# Professional caregivers for patients with dementia: Predictors of job and career commitment

Charles Drebing, PhD Ellen F. McCarty, PhD, RN, CS Nancy B. Emerson Lombardo, PhD

## Abstract

The purpose of this study is to identify what factors predict job and career commitment among professional caregivers working with patients with dementia. A secondary analysis was completed using data collected from 77 professional caregivers working in residential dementia special care programs. The findings suggest that professional caregivers' commitment to their jobs and careers is most closely related to their level of involvement in the interpersonal aspects of the work, the degree to which they feel personal growth or benefit, and the level of burden that their work generates. Strategies are suggested for improving job and career longevity among professional caregivers by enhancing attachment to patients and families, fostering professional identity and personal growth, and monitoring and managing professional caregiver burden.

Key words: dementia care programs, dementia patients, maintaining stable and sufficient staffing, caregivers' commitment to their jobs

# Introduction

Over the past decade, healthcare facilities in the United States have faced a growing challenge in maintaining stable and sufficient staffing.<sup>1,2</sup> This problem has been attributed to a range of factors, including a declining pool of

qualified workers, an aging work force, workers leaving the field of healthcare, staff diversity, a high rate of change between healthcare jobs, and relatively low salaries.<sup>3-7</sup> Dementia care programs and nursing homes have been particularly affected. Turnover rates for longterm care staff have been found as high as 69 percent, with the turnover rates for some positions, such as nursing assistants, rising as high as 200 percent.<sup>6,8</sup>

Staffing problems in long-term care programs have important consequences for client welfare. A number of studies have found that staffing levels and professional mix of the staff are correlated with client outcomes.<sup>9-11</sup> The number of licensed nursing hours per client has been associated with client functional ability, risk of death, and probability of discharge from nursing homes.<sup>12</sup> High turnover rates have been associated with lower quality of care in nursing homes and poorer outcomes for residents.<sup>13,14</sup>

The causes of high turnover rates among nursing staff are not well understood. Factors related to extrinsic motivations for work, such as pay and benefits, have received most of the public and research attention. For example, relatively low wages and the availability of other job opportunities have been identified as likely contributors to the current crisis.<sup>3,5</sup> Other variables found to have a relationship to turnover include workload, training, conflict between work and nonwork demands, job tenure, professional growth opportunities, job design, supervision, involvement in assessment and care planning, autonomy, and role clarity.<sup>6,15-18</sup>

It has been suggested that salient rewards and stressors for professional caregivers of patients with dementia may parallel those affecting family caregivers.<sup>19</sup> Burden among family caregivers is well documented but is also relevant for professional caregivers in dementia care programs.<sup>20</sup> High-need patient groups,

Charles Drebing, PhD, Bedford VA Medical Center, Boston University Alzheimer's Disease Center, Bedford, Massachusetts.

Ellen F. McCarty, PhD, RN, CS, Salve Regina University, Newport, Rhode Island; Boston University Alzheimer's Disease Center, Bedford, Massachusetts.

Nancy B. Emerson Lombardo, PhD, Wellesley College; Boston University Alzheimer's Disease Center, Bedford, Massachusetts.

such as patients with Alzheimer's disease, can require up to three times the level of care of residents at lower levels of need, resulting in higher burden and turnover among staff.<sup>19</sup> Research among family caregivers suggests that the degree of burden is related to the commitment to continue caregiving<sup>21</sup> and that intrinsic benefits of caregiving can function as counterweights to burden, being positively correlated with how long family caregivers are willing to provide care.<sup>22-24</sup> There has been no study of the impact of burden or the intrinsic rewards on professional caregivers for patients with dementia.

This study seeks to describe professional caregivers' commitment to their current jobs and their intentions to continue to work in the area of dementia care, and to examine whether these variables are related to factors associated with intrinsic work motivation, extrinsic work motivation, and the experience of caregiver burden. The categories of "intrinsic" and "extrinsic" work factors have been used extensively in studying job commitment and career longevity. Both types of factors have been found to be significantly related to work involvement, job satisfaction, and job and career tenure.<sup>25-27</sup> though the relationship varies widely depending on the nature of the work, availability of different rewards, and characteristics of the employees.<sup>28-30</sup> For the current study, extrinsic factors include pay, hours worked, hours of direct patient care, and job role, whereas intrinsic factors include personal growth, attachment to patients and their family members, and increased sense of professional growth and identity.

Based on prior studies of family and professional caregivers, we test the following hypotheses:

1. Extrinsic factors, such as hours of work, hours of direct patient care, pay, and job role will be related to job and career commitment, with relatively high levels of work and patient care, low pay, and low job status being related to lower job and career commitment.

2. Like family caregivers, professional caregivers who report that they receive relatively more intrinsic rewards from their work, including personal growth, desired contact with patients and their family members, and greater sense of professional identity, will have greater job and career commitment.

3. Like family caregivers, professional caregivers who report higher levels of burden associated with their work will have lower job and career commitment.

# Methods

This is an archival study, using data from the Professional Caregiver Database of the Boston University Alzheimer's Disease Core Center (BU ADCC).<sup>31</sup>

#### Sample

Data obtained from the BU ADCC database consists of questionnaire responses from 77 professional caregivers employed full- or part-time at one of six residential dementia special care programs in southern New England. Table 1 summarizes the demographic characteristics of the sample. The sample consists primarily of nursing staff, with the largest single group consisting of nursing assistants, smaller groups of LPNs and RNs, three nurse administrators, four social workers, and seven recreational therapists. To be included in the database, all respondents had to routinely provide at least five hours per week of direct patient care to adults with Alzheimer's disease. Similar to the general population of professional caregivers, the sample is predominantly female and middle aged.<sup>1</sup> Work experience ranges widely, with an average length of tenure in current jobs of 8 years and an average of 13 years as a professional caregiver.

#### Procedure

Subjects were recruited at their work site by the BU ADCC staff. Approximately 122 professional caregivers were invited to participate, with a resulting return rate of 63 percent. Each participant was paid \$10 for completing the anonymous survey.

#### Instrumentation

Stability of the caregiver workforce is related to at least two types of commitment: job commitment and commitment to professional caregiving as a career. Both have important but somewhat different implications, with job commitment being directly related to immediate turnover and staffing levels, and career commitment affecting long-term staffing trends as well as the depth of experience and expertise accrued by the work force.

To measure job commitment, two items from the BU ADCC questionnaires were used: (a) "I think about quitting my current job," and (b) "I am actively looking toward finding another job." A four-choice answer format was used, with the anchors comprised of "none of the time," "some of the time," "a good part of the time," and "most of the time." To assess career commitment, subjects were asked to respond to two items: (a) "I don't

Table 1. Demographics, work characteristics, and commitment						
		Percent of sample who				
	n (%)	Think about quitting current job	Are actively looking for a new job	Don't see themselves in dementia care for career	Don't see themselves in dementia care in one year	
n	77	49	27	21	4	
Age						
< 30	16 (21)	63	50	38	6	
30 - 39	13 (17)	54	23	15	0	
40-49	26 (34)	46	19	27	4	
50 - 59	19 (25)	42	21	5	5	
> 60	3 (4)	33	33	0	0	
Gender						
Male	5 (6)	60	40	60	0	
Female	72 (84)	49	26	18	4	
Education						
Less than high school	4 (5)	0	0	0	0	
High school graduate	23 (30)	52	39	13	0	
Some college	23 (30)	48	13	17	4	
Completed college	24 (31)	54	29	33	8	
Completed graduate training	3 (4)	67	67	33	0	
Race						
Caucasian	64 (83)	48	23	19	5	
African-American	6 (8)	83	67	67	0	
Other	7 (9)	29	29	0	0	
Years working in this position						
< 2 years	26 (34)	46	31	23	4	
3 – 10 years	29 (38)	68	41	27	7	
> 10 years	22 (29)	27	5	9	0	
Years working in this profession						
0-2 years	10 (13)	40	30	40	10	
3 – 10 years	31 (40)	68	45	23	0	
11+ years	36 (47)	36	11	14	6	
11+ years Note: A high frequency of respons	36 (47) se indicates a	36 a low degree of co	11 ommitment.	14	6	

see myself working with dementia patients for the rest of my career," and (b) "I don't see myself working with dementia patients in 1 year." A five-point Likert scale answer format was used (strongly disagree, disagree, neutral, agree, strongly agree). Note that the job and career commitment items are worded negatively. For the sake of clarity, notes have been added to the tables to assist the reader in correctly interpreting the direction of responses and correlations.

#### Extrinsic factors

Questions describing the respondents' current jobs were selected, including (a) their job title, (b) the number of hours worked weekly, (c) the number and proportion of hours of work involved in direct patient care, and (d) annual income from their dementia care job. Respondents were also asked to respond to two Likert scale items assessing whether they see extrinsic rewards related to job commitment. Respondents were asked to rate the following items on a five-point scale (strongly disagree, disagree, neutral, agree, or strongly agree): (a) "I stay in this job because of the pay," and (b) "I stay in this job because of the benefits and seniority."

#### Intrinsic factors

*Uplifts.* An eight-item scale developed by Pruchno *et al.*,<sup>32</sup> was used to measure personal benefits of caregiving. Respondents are asked to rate the frequency they experience a variety of benefits of being a caregiver, such as increased awareness of inner strengths and personal growth. Previous research indicates that family caregivers with higher scores on the Uplifts scale continue caregiving longer.<sup>21</sup> The scale has good reliability (coefficient alpha = 0.82).<sup>32</sup> Two of the original eight items were eliminated due to lack of relevance to the professional caregiving setting. The remaining six items retain good internal reliability (coefficient alpha = 0.87) and split half reliability (0.89) when completed by professional caregivers.<sup>19</sup>

Attachment to patient and families. Two Likert scale questionnaire items that assess the degree of attachment professional caregivers feel toward patients and their families were selected. Respondents were asked to rate the following items on a four-point scale (not at all, a little, somewhat, and very attached): (a) "In your work with dementia patients, how attached have you felt to patients?" and (b) "How attached have you felt to their family members?"

Respondents are also asked to respond to two Likert scale items assessing whether they see contact with patients and contact with families as related to their job commitment. Respondents were asked to rate the following items on a five-point scale (strongly disagree, disagree, neutral, agree, or strongly agree): (a) "I stay in this job because of contact with patients," and (b) "I stay in this job because of contact with families."

*Professional identity and learning.* Respondents were asked to rate two items on a five-point scale (strongly disagree, disagree, neutral, agree, strongly agree): (a) "Professionally, I consider working with patients with dementia as my 'specialty,'" and (b) "I stay in this job because of what I am learning."

#### Burden

Professional caregiver burden index (PCBI). This 12item paper-and-pencil measure, developed specifically to measure burden among professional caregivers working with patients with dementia, was used to measure burden.<sup>19</sup> Coefficient alpha (r = 0.90), split-half reliability (r = 0.90), and test-retest reliability (r = 0.75) are in the acceptable range. Support for the content validity was provided by correlations with variables such as subjects' rating of their own burnout (r = 0.60), and thoughts about taking sick leave for emotional reasons (r = 0.59), as well as correlations with patient caseload.<sup>19</sup>

*Grief.* Protracted grief is a common painful part of the experience of family caregivers for adults with dementia,<sup>33</sup> and so may be part of the emotional burden associated with caregiving.<sup>34</sup> The Grief Resolution Index (GRI)<sup>35</sup> is a seven-item measure of bereavement. The GRI has been found to be reliable (coefficient alpha = 0.87) and correlates with a number of other measures of coping and adjustment, including discussions about the death with family and friends, planning for the death, behavioral rehearsal for death, and depression and anxiety.<sup>36</sup> Item wording was adapted to the professional caregiving setting, and three items were eliminated because they are not relevant to professionals. The resulting scale retains good reliability (coefficient alpha = 0.75; splithalf reliability = 0.87).

Family conflict due to their work. A single questionnaire item asks for a response to the following item "How much conflict in family relationships do you think has been caused directly or indirectly from your work on an Alzheimer's Special Care Unit?" Response anchors consist of "no conflict," "just a little conflict," "some conflict," "a lot of conflict."

# Analyses

Analyses were completed in two steps. First, descriptive statistics were calculated for background variables,

Table 2. Extrinsic work factors and longevity						
		Percent of sample who				
	n (%)	Think about quitting current job	Are actively looking for a new job	Don't see them- selves in dementia care for career	Don't see themselves in dementia care in one year	
n	77	49	27	21	4	
Position						
Nursing assistant	37 (48)	52	32	19	0	
LPN	13 (17)	46	8	15	0	
RN	13 (17)	31	15	23	5	
Nurse administrator	3 (4)	100	33	33	33	
Activities director	7 (9)	57	43	0	0	
Social worker	4 (5)	50	50	43	0	
Hours of work						
Less than 40 hours per week	27 (35)	41	19	19	7	
40 hours per week	39 (51)	54	31	18	0	
Over 40 hours per week	11 (14)	55	36	36	10	
Hours of patient contact						
5 – 20 hours per week	26 (34)	58	39	31	8	
21 – 36 hours per week	24 (31)	38	21	17	4	
37+ hours per week	27 (35)	52	22	15	0	
Income						
\$5,000 - \$9,999	7 (9)	14	14	28	0	
\$10,000 - \$19,999	29 (26)	60	35	20	0	
\$20,000 - \$29,999	18 (23)	44	22	17	6	
\$30,000 - \$39,999	18 (23)	50	28	22	6	
\$40,000 - \$49,999	11 (14)	64	27	18	0	
\$49,000 and above	3 (4)	33	33	33	33	
Note: A high frequency of response indicates a low degree of commitment.						

job and career commitment variables, and predictor variables. Second, the relationship between predictor variables and job and career commitment was examined using a series of chi-squares and t-tests of correlations. To accomplish this, the responses to the job and career commitment items were used in two ways. For correlations, the full responses were used, whereas for the chisquare analyses, the responses were collapsed, with "some of the time," "a good part of the time," and "most of the time" being coded as yes, and "none of the time" coded as no.

### Results

Responses to the questions regarding job and career commitment are included in Tables 1 and 2. The responses suggest that about half of the sample were thinking about quitting their current job, a quarter were looking for a different job, and more than three quarters saw themselves working in dementia care for the remainder of their career. Responses to the two job commitment items are highly correlated (r = 0.65) such that all subjects who said that they were looking for another job also said that they thought about quitting. Responses to the two career commitment items are also highly correlated (r = 0.78), such that all subjects who said that they did not see themselves working in dementia care a year from now also said that they did not see themselves working with dementia patients for the remainder of their career. Responses between the job and career commitment items are moderately correlated (r = 0.39-0.49), and most but not all subjects who reported low career commitment also had low job commitment.

Job commitment did not differ significantly as a function of age, education, race, or gender. A significant relationship was found between job tenure and job commitment, such that those who had worked in their current job for ten or more years were significantly less likely to be thinking about changing jobs ( $\chi^2 = 9.11$ , df = 2, p < 0.01) or looking for a new job ( $\chi^2 = 10.67$ , df = 2, p < 0.01). Similar findings were noted with respect to career tenure.

Career commitment was not significantly different as a function of age, education, gender, marital status, or job or career tenure. Race was found to be significantly related to career commitment, with fewer African-American caregivers stating that they see themselves working in dementia care throughout their career.

Hypothesis one is only modestly supported by the current findings. When asked why they stay in their current job, only 18 percent say they stay because of the pay, and 30 percent because of the benefits (see Table 3). Extrinsic factors, such as position and total hours of

work were not found to be related to job or career commitment (see Tables 2 and 4). In contrast to our hypothesis, the percentage of work time spent in direct patient care is negatively correlated with actively looking for a new job (r = -0.24, t = 2.19, p < 0.05) and not seeing themselves in this career in one year (r = -0.25, t = 2.26, p < 0.05), indicating that the greater the percent of work time spent with patients, the more committed professionals were to their job and career. Income across the entire sample was not found to be correlated with job or career commitment. Because the perception of the adequacy of income is related to position, we examined the relationship between income and job and career commitment in the largest single subgroup, the full-time nursing assistants (n = 35). When examined in this subgroup, a significant positive correlation was found between income and career commitment (r = -0.37, t = 2.36, p < 0.05) but not between income and job commitment (see Table 4).

Hypothesis two finds fairly strong support. When asked why they stay in their current job, 29 percent said they stay because of the contact with families, but 72 percent stated that they stay because of the contact with patients, and 77 percent because of what they are learning (see Table 3). The degree to which professional caregivers reported intrinsic rewards in their work such as personal growth, professional identity, and attachment to patients and to family members is significantly correlated with career commitment (see Table 4). The correlations range from 0.33 to 0.47, with professional identity having the highest correlations, and attachment to family having the lowest correlations. In contrast, fewer intrinsic factors were significantly correlated with job commitment. A statistically significant negative correlation was found between Uplift scores and thinking about quitting (r = -0.35, t = 3.26, p < 0.01) and actively looking for a new job (r = -0.23, t = 2.02, p < 0.05). A significant negative correlation was also found between attachment to family members and thoughts about quitting (r = -0.27, t = 2.30, p < 0.05). Professional identity and attachment to patients were not significantly correlated with job commitment.

Because nursing assistants represent a large subgroup of professional caregivers in dementia programs with particularly high turnover rates and the highest levels of direct care responsibilities,<sup>6,8</sup> the analyses were repeated for the sample of 37 nursing assistants. Findings were consistent with findings for the entire sample: significant correlations were found between intrinsic factors and career commitment and between the Uplifts scale and job commitment. In addition, attachment to patients (r = 0.37, t = 2.26, p < 0.05) and professional identity (r = 0.43, t = 2.28, p < 0.01) were significantly correlated with job commitment for the nursing assistants.

Table 3. Self-perceived benefits and job commitment				
Variable	n	Percent		
I stay in this job because of				
the pay	14	18		
contact with families	22	29		
the benefits and seniority	23	30		
contact with patients	56	72		
what I am learning	59	77		

Hypothesis three is supported. Scores on the PCBI were positively correlated with thinking about quitting (r = 0.50, t = 5.00, p < 0.001), actively looking for a new job (r = 0.46, t = 4.48, p < 0.001), and negatively correlated with whether respondents see themselves in dementia care for the rest of their career (r = 0.34, t =3.11, p < 0.001). Surprisingly, grief is positively correlated with career commitment (r = 0.35, t = 3.19, p < 0.01), such that professionals who report a high degree of grief over the death of patients are more likely to see themselves as working in this field throughout their career. Professionals who report that their work results in conflict in their family are more likely to be thinking about quitting their current job (r = 0.24, t = 2.13, p < 0.05). These findings were also found for the subgroup of nursing assistants.

# Discussion

The current results suggest that burden and intrinsic and extrinsic work factors are related to job and career commitment, and that burden and intrinsic factors are more closely related to career longevity than are extrinsic rewards. Mixed findings were noted with respect to extrinsic factors, including pay, the number and percent of hours spent in patient care, and job and career commitment. Pay, when examined within a single professional group, nursing assistants, is positively correlated with career commitment but not job commitment. Contrary to expectations, the amount and percent of work time spent in patient care was positively correlated with career commitment, suggesting that professionals who spent more time working directly with patients were more committed to their jobs and careers. We had anticipated that patient contact hours would be negatively correlated because of the stressful nature of patient care.

The positive correlations suggest direct patient care either is relatively less stressful than other work responsibilities or is relatively rewarding independent of the "pay-for-work" format. Work role and total number of hours worked were not related to job and career commitment. Finally, when asked why they stay in their current job, most professional caregivers do not identity extrinsic rewards as motivators. Together, these findings suggest the absence of a strong link between extrinsic factors and job or career commitment.

In contrast, all the intrinsic factors were significantly related to career commitment and to a lesser degree to job commitment. Those professionals with a greater sense of personal growth from work experiences, greater attachment to patients and their families, and a greater sense of professional identity are more likely to feel committed to their careers. This is supported by the selfreport questions, where most respondents attributed their motivation to stay in their current job to intrinsic motivators. The more modest relationship between intrinsic factors and job commitment is important and may reflect the fact that intrinsic motivators are present in most or all dementia care jobs and so should have a closer relationship to career commitment than to job commitment. For nursing aides, intrinsic factors are more closely related to job commitment.

As predicted, a significant negative correlation was found between burden and job and career commitment. Job and career commitment likely result from informal "cost-benefit analysis" of jobs and careers. Burden clearly contributes to the "cost" of a job, whereas intrinsic motivators are part of the "benefits" portion of the equation. In this way, themes and patterns found among family caregivers are similar to those found in professional caregivers. These findings are also consistent with a wide range of literature documenting the important connection

Table 4. Correlations between work factors and job and career commitment					
	Percent of sample who				
	Think about quitting current job	Are actively looking for a new job	Don't see them- selves in dementia care for career	Don't see themselves in dementia care in one year	
Extrinsic factors					
Number of hours worked weekly	0.13	0.13	0.01	-0.12	
Number of hours in direct patient care	-0.07	-0.16	-0.21	-0.30	
Percentage of hours in direct patient care	-0.14	-0.24	-0.22	-0.25	
Income	0.06	0.01	-0.07	-0.09	
Income, full-time nursing assistants $(n = 35)$	0.04	0.11	-0.40	-0.31	
Intrinsic factors					
Attachment to patient	-0.10	-0.15	-0.37	-0.34	
Attachment to families	-0.27	-0.03	-0.33	-0.17	
Personal growth — Uplifts scale	-0.35	-0.23	-0.42	-0.36	
Professional identify	-0.16	-0.06	-0.43	-0.47	
Burden					
Professional Caregiver Burden Index	0.50	0.46	0.34	0.18	
Grief	-0.07	-0.02	-0.35	-0.17	
Conflict in family due to their work	0.24	0.14	0.11	-0.08	

# Note: The job and career commitment items are worded such that positive correlation indicates a positive correlation with lack of commitment.

between intrinsic work factors and employee satisfaction and job longevity.<sup>26,27,29</sup>

The unexpected finding with respect to grief suggests that the grief professional caregivers experience related to the loss of their patients is more closely linked to their attachment to their patients than to the experience of burden. In this study, grief was not significantly correlated with the burden measure (r = 0.05), but was positively correlated with responses to items about attachment to patients (r = 0.43) and their families (r = 0.32). Although grief is a painful experience, it does

not appear to contribute to the experience of burden, at least for professionals.

This study has some important implications for administrators, policy makers, staff development specialists, and educators trying to address the staffing crisis in dementia care and other long-term care programs. Though most of the focus in recent publications has been on improving extrinsic factors such as pay and benefits as a means of reducing turnover, the current study highlights the important role of intrinsic factors. Enhancing intrinsic rewards at work is likely to have positive effects for employees and for patient care, and improving intrinsic rewards may be more effective and may be less costly in the shortrun than improving extrinsic rewards. From a long-term perspective, enhancing both extrinsic and intrinsic rewards will be the most effective strategy for reducing turnover and improving clinical outcomes.

The current data suggest that one way to enhance intrinsic rewards is to foster attachment with patients and their families. Although there is little research data suggesting how to do this, caregiver-dementia patient attachment can likely be enhanced in a number of ways, including maintaining stable patient assignments, emphasizing a "resident-as-a-person" orientation as opposed to a task orientation, explicitly encouraging rather than discouraging relationships between staff and patients, ensuring ongoing contact between staff and families, and providing staff with personal background history on dementia patients.<sup>4,17</sup> While fostering attachment may result in higher levels of grief among the professional caregivers, the current findings suggest that any heightened grief does not add to caregiver burden. Recent interventions designed to improve communication between professional and family caregivers have been successful by using joint meetings involving communication training and interaction.<sup>6,8</sup>

A second way to increase job and career commitment through intrinsic rewards is to foster a sense of professional identity and specialization. Though we are unaware of any national professional credential specific to dementia care, there are recognized areas of specialization in geriatrics in the field of nursing and other professions. Whether using formal or informal criteria, a sense of specialization and professional identity can be encouraged by providing staff with opportunities and resources for receiving specialized dementia or geriatrics training, for participation in professional meetings, and for taking a leadership role in their profession related to dementia care.

Enhancing personal growth through the work experience is another important way of enhancing intrinsic rewards. Encouraging employees to process their experience at a personal level is one possible method to accomplish this. Coworker support groups and educational experiences that focus on the personal meaning of the work are likely to facilitate personal growth and have been used successfully with professional caregivers for other patient groups such as adults with AIDS.<sup>37,38</sup>

The current data also underline the importance of monitoring burden among professional staff. A recent study used serial screening of staff burden to document the dramatic rise in burden in the nursing staff of a specialty dementia care program as the program underwent a decrease in staffing levels.<sup>19</sup> The increase in burden scores was closely correlated with the level of staff turnover. Brief measures of burden, such as the PCBI, can be used as a quality assurance measure to monitor staff burden levels over time. Timing interventions designed to reduce burden can help head off increases in turnover and should have a positive impact on job and career commitment.

The current study is among the first to identify the important role of intrinsic rewards and burden in determining staff turnover and job and career commitment among professional caregivers of patients with dementia. Strengths of the study include the range of variables examined and the focus on professional caregivers. The study is limited by the correlational nature of the analysis, the reliance upon archival data consisting of selfreport questionnaire items for some variables, and a relatively small sample. Future studies should attempt to replicate this finding, as well as attempt to find ways to improve job and career commitment through interventions designed to enhance intrinsic rewards and diminish burden.

# Acknowledgment

Preparation of this article was supported by the National Institute of Aging through the Boston University Alzheimer's Disease Core Center (Grant No. AG13846) and the Department of Veterans Affairs. We gratefully acknowledge the assistance of Cecile DeSilva, Judy DeCarteret, and Diane Dixon.

# References

1. Buerhaus PI, Staiger DO, Auerbach DI: Why are shortages of hospital RNs concentrated in specialty care units. *Nurs Econ.* 2000; 18(3), 111-116.

2. Greene J, Nordhause-Bike AM: Where have all the RNs gone? *Hosp Health Netw.* 1998; 78-80.

3. Campbell P: Testimony before the Division of Health Care Finance & Policy, November 29, 1999. Paper presented at the Division of Health Care Finance & Policy, Boston, Mass., 1999.

4. Emerson Lombardo NB, L'Heureux K: Carework in eldercare. Paper presented at the Carework, Inequity and Advocacy Conference, Irvine, Calif., 2001.

 Frank BW: Testimony before the Division of Health Care Finance and Policy on 114.3 CMR 3.00 Home Health Agency Services, 1999.
Grant L: Staffing for dementia care in nursing homes and assisted living facilities. Paper presented at the Annual Meeting of the Gerontological Society of America, Chicago, 2001.

7. Kuhl A: Emerging responses to the specialty nurse shortage: Leveraging critical care training. The Advisory Board Company, The Nursing Executive Center, 1999.

8. Lindeman D: Developing an effective frontline SCU workforce using innovative training modalities. Paper presented at the Annual Meeting of the Gerontological Society of America, Chicago, 2001.

9. Cherry RL: Agents of nursing home quality of care: Ombudsmen and staff ratios revisited. *Gerontologist*. 1991; 31, 302-308.

10. Cohen JW, Spector WD: The effect of Medicaid reimbursement on quality of care in nursing homes. *J Health Econ.* 1996; 15, 23-48. 11. Harrington C, Zimmerman D, Karon SL, *et al.*: Nursing home

staffing and its relationship to deficiencies. *J Gerontol.* 2000; 55B(5), S278-S287.

12. Bliesmer MM, Kane RL, Shannon I: The relationships between nursing staffing levels and nursing home outcomes. *J Aging Health*. 1998; 10, 351-371.

13. Munroe DJ: The influence of registered nursing staff on the quality of nursing home care. *Res Nurs Health.* 1990; 13(4), 263-270.

14. Spector WD, Takada HA: Characteristics of nursing homes that affect resident outcomes. *J Aging Health*. 1991; 3(4), 427-454.

15. Alexander JA, Lichtenstein R, Oh HJ, *et al.*: A causal model of voluntary turnover among nursing personnel in long-term psychiatric settings. *Res Nurs Health.* 1998; 21(5), 415-427.

16. Decker FH: Occupational and non-occupational factors in job satisfaction and psychological distress among nurses. *Res Nurs Health*. 1997; 20(5), 453-464.

17. Emerson Lombardo NB, Fogel BS, Robinson GK, *et al.*: Achieving mental health of nursing home residents: Overcoming barriers to mental health care. *J Ment Health Aging*. 1995; 1(3), 165-211. 18. Grant LA, Kane R, Potthoff S, *et al.*: Staff training and turnover in Alzheimer's special care units: Comparison with non-special care

units. *Geriatr Nurs*. 1996; 17(6), 278-282. 19. McCarty EF, Drebing CE: Burden and professional caregivers:

Validation of a new measure. *J Nurses Staff Dev.* 2002; 18(5): 250-257.

20. Drebing CE: Trends in the content and methodology of Alzheimer caregiving research. *Alzheimer Dis Assoc Disord*. 1999; 13(S1), S93-S100.

21. Pruchno RA, Michaels JE, Potashnick SL: Predictors of institutionalization among Alzheimer disease victims with caregiving spouses. *J Gerontol*. 1990; 45(6), S259-S266.

22. Farran CJ, Keane-Hagerty E, Salloway S, *et al.*: Finding meaning: An alternative paradigm for Alzheimer's disease family care-givers. *Gerontologist.* 1991; 31(4), 483-489.

23. Kinney JM, Stephens MAP, Fransk MM, *et al.*: Stresses and satisfactions of family caregivers to older stroke patients. *J Appl Gerontol.* 1995; 14(1), 3-21.

24. Noonan AE, Tennstedt SL: Making the best of it: Themes of meaning among informal caregivers to the elderly. *J Aging Stud.* 996;

10(4), 313-327.

25. Riipinen M: The relation of work involvement to occupational needs, need satisfaction, locus of control and affect. *J Soc Psychol.* 1996; 136(3), 291-303.

26. Silver PT, Pouline JE, Manning RC: Surviving the bureaucracy: The predictors of job satisfaction for public agency supervisors. *Clin Super*. 1997; 15(1), 1-20.

27. Tarsi R, Feij JA: Longitudinal examination of the relationship between supplies-values fit and work outcomes. *Appl Psychol.* 2001; 50(1), 52-80.

28. Cotton L, Bynu DR, Madhere S: Socialization forces and the stability of work values from late adolescence to early adulthood. *Psychol Rep.* 1997; 80(1), 115-124.

29. Hazer JT, Alvares KM: Police work values during organization entry and assimilation. *J Appl Psychol.* 1981; 66(1), 12-18.

30. Lynn SA, Cao LT, Horn BC: The influence of career stage on the work attitudes of male and female accounting professionals. *J Org Behav.* 1996; 17(2), 135-149.

31. Siwek D: The Health Outreach Program for the Elderly (HOPE) Database. *Alzheimer Dis Assoc Disord*. 1999; 13(S1), S101-S105.

32. Pruchno R: Studying caregiving families: Theoretical and methodological challenges. In Light E, Niederehe G, Liebowitz GD (eds.), *Stress Effects on Family Caregivers of Alzheimer's Patients*. New York: Springer Publishing Co., 1994

33. Ponder RJ: The grief of caregivers: How pervasive is it? J Gerontol Soc Work. 1996; 27(1-2), 3-21.

34. Beery LC, Pigerson HG, Bierhals AJ, *et al.*: Traumatic grief, depression and caregiving in elderly spouses of the terminally ill. *Omega.* 1997; 35(3), 261-279.

35. Redmondet JH, Hansson RO: Assessing a widow's grief: A short index. *J Gerontol Nurs*. 1987; 13, 31-34.

36. Gabriel RM, Kirschling JM: Assessing grief among the bereaved elderly: A review of existing measures. *Bereave Care*. 1989; 3, 29-54.

37. Frost JC: Support groups for medical caregivers of people with HIV diseases. *Group.* 1994; 18(3), 141-153.

38. Garside B: Physicians Mutual Aid Group: A response to AIDS-related burnout. *Health Soc Work*. 1993; 18(4), 259-267.