

## 介護老人保健施設における看護職のストレスの特徴と職務満足度との関係

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### Relationship between Job Satisfaction and Characteristics of Stressors Experienced by Nursing Staff Working in Nursing Care Facilities for the Elderly

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To identify the characteristics of stressors experienced by nursing staff who work in nursing care facilities for the elderly and to examine their relation with job satisfaction, a nationwide study was conducted by random sampling. The survey was performed using self-report questionnaires sent by mail, targeting 6,500 nursing staff members. Responses were obtained from 1,444 staff members (response rate, 22.2%).

The participants were 1,365 females (94.5%), had an average age of  $45.5 \pm 10.1$  years, had an average of  $19.9 \pm 10.2$  years of nursing experience, and an average of  $6.1 \pm 5.6$  years of nursing experience in nursing care facilities for the elderly.

The stressors consisted of the following 9 factors: "anxiety over nursing judgments," "dealing with changing situations," "difficulty in collaborating with staff in other occupations working in the facility," "burden caused by overwork," "considerations regarding accident prevention," "diversification of tasks," "difficulty of coordinating," "verbal and physical abuse by residents of the facility," and "managing both work and housework." Since the stressors showed negative correlations with job satisfaction level ( $r = -0.485, p < 0.001$ ), this study suggests the need to introduce new educational programs to mitigate the effects of these stressors, which are specific to nursing staff who work in nursing care facilities for the elderly, as well as to improve the work environment, and increase nurses' desire to continue working.

介護老人保健施設の看護職が体験するストレスの特徴を把握し、職務満足度との関連性を検討することを目的に、無作為抽出による全国調査を行った。調査は、6,500名を対象とし郵送による自記式質問紙法で行い、1,444名（回収率22.2%）から回収された。

対象者の概要は、女性1,365名（94.5%）、平均年齢 $45.5 \pm 10.1$ 歳、平均看護経験年数 $19.9 \pm 10.2$ 年、高齢者施設看護経験年数 $6.1 \pm 5.6$ 年であった。

老健看護職のストレスは、『看護判断への不安』、『状態変化への対応』、『施設内職員間の連携の困難さ』、『オーバーワークによる負担』、『事故防止への気づかい』、『業務の多様化』、『調整困難』、『入所者の暴言・暴力』、『仕事と家事の両立』の9因子で構成されていることが明らかになった。これらには、病院に勤務する看護職のストレスと異なる特有の因子も含まれていた。また、職務満足度と負の相関関係がみられた( $r = -.484, p < .001$ )ことから、ストレスを低減するための対応策を講じるためには介護老人保健施設の看護職に特有なストレスを考慮した新たな教育プログラムが必要であることが示唆された。

キーワード：看護職のストレス、介護老人保健施設、職務満足度

## Introduction

Twelve years have elapsed since the long-term care insurance system was introduced, and the number of nursing care facilities has increased rapidly. However, around 30-40% of the facilities fall short of their nursing care staff requirement (Japanese Nursing Association, 2004), and this deficiency is an ongoing and serious issue. The high turnover rate of nurses is another serious issue. The causes for the high turnover rate are stresses associated with low wages, poor working conditions, backache, physical burdens such as those imposed by overwork, mental health problems caused by unhealthy relationships with senior staff and people in other occupations, verbal abuse from the elderly with dementia, and the difficulties of administering nursing care for the elderly with severe disabilities (Momose, 2007).

Additional sources of stress include differences in care provision policies, the lack of persons with whom problems can be discussed, and the scarcity of places suitable for such discussions (Azechi, Onodera and Endo, 2006). However, there have been few studies conducted to investigate the stress experienced by nurses who work in nursing care facilities for the elderly in Japan, and the existing studies have been descriptive studies using interviews. Meanwhile, several studies abroad have investigated stress and burnout in nursing staff working in nursing care facilities for the elderly, and the results have pointed to a lack of knowledge about the causes of stress and how to cope with it (Cohen and Noelker, 2000). Studies conducted in foreign countries have suggested that effective ways of coping with stress and gaining more job satisfaction include training to develop clinical abilities, development of a healthful work environment and support system, implementation of programs that promote nurses' empowerment, and educating nurses about stress reduction (Laschinger et al., 2001; Bernice, 2005). However, because service delivery systems and the working environment in nursing care facilities for the elderly in Japan differ from those in foreign countries, application of those studies' results in the Japanese con-

text would cause many problems. Therefore, it seems important to identify the characteristics of stressors and to examine their relationships with nurses' job satisfaction level, and to devise solutions that enable nurses to continue their work at nursing care facilities for the elderly with a high level of job satisfaction, while reducing nursing staff turnover.

## Aim

The purpose of this study was to explore the factors associated with stressors experienced by nursing staff working in nursing care facilities for the elderly, where the number of nursing staff employed is high relative to other facilities, in order to characterize stressors and to examine their relationships with job satisfaction levels.

## Method of Study

### 1. Participants

The participants were 6,500 nurses who worked in nursing care facilities for the elderly throughout Japan. These facilities are registered in the WAM NET (Welfare and Medical Service Network System), a website that provides comprehensive information on welfare and health services in Japan.

### 2. Data Collection

A list of facilities registered with WAM NET was compiled, and facilities to which questionnaires would be sent were chosen at random using systematic sampling. Self-report questionnaires together with a document that explained the purpose of the study were sent by mail to the directors of nursing care facilities for the elderly. When approval was obtained from the facility directors, the questionnaires were distributed among the nursing staff. Questionnaires were completed anonymously, placed in an enclosed return envelope that was sealed, and returned by post.

The survey was conducted during February and March of 2010.

### 3. Survey Content

The questionnaire included items on the sociodemographic attributes of the participants, the size of the facility and the number of its staff, the condition of the residents in the facility, a stressor scale for nursing staff at the facilities, and a job satisfaction scale. Fifty-four items were included in the stressor scale. Before the start of this study, we conducted interviews with nursing staff working in nursing care facilities to obtain information about the stressors they experienced in their daily tasks, and extracted subcategories from a qualitative analysis of the information obtained. These subcategories and related studies were used as the reference for creating the 54 items we used in this study. Thus, the stressors investigated in this study were those related to work. The ratings were scored on a 7-point scale that measured the degree of perceived burden and difficulties in daily nursing practice, ranging from "Totally disagree, 1" to "Totally agree, 7." Job satisfaction level was measured using a scale developed by Nakayama et al. (2001). This scale consists of 7 items that concern salary, working conditions, facility management, autonomy of work, relationships at work, attitudes to nursing care, and the quality of nursing care. Each item was scored on a 5-point scale ranging from "Totally dissatisfied, 1" to "Totally satisfied, 5"; more points were given for higher satisfaction levels.

### 4. Data Analysis

The characteristics of each item in the stressor and job satisfaction level scales were identified by summing the reported scores for each item. Next, exploratory factor analysis was conducted to explore the structure of the stressors. Regarding the relationship between the stressors and job satisfaction level, the factor score for each stressor was calculated by summing the scores for each item. Associations between the total score and factor scores for the stressors, along with the total score for job satisfaction, were examined using Pearson product-moment correlation coefficients. Missing values were processed using listwise deletion.

## Results

### 1. Sociodemographics of the Participants

The questionnaire was returned by 1,444 respondents (response rate, 22.2%). A summary of the participants is given in Table 1.

### 2. Stressor Characteristics

#### 1) Characteristics analyzed from scores for each stressor item

Among the 54 stressor items, the item having the highest response rate of "Totally agree" or "Agree," was "concerned about infection prevention," followed in order by "nervous about fall prevention concerning residents of the facility," "feel anxious about clinical judgments made during the absence of physicians," "difficulty in dealing with patients with dementia," and "decision-making when having a facility resident visit the emergency department when their condition suddenly changed." Items with lower scores were "getting involved in problems with the family," "being criticized by superiors and colleagues," and "family's lack of understanding of the job."

#### 2) Factor Structure of Stressor

In order to explore the subcategories that constitute the stressors, factor analysis (principal factor method and promax rotation) was performed on the stressor scale, which consisted of 54 items. The number of factors was determined on the basis of components with eigenvalues of 1.0 or more. The analysis was repeated after dropping items with factor loadings of 0.40 or less. As a result, 9 factors comprising 38 items were extracted (Table 2). The cumulative contribution rate of these 9 factors was 53.0%. The first factor was "anxiety over nursing judgments" (item 5), followed in order by "dealing with changing situations" (item 7), "difficulty collaborating with staff in other occupations working in the facility" (item 6), "burden caused by overwork" (item 6), "considerations regarding accident prevention" (item 4), "diversification of tasks" (item 3), "difficulty in coordinating" (item 3), "verbal and physical

Table 1 Demographic Characteristics of participants

Age (mean $\pm$ SD) years ( $n = 1434$ )	45.5 $\pm$ 10.5 (range 21-72)
Gender ( $n = 1444$ )	Male 79 (5.5%) Female 1365 (94.5%)
Marital status ( $n = 1430$ )	Single 224 (15.7%) Married 981 (68.6%) Bereavement 51 (3.6%) Divorce 174 (12.2%)
Residential style ( $n = 1271$ )	Living alone 166 (13.1%) Living with partner 224 (17.6%) Living with family 881 (69.3%)
Education ( $n = 1249$ )	Junior college or vocational school equivalency degree 1174 (94.0%) College graduate or higher 75 (6.0%)
Working experience (mean $\pm$ SD) years ( $n = 1444$ )	19.9 $\pm$ 10.22 (range 0-51)
Years employed at facility (mean $\pm$ SD) years ( $n = 1444$ )	6.1 $\pm$ 5.59 (range 0-42)
Positions ( $n = 1414$ )	Staff nurse 1101 (77.9%) Assistant head nurse 157 (11.1%) Head nurse 115 (8.1%) Others 41 (2.9%)
Style of Employment ( $n = 1442$ )	Typical-employment 1280 (88.8%) Atypical-employment 135 (9.4%) Others 27 (1.9%)
Shift work ( $n = 1439$ )	Shift work with night shift 965 (67.1%) Without night shift 474 (32.9%)
Mean number of night shifts per month (mean $\pm$ SD) years ( $n = 939$ )	4.6 $\pm$ 1.70 (range 1-12)

SD: standard deviation

abuse by residents of the facility” (item 2), and “managing both work and housework” (item 2). Internal consistency was calculated using Cronbach’s alpha coefficient. The coefficient of each factor was between 0.77 and 0.89.

### 3. Job Satisfaction

In order to evaluate job satisfaction, participants were asked to respond to the relevant questions in the questionnaire, each comprised of 7 items. Each item was scored on a 5-point scale. Higher scores were assigned to higher levels of satisfaction. The total satisfaction score was the total score of the 7 items. The total satisfaction scores ranged from 7 to 34 and the average [ $\pm$  standard deviation (SD)] was 17.8  $\pm$  3.9. Among the individual items, the median and mean values of scores for relationships with people and attitudes to nursing care both tended to be slightly high, and scores for salary and facility management tended to be slightly low.

### 4. Relationship with Stressors and Job Satisfaction

The range of total scores for the 38 items was from 75 to 266; the average ( $\pm$  SD) was 179.0  $\pm$  31.5. Associations between total stressor scores of the 38 items and factor scores for each of the 9 factors and total job satisfaction score were examined. The total stressor score and the total job satisfaction score showed a slightly strong correlation ( $r = -0.485$ ,  $p < 0.001$ ). Among the scores for individual stressor factors, “F3: difficulty in collaborating with staff in other occupations working in the facility” showed the strongest negative correlation ( $r = -0.541$ ,  $p < 0.001$ ). Some other factor scores showed slightly weak negative correlations, such as “F4: burden caused by overwork” ( $r = -0.384$ ,  $p < 0.001$ ), “F2: dealing with changing situations” ( $r = -0.355$ ,  $p < 0.001$ ), and “F6: diversification of tasks” ( $r = -0.331$ ,  $p < 0.001$ ). All other factors showed a statistically significant, albeit weak, negative correlation (Table 3).

Table 2 Factor analysis of Nurses' Stressor Scale (principal factor method with promax rotation)

Factor/question item	Factor loading								
	Factor I	Factor II	Factor III	Factor IV	Factor V	Factor VI	Factor VII	Factor VIII	Factor IX
<b>Factor I: Anxiety over nursing judgments (<math>\alpha = .893</math>)</b>									
6) I find it difficult to make decisions on whether I should make a resident of the facility visit an emergency department outside our facility at the time of his/her sudden change in condition.	.846	-.013	.036	.015	-.099	-.030	.038	.029	-.056
5) I feel anxious about making clinical judgments during the absence of physicians.	.826	.018	-.102	.186	-.082	-.043	-.077	.026	.036
9) I feel anxious because symptoms are difficult to recognize in the elderly.	.734	.027	-.046	.005	.065	.023	-.011	.012	-.016
7) Various needs with regard to dealing with emergency situations of the residents make me feel nervous.	.723	.004	.009	.048	.062	.020	.027	-.025	-.018
8) It is difficult to identify what changes in the elderly justify consultation with physicians.	.662	-.090	.170	.031	.082	-.016	.033	-.010	-.073
<b>Factor II: dealing with changing situations (<math>\alpha = .849</math>)</b>									
34) I feel the intentions of the residents are not being communicated to their families.	-.138	.788	.020	.070	.023	-.098	.041	.012	-.023
33) I feel irritated by attitudes of the family that do not seem to be in the resident's best interest.	-.098	.786	.022	.047	.024	-.056	-.027	.043	-.016
29) Hospital staff do not understand my judgment regarding a resident's need to visit a hospital.	.133	.663	-.134	-.112	-.083	.097	.105	-.019	.044
28) I feel irritated with the way hospital staff deal with the situation when a resident visits the emergency department.	.031	.646	-.098	-.088	-.011	.074	.057	-.021	.076
35) Because the policies regarding medical treatment of the elderly living in the facility are not clear, I find it difficult to make plans.	.033	.556	.152	.056	-.018	-.049	.068	-.053	-.028
31) When the condition of a resident becomes worse, I cannot see any hope for his/her improvement.	.033	.451	.112	.108	.105	.068	-.061	.037	-.073
32) I feel there are limits to what terminal care can achieve.	.160	.451	.065	.079	.071	-.082	-.040	.025	.010
<b>Factor III: Difficulty collaborating with staff in other occupations working in the facility (<math>\alpha = .785</math>)</b>									
44) Sometimes staff members have different opinions about the care that can be administered to a resident.	-.020	.075	.742	-.049	.027	.039	-.179	.058	-.023
54) When collaborating with staff in other occupations, sometimes there is difficult in understanding each other.	.025	-.025	.720	-.035	-.006	.028	-.041	-.010	-.002
43) There are some staff members I do not like working with.	.002	.024	.624	.060	-.032	-.052	-.118	.028	.026
45) My superiors and colleagues criticize the care services I provide for the residents.	.027	-.117	.588	-.053	-.039	-.056	.151	.066	.118
53) There is no colleague or superior I can get advice from when I feel anxious about my care services.	.009	-.073	.559	.031	-.114	.014	.050	-.021	.105
37) Things confirmed at staff meetings are not incorporated in work.	-.045	.177	.551	.049	-.050	.091	.009	-.099	-.103
<b>Factor IV: Burden caused by overwork (<math>\alpha = .820</math>)</b>									
3) Each nurse has too many residents to take care of.	.088	.014	-.016	.698	.042	.086	-.166	.048	.028
2) As I am in charge of many residents, I cannot grasp information about the elderly medical and life history	.091	.013	.000	.578	-.073	-.020	.082	-.038	.071
16) Even if I want to talk with the residents, I am too preoccupied with other tasks and have no time to listen.	-.071	-.068	.014	.498	.096	-.015	.442	-.043	-.042
4) As the number of full-time nurses is small, each of us has a lot of responsibility.	.206	.077	-.072	.492	-.058	.118	-.114	-.054	.147
17) As our work keeps us busy, it is difficult to provide individualized care for the elderly with dementia.	-.023	-.057	.029	.485	.226	-.055	.317	-.031	-.062
1) It is a burden for me that I have to take care of residents on a floor different from the one I am in charge of.	.037	.015	.069	.414	-.077	.131	.031	.005	.065
<b>Factor V: Considerations regarding accident prevention (<math>\alpha = .774</math>)</b>									
23) I am concerned about infection prevention in residents.	-.074	.023	-.133	.083	.829	.039	-.233	.046	.019
22) I feel nervous about preventing falls in residents.	-.001	-.043	-.024	.224	.723	-.029	-.096	.034	-.004
26) I feel nervous about an external facility's audit.	.137	.089	.058	-.344	.459	.093	.142	-.043	.075
27) I feel nervous about family members observing my work closely.	.072	.035	.050	-.269	.447	.004	.284	-.062	.075
<b>Factor VI: Diversification of tasks (<math>\alpha = .798</math>)</b>									
11) Other coordination tasks interrupt important care tasks I have to do.	-.088	-.015	.028	.165	.013	.773	.023	.031	-.034
10) Other than engaging in care services for the residents, there are too many facility management tasks that I am in charge of.	.037	-.025	-.039	-.004	.042	.724	.037	-.002	.010
12) Even during periods when there is more need for care work, I have to give instructions to care staff.	.003	-.005	.074	.099	.017	.545	.072	-.020	-.026
<b>Factor VII: Difficulty in coordinating (<math>\alpha = .785</math>)</b>									
15) I get involved in problems with the families of the residents.	-.042	.070	-.069	-.029	-.171	.107	.777	.112	-.007
14) I cannot cope very well with the requirements of the residents' families.	.060	.071	-.081	.061	-.100	-.017	.771	.014	.038
18) I find it difficult to coordinate the tasks to address the residents' dissatisfaction.	.024	.049	.064	.288	.080	-.046	.440	.002	-.049
<b>Factor VIII: Verbal and physical abuse by residents of the facility (<math>\alpha = .869</math>)</b>									
41) I was verbally abused by a resident.	.004	.033	.013	-.016	.046	-.026	.077	.849	.002
42) I was physically abused by a resident.	.031	-.019	.034	-.028	.000	.036	.063	.820	.000
<b>Factor IX: Managing both work and housework (<math>\alpha = .767</math>)</b>									
49) I am sometimes caught in a dilemma between my professional work and work for my family, such as housework and child rearing.	-.050	-.001	-.016	.108	.092	-.011	.008	.001	.790
48) I sometimes feel difficulty in getting my family to understand my work.	-.048	.027	.166	.084	-.020	-.023	.016	.002	.673

	Eigen value	11.91	2.347	1.969	1.537	1.461	1.428	1.229	1.124	1.082
	Contribution ratio	30.14	5.05	3.89	2.92	2.9	2.54	2.09	1.758	1.703
	Cumulative proportion of variance explained	30.14	35.19	39.08	42	44.9	47.43	49.52	51.28	52.98
Correlation Coefient	(Factor I)	.522	.467	.544	.473	.508	.592	.209	.204	
	(Factor II)		.626	.494	.554	.473	.596	.388	.151	
	(Factor III)			.501	.430	.458	.615	.407	.313	
	(Factor IV)				.453	.519	.522	.342	.147	
	(Factor V)					.369	.608	.244	.102	
	(Factor VI)						.436	.179	.284	
	(Factor VII)							.331	.205	
	(Factor VIII)								.141	

$\alpha$  : Cronbach's alpha

Table 3 Correlation of Total Job Satisfaction Score and Stressor Score

	( <i>n</i> = 1444)
F 1 anxiety over nursing judgments	-.262***
F 2 dealing with changing situations	-.355***
F 3 difficulty collaborating with staff in other occupations working in the facility	-.541***
F 4 burden caused by overwork	-.384***
F 5 considerations regarding accident prevention	-.172***
F 6 diversification of tasks	-.331***
F 7 difficulty in coordinating	-.293***
F 8 verbal and physical abuse by residents of the facility	-.239***
F 9 managing both work and housework	-.284***
Total stressor score of the 38 items	-.485***

\*\*\*  $P < 0.001$

## Discussion

### 1. Characteristics of Stressors among Nursing Staff Working in Nursing Care Facilities for the Elderly

Interviews were conducted with nursing staff about the difficulties and burdens they experience in their daily care giving tasks. Stressor items were established on the basis of the data obtained. The contents of these items are therefore considered to reflect the stressors acting on the nursing staff in this field very closely. Among the 54 items initially established, 16 items whose factor loadings were low were dropped, and 9 factor structures, comprising 38 items, were retained.

This survey clearly showed some phenomena that may cause psychological burden and stress among nursing staff working nursing care facilities for the elderly, and these were different from the hospitals (Higashiguchi et al. (1998)). For example, the item that constitutes the factor "difficulty collaborating with staff in other occupations working in the facility" in this

study seems to impose stress on nursing staff working in nursing care facilities. This may be because there is a greater variety of professionals normally engaged in care at such facilities compared to hospitals, such as care staff, professionals in rehabilitation, consultants, etc. Sometimes this staffs have difficulty understanding each other because the aims and principles of care as well as their approaches differ depending on the occupation. Furthermore, in hospital, relationships are limited to those with patients. However, nursing staff working in nursing care facilities do not deal only with residents of the facility. This study revealed that in actual situations these nursing staff are involved in problems with the residents' families and experience stressors related to "difficulty of coordinating" in order to cope with the requirements and dissatisfactions of the residents' family.

The stressors in hospitals related to qualitative burden of work are those experienced at times when nursing staff are assigned tasks that they are not familiar with, such as test and treatment methods as well as



operating medical devices. In contrast, the characteristics of stressors experienced by the nursing staff in this study were related to “anxiety over nursing judgments.” This is because they are required to make judgments on their own when changes in signs and symptoms are noticed, but physicians are absent. In addition, there are stressors related to “dealing with changing situations,” such as the judgments and responses nurses need to make sometimes to ensure that residents of the facility visit medical institutions outside their facility when their condition shows a sudden change.

Some other stressors were found among nursing staff working in nursing care facilities for the elderly, including those related to “consideration for accident prevention,” “diversification of tasks,” “verbal and physical abuse by the residents of the facility,” and “managing both work and housework.”

“Considerations regarding accident prevention” includes items stemming from the prevention of infection and falls of facility residents. The elderly have a weakened immune system. Therefore, infection can lead to life-threatening situations, and infection of one resident in these facilities can lead a group infection. This item seems to be one of the stronger stressors acting on nursing staff working in such facilities. In addition, it can be assumed that nurses are nervous about fall prevention because falls in the elderly can frequently lead to fractures and make them bedridden.

Stressors related to “diversification of tasks” comprised instructions to care staff, facility management tasks, and the frustration of not being able to concentrate on necessary nursing care because of the need to perform tasks such as coordinating with staff in other occupations. Those were found to be causes of stress. Nursing staff assume the role of offering nursing services mainly related to health management and livelihood support. However, as the necessity for care of facility residents increases, more medical treatment is required from nurses. Because the Long-Term Care Insurance Act regulates the number of staff, the amount of work each nursing staff member has to handle can become a considerable burden. Furthermore, in order to perform managerial tasks and care specific to

these facilities in collaboration with other staff, nursing staff also must take on the responsibility of instructing care workers. Consequently, nurses feel pressed for time and preoccupied with work at hand, which does not enable them to provide care for residents of the facility with enough consideration for individual needs. It seems that such situations make them feel stressed because they feel unable to provide respectful care for the elderly (Matsuoka et al., 2010).

Stressors related to “verbal and physical abuse by facility residents” may be characteristic of nursing staff working in such facilities because they provide care services to the elderly with dementia. It seems that this can be a major cause of stress, particularly when the nursing staff have inadequate understanding about the causes of verbal and physical abuse and do not know how to respond. This stressor is similar to that experienced by psychiatric nurses who deal with patients who show rejection behaviors, or patients with mental disorders, for whom it is difficult to provide nursing intervention (Miyake et al., 2011).

“Managing both work and housework” may be a cause of stress for some nurses who work in such facilities because their expectation of the job differs from the reality. Compared with hospital nurses, nurses who work in these facilities are relatively old and many of them are married. Some of them choose to work in such facilities expecting less difficulty handling both their nursing work and work for their family, such as housework and child rearing, with more emphasis on the latter.

## 2. Relation between Job Satisfaction and Stressors Acting on Nursing Staff Working at Nursing care Facilities for the Elderly

Many nursing staff working in nursing care facilities for the elderly work in the management system of their facility. Unlike hospitals, nursing care facilities for the elderly are places where people live, which enable nurses to develop autonomy in their care for the residents. Autonomy of nursing seems to provide a somewhat high level of satisfaction. However, dissatisfaction appears to arise from the feeling that restrictions im-

posed by the nursing care insurance system prevent them from providing the care they consider to be necessary. Nurses working in these facilities also seem to feel stressed when their idea of care delivery does not match the facility's policy of care delivery. These issues seem to increase their dissatisfaction with the management system of the facility.

As for other environmental factors that cause stress, Chang et al. (2005) mentioned poor quality of nursing staff and medical staff, incapability of delivering high quality care, a poor relationship between staff members, and insufficient organizational efforts. According to a previous study of long-term care facilities in Canada, a strong relationship among staff members was directly related to increased job satisfaction and a lower desire to leave the job (Tourangeau et al., 2010). Therefore, it seems to be important to establish a relationship that enables staff in different occupations to understand their roles in relation to each other and to establish effective collaboration. The above-mentioned study also found a strong correlation between the strength of nurses' individual sense of accomplishment and job satisfaction. However, in Japan, it is probably less common for nurses to have a sense of accomplishment because they may not receive positive feedback regarding their work from their senior staff. Furthermore, concerning the relationship with work load, the stressor related to the "burden caused by overwork" showed a low but negative correlation with the job satisfaction level. Dissatisfaction with work due to overwork, which has been sporadically observed at nursing care facilities around the world (Kathenne and Mary, 1994), is a causative factor related to nurses quitting their jobs, and is indicative of the need to improve working conditions. It was reported that when nurses are given more jobs that they do not recognize as their real job, such as clerical work and patient management, they experience lower job satisfaction and greater stress (Yokoyama, Iwanaga and Sakata, 2004). Rationalization of their tasks seems to be an issue that needs urgent attention.

Considering the above finding, in order to improve job satisfaction at nursing care facilities, a strategy to reduce individual stressors will be necessary. It would

include education to equip nurses with the knowledge required to make clinical decisions and take appropriate action when facility residents experience emergencies, in addition to a feedback system that recognizes nurses' achievements. The above also suggests the importance of a support system that will serve to strengthen ties and relationships among staff members at nursing facilities regardless of their occupation.

### 3. Limitations of This Study and Future Directions

The limitation of this study is that, although questionnaires were sent to nursing care facilities for the elderly throughout Japan, the response rate was 22.2%. We consider that groups who did not respond to the questionnaire are those who have relatively less interest in stress management. Thus, there may actually be more stressors than reported in this study, and it would therefore be difficult to generalize from its results. Further studies are needed, and with a larger target group that includes various types of specialized nursing care facilities for the elderly, in order to clarify and generalize the characteristics of stressors experienced by nurses working in nursing care facilities for the elderly. Our goal is that based on findings from our studies, educational programs will be developed with which nurses working in such facilities can acquire skills enabling them to manage their stressors.

### Conclusion

We conducted a nationwide questionnaire survey for nurses working in nursing care facilities for the elderly and explored the characteristics of the stressors they experienced.

The results revealed that the stressors acting on these nurses consist of 9 factors: "anxiety over nursing judgments," "dealing with changes in situations," "difficulty in collaborating with staff in other occupations working in the facility," "burden caused by overwork," "considerations regarding accident prevention," "diversification of tasks," "difficulty of coordinating," "verbal and physical abuse by residents of the facility," and "managing both work and housework." Because the



stressors showed a negative correlation with job satisfaction level, the study suggests the need to develop new educational programs in order to mitigate the effects of these stressors, improve the work environment, and increase nurses' desire to continue working.

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