

## Subjective Well-being and Burnout among Care Givers for Dementia Patients in Japan

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### Abstract

In the “Group homes”, one care giver is assigned to three patients placed therein, there are concerns about physical and mental health, such as stress or burnout of care givers due to overwork. This study is intended to elucidate actual conditions of mental health and burnout among care givers of dementia patients. Subjects were 107 care givers working in 12 group homes in the northern Kyushu. Additionally, WHO Subjective Well-Being Inventory (SUBI) and Maslach Burnout Inventory (MBI) were also included in the questionnaires. In the survey by SUBI, for “SUBI: Mental health degree (MHD)”, 15.9% of the subjects were in the high score group, 64.5% were in the middle score group, and 19.6% were in the low score group. For SUBI: “Mental fatigue degree (MFD)”, 49.5% of the subjects were in the high score group, 33.6% were in the middle score group and 16.8% were in the low score group. MBI three subscale scores were significantly correlated with MHD, “expectation-achievement congruence”, “family group support”, “social support”, and “general well-being and negative affect”. It is important to receive support from family members and society to maintain emotional health and prevent burnout among care givers of dementia patients. Moreover, improvement of working conditions among care givers should be considered.

**Key words:** subjective well-being, dementia, care givers, burnout

### ❖ Introduction

In 2008, 22.1% of Japan’s population was older than 65 yr of age. The average life expectancy for women was 86.1 yr and 79.3 yr for men<sup>1)</sup>. The number of individuals older than 65 yr of age is on the rise. In Japan, 2.5 million people have dementia<sup>1)</sup>. Dementia has been listed as one of the major reasons why the elderly are in need of nursing care. The core symptoms of senile dementia disorders, including Alzheimer’s disease, involve impairment of cognitive functions, such as memory, orientation, and judgment<sup>2-5)</sup>. Certain behaviors associated with these disorders, such as delusions, insomnia, wandering, and difficulties with daily activities such as eating and excretion, place a

heavy burden on care givers. These symptoms are very stressful for care givers and often cause psychological symptoms (paralysis, impaired judgment) or physical symptoms (insomnia, sense of malaise). “Group homes” are special facilities that provide nursing care for dementia patients, and they were established under the long-term care insurance program in 2000. In these homes, three patients are assigned to each care giver, and there are concerns about the physical and mental health of care givers, including stress and burnout due to overworking.

Stress refers to the strain put on a living body when it experiences harmful and abnormal stimulation and the resulting reaction that attempts to alleviate these ill effects. Stress involves physical and mental reactions caused by external stimulation. In this study, job stress refers to the physical or mental fatigue resulting from the difficult nature of providing direct care to dementia patients and dealing with interpersonal relations.

There have been a few previous studies of mental

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health and burnout among care givers in group homes in Japan<sup>6, 7</sup>). However, there has not been a study that elucidates the relationship between decline of mental health and burnout. Thus, this study was designed to examine the relationships between mental health and burnout, physical health condition, and job status and life satisfaction among care givers in group homes.

## ❖ Methods

### Subjects

This study focused on 121 professional care givers who work with dementia patients and were employed at twelve facilities in northern Kyushu (Fukuoka, Saga, and Nagasaki Prefectures). Of the 121 total care givers, 110 participants responded (90.9%), and of these, 107 participants were eligible for the analysis (97.3%). The survey was carried out over five months between June 1 and October 31, 2006.

### Variables

A questionnaire was administered that gathered information about demographic characteristics such as age, gender, whether a person possessed the nursing care qualification, type of nursing care qualification, and number of years of work experience. In addition, present state of health was measured and rated on a two-point scale: “healthy”, or “not healthy”, satisfied with life was also measured on a two-point scale: “satisfied”, or “dissatisfied”. Four dichotomized questions related to present subjective symptom, current subjective feelings, including whether they experienced problems at work or job stress and whether they felt providing care is burdensome. Also included in the questionnaire were the Japanese version of SUBI<sup>8</sup>), the self-evaluation well-being inventory questionnaire<sup>9-11</sup>) developed by the World Health Organization (WHO), and the burnout inventory in Japanese version<sup>12, 13</sup>) (Maslach Burnout Inventory in Japanese version, referred to here as MBI). Reliability and validity of the SUBI and MBI have been verified<sup>14, 15</sup>).

## ❖ Instruments

### SUBI

According to SUBI, mental health has the following three elements: (1) pleasure, happiness, and

excitement, (2) sorrow, anxiety, depression, and boredom, and (3) the recognition that one is satisfied and has achieved their expectations.

SUBI<sup>16</sup>) consists of two scales that measure positive affect (MHD) and negative affect (MFD), and together comprise a subjective feeling of happiness. The instrument is a self-marking questionnaire whereby one can comprehensively evaluate his or her full mental life, including not only mental health but also personal relations and a sense of physical health. In this study, we used the SUBI, a subjective scale developed by Sell and Nagpa that measures sense of well-being<sup>14</sup>) and translated it into Japanese and standardized it according to Ohno and Yoshimura<sup>8</sup>). The SUBI is composed of forty questions and responses where participants choose between three choices: “I think so very much”, “I think so to some extent”, or “I don’t think so”. The evaluation was performed in two parts divided into nineteen items that represent “MHD” and twenty-one items that represent “MFD”. For both parts, the higher the scores are, the better the sense of well-being.

For MHD, the aggregate score was 57 points, and the scores were classified in the following way: the high score group had  $\geq 42$  points, the middle score group had 31–41 points, and the low score group had  $< 31$  points. For MFD, the aggregate score was 63 points, and the scores were classified in the following way: the high MFD group had  $\geq 48$  points, the middle MFD group had 43–47 points, and the low MFD group had  $< 43$  points.

The subscales consisted of the following eleven items: (1) general well-being and positive affect, (2) expectation-achievement congruence, (3) confidence in coping, (4) transcendence, (5) family group support, (6) social support, (7) primary group concern, (8) inadequate mental mastery, (9) perceived ill health, (10) deficiency in social contacts, and (11) general well-being and negative affect. For each of the subscales, higher scores mean a better overall sense of well-being. The internal scale reliability in this study was 0.74 according to Cronbach’s alpha coefficient.

### MBI Scale

Maslach & Jackson<sup>17</sup>) define burnout in the following way: “in the process of working for people, one’s emotional resource is exhausted, and a negative and cold attitude or feeling toward a patient arises. In addition, an actual symptom is that he or she nega-

tively evaluates himself or herself in a relation with a patient". The Maslach Burnout Inventory (MBI)<sup>18</sup> consists of three major concepts: "Emotional Exhaustion", "Depersonalization", and "Personal Accomplishment". According to the third version of MBI, "Emotional Exhaustion" arises when excessive emotional resources are demanded every day at work, and "Depersonalization" and "Personal Accomplishment" result from this "exhausted condition". The MBI is a self-rated scale where respondents answer seventeen items according to five levels that describe how often he or she has experienced a particular feeling during the last six months. Respondents selected a response from the following scale: "I always feel so (five points)", "I often feel so (four points)", "I sometimes feel so (three points)", "I infrequently feel so (two points)", or "I don't feel so (one point)". The MBI was further divided into three subcategories: "Emotional Exhaustion", "Depersonalization", and "Personal Accomplishment". Higher scores indicate a high level of burnout. The internal reliability of the MBI scale in this study was 0.77 according to Cronbach's alpha coefficient.

### ❖ Statistical analyses

First, a student *t*-test was performed in order to compare MHD, MFD, SUBI eleven subscales, and MBI three subscale scores according to "present state of health", "present subjective symptom", "problems at work", "job stress", "care is burdensome", and "satisfied with life".

Second, MBI three subscales, namely "emotional exhaustion", "depersonalization", and "personal accomplishment" were compared against the SUBI score groups using a one-way analysis of variance test (ANOVA).

Third, Spearman's rank correlation coefficients were calculated in order to examine the correlation between MHD, MFD, SUBI eleven subscales, and three MBI subscales. All of the statistical analysis was performed using the Windows version of SPSS16.0 (Chicago, IL, USA)<sup>19,20</sup> and the statistical level of significance was set to less than 5%.

### ❖ Ethics

The goals of the surveys were to monitor and protect care givers from burnout rather than conduct and

gather research. Participation was optional and written informed consent was obtained from all subjects.

### ❖ Results

Table 1 shows the characteristics of the subjects and distribution of SUBI and MBI scores. The average age of the subjects was 44.6 yr old (SD13.0). The average amount of work experience was 2.7 yr (SD1.8). Among the study participants, 14.0% of the participants had less than a year of work experience, 37.3% had between one and three years experience, 27.1% had between three and five years experience, and 19.6% had between five and seven years of work experience. About 80.4% percent of the participants possessed nursing care qualification, while 19.6% possessed no qualification. In terms of the types of jobs subjects held, 1.9% were registered nurses, 2.8% were practical nurses, 55.1% were home-care workers, 28.9% were care workers, 0.9% were social welfare workers, and 7.4% were care managers.

The average MHD score for the subjects was 35.4 points (SD 6.1). Of all the subjects, 15.9% were classified as part of the high MHD group, 64.5% fell in the middle MHD score group, and 19.6% fell in the low MHD score group. The average MFD score was 48.8 points (SD 6.6). Of all the subjects, 49.5% were classified as part of the high MFD score group, 33.6% fell in the middle score group, and 16.8% fell in the low MFD score group.

Table 2 shows the results in terms of present state of health, 85.0% of the subjects responded that their health status was "healthy" and 53.3% of the participants responded that they had "some physical symptoms". In terms of problems at work, 77.6% of the participants responded that they had some work problems, 65.4% of the subjects responded that they had some job stress, and 52.3% of the subjects indicated that they had some degree of work burden. But, 63.6% of respondents indicated that they were satisfied with their lives. Table 2 shows the results of score comparisons between 11 SUBI subscales and 3 MBI subscales according to health status, working conditions, and life satisfaction. A comparison of the mean values for these two groups revealed that MHD scores display a significant relationship with present state of health ( $p < 0.01$ ), job stress ( $p < 0.001$ ), and satisfied with life ( $p < 0.001$ ). MFD scores display a significant relation with present state of health ( $p < 0.05$ ), present

**Table 1** Characteristics of Subjects and distribution of SUBI Scores and MBI Scores

	Men (n=15)	Women (n=92)	total (n=107)
Age <sup>a)</sup>	35.7 (12.5)	46.0 (12.6)	44.6 (13.0)
Qualification <sup>b)</sup> (multiple answers allowed)			
Possess Qualification	11 (10.3)	75 (70.1)	86 (80.4)
No Qualification	4 (3.7)	17 (15.9)	21 (19.6)
Qualification <sup>b)</sup> (multiple answers allowed)			
Registered nurse	0 (0.0)	2 (2.1)	2 (1.9)
Practical nurse	0 (0.0)	3 (3.2)	3 (2.8)
Care worker	4 (26.6)	27 (29.3)	31 (28.9)
Certified social worker	0 (0.0)	2 (2.1)	1 (0.9)
Home care worker	7 (46.7)	52 (56.5)	59 (55.1)
Care manager	0 (0.0)	8 (8.6)	8 (7.4)
Social welfare worker	0 (0.0)	1 (1.0)	1 (0.9)
Nursing preservation adviser	0 (0.0)	1 (1.0)	1 (0.9)
No Qualification	4 (26.6)	17 (15.9)	21 (19.6)
Non-responding	0 (0.0)	1 (1.0)	1 (0.9)
Number of Years Work Experience <sup>a)</sup>			
Less than 1 yr <sup>b)</sup>	2 (13.3)	13 (14.1)	15 (14.0)
More than 1 yr, Less than 3 <sup>b)</sup>	5 (33.4)	35 (38.1)	40 (37.3)
More than 3 yr, Less than 5 <sup>b)</sup>	5 (33.4)	24 (26.1)	29 (27.1)
More than 5 yr, Less than 7 <sup>b)</sup>	1 (6.7)	20 (21.7)	21 (19.6)
Non-responding <sup>b)</sup>	2 (13.3)	0 (0.0)	2 (1.9)
SUBI			
MHD <sup>a)</sup> (max 57 points)	34.7 (6.8)	35.6 (6.0)	35.4 (6.1)
42 points or more: higher score group <sup>b)</sup>	2 (13.3)	15 (16.3)	17 (15.9)
31~41 points: middle score group <sup>b)</sup>	9 (60.0)	60 (65.2)	69 (64.5)
31 points less than: lower score group <sup>b)</sup>	4 (26.7)	17 (18.5)	21 (19.6)
MFD <sup>a)</sup> (max63 points)	48.2 (6.1)	48.9 (6.6)	48.8 (6.6)
48 points or more: higher score group <sup>b)</sup>	7 (46.7)	46 (50.0)	53 (49.5)
43~47 points: middle score group <sup>b)</sup>	5 (33.3)	31 (33.7)	36 (33.6)
43 points less than: lower score group <sup>b)</sup>	3 (20.0)	15 (16.3)	18 (16.8)
MBI <sup>a)</sup>			
Emotional Exhaustion	2.1 (0.7)	2.3 (0.9)	2.3 (0.8)
Depersonalization	1.7 (0.6)	1.6 (0.7)	1.6 (0.7)
Personal Accomplishment	3.1 (0.8)	3.2 (0.8)	3.2 (0.8)

MHD: Mental health degree. MFD: Mental fatigue degree. a) mean (SD). SD: Standard Deviation. b) Values are shown as the number, and percentage are shown in parentheses.

subjective symptom ( $p < 0.01$ ), problems at work ( $p < 0.001$ ), job stress ( $p < 0.001$ ), and satisfied with life ( $p < 0.001$ ).

The scores for general well-being and positive affect, one of the eleven SUBI subscales, showed significant relations with the following factors: present state of health ( $p < 0.01$ ), present subjective symptom ( $p < 0.01$ ), problems at work ( $p < 0.05$ ), job stress ( $p < 0.01$ ), and satisfied with life ( $p < 0.001$ ). The scores

for family group support showed significant relations with job stress ( $p < 0.05$ ) and satisfied with life ( $p < 0.05$ ). The scores for social support showed significant relations with present state of health ( $p < 0.05$ ), job stress ( $p < 0.05$ ), and satisfied with life ( $p < 0.05$ ). The scores for perceived ill health showed significant relations with present state of health ( $p < 0.001$ ), present subjective symptom ( $p < 0.001$ ), problems at work ( $p < 0.001$ ), job stress ( $p < 0.001$ ), and satisfied with life

Table 2. Comparison of mean scores from 11 SUBI subscales and 3 MBI subscales of state of physical health, working conditions, life satisfaction, each divided into two groups

	Present state of health			Present subjective symptom			Problems at work		
	Healthy n=91 (85.0%)	Not Healthy n=16 (15.0%)	p value	some n=57 (53.3%)	none n=49 (46.7%)	p value	some n=83 (77.6%)	none n=24 (22.4%)	p value
	mean			mean			mean		
SUBI: Mental health degree (MHD)	36.1	31.6	<0.01**	34.4	36.6	0.07	34.9	37.3	0.09
General well-being and positive affect	5.8	4.8	<0.01**	5.3	6.0	<0.01**	5.5	6.3	0.01*
Expectation-achievement congruence	5.1	4.5	0.06	4.7	5.4	<0.01**	4.9	5.4	0.09
Confidence in coping	5.6	5.1	0.15	5.3	5.7	0.17	5.4	6.0	0.07
Transcendence	5.6	5.3	0.25	5.4	5.8	0.08	5.5	5.8	0.28
Family group support	6.4	5.8	0.08	6.3	6.4	0.72	6.4	6.3	0.69
Social support	6.0	5.1	0.04*	5.9	5.8	0.80	5.9	5.8	0.79
SUBI: Mental fatigue degree (MFD)	49.4	45.1	0.02*	46.9	50.9	<0.01**	47.6	52.9	<0.001**
Primary group concern	7.3	7.4	0.87	7.2	7.5	0.43	7.1	7.8	0.06
Inadequate mental mastery	16.1	15.7	0.60	15.8	16.3	0.28	15.6	17.4	<0.01**
Perceived ill health	15.1	12.7	<0.001**	13.7	15.9	<0.001**	14.3	16.0	<0.001**
Deficiency in social contacts	7.5	7.1	0.29	7.3	7.6	0.29	7.4	7.5	0.72
General well-being and negative affect	7.4	6.8	0.06	7.1	7.6	0.02*	7.2	7.9	<0.01**
MBI									
Emotional Exhaustion	2.2	2.6	0.19	2.5	2.1	0.001**	2.4	1.8	<0.001**
Depersonalization	1.5	1.8	0.03*	1.6	1.5	0.39	1.6	1.3	0.06
Personal Accomplishment	3.1	3.3	0.50	3.2	3.2	0.90	3.2	3.2	0.97
Job stress									
Care is burdensome									
Satisfied with life									
Job stress- some, none p value									
Care is burdensome- some, none p value									
Satisfied with life- satisfied, dissatisfied p value									
mean									
mean									
mean									
SUBI: Mental health degree(MHD)	33.8	38.6	<0.001**	35.2	35.9	0.57	37.2	32.4	<0.001**
General well-being and positive affect	5.4	6.2	<0.01**	5.5	5.8	0.31	6.0	5.0	<0.001**
Expectation-achievement congruence	4.8	5.5	<0.01**	5.0	5.2	0.36	5.2	4.7	0.03*
Confidence in coping	5.2	6.1	<0.001**	5.2	5.9	<0.01**	5.7	5.2	0.07
Transcendence	5.4	6.0	0.01*	5.5	5.7	0.41	5.8	5.2	<0.01**
Family group support	6.2	6.6	0.04*	6.6	6.1	0.09	6.6	6.0	0.03*
Social support	5.7	6.3	0.03*	6.1	5.8	0.26	6.1	5.5	0.04*
SUBI: Mental fatigue degree (MFD)	46.5	53.1	<0.001**	47.8	49.9	0.11	50.6	45.6	<0.001**
Primary group concern	7.1	7.7	0.10	7.1	7.7	0.08	7.5	6.8	0.04*
Inadequate mental mastery	15.1	17.7	<0.001**	15.6	16.5	0.09	16.4	15.4	0.07
Perceived ill health	14.0	16.1	<0.001**	14.4	15.2	0.06	15.2	13.8	<0.01**
Deficiency in social contacts	7.3	7.7	0.06	7.4	7.3	0.69	7.5	7.3	0.29
General well-being and negative affect	7.2	7.7	0.04*	7.2	7.4	0.43	7.6	6.8	<0.01**
MBI									
Emotional Exhaustion	2.5	1.8	<0.001**	2.3	2.2	0.31	2.1	2.7	<0.001**
Depersonalization	1.7	1.3	<0.001**	1.6	1.5	0.32	1.4	1.8	<0.01**
Personal Accomplishment	3.2	3.0	0.29	3.2	3.1	0.38	3.0	3.4	0.12

Each two groups were compared by t-test. SUBI: Subjective Well-Being Inventory (Japanese version). MBI: Maslach Burnout Inventory (Japanese version). \*:  $p < 0.05$ , \*\*:  $p < 0.01$ . Division between groups: Present state of health- healthy, not healthy Present subjective symptom- some, none Problems at work- some, none Job stress- some, none Care is burdensome- some, none Satisfied with life- satisfied, dissatisfied.

( $p < 0.01$ ). The scores for general well-being and negative affect showed significant relations with present subjective symptom ( $p < 0.05$ ), problems at work

( $p < 0.01$ ), job stress ( $p < 0.05$ ), and satisfied with life ( $p < 0.01$ ). In terms of the scores for the three MBI subscales, "Emotional Exhaustion" showed significant



Table 3. Comparison of obtained values of 3 sections of SUBI and 3 MBI subscale

SUBI		Mental health degree (MHD) 35.4 (6.1) <sup>a)</sup>			Mental fatigue degree (MFD) 48.8 (6.6) <sup>a)</sup>		
		lower score group (n=21)	middle score group (n=69)	higher score group (n=17)	lower score group (n=18)	middle score group (n=36)	higher score group (n=53)
Emotional Exhaustion	mean	2.76	2.19	1.94	2.87	2.55	2.01
	SD	0.84	0.83	0.65	1.13	0.89	0.61
	One-way ANOVA F value p value		5.49 <b>&lt;0.01**</b>		10.66 <b>&lt;0.01**</b>		
Depersonalization	mean	1.71	1.59	1.25	2.05	1.62	1.41
	SD	0.48	0.73	0.28	1.07	0.55	0.45
	One-way ANOVA F value p value		2.61 <b>0.04*</b>		7.99 <b>0.01**</b>		
Personal Accomplishment	mean	3.59	3.30	2.11	3.12	3.39	3.12
	SD	0.53	0.69	0.72	0.86	0.69	0.86
	One-way ANOVA F value p value		26.32 <b>&lt;0.01**</b>		0.91 0.40		

SUBI score (MHD and MFD) were divided into 3 groups, and then compared with the scores from MBI and 3 subscales. a): mean (SD). One-Way ANOVA. SUBI: Subjective Well-Being Inventory (Japanese version). MBI: Maslach Burnout Inventory (Japanese version). \*:  $p < 0.05$ , \*\*:  $p < 0.01$ .

relations with present subjective symptom ( $p < 0.001$ ), problems at work ( $p < 0.001$ ), job stress ( $p < 0.001$ ), and satisfied with life ( $p < 0.001$ ). “Depersonalization” showed significant relations with present state of health ( $p < 0.05$ ), job stress ( $p < 0.001$ ), and satisfied with life ( $p < 0.01$ ). While personal accomplishment showed no significant relations with any factors.

Table 3 shows the results of the one-way ANOVA test scores for the three MBI subscales, divided into three groups of SUBI (MHD and MFD). In terms of the scores of these three MBI subscales and the MHD groups, a significant negative relation was observed with “Emotional Exhaustion”, ( $p < 0.01$ ) “Depersonalization ( $p < 0.05$ )”, and “Personal Accomplishment ( $p < 0.01$ )”. In the MFD groups, a significant negative relation was observed for the scores of “Emotional Exhaustion ( $p < 0.01$ )” and “Depersonalization ( $p < 0.01$ )”.

Table 4 shows a correlation among the scores for MHD, MFD, eleven SUBI subscales, and the three MBI subscales. MBI three subscale scores were significantly correlated with MHD, “expectation-

achievement congruence”, “family group support”, “social support”, and “general well-being and negative affect”.

## ❖ Discussion

This study was designed to examine the actual conditions of mental health and burnout among care givers for dementia patients in Japan. The results indicated that the middle and lower score group of MHD accounted for 84.1% of the subjects, while the middle and lower score group of MFD accounted for 50.4%. Furthermore, 65.4% of the subjects felt job stress, and we observed that the subjects’ mental health and level of burnout were related to job stress. These results suggested that care givers of dementia patients suffer from poor mental health conditions due to job stress.

It has been reported<sup>21)</sup> that care givers of dementia patients have higher stress levels and lower levels of mental health than those who care for other types of patients. Since these care givers overworked, they suffered from stress, resulting in a lower quality of work

Table 4. Correlation matrix of variables: Correlation between SUBI (11 subscales) and MBI (3 subscales) scores

	Mental health degree (MHD)	Mental fatigue degree (MFD)	General well-being and positive affect	Expectation-achievement congruence	Confidence in coping	Transcendence	Family group support
Emotional Exhaustion	<b>-0.37**</b>	<b>-0.54**</b>	<b>-0.28**</b>	<b>-0.30**</b>	<b>-0.25*</b>	-0.18	<b>0.32**</b>
Depersonalization	<b>-0.30**</b>	<b>-0.45**</b>	-0.16	<b>-0.24*</b>	-0.17	0.10	<b>-0.23*</b>
Personal Accomplishment	<b>-0.50**</b>	-0.15	<b>-0.31**</b>	<b>-0.04**</b>	<b>-0.44**</b>	<b>-0.46**</b>	<b>-0.30**</b>

  

	Social support	Primary group concern	Inadequate mental mastery	Perceived ill health	Deficiency in social contacts	General well-being and negative affect
Emotional Exhaustion	<b>-0.32**</b>	<b>-0.35**</b>	<b>-0.46**</b>	<b>-0.51**</b>	<b>-0.20*</b>	<b>-0.30**</b>
Depersonalization	<b>-0.31**</b>	<b>-0.28*</b>	<b>-0.43**</b>	<b>-0.35**</b>	<b>-0.32**</b>	<b>-0.26**</b>
Personal Accomplishment	<b>0.29**</b>	-0.14	0.02	-0.16	0.11	<b>-0.20*</b>

Spearman's rank correlation coefficient. \*:  $p < 0.05$ , \*\*:  $p < 0.01$ .

and susceptibility to delinquency or accidents. From a long-term perspective, this situation may cause care givers to suffer from physical diseases or mental disorders. Thus, it is important to measure job stress and prevent the deterioration of mental health conditions and the progression of burnout.

More than 50% of the study subjects reported that they had "present subjective symptom", "problems at work", "job stress", and "care is burdensome". Appropriate measurements to determine physical and mental conditions among care givers who work in nursing care facilities for dementia patients should be taken to provide adequate working environments. Care givers have less medical knowledge and skills than nurses, and they can not provide the expected level of care. Moreover, care givers often feel the burden of providing care and do not have the resources of time to deal with problems and issues related to nursing care. As a result, they experience more mental stress. In addition, among the study subjects, lower life satisfaction was related to lower scores of MFD, MHD, "Emotional Exhaustion", and "Depersonalization". This result suggests that life satisfaction, mental health, and burnout have a considerable influence on each other.

Comparisons of the scores of the three MBI scales and the three MHD groups showed that lower MHD scores were significantly related to higher scores of "Emotional Exhaustion", "Depersonalization", and

"Personal Accomplishment". In addition, lower MFD scores were significantly related to higher scores of "Emotional Exhaustion" and "Depersonalization". Poor mental health state and mental fatigue may cause burnout.

The results also showed negative correlations between three MBI subscale scores and "expectation achievement congruence", "family group support", "social support", and "general well-being and negative affect". People often feel burnout when they experience a lot of stress related to personal relationships. In this way, a relationship determines the conditions of an individual's physical and mental health. Care givers who work in group homes may find it difficult to have relationships with dementia patients, thus they may be exhausted, absent-minded, and experience accumulated stress.

Personal relationships or excessive amounts of work can cause burdens, and that boring routine work can cause emotional exhaustion. As a result, there may be an increase in affectless and dehumanized treatments of dementia patients where care givers ignore their human rights. Unwillingness to talk with dementia patients who have communication difficulties may cause care givers to feel that care is burdensome or that the job is uninteresting, and thus poorly evaluate themselves. There was also a negative relationship between "personal accomplishment", "confidence in coping", and "transcendence". The results show that

when the study subjects could not give quality nursing care to dementia patients, they found their jobs neither challenging nor enjoyable.

In the our result, “expectation-achievement congruence”, “family group support”, “social support”, and “general well-being and negative affect” showed significant negative correlation with the three MBI subscales. Burnout, which happens when individuals do not feel a sense of achievement in the job, leads to overall frustration with life. Yet when care givers experience burnout, if they receive support from their family members or close relatives, their mental health conditions can improve. Social support, such as consideration of workload or understanding of what a job involves, is very important.

This study is limited in that we targeted and examined only care givers in group homes with dementia patients, and we did not compare our results with care givers who do not provide nursing care for dementia patients. For further study, it would be interesting to compare these two groups. Larger study facilities and more study subjects would also be required. We also need to examine in detail how “job stress”, “family group support”, and “problems at work” influence burnout. In conclusion, maintenance of physical and mental health among care givers and prevention of burnout leads to quality care for dementia patients. “family group support” and “social support” are very important for maintaining good mental health. A work environment that has a great deal of “social support” has a huge impact on mental stress and satisfaction with a workplace<sup>22)</sup>. Fujiwara<sup>23)</sup> argued that longer working hours and increased involvement with residents in group homes would result in overload for care givers. It is important to understand the characteristics of nursing care for dementia patients and to provide quality nursing care. Onodera<sup>24)</sup> found that the stress of care givers had a correlation with conflict with their peers supervisors and dementia patients<sup>25-27)</sup>.

Specifically, conflict with supervisors is strongly associated with quality of nursing care to patients. When personal relationships are aggravated or additional burdens are placed on them, people often feel emotional exhaustion. It is important for care givers to learn professional dementia care and ways to cope with stress to relieve emotional exhaustion. Moreover, working environments need to improve by offering more support from supervisors and peers. It is important to consider continuous support through the

education system. A personal relationship may serve to alleviate stress<sup>27)</sup>. Social support can involve physical assistance or other types of assistance for various problems and sharing useful information or mutual consolation<sup>28-34)</sup>. These support systems can alleviate burnout. “Social support” and “family group support” are very important factors to prevent burnout for those who are engaged in human services such as care givers.

## ❖ Conclusion

Family and social support are considered very important factors in maintaining emotional health and preventing burnout among care givers of dementia patients. In terms of social support, it is particularly important to improve their working conditions.

## ❖ References

- 1) Journal of Health and Statistics Health and Welfare Statistics Association 56, 71 (2009).
- 2) Birren J, Craik FIM: Age difference in human memory. In Handbook of the psychology of Aging. Van Nostrand Reinhold, New York, 1977: 384-420.
- 3) Bromley DB: Some effects on short term learning and remembering. J Gerontol 13, 398-406 (1998).
- 4) Ian S (translation by Ishimaru T): The psychology of Aging, Tokyo: Iwasaki Gakujutsu Shuppansha, 1995: 67-96.
- 5) Salthouse TA: Independence of age-related influences on cognitive abilities across the life span. Developmental Psychology 34, 851-864 (1998).
- 6) Toyoshima M, Susa K: Burnout of the care managers and the related factor. J Japanese Society for the Study of Nursing and Society Work 9, 127-135 (2004).
- 7) Furuse M: Factors related to burnout of care managers. J Japan Academy Sof Home Health Care 7, 61-67 (2003).
- 8) Ono Y, Yoshimura K, Yamauchi K: Subjective Well-being and ill-being among the patient and non-patient. Jpn J Stress Science 10, 273-278 (1995).
- 9) Jorm AF, Duncan J, NeuroSc P: Symptoms and subjective well-being in a community sample. different sides of the same coin. Psychological Medicine 20, 647-654 (1990).
- 10) Nagpal RS: Assessment of subjective well-being inventory (SUBI). New Delhi Regional Office for



- South-East Asia. Geneva: World Health Organization, 1992: 201–235.
- 11) Bradburn NM: The structure of psychological well-being. Chicago Aldine, 1969: 318.
  - 12) Kubo M: The relationship of Stress and Burnout: Is burnout one of stressors? Japanese Association of Industrial /Organizational Psychology J 12, 5–15 (1998).
  - 13) Tao M, Kubo M: Theory and Fact of Burnout. Tokyo: Seishinshobo, 1996: 184–216.
  - 14) Nagpal R, Sell H: Subjective well-being. SEARO Regional Health Papers, 7. New Delhi Regional Office for South- East Asia. Geneva: World Health Organization, 1985: 223–264.
  - 15) Kubo M: The factorial and construct validity of the Japanese burnout scale. J Science of Labour 83, 39–53 (2007).
  - 16) Ono Y, Yoshimura K: Guidebook of WHO SUBI. Tokyo: Kaneko Shobo, 2001: 12–35.
  - 17) Maslach C, Jackson SE: The measurement of experienced burnout. J Occupational Behaviour 2, 99–113 (1981).
  - 18) Maslach C, Jackson SE, Leiter MP: The Maslach Burnout Inventory (3rd ed.), Palo Alto, CA: Consulting Psychologists Press, 1996: 172–203.
  - 19) Robert C, Jane GN: Doing Data Analysis with SPSS (Version 16.0) International of 4th revised ed. Cengage Learning, Inc, 2009: 344.
  - 20) Lee AK, Brooke CF: A Simple Guide to SPSS for Version 16.0 9th rev ed. Cengage Learning, Inc, 2009: 128.
  - 21) Miho M: The stress of care staff members at group home. The Japanese Society for Dementia Care 3, 21–29 (2004).
  - 22) Hiromichi M: A Study of Care Staff's Mental Health in Nursing Homes—To Think about Work Style in Terms of Work Control—. Kawasaki J Medical Welfare 13, 263–269 (2003).
  - 23) Fujiwara K, Kosaka J, Imaoka Y: Actual Situation of the Workplace and burnout of Care Workers'. Osaka College of Social Health and Welfare 7, 125–132 (2008).
  - 24) Onodera A, Azechi R, Shimura Y: Relationship between Stressors and Burnout in care staff for the elderly. Japan Socio-Gerontological Society 28, 464–475 (2007).
  - 25) Imai J: Study on Stress of Employees at Elderly Nursing Facilities. Nursing Welfare 7, 46–57 (2007).
  - 26) Nakajima M, Nagata K, Hirabayashi K: Research on the practical usage of service evaluation results on group homes for elderly people with dementia: A comprehensive analysis of both self-evaluation and third party evaluation. The Japanese Society for Dementia Care 4, 62–72 (2005).
  - 27) Jackson SE, Maslach C: After-effects of Job-related stress: Families as Victims. J Occupational Behaviour 3, 63–77 (1982).
  - 28) Beck CL, Gargiulo RM: Burnout in teachers of retarded and nonretarded children. J Educational Research 76, 169–173 (1983).
  - 29) Burke RJ, Shearer J, Deszca G: Burnout among men and women in police work: An examination of the Cherniss model. JHHRA FALL 17, 162–188 (1984).
  - 30) Davis EW, Barrett M: Supervisions for management of work stress. Administration in Social Work 5, 55–64 (1981).
  - 31) Kirk W, Walter G: Teacher support groups serve to minimize burnout. Principles for organizing Education 102, 147–150 (1981).
  - 32) Paine WS: The burnout phenomenon. Vocational Education 56, 30–33 (1981).
  - 33) Shinn M, Rosario M, Mørch H, Chestnut DE: Coping with job stress and burnout in human service. J Personality and Social Psychology 46, 864–876 (1984).
  - 34) Wade DC, Cooley E, Savicki V: A longitudinal study of burnout. Children and Youth Services Review 8, 161–173 (1986).