personal care aides are of importance for the well-being of not only the workers themselves, but also of the residents and families they serve. It may come as some surprise, then, that although there has been extensive research considering the stress of caring for people with dementia on family caregivers, little research has investigated the stressors placed on these long-term care workers (Mackenzie & Peragine, 2003; McCarty & Drebing, 2003). This oversight applies to care in both nursing homes—in which more than 50% of residents have dementia (Krauss & Altman, 1998)—and residential care/assisted living (RC/AL) settings, in which 24% to 42% of residents have moderate or severe dementia, including as many as 8% with severe dementia (Zimmerman & Sloane, 1999).

Matters related to care provision in RC/AL are particularly understudied, as this component of long-term care has only recently undergone significant

This research was supported by grants from the National Alzheimer's Association Program and Community Services Division and Medical and Scientific Division (Grant No. IIRG-00-2222). We appreciate the cooperation of the staff, residents, and families participating in the Collaborative Studies of Long-Term Care. We are also grateful to Ms. Jane Darter and Mr. Karminder Gill for expert data management, and to Dr. Debra Dobbs for input during the development of this article.

Address correspondence to Sheryl Zimmerman, PhD, Program on Aging, Disability and Long-Term Care, Cecil G. Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill, 725 Martin Luther King Jr. Blvd., CB 7590, Chapel Hill, NC27599-7590. E-mail: Sheryl_Zimmerman@unc.edu

¹Cecil G. Sheps Center for Health Services Research, The University of North Carolina, Chapel Hill.

²School of Social Work, University of North Carolina, Chapel Hill.

³School of Public Health, University of North Carolina, Chapel Hill.

⁴Alzheimer's Association, National Office, Chicago IL.

⁵Regenstrief Institute and Indiana University Center for Aging Research, Indianapolis.

⁶Department of Biostatistics, University of North Carolina, Chapel Hill.

⁷Department of Family Medicine, University of North Carolina, Chapel Hill.

growth. RC/AL is broadly defined as those facilities (or discrete portions of facilities) licensed by the state, at a non-nursing-home level of care, that provide room, board, 24-hr oversight, and assistance with activities of daily living (Kane & Wilson, 1993). They display marked diversity, ranging from converted single-family homes with only a few resident beds to high-rise facilities with hundreds of beds. Between 15% and 37% of residents are impaired in three or more core dependencies (e.g., dressing, eating, and transferring), and 37% to 49% exhibit behavioral symptoms, with rates of impairment tending to be higher in smaller facilities (Zimmerman, Sloane, & Eckert, 2001; Zimmerman et al., 2003). As RC/AL has become a notable site of care for almost 1 million individuals (Golant, 2004), it is important that they be included when statements are made about the situation of the direct care provider in long-term care.

The theoretical model of stress in nursing home staff provides a helpful grounding for this topic. It recognizes sources of stress (personal and work stressors related to the overall function of the workplace and interactions with coworkers and residents), intervening variables (personal and work resources, the latter of which includes job training), the resultant person-job fit, the stress response (including emotional reactions such as cynicism or optimism and satisfaction, and behavioral reactions such as quitting), and the impact of stress on the workplace (related to the quality of care; see Cohen-Mansfield, 1995). Others agree that contributors to stress include lack of preparation to provide care and lower self-efficacy in perceived ability to provide care, and that the impact of stress includes decreased job satisfaction and increased turnover (Evers, Tomic, & Brouwers, 2001; Mackenzie & Peragine, 2003; Schaefer & Moos, 1996). As turnover rates exceed 100% in many long-term care settings (Pillemer, 1997), the time has come to better understand the attitudes, stressors, and satisfaction of direct care workers who provide care to those with dementia.

We designed this study to examine the attitudes that long-term care workers hold about dementia, the work stress they experience, and the satisfaction they derive from working with these residents. We explore differences by facility types and worker characteristics and examine (select) sources of stress, intervening variables, the resultant level of stress, and responses to stress. We conclude with suggestions on steps that might be taken to affect attitudes, stress, and satisfaction that have implications for the quality of care.

Methods

Participants and Recruitment

The facilities and staff participating in this project are part of the Collaborative Studies of Long-Term Care (CS-LTC), a consortium of more than 350 RC/

AL facilities and nursing homes across four states (Florida, Maryland, New Jersey, and North Carolina) that have been participating in studies related to quality of life and quality of care since 1997. Using the typology developed for the CS-LTC, the Dementia Care project enrolled four different types of facilities: nursing homes; RC/AL facilities with fewer than 16 beds; traditional RC/AL facilities; and new-model RC/AL facilities distinguished by provision of nursing care or that cater to an impaired population. Details of the CS-LTC and the facility typology can be found elsewhere (Zimmerman et al., 2001).

The Dementia Care project used a multistage cluster sampling strategy. It enrolled a purposive sample of 45 facilities, 33 of which were drawn from those already participating in the CS-LTC and known to evidence variability in some areas of dementia care (e.g., acceptance of behavior symptoms). Chapter representatives from the Alzheimer's Association identified 12 additional facilities that had some features of particular interest (e.g., responsive owners, a special care unit, individualized care, daily programming, staff training, or environment features). In general, we excluded facilities with fewer than 2 eligible residents (in facilities with fewer than 16 beds) or 13 eligible residents (in all other facilities) from the study. We enrolled all eligible facilities in a manner that maintained stratification across states and by facility type. During recruitment, 22 facilities (33%) refused to participate. Facilities that refused did not differ from participating facilities by type, size, or state. The final sample included 14 facilities with fewer than 16 beds (31% of the sample), 11 traditional RC/AL facilities (24%), 10 new-model RC/AL facilities (22%), and 10 nursing homes (22%). Proportionately more small facilities were enrolled to increase the number of residents and staff who represented that stratum. North Carolina had 12 facilities, and all other states had 11 facilities.

Within these facilities, we randomly selected 421 residents aged 65 and older with a diagnosis of dementia (up to a maximum number per facility), and we asked a direct care provider (identified by the administrator as the individual who provided the most hands-on care and knew the most about the resident's care, health, mood, and daily activities) to provide information about the resident as well as about his or her own attitudes, stress, and satisfaction. Each facility's administrator provided information regarding facility characteristics. The project was approved by the Institutional Review Boards of the Universities of North Carolina and Maryland, and data collection was conducted on site between September 2001 and February 2003.

Measures

We used three measures to collect data regarding attitudes, stress, and satisfaction.

Approaches to Dementia.—This measure (Lintern, Woods, & Phair, 2000) includes 19 attitudinal items, each scored from 1 (*strongly disagree*) to 5 (*strongly agree*). They are summed to form a total score (range 19–95) as well as a hope subscore (8 items, range 8–40) and a person-centered subscore (11 items, range 11–55). Higher scores indicate more positive attitudes. Example items indicative of hope (reverse scored) include “people with dementia are very much like children” and “it is important not to become too attached to residents.” Items related to person-centered care include “it is important for people with dementia to be given as much choice as possible in their daily lives” and “people with dementia need to feel respected, just like anybody else.”

Work Stress Inventory.—This measure (Schaefer & Moos, 1993) is a modification of the original measure and is derived by averaging the frequency of 45 stressors, each scored 1 (*never—not at all*) to 5 (*often—very well*). Higher scores indicate more stress, and subscales can be created for each of six domains: stress related to events, resident care, relations with coworkers, relations with supervisors, workload and scheduling, and physical design. Example items (one for each domain) ask about the past 30 days, and include the following: “how often have you had to do tasks for which you have little or no training?”; “how often have you cared for a resident who was uncooperative, angry, or complaining?”; “how often have you not gotten help from your coworkers when you needed it?”; “how often have you been uncertain about whether your supervisors think you are doing a good job?”; “how often have you had to work with staff who are inexperienced and poorly trained?”; and “would you describe your workplace as not having a place to get away from residents?”

Staff Experience Working With Demented Residents.—This measure (Åstrom, Nilsson, Norberg, Sandman, & Winblad, 1991) includes 21 items assessing satisfaction, each scored from 0 (*not at all*) to 4 (*extremely*) and summed to create a total score ranging from 0 to 84. Higher scores indicate more satisfaction, and subscales can be created for each of six domains: (satisfaction with) feedback, the care organization, one’s own expectations, patient contact, expectations of others, and the environment. Example items (one for each domain) ask to what extent the following occur: “you experience contact with confused residents as stimulating”; “work flows well between day staff and night staff”; “relatives of demented residents respond to your expectations of them”; “you can be helpful and see to the needs of residents with dementia”; “you can respond to the expectation of your coworkers” and “your workplace is ideal for the care of demented residents.”

Direct care providers also provided demographic information about themselves and reported on how well trained they considered themselves to be to assess and treat behavioral symptoms, depression, pain, activity involvement, mobility, and food and fluid intake (see related reports in this issue). Scores range from 0 (feels *not at all* or *a little* trained in all areas) to 21 (feels *extremely well trained* in all areas). Finally, facility administrators reported on facility size, age, profit status, whether it provided special care for residents with dementia, and resident case-mix.

Analyses

We computed simple descriptive statistics (means, standard deviations, and percentages) for facility and care provider demographic characteristics, as well as for care provider attitudes, work stress, and satisfaction. To develop the total and subscale scores on the measures of Approaches to Dementia, Work Stress Inventory, and Staff Experience Working With Demented Residents, we created summary scores if at least 75% of the component items were non-missing, with the scores rescaled to maintain the same range. We examined internal consistency by computing Cronbach’s coefficient alpha for the total scores as well as for each subscale, basing it only on respondents with no missing items for each measure or subscore.

To estimate associations among attitudes, work stress, and satisfaction, we computed Pearson correlation coefficients for both total scores and subscales. We tested the statistical significance of these associations by using the general linear model with correlated errors (Diggle, Heagerty, Liang, & Zeger, 2002), specifying a compound symmetrical correlation structure within facilities. Using linear models, we tested bivariate associations between facility and care provider characteristics and each of the measures of attitudes, work stress, and satisfaction, with attitudes, stress, and satisfaction as the dependent variables and facility and care provider characteristics as the independent variables; again, we specified a compound symmetrical correlation structure for care providers within facilities. (Because we estimated a separate model for each association in the bivariate analyses, we conducted multiple statistical tests for each dependent variable; hence, interpretations of results are focused on characteristics associated with more than one measure.) Finally, we estimated the independent associations of the care provider and facility characteristics with attitudes, stress, and satisfaction, each in a single regression model that included all the facility and care provider characteristics (as well as attitudes, stress, and satisfaction, except when it was the dependent variable).

Table 1. Facilities and Direct Care Providers of the Dementia Care Study

Variable	N (%) or M (SD)
Facilities	
Type	
Nursing home	10 (24.4%)
RC/AL	
< 16 beds	10 (24.4%)
Traditional	11 (26.8%)
New-model	10 (24.4%)
Bedsized	67.0 (51.8)
Facility age	20.5 (21.6)
For profit	30 (73.2%)
Special care unit or facility	22 (53.7%)
Resident case-mix ^a	
Age, % 85 and older	41.9 (22.0)
Gender, % male	21.9 (14.4)
Race, % non-White	7.2 (12.6)
% Hispanic	0.8 (3.3)
% Medicaid	27.2 (30.5)
% bedfast	2.2 (4.3)
% chairfast	30.7 (24.3)
% dementia diagnosis	53.2 (23.7)
Direct care providers	
Gender, male	10 (6.5%)
Age	39.9 (12.4)
Education, some college	59 (38.8%)
Race	
Black	86 (55.8%)
White	56 (36.4%)
Other	12 (7.8%)
Hispanic	11 (7.2%)
Experience, time in present job	
< 6 months	11 (7.2%)
6–11 months	21 (13.7%)
1–2 years	25 (16.3%)
≥ 2 years	96 (62.7%)
Experience, with dementia residents	
< 1 year	14 (9.2%)
1–2 years	15 (9.8%)
≥ 2 years	124 (81.0%)
Perception of assessment training ^b	15.8 (3.7)
Perception of treatment training ^b	15.0 (3.9)

Notes: RC/AL = residential care/assisted living. For facilities, N = 41. The 4 facilities providing no staff data were all RC/AL with < 16 beds; 3 had only administrators or supervisors, and 1 had only one provider who did not complete the staff interview. Due to missing data for direct care providers, N = 151–154.

^aFacility administrators reported case-mix for their facilities. Statistics reported are the M (SD) for these estimates.

^bPerception of training is a summary score of adequacy of training to assess and treat behavioral symptoms, depression, pain, activity involvement, mobility, and food and fluid intake. Scores can range from 0 (feels *not at all* or *a little* trained in all areas) to 21 (feels *extremely well trained* in all areas); actual scores range from 3 to 21.

Results

A total of 154 direct care providers from 41 facilities provided data for these analyses (4 small facilities were not represented). In total, 64 direct care providers (42%) worked in RC/AL facilities, and 90 (58%) worked in nursing homes; further, 11

were administrators (in RC/AL facilities with <16 beds), 1 was a registered nurse, 1 was a licensed nurse, 136 worked at the level of a certified nursing assistant with no additional credentials, and the status of 5 is unknown. As shown on Table 1, the facilities in which these workers were employed were equally distributed by long-term care setting (i.e., approximately one fourth from each of the RC/AL facility types and nursing homes). They tended to be for profit (73%) and one half (54%) had a unit or facility that specialized in the care of residents with dementia. Slightly more than one half of the residents had dementia (53%); fewer were chairfast (31%) or on Medicaid (27%).

The care providers were primarily female (94%) and averaged 40 years of age (range 16–65). Slightly more than one half of the providers were Black (56%) and had been working in their job for 2 or more years (63%). The majority (81%) had been working with residents with dementia for 2 or more years. Finally, in an index of perceived competence of training, scores averaged 15 to 16 out of a possible 21, indicating high levels of perceived preparation for care in key domains.

Table 2 provides the descriptive statistics for the measures of attitudes, stress, and satisfaction, overall and by their respective domains, as reported by the 154 respondents. Attitudes and satisfaction were skewed toward the positive (mean of 70.7 out of a possible 95 and 62.3 out of a possible 84, respectively) and stress was skewed toward the negative (i.e., low stress; mean of 1.8 out of a possible 5). Scores aggregated on a facility level (not shown) were quite similar, averaging 71.0 (SD = 4.7) for attitudes, 62.7 (SD = 6.6) for satisfaction, and 1.8 (SD = 0.4) for stress. Considering scores within each domain, we found that positive attitudes were most evident in the person-centered subscale (compared with the hope subscale); stress was highest in the caring for residents subscale; and satisfaction was highest in the patient contact subscale.

Correlations between the three measures (not shown) were $-.03$ (attitudes and stress), $.21$ (attitudes and satisfaction; $p < .01$), and $-.24$ (satisfaction and stress; $p < .01$). The strongest correlations between subscales and total scores were between person-centered care and satisfaction ($r = .28$, $p < .01$) and between stress with coworkers, supervisors, workload, and physical design, and satisfaction ($r = -.20$ to $-.27$; $p < .01$). The strongest correlations between subscales were between the attitude of person-centered care and satisfaction (with feedback and patient contact); and between satisfaction (with the organization and own expectations) and stress (related to coworkers and workload), all six of which ranged from $\pm .30$ to $\pm .45$ ($p < .001$).

Table 3 displays the relationship of the facility and care provider characteristics to subscales and total scores of attitudes, stress, and satisfaction, adjusted for facility-level clustering. Given the number of

Table 2. Descriptive Statistics of Attitudes About Dementia, Work Stress, and Satisfaction

Variable	<i>M (SD)</i>	Minimum	Maximum	Internal Consistency	
				No. of Items	Cronbach's α
Attitudes about dementia					
Hope (theoretical range, 8–40)	24.1 (4.3)	10.0	36.0	8	.65
Person-centered care (11–55)	46.5 (3.8)	37.0	55.0	11	.75
Total (19–95)	70.7 (6.4)	49.0	88.0	19	.75
Work stress					
Work events (1–5)	2.0 (0.7)	1.0	4.0	7	.71
Caring for residents (1–5)	2.7 (0.9)	1.0	5.0	4	.68
Relationships with coworkers (1–5)	1.6 (0.6)	1.0	3.4	9	.85
Relationships with supervisors (1–5)	1.5 (0.7)	1.0	4.4	7	.90
Workload and scheduling (1–5)	1.8 (0.7)	1.0	4.1	8	.81
Physical design (1–5)	1.7 (0.8)	1.0	4.3	10	.86
Total (1–5)	1.8 (0.5)	1.0	3.8	45	.93
Staff satisfaction					
Experience of feedback at work (0–24)	17.9 (3.8)	8.0	24.0	6	.76
Care organization (0–12)	8.7 (2.2)	2.0	12.0	3	.65
Satisfaction of own expectations (0–12)	8.7 (2.1)	3.0	12.0	3	.41
Satisfaction with patient contact (0–12)	10.3 (1.5)	6.0	12.0	3	.58
Satisfaction with expectations of others (0–12)	7.7 (2.0)	0.0	12.0	3	.47
Satisfaction with environment (0–12)	9.1 (2.1)	3.0	12.0	3	.65
Total (0–84)	62.3 (9.9)	34.0	80.0	21	.87

Notes: For the table, $N = 154$. Table data are based on an average (SD) of 3.8 (2.7) staff in each facility.

comparisons that have been made, we find it advisable to focus on those that demonstrate consistency and are significant across variables. With that caveat in mind, it is first apparent that no facility or care provider characteristic related to all three outcomes of interest (attitudes, stress, and satisfaction); at best, variables related to two of the domains under study. Focusing first on facility characteristics, we found that only two variables were significantly associated with the summary measures: older facility age related to less optimal attitudes (the score for facilities older than 10 years was $M = 69.2$, $SD = 3.7$, compared with 73.2 , $SD = 5.7$ for younger facilities; $p < .01$), and having a special care unit related to more stress ($M = 37.5$, $SD = 14.1$, vs 29.0 , $SD = 17.2$; $p < .05$). None of the domains differed by the type of facility in which the staff worked (RC/AL or nursing home), and only a few resident characteristics were related to hope and some components of satisfaction, but not to work stress.

Care provider characteristics that were consistently associated with the variables under study include worker age, time in job, and perceived adequacy of training. Older workers consistently reported less stress: For those 45 years of age and older, the mean for the overall scale was 28.0 ($SD = 19.5$), compared with 34.0 ($SD = 22.9$) for those 35–44 and 45.2 ($SD = 26.3$) for those younger than 35 ($p < .01$ for both). Older workers also reported more satisfaction, although less consistently so (i.e., three of six subscales were significant). Staff who had been working for between 6 months and 2 years reported more stress (ranging 43.3 – 46.6 , $SD = 28.5$, 23.8) than

those working for more than 2 years ($M = 31.7$, $SD = 21.8$); however, those working for between 1 and 2 years reported more hope and person-centered attitudes ($M = 73.8$, $SD = 5.6$) than those working for a longer period of time ($M = 69.5$, $SD = 6.2$; $p < .01$). Additional analyses showed that staff who have been working for more than 2 years tended to be working in older facilities (i.e., facility age, $M = 29.9$ years vs 19.3 – 21.4 years for other staff age groups). Further, staff who feel they are better trained to assess and treat common sequelae of dementia were more likely to embrace a person-centered attitude ($r = .26$ and $.29$, $p < .002$, respectively) and to be more satisfied ($r = .58$ and $.56$, $p < .0001$, respectively). Finally, Black and other minority staff (who were more likely to be in their jobs for more than 2 years; data not shown) were less likely than Whites to report person-centered care ($M = 46.1$, $SD = 3.7$, and $M = 44.6$, $SD = 2.2$, respectively, vs $M = 47.6$, $SD = 4.0$; $p < .05$) but more likely to be satisfied with the environment ($M = 9.4$, $SD = 2.1$ and $M = 9.9$, $SD = 1.7$, respectively, vs $M = 8.5$, $SD = 2.0$; $p < .05$).

After adjusting for all facility and caregiver characteristics (see Table 4), hopeful or person-centered attitudes were more often espoused by workers with higher education ($p < .05$) and those working between 1 and 2 years (vs a longer period of time; $p < .10$); they were less often reported by those who are not Black (vs those who are White; $p < .01$). Stress was more often reported by men, younger workers, and those working between 1 and 2 years (vs a longer period of time; $p < .05$), but less often reported by workers in RC/AL facilities with <16

Table 3. Facility and Staff Characteristics Related to Attitudes About Dementia, Work Stress, and Satisfaction

Characteristics	Attitudes About Dementia				Work Stress				Satisfaction						
	Hope	Person-Centered Care	Total Events	Resident Care	Super-visors	Work-load	Physical Design	Total	Feed-back	Care Org	Own Expectations	Patient Contact	Others' Expectations	Environment	Total
Facility															
Type of facility															
RC/AL															
< 16 beds															
Traditional															
New-model															—**
Nursing home (reference)															
Facility age															
For profit		—**	—***												—***
Special care unit		+	+												
Resident case-mix															
Age 85+															
Non-White															
Male															
Chairfast															
Bedfast															
Medicaid															
Dementia diagnosis															
Care provider															
Male gender															
Age															
Education, some college															
Race															
Other															
Black															
White (reference)															
Time in present job															
< 6 months															
6-11 months															
1-2 years															
> 2 years (reference)															
Training: assessment															
Training: treatment															

Notes: RC/AL = residential care/assisted living. For facility, $N = 41$; the number of facilities is 39 to 40 for case-mix data. For care provider, $N = 154$; the number of participants varies from 138 to 154 because of missing data. A dash indicates a negative association, and a plus indicates a positive association. Each comparison is based on a linear-mixed model, adjusting for facility-level clustering.
 * $p < .10$; ** $p < .05$; *** $p < .01$.

Table 4. Facility and Staff Characteristics Related to Attitudes About Dementia, Work Stress, and Satisfaction, Unadjusted and Adjusted

Characteristics	Regression Coefficient (SE)					
	Attitudes About Dementia		Work Stress		Satisfaction	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Facility						
Type of facility						
RC/AL						
< 16 beds	0.87 (2.00)	-1.10 (4.01)	-0.13 (0.18)	-0.68 (0.33) [†]	0.03 (3.20)	1.57 (4.92)
Traditional	1.03 (1.56)	-1.16 (3.66)	-0.11 (0.14)	-0.19 (0.31)	1.38 (2.53)	6.85 (4.42)
New-model	1.86 (1.55)	-0.18 (3.33)	-0.11 (0.14)	-0.23 (0.28)	0.00 (2.52)	1.34 (4.04)
Nursing home (reference)	—	—	—	—	—	—
Facility size (per 10 beds)	-0.05 (0.12)	0.13 (0.22)	-0.00 (0.01)	0.01 (0.02)	-0.11 (0.19)	-0.29 (0.25)
Facility age (per 10 years)	-0.59 (0.20)**	0.02 (0.41)	0.00 (0.02)	0.04 (0.03)	-0.59 (0.36)	-0.81 (0.48)
For profit	2.08 (1.23) [†]	-0.19 (2.61)	0.15 (0.11)	0.30 (0.22)	-0.25 (2.01)	-3.26 (3.16)
Special care unit	0.53 (1.22)	-1.63 (2.12)	0.21 (0.10)*	-0.09 (0.18)	-3.50 (1.81) [†]	2.50 (2.56)
Resident case-mix (per 10%)						
Age 85+	-0.30 (0.29)	-0.34 (0.42)	0.00 (0.03)	0.02 (0.04)	0.18 (0.45)	-0.23 (0.51)
Non-White	-0.69 (0.39) [†]	-1.05 (0.72)	-0.02 (0.03)	-0.03 (0.06)	0.29 (0.57)	1.41 (0.86)
Male	-0.57 (0.53)	-0.12 (0.63)	-0.02 (0.01)	-0.02 (0.05)	0.47 (0.76)	0.10 (0.79)
Chairfast	-0.39 (0.24)	-0.50 (0.44)	-0.00 (0.02)	-0.07 (0.04) [†]	0.46 (0.34)	0.25 (0.54)
Bedfast	0.34 (1.57)	2.52 (2.43)	0.15 (0.12)	0.15 (0.21)	1.33 (2.19)	-0.42 (3.00)
Medicaid	-0.18 (0.19)	0.03 (0.35)	0.01 (0.02)	-0.00 (0.03)	-0.00 (0.28)	0.39 (0.43)
Dementia diagnosis	0.13 (0.29)	-0.05 (0.45)	0.01 (0.02)	0.03 (0.04)	0.41 (0.41)	-0.04 (0.54)
Care provider						
Male gender	-4.10 (2.07) [†]	-3.13 (2.34)	0.20 (0.17)	0.41 (0.19)*	2.69 (3.27)	0.89 (3.04)
Age	-0.02 (0.04)	-0.04 (0.06)	-0.01 (0.00)***	-0.01 (0.00)*	0.10 (0.07)	0.06 (0.07)
Education, some college	1.75 (1.05) [†]	2.75 (1.24)*	-0.05 (0.09)	-0.11 (0.10)	-0.71 (1.66)	-1.03 (1.63)
Race						
Other	-5.23 (1.98)*	-4.64 (2.38) [†]	-0.00 (0.17)	0.13 (0.20)	2.19 (3.21)	6.39 (3.03)*
Black	-2.58 (1.09)*	-1.82 (1.46)	-0.11 (0.10)	-0.10 (0.12)	1.32 (1.83)	1.20 (1.84)
White (reference)	—	—	—	—	—	—
Time in present job						
< 6 months	0.26 (1.98)	-1.16 (2.23)	0.02 (0.17)	-0.01 (0.18)	1.15 (3.16)	0.92 (2.87)
6–11 months	2.21 (1.50)	1.54 (1.76)	0.24 (0.12) [†]	0.14 (0.15)	-0.88 (2.39)	-0.27 (2.28)
1–2 years	4.09 (1.38)**	3.01 (1.64) [†]	0.33 (0.11)**	0.36 (0.13)*	-2.19 (2.20)	-1.41 (2.14)
> 2 years (reference)	—	—	—	—	—	—
Training: assessment	0.40 (0.13)**	0.26 (0.23)	-0.01 (0.01)	0.02 (0.02)	1.53 (0.18)***	1.09 (0.29)***
Training: treatment	0.30 (0.13)*	0.03 (0.21)	-0.02 (0.01)	0.00 (0.02)	1.43 (0.17)***	0.56 (0.26)*
Approaches to dementia	NA	NA	-0.01 (0.01)	-0.01 (0.01)	0.32 (0.12)*	0.18 (0.12)
Work stress	-0.77 (0.97)	-1.65 (1.15)	NA	NA	-4.42 (1.46)**	-2.45 (1.49)
Satisfaction	0.13 (0.05)*	0.10 (0.07)	-0.01 (0.00)**	-0.01 (0.01)	NA	NA

Notes: RC/AL = residential care/assisted living; NA = not applicable. Table data were adjusted for the facility and care provider characteristics shown. Regressions coefficients and standards errors were based on a general linear model with correlated errors, specifying a compound symmetrical correlation structure within facilities.

* $p < .05$; ** $p < .01$, *** $p < .001$; [†] $p < .10$.

beds than by workers in nursing homes. Finally, satisfaction was higher among workers who are not Black (vs those who are White; $p < .05$), and those with more training in assessment ($p < .001$) and treatment ($p < .05$). Also of interest is that, although the results were not significant, workers in nursing homes reported the least favorable attitudes regarding dementia in unadjusted analyses, but the most favorable attitudes in adjusted analyses.

Discussion

In this article, using three relatively new measures that evaluate characteristics relevant to the provision

of care for residents with dementia, we present the perspectives of 154 direct care providers surveyed from a range of long-term care facilities. In doing so, we focus attention on a neglected component of long-term care—frontline staff—and identify areas of practice that might benefit from attention. Our study also benefits the academic community by making more accessible three measures that are not commonly cited in the literature and that have adequate psychometric properties, which justifies their further use.

Adjusted analyses indicate varied associations with aggregate measures of attitudes, stress, and satisfaction. Of note, no facility characteristic

reached a significance level of $p < .05$. However, compared with workers in nursing homes, those in RC/AL facilities with <16 beds reported less stress ($p < .10$). This finding, coupled with the recognized structural merits of smaller facilities (e.g., providing a more homelike and familial environment) and beneficial resident outcomes (e.g., less functional and social decline over 1 year), recognizes yet another advantage of this supportive environment (Morgan, Gruber-Baldini, Eckert, & Zimmerman, 2004; Zimmerman, Sloane, Eckert, et al., 2005). Stress was also more often reported by male workers, younger workers, and those working for 1 to 2 years (vs longer); certainly, providing targeted support to such individuals seems warranted, especially as they have already demonstrated a level of job commitment. On a related matter, those individuals who have worked for 1 to 2 years were more likely to espouse hopeful or person-centered attitudes than those who have worked longer. Thus, attending to the welfare and ongoing training of these workers may lessen a tendency to become jaded over time or seek job opportunities elsewhere. More educated workers were also more likely to report dementia-sensitive attitudes, but, compared with White workers, those who were not Black (e.g., were Asian) were less likely to report such attitudes. Ironically, they were also more satisfied than White workers (as were workers who had more training). As the long-term care workforce is increasingly one of racial and ethnic diversity, these findings suggest that special consideration may be needed to ensure culturally sensitive care provision. Finally, of note is the shift in the direction of the relationship between facility type (RC/AL) and attitudes toward dementia, when relationships are adjusted for facility and care provider characteristics; this shift suggests that environmental and personal characteristics are likely to exert a strong influence on staff attitudes.

While adjusted analyses elucidate the independent contribution of facility and care provider characteristics to the outcomes under study, bivariate comparisons are useful because the relationship among characteristics and attitudes, stress, and satisfaction are rarely “adjusted” in the real world. In this regard, one of the most notable findings is that attitudes toward dementia care (and especially person-centered care) are related to worker satisfaction. To our knowledge, this study is the first to empirically assess correlates of person-centered care—the individualized mode of care thought to be the true intent of the quality-improvement nursing home reforms embodied in the Omnibus Budget Reconciliation Act of 1987 (Rader, 1995). The items reflective of this mode of care address the need to provide stimulating and enjoyable activities, choice, empathy, understanding and reassurance, respect, and care for psychological needs; to see residents as having abilities and reasons for their behavior; and to enjoy being with residents and

believe that what is said to a person with dementia actually matters. Individualized care has been touted as important for the well-being of residents with dementia, but, until now, nothing has been documented about its relation to the well-being of the staff. To care for staff means to prepare them sufficiently (Kitwood, 1997), and a person-centered perspective may relate to staff satisfaction because it indicates better preparation for the challenging task of providing dementia care.

A person-centered attitude to care is more often reported by staff working in newer facilities and by those who feel better trained. Given the relative recency of the evolution of the philosophy of person-centered care, we find it highly plausible that its lower prevalence in older facilities represents an entrenchment of the more traditional medical model of care. Therefore, considering that a “facility culture” of dementia care can evolve over time (Mead, Eckert, Zimmerman, & Schumacher, 2005, this issue), administrators may be well advised to incorporate person-centered training into their list of priorities. They may want to consider using an instrument similar to the Approaches to Dementia measure to determine to what degree individual staff members espouse a dementia-sensitive attitude, and then develop and implement training curricula to bolster these attitudes. Although “goodness” and “kindness” may to some extent be innate qualities, sensitivity can be mentored and learned when such expectations are set (Fazio, Seman, & Stansell, 1999).

This study also finds that workers who perceive themselves to be better trained in dementia care are more likely to espouse person-centered care and report more satisfaction (the latter finding was significant in adjusted analyses, as well). Given the cross-sectional nature of this study, it is not clear whether training results in satisfaction or whether those who are more satisfied perceive themselves to be better trained. Similarly, it is possible that a person-centered attitude provides a necessary framework for perceptions of competence or that competence encourages a person-centered attitude. Nonetheless, these results suggest that the benefits of training extend beyond those afforded to residents, by allowing a worker to feel assured while conducting his or her tasks (Kitwood, 1997). Other studies also have found that staff training contributes to job satisfaction, motivation, and commitment (Gurnik & Hollis-Sawyer, 2003; Landi et al., 1999; Mackenzie & Peragine, 2003). In one intervention, for example, an 80-hr training session on providing care to people with dementia resulted in greater knowledge of Alzheimer’s disease, job satisfaction, and satisfaction with job preparation (Mass, Buckwalter, Swanson, & Mobily, 1994).

On a less positive note, worker stress is higher in facilities with specialized dementia units. Other published studies of the relationship between specialized dementia units and staff stress have yielded

mixed results, with controlled studies suggesting that stress is not related to specialized dementia status per se but rather to factors such as dementia severity, staff-to-resident ratios, and staff training (U.S. Congress, 1992; also see McCarty & Drebing, 2002). Thus, one possible explanation for the detected relationship is that specialized settings provide care for a more impaired population, a hypothesis that is supported in this study by the finding that individuals with severe or very severe dementia were more prevalent in facilities with a special care unit (76% vs 52%, $p = .003$). Further, participants in facilities with special care units reported significantly more behavioral symptoms and slightly more impairment in activities of daily living (not significant). However, the fact that facility type and resident case-mix are not related to any of the variables under study argues against this hypothesis. Instead, it may be helpful to consider some of the items embedded in the two stress subscales that are significant (resident care and workload and scheduling), and the two subscales of satisfaction that are significant (satisfaction with the care organization and environment). These imply that specialized unit workers face a cluster of stressful challenges, including residents who are unappreciative or uncooperative, families who complain or need emotional support, understaffing, inexperienced coworkers, dissatisfaction related to work flow, and unmet expectations. Thus, facilities that have special care units (in this analyses, 45% of those in RC/AL and 80% of those in nursing homes) may attract a different demographic of clientele, suffer organizational challenges not evidenced in other facilities, and perhaps establish expectations that are difficult to meet. Considering that the majority of long-term care for residents with dementia is not provided in special care units (e.g., in RC/AL, 68% to 89% of residents who have moderate or severe dementia do not reside in special care facilities or units; see Sloane, Zimmerman, & Ory, 2001), and lacking data demonstrating the benefits of special care (Phillips et al., 1997), we believe it behooves administrators to reconsider the structure and goals of specialized units and to address deficits in the organization of that care. At minimum, facilities might benefit from administrative mechanisms to reduce stress and provide staff support (Gilster & McCracken, 1995).

As with all such work, limitations to this study must be acknowledged. Because facilities had to have a minimum number of residents with dementia to be eligible for study (i.e., 2 in facilities with < 16 beds and 13 in larger facilities), more facilities in this sample had special care units (54%) than is typical in RC/AL, where the actual range is from 8% to 25% (Sloane et al., 2001). However, this oversampling allowed for a more robust examination of the relationship of special care units to outcomes. In addition, this study is limited to workers in 41

facilities, and the data are self-report and may not be borne out in reality. Whereas attitudes, stress, and satisfaction may well best be self-report, assessing approaches to care is certainly best witnessed, but efforts do so are in their infancy (see Zimmerman, Sloane, Williams, et al., 2005, this issue, for new work in this area). Nonetheless, despite these limitations, understanding the correlates of worker attitudes and well-being offers an opportunity to improve not only the situation of the workers but also that of the residents for whom they care.

References

- Åstrom, S., Nilsson, M., Norberg, A., Sandman, P., & Winblad, B. (1991). Staff burnout in dementia care—Relations to empathy and attitudes. *International Journal of Nursing Studies*, 28, 65–75.
- Bowers, B., Esmond, S., & Jacobson, N. (2000). The relationship between staffing and quality in long-term care facilities: Exploring the views of nurse aides. *Journal of Nurse Care Quality*, 14, 55–64.
- Cohen-Mansfield, J. (1995). Stress in nursing home staff: A review and a theoretical model. *Journal of Applied Gerontology*, 14, 444–466.
- Deutschman, M. (2000). What you hear when you listen to staff. *Nursing Homes Long Term Care Management*, 49, 37–43.
- Diggle, P. J., Heagerty, P., Liang, K.-Y., & Zeger, S. L. (2002). *The analysis of longitudinal data* (2nd ed.). Oxford, England: Oxford University Press.
- Evers, W., Tomic, W., & Brouwers, A. (2001). Effects of aggressive behavior and perceived self-efficacy on burnout among staff of homes for the elderly. *Journal of Mental Health Nursing*, 22, 439–454.
- Fazio, S., Seman, D., & Stansell, J. (1999). *Rethinking Alzheimer's care*. Baltimore: Health Professions Press.
- Gilster, S. D., & McCracken, A. L. (1995). Mechanisms to reduce stress and provide staff support. *Journal of Long Term Care Administration*, 23, 12–16.
- Golant, S. M. (2004). Do impaired older persons with health care needs occupy U.S. assisted living facilities? An analysis of six national studies. *Journal of Gerontology: Social Sciences*, 59B, S68–S79.
- Gurnik, M., & Hollis-Sawyer, L. (2003). Empowering assisted living frontline care staffs to better care for Alzheimer's and dementia residents. *Ageing International*, 28, 82–97.
- Kane, R., & Wilson, K. B. (Eds.). (1993). *Assisted living in the United States: A new paradigm for residential care for frail older persons?* Washington, DC: Public Policy Institute, American Association of Retired Persons.
- Kitwood, T. (1997). *Dementia reconsidered*. Bristol, PA: Open University Press.
- Krauss, N. A., & Altman, B. M. (1998). *Characteristics of nursing home residents, 1996. MEPS research findings no. 5* (AHCPR Publication No. 99-0006). Rockville, MD: Agency for Health Care Policy and Research, U.S. Department of Health and Human Services.
- Landi, F., Sgadari, A., Zuccala, G., Pahor, M., Carbonin, P., & Bernabei, R. (1999). Brief training program on Resident Assessment Instrument improves motivation of nursing home staff. *Journal of Nutrition, Health, and Aging*, 3, 24–28.
- Lintern, T., Woods, B., & Phair, L. (2000). Training is not enough to change care practice. *Journal of Dementia Care*, 8, 15–17.
- Mackenzie, C. S., & Peragine, G. (2003). Measuring and enhancing self-efficacy among professional caregivers of individuals with dementia. *American Journal of Alzheimer's Disease and Other Dementias*, 18, 291–298.
- Mass, M., Buckwalter, K. C., Swanson, E., & Mobily, P. (1994). Training key to job satisfaction. *Journal of Long-Term Care Administration*, 22, 23–26.
- McCarty, E. F., & Drebing, C. (2002). Burden and professional caregivers: Tracking the impact. *Journal for Nurses in Staff Development*, 18, 250–257.
- McCarty, E. F., & Drebing, C. (2003). Exploring professional caregivers' perceptions: Balancing self-care with care for patients with Alzheimer's disease. *Journal of Gerontological Nursing*, 29, 42–48.
- Mead, L. C., Eckert, J. K., Zimmerman, S., & Schumacher, J. G. (2005). Sociocultural aspects of transitions from assisted living for residents with dementia. *The Gerontologist*, 45(Special Issue 1), 116–124.
- Mercer, S., Heacock, D., & Beck, C. (1993). Nurses aides in nursing homes: Perceptions of training, workloads, racism, and abuse issues. *Journal of Gerontological Social Work*, 21, 99–112.
- Morgan, L. M., Gruber-Baldini, A. L., Eckert, J. K., & Zimmerman, S.

- (2004). Policy and research issues for small assisted living facilities. *Journal of Aging & Social Policy*, 16, 1–16.
- Phillips, C. D., Sloane, P. D., Hawes, C., Koch, G., Han, J., Spry, K., et al. (1997). Effect of residence in Alzheimer disease special care units on functional outcomes. *Journal of the American Medical Association*, 278, 1340–1344.
- Pillemer, K. (1997). A higher calling: Choose nursing assistants carefully, train them well, and your turnover rates will dwindle. *Contemporary Long-Term Care*, 20, 50–56.
- Rader, J. (1995). Moving away from the hospital model to an individualized resident-centered model. In J. Rader & E. M. Tornquist (Eds.), *Individualized dementia care: Creative compassionate approaches*. New York: Springer.
- Schaefer, J. A., & Moos, R. H. (1993). Relationship, tasks, and system stressors in the health care workplace. *Journal of Community & Applied Social Psychology*, 3, 285–298.
- Schaefer, J. A., & Moos, R. H. (1996). Effects of work stressors and work climate on long-term care staff's job morale and functioning. *Research in Nursing & Health*, 19, 63–73.
- Schrim, V., Uhman, C., & Barton, K. (1996). A new view: What nursing assistants think about caregiving. *Health Care in Later Life*, 1, 97–104.
- Sloane, P. D., Zimmerman, S., & Ory, M. (2001). Care for persons with dementia. In S. Zimmerman, P. D. Sloane, & J. K. Eckert (Eds.), *Assisted living: Needs, practices, and policies in residential care for the elderly* (pp. 242–270). Baltimore: The Johns Hopkins University Press.
- U.S. Congress, Office of Technology Assessment. (1992). *Special care units for people with Alzheimer's and other dementias: Consumer education, research, regulatory, and reimbursement issues* (Report OTA-H-543). Washington, DC:U.S. Government Printing Office.
- Zimmerman, S., Gruber-Baldini, A. L., Sloane, P., Eckert, J. K., Hebel, J. R. Morgan, L. A., et al. (2003). Assisted living and nursing homes: Apples and oranges? *The Gerontologist*, 43, 107–117.
- Zimmerman, S. I., & Sloane, P.D. (1999). Optimum residential care for people with dementia. *Generations*, 23, 62–68.
- Zimmerman, S., Sloane, P. D., & Eckert, J. K. (Eds.). (2001). *Assisted living: Needs, practices, and policies in residential care for the elderly*. Baltimore: The Johns Hopkins University Press.
- Zimmerman, S., Sloane, P. D., Eckert, J. K., Gruber-Baldini, A. L., Morgan, L. A., Hebel, J. R., et al. (2005). How good is assisted living? Findings and implications from an outcomes study. *Journal of Gerontology: Social Sciences*, 60B, S195–S204.
- Zimmerman, S., Sloane, P. D., Williams, C. S., Reed, P. S., Preisser, J. S., Eckert, J. K., et al. (2005). Dementia care and quality of life in assisted living and nursing homes. *The Gerontologist*, 45(Special Issue 1), 134–147.

Received June 23, 2004

Accepted March 29, 2005

Decision Editor: Richard Schulz, PhD