

*Original Article***A study of burnout characteristics among support coordinators for persons with high brain dysfunction**Yasuhiko Shirayama, PhD,¹ Yasoichi Nakajima, MD²¹Shizuoka Eiwa Gakuin University, Faculty of Human Society²National Rehabilitation Center for Persons with Disabilities**ABSTRACT**

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Objective: We conducted a quantitative investigation of burnout (BO) characteristics among support coordinators (SCs) for persons with high brain dysfunction.

Methods: We administered a questionnaire, including the Japanese BO scale items and questions on individual attributes, to 66 persons who attended the national SC Conference.

Results: Of the 66 participants, 65 were SCs. The average scores for sub-factors in the Japanese BO scale were 13.40 ± 4.36 for emotional exhaustion, 11.18 ± 3.65 for depersonalization, and 16.98 ± 3.92 for personal accomplishment. Burnout tendencies were seen in \pm SCs (13.8%). Comparison of the attributes of the sub-factor scores showed significant differences with regard to the sex of the individual, with women experiencing greater levels of emotional exhaustion than those experienced by men; professional role, with the sense of personal accomplishment being greater in management positions than in non-management positions; and job satisfaction, with the levels of emotional exhaustion and depersonalization being greater among dissatisfied participants than those in satisfied participants.

Conclusion: Our results suggest that care tailored to SCs' individual attributes, as well as swift systemwide responses are necessary to prevent BO among SCs.

Key words: high brain dysfunction, support coordinators, burnout, Japanese burnout scale

Introduction

Sudden professional deterioration in specialist staff working in the medical and social welfare fields has a major effect on the clients that they serve, their families, and the local communities in which they live. Burnout (BO) has been cited as one cause of professional deterioration [1]. "Burnout" is a condition in which all available energy has been exhausted, and is defined by Maslach [2–4] as a syndrome characterized by extreme physical fatigue and emotional depletion. Its 3 sub-factors include emotional exhaustion (EE), evidenced by a sense of exhaustion; depersonalization (DP), evidenced by a cynical attitude; and a decreased sense of personal accomplishment (PA), evidenced by reduced work efficiency.

A decade has passed since the 2001 launch of measures for supporting people with high brain dysfunction. Today, in all prefectures of Japan, there are designated support centers, including hospitals and social welfare facilities, both public and private, to which 74 [6] support coordinators (SCs) have been assigned [5]. Depending on the support center, SCs are drawn from a variety of professions, including occupational therapy, medical social work (MSWs), and clinical psychology. The roles and duties of SCs are varied, and mainly consist of providing advice and direct support for persons with high brain dysfunction, providing public education regarding related issues, and liaising with other acute/recovery phase hospitals (wards) and welfare/labor organizations; high expectations are placed upon them as core staff. SCs frequently complain of exhaustion from psychological stress resulting from work with clients with symptoms, such as social behavior disorders, as well as from the excessive responsibilities they face while working alone [5]. In the light of these specific roles and duties,

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BO prevention is regarded as an important issue.

In the present study, we performed a quantitative analysis of BO characteristics among SCs, and examined the issues face by them.

Methods

The subjects included 66 participants from the Second Support Coordinators' Conference organized by the National Rehabilitation Center for Persons with Disabilities, Ministry of Health, Labour and Welfare, Japan, in February 2010.

After explaining the outline and objective of the study to the participants, we distributed and collected a questionnaire that included questions about individual attributes, such as sex, age, profession, organizational and business structure of the institution to which they belonged, status, professional role, length of experience, caseload size, and job satisfaction, as well as the Japanese BO scale items. Nakajima's classification was referenced for profession and organizational structure [6]. Job satisfaction was graded using a four-level scale to answer questions regarding professional awareness with respect to persons with high brain dysfunction; the levels included, "Extremely dissatisfied" (1 point), "Dissatisfied" (2 points), "Satisfied" (3 points), and "Highly satisfied" (4 points). For the purposes of statistical analysis, SCs who answered "Extremely dissatisfied" or "Dissatisfied" were categorized as "dissatisfied," while those who answered "Satisfied"

or "Highly satisfied" were categorized as "satisfied."

We used the Maslach Burnout Inventory (MBI) [3] translated into Japanese and amended by Tao et al. [4], with a five-level scale comprising "Always" (5 points), "Most of the time" (4 points), "Sometimes" (3 points), "Occasionally" (2 points), and "Never" (1 point) as answers for each factor; a total score was calculated for each. (Table 1) [7]. As our reference, we also used the method implemented by Baba et al. [8] for certified palliative care nurses (MGI-GS). The sub-factors of this scale were "exhaustion," "cynicism," and "job performance," with respondents categorized as either BO or non-BO in accordance with the cut-off point for each factor. Respondents with high levels of exhaustion and either high cynicism, low job performance, or both were classified as cases of BO.

However, the MBI-GS and the Japanese BO scale differ in terms of the numbers of questions, names of sub-factors, and methods for calculating scores. In addition, we judged that the sub-factor of exhaustion might not always be present in BO. Therefore, we followed the BO self-diagnosis criteria indicated by Tao et al. [7] (Table 2), with respondents meeting 2 or more of the following criteria, $EE \geq 19$, $DP \geq 15$, and/or $PA \leq 15$, being classified as having BO characteristics.

A comparison of sub-factor scores for individual attributes showed that equal variance could not be assumed. Therefore, the Kruskal-Wallis test was used to investigate the multi-group categories of profession, organizational and business structure of an institution,

Table 1. Japanese burnout scale

No.	Question
1	Do you ever feel that you want to give up this type of work?
2	Do you ever become so immersed in your work that you forget yourself?
3	Do you ever find it troublesome to pay attention to small details?
4	Do you ever feel your personality is suited to this type of work?
5	Do you ever dislike having to look colleagues or patients in the face?
6	Do you ever feel that your work is boring?
7	Do you ever feel glad to have finally finished work for the day?
8	Before you leave for work, do you ever feel that you don't want to go to work and would rather stay home?
9	When you finish work, do you ever feel that today was a good day?
10	Do you ever feel that you don't want to talk to colleagues or patients?
11	Do you ever feel that you don't care about the outcome of your work?
12	Do you ever feel that you have no mental space because of your work?
13	Do you ever feel thoroughly happy with your day's work?
14	Do you ever feel that you aren't very interested in your day's work?
15	Do you ever enjoy your work so much that you don't notice the time pass by?
16	Do you ever feel completely tired, both mentally and physically?
17	Do you ever think you've done a good job, if you say so yourself?

Emotional exhaustion (EE) = 1 + 7 + 8 + 12 + 16

Depersonalization (DP) = 3 + 5 + 6 + 10 + 11 + 14

Personal accomplishment (PA) = 2 + 4 + 9 + 13 + 15 + 17

Table 2. Burnout self-assessment criteria

Assessment	EE	DP	PA
Still OK	5-15	6-11	25-18
Average	16-18	12-14	17-16
Requires attention	19-20	15-17	15-13
Requires special attention	21-23	18-20	12-10
At risk	24-25	21-30	9-5

Abbreviations: EE, emotional exhaustion; DP, depersonalization; PA, personal accomplishment

and status; a *U* test was used to investigate the binary categories of sex, professional role, and job satisfaction. Correlations with age, length of experience, number of SCs, and caseload size were investigated by calculating Spearman's rank correlation coefficient. PASW Statistics software, version 18 (SPSS Software, IBM Corporation, Somers, NY, USA), was used for statistical analysis. The level of statistical significance was determined to be < 0.05 .

This study was approved by the Ethics Committee of Shizuoka Eiwa Gakuin University, and consent was obtained from all subjects.

Results

Sixty-six questionnaires were distributed and collected; 1 respondent was excluded because the respondent stated on the question sheet that they were not an SC. Therefore, 65 subjects were analyzed in this study. Table 3 shows the subjects' attributes.

The average age was 41 ± 11.4 years, and the number of female SCs was greater than that of male SCs. MSWs and social work were the most common professions, with the majority of these professionals being affiliated with hospitals. The other professionals were almost evenly divided between healthcare corporations, social welfare corporations, and local authorities. In terms of status, most subjects were regular employees who combined support coordination with another position; approximately 80% ($n = 53$)

Table 3. Individual attributes

Sex	N (%)	Business structure of institution	N (%)
Male	25 (33.8)	Healthcare corporation	14 (21.5)
Female	40 (66.2)	Social welfare corporation	17 (26.2)
		Local authority	15 (23.1)
		NPO corporation	3 (4.6)
		Private company	0 (0)
		Other	15 (23.1)
		No response	1 (1.5)
Age	Average (SD) 41.0 (11.4)	Status	N (%)
		Regular full-time employee	21 (32.3)
		Regular employee combined with other position	30 (46.2)
		Temporary/contract employee	13 (20.0)
		No response	1 (1.5)
Profession	N (%)	Professional role	N (%)
MSW/social worker	16 (24.6)	Management position	11 (16.9)
Clinical psychologist	10 (15.5)	Non-management position	53 (81.6)
Counselor/case worker	11 (16.9)	No response	1 (1.5)
Psychiatric social worker	6 (9.2)		
Occupational therapist	7 (10.8)	Length of experience (months)	Average (SD) 29.8 (22.2)
Speech therapist	6 (9.2)		
Nurse/public health nurse	2 (3.1)	Number of support coordinators assigned	Average (SD) 2.2 (3.5)
Physical therapist	1 (1.5)		
Doctor	1 (1.5)	Caseload size	Average (SD) 14.7 (15.0)
Other	5 (7.7)		
Organizational structure of institution	N (%)	Job satisfaction	N (%)
Hospital	32 (49.2)	Dissatisfied	
Social welfare facility	8 (12.3)	("Extremely dissatisfied" + "Dissatisfied")	34 (52.3)
Consultation and support center	6 (9.2)	Satisfied ("Satisfied" + "Highly satisfied")	29 (44.6)
Government administration	15 (23.1)	No response	2 (3.1)
Other	4 (6.2)		

Table 4. Sub-factor scores by individual attributes

	EE			DP			PA	
	Average	SD		Average	SD		Average	SD
Sex								
Male (N = 25)	11.72	3.91	*	10.44	3.62		18.12	3.99
Female (N = 40)	14.45	4.34		11.65	3.63		16.27	3.76
Professional role								
Management position (N = 11)	13.64	3.23		10.45	1.86		19.55	2.70
Non-management position (N = 53)	13.30	4.61		11.36	3.94		16.36	3.91
Job satisfaction								
Dissatisfied (N = 34)	14.68	4.28	**	12.59	4.01	**	16.29	4.01
Satisfied (N = 29)	11.69	3.92		9.31	3.38		18.14	3.38

Legend: * $p < 0.05$; ** $p < 0.01$

Abbreviations: EE, emotional exhaustion; DP, depersonalization; PA, personal accomplishment.

were in non-management positions. The average experience was 29.8 ± 22.2 months, and an average of 2.2 ± 3.5 SCs were assigned to each support center. The average number of persons with high brain dysfunction for whom an SC was responsible was 14.7 ± 15.0 . The number of SCs who were dissatisfied with their jobs was slightly greater than that of the SCs who were satisfied with their jobs.

The average scores for EE, DP, and PA were 13.40 ± 4.36 , 11.18 ± 3.65 , and 16.98 ± 3.92 . Taken together, 9 SCs (13.8%) showed signs of BO, and among them, 4 (44%) scored above the level requiring attention for all 3 factors.

When subscale scores were compared across different attributes, there were significant differences between sexes, professional roles, and levels of job satisfaction (Table 4). Women had significantly higher EE scores than men did, while SCs in management positions scored significantly higher for PA than those in non-managerial roles did. SCs who described themselves as dissatisfied with their jobs scored significantly higher for EE and DP. No significant correlations were observed between age, length of experience, number of SCs, and caseload size.

Discussion

These results show that BO characteristics were present in 13.8% of SCs, indicating that urgent action is required, since several support centers have only 1 SC assigned to them.

As reported by Hasebe et al. [9], BO is managed inconsistently; therefore, further investigation is required in the future. Shimizu et al. [10] noted that, in addition to the provision of appropriate care tailored to individual differences, the importance of a systematic response is also widely cited in order to prevent BO in human services professionals.

In this study, gender differences influenced the development of BO characteristics, particularly EE. Numerous previous studies have reported that women have a greater tendency to develop BO than men do [7]. Since over 60% of SCs are women, sex-focused care will be important in the future.

The level of decision-making authority also influenced the development of BO characteristics. Greater decision-making authority in the performance of work duties reduces the tendency to develop BO [11]. This point was also supported by the findings of this study: we found that those in management positions, who can be regarded as having greater decision-making authority, scored significantly higher for PA and lower for overall BO than non-management staff did. Further, most SCs work alone; influential decisions, such as whether to move a person with high brain dysfunction from a hospital to home-based care, are left to the discretion of the SC. For SCs in non-management positions, however, the authority of the institution to which they belong takes precedence over the SC's individual discretion in many cases, rendering them vulnerable to stress. Therefore, it is necessary to expand the decision-making authority of SCs, especially those in non-management positions, to improve their job performance and reduce the likelihood of BO.

BO development also varied depending on the degree of job satisfaction, confirmed by EE and DP scores. Further, many studies have suggested that job satisfaction declines because of BO, potentially leading to individuals terminating their employment [12–14]. SCs leaving the profession pose serious issues for the support of persons with high brain dysfunction, and regular, proactive assessments can be helpful in preventing BO.

Systematic BO treatment may include the use of

conferences and projects organized by the national government and local authorities. One such measure is the SC Conference organized by the Ministry of Health, Labour and Welfare; a second measure includes prefectural projects to expand support for persons with high brain dysfunction (support expansion projects). The SC Conference is held regularly; it typically covers reports on each region, as well as case studies. Support expansion projects typically comprise seminars on subjects such as client rehabilitation and the formation of regional support networks. Tao et al. [7] suggested that, when managing BO, it is important to confirm at the outset that BO is common in human services. Therefore, we regard it as necessary to have more conference and workshop information about the issue of BO among SCs. Continuous support systems for SCs should also be developed, including follow-up training for BO prevention and the enhancement of local support networks.

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Conclusion

The results of this study suggest that care tailored to an SCs' individual attributes as well as swift systemwide treatments are required to prevent BO.

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