O R I G I N A L P A P E R

Improving Quality of Working Life among Nursing Home Staff:
Is it really needed?

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Abstract

Background: There is a world-wide interest in problems of the quality of working life because it is the quality of working life that influences quality of care to the nursing home residents.
Aim: The aim of the study is to investigate effects of work autonomy and open and accurate communication on quality of working life among nursing home staff.
Methodology: Data were collected from 511 staff members from ten nursing homes in one of the southern states in the U.S.A. Variables were measured by already-developed scales with good psychometric properties. Correlations and Regression were used to test the hypotheses.
Results: Work autonomy and open and accurate communication affected quality of working life, namely-job and career satisfaction, working conditions, control at work, work-home interface and general well-being among nursing home staff. Findings are consistent with social exchange theory formulations. Organizations need to increase autonomy and communication to improve quality of working life. A counterargument was presented. People with good quality of working life usually work autonomously and tell the truth openly.
Conclusion: Work autonomy and open and accurate communication improves quality of working life of staff which in turn could improves quality of care of nursing home residents.

Keywords: Autonomy, Communication, Quality of Working Life, Social Exchange Theory, Nursing Home Staff

Introduction

Improving quality of working life of staff is as much needed as improving quality of care of patients. Quality of working life is important because it is associated with employee commitment (Farjad & Varnous, 2013), turnover intentions (Korunko, et. al., 2008), organizational effectiveness (An, et. al., 2011), productivity (Nayari, et. al., 2011) and quality of life (Drobinic, et. Al., 2010). As a result, there is a world-wide interest in the problem of quality of working life (Chaitakornkijsil, 2010). The aim of this study is to investigate factors affecting quality of working life among nursing home staff and suggest a framework for future research.

Literature Review

In the modern era, the term "quality of working life" was introduced by Davis and his colleagues in the late 1960's (Davis, 1977). Its measurable dimensions were first delineated by Walton (1975) and the first empirical investigation was carried out by Taylor (1978). Over the last 35 years that have passed, an unbelievable amount of QWL studies have been conducted. There is a

study on almost every occupational or professional group and there are several reviews of them. Among caring professionals, nurses quality of work life (NQWL) has been the subject of most investigations. Knox and Irving (1997) summarized the findings of two meta-analytic reviews (Swine and Evans, 1992; Biegen, 1993) and presented 14 factors comprising NQWL. They are: reduced work stress, organizational commitment and belonging, positive communication with supervisors, autonomy, recognition, routinization/ predictability of work activities, fairness, clear locus of control of organizational decisions, education, professionalism, low role conflict, job performance, feedback, opportunity for advancement and fair and equitable pay levels. A relatively recent review (Vagharseyyedin, et.al., 2011) concluded that leadership styles, rules and policies, communication styles, managerial communication, interpersonal relationships, autonomy, shift working, workload, job tension, supportive supervisory style, adequate recognition, cooperative decision-making and managerial support can be considered as predictors of NQWL.

The findings of both these reviews reveal that several variables have been considered as one of the dimensions as well as predictor of QWL. Therefore, to clarify, the present review will address four inter-related questions: what are major dimensions, antecedents, consequences and theories used in QWL studies? Since earlier studies have been included in the previous reviews, the present review will focus only on the studies conducted in health care since 2001.

Chart 1 Summary of QWL Studies

Author, Year	Participants, Country	Antecedents	QWL	Consequences	Theory
Lewis, et. al. 2001	Staff of variety of health care organizations, south central region Ontario, Canada.		Co-worker and supervisory support, teamwork and communication, job demands and authority, patient/resident care, organization characteristics, compensation benefits, training and development, impressions of the organizations.	Job Satisfaction	Scientific Management, Human Relations, Extrinsic and Intrinsic Rewards
Krueger, et. al. 2002	Staff of variety of health care organizations central west region Ontario, Canada.		Co-worker and supervisory support, teamwork and communication, job demands and authority, patient/resident care, organization characteristics, compensation benefits, training and development, impressions of the organizations.	Job Satisfaction	Scientific Management, Human Relations, Extrinsic and Intrinsic Rewards
Gifford, et. al. 2002	Nurses in obstetric units in hospice.	Hospice unit culture	Commitment, satisfaction, empowerment, job involvement, turnover intention.		Competing Values Framework
Beaudoin, & Esgar, 2003	Nurses from in-patient and outpatient dept. of Hospitals, Montreal, Canada	Social-Environment, Operational, Administrative, Nurse Hassels	QWL	Dissatisfaction Turnover	Unifying Framework (O'Brian-Palles & Baumann)

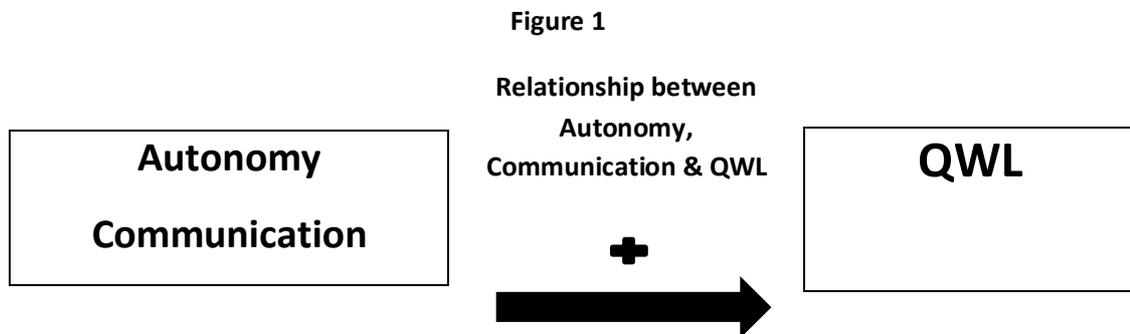| Author, Year	Participants, Country	Antecedents	QWL	Consequences	Theory
Hsu, L. Kernohon 2005	Nurses, Northern Ireland UK		Adequate & fair compensation, Safe & healthy work conditions, Opportunity for continual growth, Security, Meaning of work personnel		
Brooks, et. al., 2007	Nurses in 3 Midwestern urban community Hospitals, U.S.A		Work-Home Life, Work Design, Work Context, Work World		Socio-technical System Theory & O'Brian-Pallel & Baumason Unifying Framework
Laar, et.al. 2007	Healthcare workers from hospital and primary care centers South East England		Job and career satisfaction, Control at work, Working Conditions, Work-home interface, Stress at work, General well being		
Xu Zang, et. al., 2011	Nurses, Singapore		Job and career satisfaction, Control at work, Working Conditions, Work-home interface, Stress at work, General well being		
Nayeri, et. al., 2011	Nurses, Iran		Autonomy, Work aspect, Management-Personnel Relations, Salary and Economic Rewards, Job Promotion	Effectiveness, Efficiency, Commitment, Presence for patients	
An, et. al., 2011	Nurses in the hospital, Korea	Organizational Culture, Allocation culture, Progressive culture, maintenance culture	Job compensation, Working conditions, Human relations, Growth and development		

The above chart reveals that most of the studies have focused only on dimensions of quality of working life and that there is no agreement on what constitutes QWL. This is not a surprise; in fact, there is consensus among reviews (Vinopal, 2012; Findlay, Kalleberg, & Warhurst, 2013) that there is a lack of consensus about indicators of measuring QWL. Studies are constantly upgrading QWL scales to make it better. The approach is to include as many items as possible, as if QWL is "everything." Socio-Technical System (STS) theory (Davis & Trist, 1979), Competing Value Framework (CVF) (Quinn & Rohrbaugh, 1983); A Unifying Framework (O'Brian-Pallel & Baumann, 1992) and Need-Satisfaction theory (Sirgy,et.al., 2001; Maria, et. al., 2013) have been used in QWL studies Delineation of QWL dimensions and theory applied should lead to a determination of antecedents and consequences.

Theory and Hypotheses

Quality of working life is defined as "the quality of relationship between the worker and his/her working environment as a whole" (Davis, 1977). Social exchange theory suggests that workers can form exchange relationships with coworkers, supervisors, organizations, governing boards, community and the clients that they serve. Social exchange can be either direct or indirect. The direct exchange relationships can be further

distinguished by whether transactions are negotiated or reciprocal (Blau, 1964; Gouldner, 1960). In many exchange relationships, participants exchange in both forms of exchange throughout their association. Often, one form of exchange provides the dominant overarching context for the relationship with opportunity for the other form embedded in the larger context. When the two forms of exchange are combined, the positive effects of each form of exchange-the greater structural cooperativeness of negotiated exchange, and the positive relational

Figure 1

**Relationship between
Autonomy,
Communication & QWL**

climate of trust and perceived partnership created by reciprocated exchange-will work together to produce stronger behavioral commitments than either of these forms alone (Molm, Whitham, & Melamed, 2012; Molm, Melamed, & Whitham, 2013).

Since earlier reviews (Knox & Irving, 1997; Vagharseyyedin, et. al., 2011) have included autonomy and communication as a part of the dimensions as well as predictors of QWL, this study acknowledges their importance and examines their relationship to QWL.

Autonomy and QWL

Work autonomy reflects employees beliefs about organizations providing discretion, freedom and independence in determining methods/procedures to do the job, control in scheduling and ability to change and modify criteria for evaluation (Breaugh, 1985). This may require employee

negotiation with the organization or an agent of the organization, and this also requires organization trust among employees about carrying tasks, making schedules and cooperation in the evaluation process. Employees may believe that they are valued by the organization and may reciprocate with loyalty and increased work efforts. Thus combined exchange dominated by negotiation- rationality and supplemented by reciprocity will result in work autonomy which will affect quality of working life. Thus, social exchange-based argument provides theoretical justification for first set of hypotheses:

H1. Work autonomy will be positively related to quality of working life indicators:
a. job and career satisfaction;
b. working conditions;
c.control at work;
d. home-work interface; and
e. general well-being.

Communication and QWL

Communication openness and information accuracy are considered essential for decision – making and healthy organizational functioning (Roberts & O'Reilly, 1974; O'Reilly & Roberts, 1976). Open communication is where employees feel free to express opinions, voice complaints, offer suggestions to their supervisors and talk freely among themselves about important policy decisions and their concerns (Buchholz, 2001). Information accuracy is to provide honest and correct information with an appropriate emotional overtone at the correct time to all members who need the communication content (Hall & Tolbert, 2005). Organizations strongly seek to have open and accurate conversations among them. They may develop and implement this notion as part of their administrative practice. Members of the organizations may develop similar reactions and reciprocate each other by open and accurate communication. But people in organizations usually behave according to their role status, and organizational life is full of small or big negotiations and compromises that require a constant flow of information. Thus organizational communication is dominated by reciprocity and supplemented by rationality; this combined exchange process affects quality of working life. This theoretical reasoning leads to the formulation of second set of hypotheses:

H2. Organizational communication will be positively related to indicators of quality of working life:
a. job and career satisfaction;
b. working conditions;
c. control at work;
d. home-work interface;
e. general well-being.

Methodology

Data and Sample
The data for this paper were collected as part of a larger study. The organizations studied were ten nursing homes privately owned by a corporation in one of the southern states in the United States. Of 1,732 employees, 511 staff members completed the questionnaire, resulting in a completion rate of 29.08%. Their predominant

function is "People-Sustaining" as they offer around-the-clock health care to patients.

Measurement

Work Autonomy
Work autonomy consists of three facets:
1. Work method autonomy,
2. Work scheduling autonomy and
3. Work criteria autonomy.
Each of the three components were measured by three-items developed by Breaugh (1985). An item example for work method autonomy is "I am able to choose the way to go about my job" (procedure to utilize). An item example for work scheduling autonomy is "I have control over my work schedule." An item example of work criteria autonomy is "I am able to modify what my job objectives" (What I am supposed to accomplish). All of these statements were rated on a five-point likert type scale ranging from "Strongly Disagree" (1) to "Strongly Agree" (5). The mean for the 9 items scale is 3.49. The standard deviation is .78 and the Chronbach Alpha is .88.

Organizational Communication
Organizational communication comprised of two constructs: communication openness and information accuracy. Communication openness was measured by five statements. A sample statement was: "I find it enjoyable to talk to other coworkers in this nursing home." Informational accuracy was measured by another five statements. A sample statement was: "The information I receive in this nursing home is often inaccurate." The respondents rated these statements on a five-point scale (1) Strongly Disagree to (5) Strongly Agree. Each of the ten statements were summed to make a composite measure of organizational communication. These measures were adapted from O'Reilly and Roberts (1976) measures of communication behaviors. The mean for this on the ten item scale is 3.38, standard deviation was .42 and Chronbach Alpha was .85.

Quality of Working Life
Quality of working life was measured by five sub-scales chosen from a work-related quality of life scale (VanLaar, et.al., 2007) developed in the United Kingdom initially for healthcare workers.

Later on, this scale was used for nurses in Singapore (Zeng, et.al., 2011). Since this instrument claimed its utility as both multidimensional and unidimensional measure for other professions and in other parts of the world, it was chosen for this study.

1.The Job and Career Satisfaction (JCS) scale contained six items. An item example is "I am satisfied with the career opportunities available for me here." The mean for six items scale is 3.90, standard deviation is .70 and the reliability coefficient Chronbach Alpha is .84.

2. Working Conditions scale (WCS) contained only two items. An item example is "The working conditions are satisfactory." The mean for this sub-scale is 3.96, the standard deviation is .83 and the reliability coefficient Chronbach Alpha is .76.

3. Control at Work (CAW) scale had three items in it. An item example is "I am involved in decisions that affect me in my own area of work." The mean for this sub-scale is 3.81, the standard deviation is .81 and the reliability coefficient Chronbach Alpha is .67.

4. Home-Work Interface (HWI) scale included two items. An item example is "My current working hours suit my personal circumstances." The mean for this sub-scale 3.61, the standard deviation is .72 and the reliability coefficient Chronbach Alpha is .67.

 5. General Well-Being (GWB) scale consists of six items. An item example is "Generally things work out well for me." The mean for this sub-scale us 3.69, the standard deviation is .72 and the reliability coefficient Chronbach Alpha is .88 for the scale.

Respondents rated all the items on a five point scale ranging from (1) Strongly Disagree to (5) Strongly Agree.

Socio-Demographic Characteristics

The socio-demographic characteristics measured in the study include age, gender, marital status, ethnicity, education and tenure.

Age was measured as their actual age at their most recent birthday.

Gender was measured as 0=male and 1=female. Marital status was measured by using one item

reporting the respondents marital status: 1=single, 2=married, 3=separated, 4=widowed and 5=divorced. This was recoded as a dichotomous variable with two categories: 1=married and 0=unmarried.

Ethnicity was measured as:1=Caucasian, 2=African American, 3=Hispanic, 4=Asian, 5=Native American and 6=Other. Ethnicity was then recoded as a dichotomous variable with two categories: 0=non-white and 1=white.

Education was measured as 1=Grade school, 2=High School, 3=Some College, 4=Bachelor's Degree and 5=Graduate Degree. Tenure was measured as the actual length of service within the organization.

Data Analysis

Data were examined using descriptive statistics, i.e. mean and standard deviation. Reliability coefficient Chronbach Alpha was calculated for the measures of work autonomy, organizational communication, and all the five sub-scales of quality of work life. Pearson product moment correlations were computed for each pair of variables. The hierarchical regression analysis was performed to determine relative and overall contribution of antecedent variables-work autonomy, communication and five indicators of quality of working life.

Results

Data were obtained from 511 staff members of ten different nursing homes. Most participants, 84% were female and a minority, 15%, was male. A majority of them, 50.7%, were married, while 30.1% were single, 3.3% were separated, 3.9% were widowed and 11.5% were divorced.

The participants were predominantly Caucasian (69%), and the others were African American (23.7%), Hispanic (8%), Native American (2.5%), and Asian (4.8%) while (2%) claimed other. In terms of education, (1.6%) had only completed grade school, 25.8% had graduated high school, 45% had some college, 14.3% had a Bachelor degree and 12.7% had a graduate degree. The mean age of the participants was 41 years and tenure, i.e. length of service, was 5.73 years.

Table 1

		1	2	3	4	5	6	7
	Zero-Order Correlations Among Study Variables							
1	**Autonomy**							
2	**Communication**	.48++						
3	**Job and Career Satisfaction**	.57++	.56++					
4	**Working Conditions**	.46++	.48++	.56				
5	**Control at Work**	.56++	.52++	.66++	.63++			
6	**Home-Work Interface**	.46++	.41++	.50++	.48++	.66++		
8	**General Well Being**	.51++	.58++	.79++	.60++	.70++	.61++	

Table 1 presents the Pearson product moment correlations for each pair of variables. The results of the correlational analysis revealed that all the proposed hypotheses are supported by this data. Given the preliminary support for the hypotheses in the correlation results, a series of stepwise regression analysis were performed.

Table 2a presents the results of regression analysis predicting "job and career satisfaction" after controlling for demographic variable. In regression equation, job and career satisfaction were entered as the demographic variables. In step one, all the demographic variables (age, gender, marital status, ethnicity, education and tenure) were entered into the equation and they contributed to a small variance (Rsquare=.03) in job and career satisfaction. In step two, autonomy was entered in the equation and it explained 30.0% variance in job and career satisfaction. In the third step, communication was entered in the equation and it explained another 15.0% variance. Thus, autonomy and communication together accounted for 45.0% variance in job and career satisfaction. In terms of their strength, communication appears to have a slightly stronger influence (Beta=.41,p<.00) than autonomy (Beta=.39,p<.00). Both the hypotheses H1a and

H2a were strongly supported. This means that more autonomy in methods, scheduling and criteria and more open and accurate communication provide more job and career satisfaction among staff members (Iliopaulou & White, 2010).

Table 2b presents the results of regression analysis predicting working conditions after controlling for demographic variables. In the regression equation, working condition was entered as the dependent variable. In step one, all the demographic variables were entered into the equation and they contributed to a small variance (Rsquare=.03) in working conditions. In step two, autonomy was entered in the equation and where it accounted for 24.0% variance. In step three, communication was entered into the equation and explained 11.0% more variance. Taken together, these two independent variables explained a 35.0% variance in working conditions. In comparison to autonomy (Beta=.31, p<.00) communication (Beta=.39, p<.00) has a much stronger influence on working conditions. It appears that frank and honest communication about resources and policies related to physical conditions and safety in the facilities provide a satisfactory response from employees.

Table 2a: Hierarchical Analysis for the Relationship Among Autonomy, Communication, Job and Career Satisfaction after Controlling for Demographic Variables

Step	Variable Entered	Rsquare	Rsquare Change	F	Beta	t	SIG
1	Demographic Variable	.03					
2	Autonomy	.33	.30	21.44	.39	7.19	.00
3	Communication	.48	.15	31.71	.41	8.34	.00

Table 2b: Hierarchical Analysis for the Relationship Among Autonomy, Communication Working Conditions after Controlling for Demographic Variables

Step	Variable Entered	Rsquare	Rsquare Change	F	Beta	t	SIG
1	Demographic Variable	.03					
2	Autonomy	.27	.24	15.09	.31	5.87	.00
3	Communication	.38	.11	23.29	.39	7.45	.00

Table 2c: Hierarchical Analysis for the Relationship Among Autonomy, Communication and Control at Work after Controlling for Demographic Variables

Step	Variable Entered	Rsquare	Rsquare Change	F	Beta	T	SIG
1	Demographic Variable	.02	.02	1.12			
2	Autonomy	.32	.30	21.47	.41	9.57	.00
3	Communication	.38	.06	33.04	.29	1.59	.00

Table 2d: Hierarchical Analysis for the Relationship Among Autonomy, Communication and Work-Home Interface after Controlling for Demographic Variables

Step	Variable Entered	Rsquare	Rsquare Change	F	Beta	t	SIG
1	Demographic Variable	.04	.04				
2	Autonomy	.23	.19	12.91	.32	5.62	.00
3	Communication	.28	.05	14.65	.26	4.57	.00

Table 2e: Hierarchical Analysis for the Relationship Among Autonomy, Communication and General Well-Being after Controlling for Demographic Variables

Step	Variable Entered	Rsquare	Rsquare Change	F	Beta	t	SIG
1	Demographic Variable	.03					
2	Autonomy	.34	.31	22.58	.37	7.61	.00
3	Communication	.48	.14	34.31	.42	8.77	.00

Table 2c presents the results of regression analysis predicting "control at work" after controlling for demographic variables. In the regression equation, "control at work" was entered as the dependent variable. In step one, all the demographic variables were entered into the equation and they contributed to a small variance (Rsquare=.02). In step two, autonomy was entered into the equation where it explained 30.0% variance in control at work. In step three communication was entered into the equation and it contributed to additional 6.0% variance. Thus, autonomy and communication together contributed to a 36.0% variance in control at work. In terms of strength, autonomy (Beta=.41, p<.00) has stronger association to control at work than communication (Beta=.29, p<.00). This is understandable because of some similarity in the attributes of autonomy and control at work. It appears that autonomy and communication allow staff to have more control over the decisions that affect their work area.

Table 2d presents the results of regression analysis predicting "home-work interface", after controlling for demographic variables. In regression equation, "home-work interface" was entered as the dependent variable. In step one, all the demographic variables were entered in the equation. The results indicated that a small portion of variance (Rsquare=.04) was explained. In step two, autonomy was added to the equation and it explained 19.0% variance. In step three, communication was included in the equation and it explained another 5.0% variance. Together, autonomy and communication accounted for 24.0% variance in work-home interface. In terms of their strength, autonomy (Beta=.32, p<.00) exert stronger influence than communication (Beta=.20, p<.00) on work-home interface. Although both autonomy-freedom, independence and choice and open and accurate communication, each seem to accommodate family and work commitment.

Table 2e presents the result of regression analysis predicting "general well-being" after controlling for demographic variables. "General well-being" was entered as the dependent variable in the equation. In step one, all the demographic

variables were entered into the equation and they contributed to a small variance (Rsquare=.03). In step two autonomy was entered to the equation and it accounted for 31.0% variance. In step two, communication was added into the equation, and it explained another 14.0% variance. Together, autonomy and communication explained 45.0% variance in general well-being. It appears that communication plays a stronger role (Beta=.42, p<.00) than autonomy (Beta=.37, p<.00) regarding well-being. It clearly reflects that autonomy and communication contribute to staff well-being.

Overall, both autonomy and communication strongly influence quality of working life. In terms of their comparative strength, autonomy has stronger effect on job satisfaction, control at work and home-work interface and communication has stronger effect on working conditions and general well-being.

Discussion

The study investigated that autonomy and communication as antecedents definitely affect the five dimensions of quality of working life, namely job and career satisfaction, working conditions, control at work, home-work interface, and general well-being. It is a fruitful effort to show the relationship between antecedents and the dimensions of QWL. The study also demonstrated that QWL is the " Quality of Relationship" and that social exchange theory can successfully explain this exchange relationship. The findings have implications for "evidence-based administration" by suggesting that corporation must provide staff opportunity to use their skills and method of work, in scheduling and input in the evaluation process. The administration should be transparent by practicing open and accurate communication not only on micro-issues but also on macro-issues such as budget, policies and standards, future commitments and plans and new programs.

In response to questions raised in the literature review section, the study suggests possible classification of variables involved in the dynamics of QWL.

Table 3: A Conceptual Schema for Quality of Working Life

Antecedents	QWL	Consequences	Theory
Technology	Job and Career Satisfaction	Commitment	
Centralization, Formalization	Working Conditions	Turnover	Social Exchange Theory
LMX 1, POS 2, Professionalization	Control at Work	Citizenship Behavior	Multi-Foci Perspective
Organizational Justice	Home-Work Interface	Quality of Care	
Autonomy, Communication	General Well-Being	Quality of Life	

The relationship among the variables in this schema could be moderated by societal cultures (House, et.al., 2004). This framework has the potential to add knowledge, design intervention programs and develop policies for caring professionals and their organizations and people needing care. This framework will be developed in a subsequent paper.

Limitations

A few limitations to this study exist. The first potential concern to construct validity is the common method of variance. Since all of the variables were measured by asking questions to a single respondent, some association among them may be expected as a result of response style. The second concern is that because the study measures the perceptions of autonomy, open and accurate communication and quality of working life, the participants responses to scale items may represent the perceived social desirability of the items rather than their actual predispositions (Nicotera, 1996). The third concern is that the study used a cross-sectional design and that samples were not randomly selected; therefore, no causal relations among variables can be established.

Conclusion

The study concludes that work autonomy and open and accurate communication have a definite influence on quality of working life among nursing home staff. These findings have a bearing on democratic values that freedom, choice, independence and open and accurate communication improve quality of working life and democracy and bureaucracy have similar foundational premises. A counterargument can be made. People with good quality of working life work autonomously and openly tell the truth. Longitudinal research may probably shed some light on this dilemma. There is nothing wrong with any one of the interpretations. It is simply a matter of perspective.

This article is dedicated to nursing home staff and administrators who provide quality care to those in need of care.

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