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Interpersonal Conflict, Social Support, and Burnout among Home Care Workers in Japan

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Abstract: Interpersonal Conflict, Social Support, and Burnout among Home Care Workers in Japan: Kyoko FUJIWARA, *et al.* Department of Public Health, Hokkaido University Graduate School of Medicine—To examine associations between interpersonal relationships in work settings and burnout, a cross-sectional survey was conducted on home care workers in Sapporo, Japan, by using the Maslach Burnout Inventory (MBI) and scales of interpersonal conflict and social support developed by the authors. Questionnaires were distributed among 303 subjects and returned by 243 subjects (80%). Complete answers were obtained from 106 subjects and were used for analysis. In multiple regression analyses, conflict with clients and their families significantly related to emotional exhaustion and depersonalization of the MBI ($p<.05$). Supervisory conflict significantly related to emotional exhaustion ($p<.05$), whereas coworker conflict significantly associated with depersonalization ($p<.01$). It is suggested that conflicts with clients' families, as well as clients, are important indicators for emotional exhaustion and depersonalization of home care workers.
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Key words: MBI (Maslach Burnout Inventory), Emotional exhaustion, Depersonalization, Personal accomplishment, Interpersonal relationship, Interpersonal conflict, Social support, Home care worker

Caring for elderly people, who may be frail or ill, is a fundamental challenge in an aging society, in the current system shifting from facility-based to community-based[1]. The growing number of elderly people with disabilities and chronic illnesses has increased home care services provided[2, 3] and technological advances have permit the provision of medical treatments at home[2]. The number of home care workers[4] in health care professionals has been increasing since 1990s[5].

Health care professionals are reported to experience a high rate of burnout[6–9], defined as a syndrome of emotional exhaustion and cynicism that occurs among the individuals in human services[10]. Interpersonal relationships with clients[11–13], coworkers and supervisors[9, 14–16] have been receiving attention as a predictor of burnout[17], besides job overload and job conflict[7, 14, 18]. As home care workers are engaged in private homes, being personally involved with the clients and their families, their relationships with clients and clients' families may be more important as psychological stresssors[19] than those in other types of health care professionals. Fisher and Eustis[20] described how both cooperation and conflict exist between clients' families and health care providers. A result has been given that care workers in Japan express dissatisfaction with their interpersonal relationships with clients and their families[21]. According to these findings, the conflicts with clients and clients' families may be strongly related to burnout among home care workers. Nevertheless, little attention has been paid to interpersonal relationships between home care workers and their clients and families as a cause of burnout.

Health care workers are also involved with their supervisors and coworkers. Several previous studies have demonstrated that lack of communication with coworkers or support from line managers[22, 23] and dissatisfaction with supervisory relationships[24] are associated with burnout and psychological distress among health care workers. Interpersonal relationships between home care workers and their supervisors and coworkers may be another important factor contributing to burnout. Negative social interactions, such as interpersonal conflict, do not necessarily imply lack of social support[25]. It is thought to be a stronger predictor of psychological distress than

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Table1. Sociodemographic variables, 106 home care workers

Average (SD)	
Age (yr)	40.7 (9.6)
Age of the youngest child (yr) (n=68)	15.5 (6.7)
Working hours per week (h)	30.0 (11.6)
Years of experience as a home care staff (yr)	3.0 (2.5)
Income ($\times 10^4$ yen/month)	17.7 (6.7)
Number (%)	
Education: more than 12 yr	58 (55)
Marital status	
single	22 (21)
divorced or bereaved	21 (20)
married	63 (59)
More than one child	64 (60)
Employment type	
full time	57 (54)
part time	49 (46)
Work type	
daytime	86 (81)
shift	20 (19)
Position of chief	16 (15)

a supportive relationship (social support)[26], so that interpersonal conflicts and social support could be considered as factors affecting burnout and psychological distress.

The Maslach Burnout Inventory (MBI) has been developed to assess three dimensions of burnout, i.e. emotional exhaustion, depersonalization and personal accomplishment[27]. The objective of the present study is to clarify the effects of interpersonal relationships, i.e., social support and conflicts with supervisors or coworkers and conflicts with clients or their families, on burnout as measured by the MBI among Japanese home care workers.

Methods

Study subjects

Home care workers are certificated by completing a course of study that varies from 130 to 230 h of classroom lectures and practice. Their services include physical care, assistance with housework, and general advice on care and welfare in the client's home, excluding medical treatment, examinations and other medical care. In 1999, 433 home care workers were selected as the target population from among 1,519 workers at all institutions (34 institutions) that provide home care services in Sapporo. We excluded part-time workers who worked fewer than 15 h to avoid the influence of additional jobs and responsibilities. Four hundred and thirty-three subjects included 234 full-time (54%) and 199 part-time workers (46%) working more than 15 h in a week. Some of these staffs worked evening and night shifts.

One institution (32 subjects) could not participate due to the pressure of daily work. In 6 institutions, the questionnaire reached fewer than half of the employees, because of the complexity of their shift schedule, so that the questionnaire was distributed to 303 care workers and returned by 243 subjects (response rate 80%). The participant rate was 56% (243/433), considering the initial 433 subjects as the target population. Furthermore, 107 subjects who did not complete the questionnaire were excluded. Among the remaining 108, 106 female workers served as the study subjects (two males were excluded). Table 1 shows the characteristics of the study subjects.

The characteristics of the 107 excluded subjects were as follows: the average (standard deviation) was 45.7 (10.6) yr for age, 30.0 (12.7) h per week for working time, 5.1 (5.9) yr for years of experience as a home care worker, and 179,000 (71,000) yen per month for income. Forty-four percent of all subjects had more than 12 yr education, 50% had been married, 57% were full timers, 15% were shift workers, and 19% were chiefs.

Questionnaire

Subjects were asked to complete a self-reported questionnaire anonymously. The questionnaire consisted of questions on socio-demographic variables, a Japanese version of the MBI[28], and scales of interpersonal conflict[29] and social support[30, 31].

The Maslach Burnout Inventory

The MBI[27] consists of 22 items, assessing burnout on the Likert scale from 0 (not at all) to 7 (very strong) for intensity, and from 0 (not at all) to 6 (every day) for frequency. A Japanese version of the MBI has been validated by Masuko *et al.*[28]. Cronbach's alpha coefficients of intensity (n=106) and frequency (n=96) were .85 and .85 for emotional exhaustion, .62 and .75 for depersonalization, and .78 and .83 for personal accomplishment.

Interpersonal Conflict

Scales for interpersonal conflicts in work settings were developed and validated for nursing home workers in Japan[29]. The scales comprised items on conflict with supervisors (four items), coworkers (three items), and clients (four items). An original 4-item scale developed for conflict with the family of the client by referring to the scale of conflict with clients (Appendix 1). For each scale of interpersonal conflict, the subjects were asked to rate each item by using a response option from 1 (not at all) to 4 (always). The scores were calculated by dividing the sum of scores by the number of items for each scale. Cronbach's alpha coefficients of each scale of conflicts in the 106 study subjects were .86 for

Table2. Correlations among the MBI, sociodemographic factors, work-related variables, interpersonal conflicts and social support

	Average (SD)	2	3	4	5	6	7	8	9	10	11	12
MBI (intensity)												
1.Emotional Exhaustion	29.9 (12.9)	.51**	-.21*	.85**	.41**	-.20*	.03	.02	.00	-.20*	.21	.29**
2. Depersonalization	6.4 (5.5)	1	-.14	.40**	.76**	-.14	-.11	.02	-.06	-.21*	.15	.23*
3. Lack of Personal Accomplishment	30.6 (8.3)		1	-.15	-.12	-.84**	-.33**	.11	-.12	-.26**	-.17	-.01
MBI (frequency)												
4. Emotional Exhaustion	24.9 (10.4)			1	.49**	-.30**	.00	.02	-.04	-.25*	.20	.33**
5. Depersonalization	5.1 (5.2)				1	-.24*	-.09	.07	-.15	-.18	.06	.29**
6. Lack of Personal Accomplishment	28.2 (8.7)					1	-.22*	.11	.04	-.13	-.14	-.06
Sociodemographic factors												
7. Age							1	-.26**	.42**	.54**	.81**	.01
8. Education (>12yr.)								1	-.06	-.19*	-.20	.09
9. Marital status (married=1, others=0)									1	.51**	-.04	-.12
10. Have more than one child										1	-.36**	-.20*
11. Age of the youngest child (n=68)											1	.19
12. Income												1
Work-related variables												
13. Employment type (full time=1, part time=0)												
14. Work type (daytime=1, shift=0)												
15. Position (chief=1, others=0)												
16. Years of experience												
17. Working hours per week												
Interpersonal conflict												
18. with supervisors												
19. with coworkers												
20. with clients												
21. with clients' families												
Social support												
22. by supervisors												
23. by coworkers												
24. by family												
25. by friends												

supervisors, .87 for coworkers, .81 for clients, and .80 for family of clients, respectively.

Social Support

Social support from four sources, viz, supervisors, coworkers, worker's family and friends, was assessed by a 5-item scale according to the conceptualization of social support by House[30] and Henderson[31]. The first two were developed from items of social support in the questionnaire of the National Institute for Occupational Safety and Health (NIOSH)[32, 33]; the next two were developed from a concept of House[30]; and the last was developed from a concept of Henderson[31]. The response options ranged from 1 (not at all) to 4 (very much). The score was calculated by dividing the sum of scores by the number of items for each scale (Appendix 2). Cronbach's alpha coefficients in 106 study subjects were .87 for supervisors, .80 for coworkers, .83 for worker's family and .83 for friends, respectively.

Socio-demographic variables

Socio-demographic variables included age, education, marital status, number of children, age of the youngest child, type of employment (full-time or part-time), work classification (daytime or shift), position, years of experience as a home care worker, and income.

Analysis

Data were analyzed by using the SAS statistical software package[34]. Pearson's correlation coefficient was calculated to show the characteristics and intercorrelations among variables. Multiple regression analyses were performed to examine the relationships of the MBI scores (dependent variables) to the interpersonal conflict and social support scores (independent variables).

Age, hours worked each week, work classification, and

(continued)

Table2. Correlations among the MBI, sociodemographic factors, work-related variables, interpersonal conflicts and social support

	13	14	15	16	17	18	19	20	21	22	23	24	25
MBI (intensity)													
1.Emotional Exhaustion	.34**	.18	-.06	.16	.19*	.37**	.36**	.43**	.50**	-.15	.01	-.03	-.12
2. Depersonalization	.21*	.05	-.05	.07	.18	.33**	.38**	.54**	.52**	-.16	-.03	-.01	-.01
3. Lack of Personal Accomplishment	-.07	-.18	-.03	-.08	-.01	-.22*	-.22**	.01	-.23*	.01	-.14	-.07	.12
MBI (frequency)													
4. Emotional Exhaustion	.35**	.11	.01	.11	.22*	.17	.22*	.42**	.40**	-.04	.07	-.03	-.07
5. Depersonalization	.26**	.10	-.08	.06	.23*	.19	.32**	.48**	.44**	.01	.10	-.02	.01
6. Lack of Personal Accomplishment	-.06	-.05	-.02	.01	-.02	-.17	-.19	-.05	-.24*	-.04	-.18	-.12	.09
Sociodemographic factors													
7. Age	-.02	.56**	.15	.43**	-.19	-.07	.01	.03	.05	.17	-.02	-.09	-.15
8. Education (>12yr.)	.26**	.05	.07	.02	.24*	-.08	.05	-.03	-.09	-.05	-.09	-.10	-.0
9. Marital status (married=1, others=0)	-.19	.19	.19	.12	-.22*	.12	.01	-.05	.02	.00	-.03	.04	-.13
10. Have more than one child	-.21*	.30**	-.04	.03	-.27**	-.09	-.06	-.14	-.12	.05	-.10	-.08	-.13
11. Age of the youngest child (n=68)	.23	.30*	.15	.49**	.10	.19	.10	.17	.31**	-.03	.25*	-.02	-.06
12. Income	.77**	.06	.41**	.35**	.74**	.27**	.25**	.29**	.31**	-.28**	.13	-.04	-.02
Work-related variables													
13. Employment type (full time=1, part time=0)	1	.18	.34**	.37**	.68**	.19	.27**	.27**	.36**	-.19*	.13	-.04	-.02
14. Work type (daytime=1, shift=0)		1	.14	.25**	-.06	-.07	.03	.06	.07	.05	-.10	-.19	-.12
15. Position (chief=1, others=0)			1	.14	.40**	.07	-.02	-.06	-.01	-.05	.10	-.02	-.18
16. Years of experience				1	.13	.07	.18	.19	.18	-.10	-.02	-.04	-.17
17. Working hours per week					1	.23*	.27**	.22*	.23*	-.26**	.11	-.19	-.14
Interpersonal conflict													
18. with supervisors						1	.46**	.18	.33**	-.48**	-.03	.07	-.11
19. with coworkers							1	.18	.28**	-.26**	-.24*	.01	-.09
20. with clients								1	.69**	-.10	-.02	-.04	-.15
21. with clients' families									1	-.14	.13	-.04	-.13
Social support													
22. by supervisors										1	.43**	.09	.23*
23. by coworkers											1	.22*	.19*
24. by family												1	.58**
25. by friends													1

The number of subjects was 106, except for the frequency of MBI (n=96). *: p<0.5, **: p<.01.

type of employment were entered as potential confounding factors in this analysis. Because of strong co-linearity between conflict with clients and clients' families (r=.69, p<.01), these two variables were entered separately into the regression equation.

Results

Table 2 shows average and standard deviation of scores on the MBI and correlation coefficients among the variables measured. Most correlation coefficients of socio-demographic variables with both intensity and frequency scales in the MBI were .30 or less.

Table 3 shows the result of multiple regression analyses by using conflicts with clients. The number of subjects analyzed was smaller than 107 because 106 and 96 subjects completed the MBI for intensity and frequency, respectively. Conflict with clients was significantly and positively associated with both intensity and frequency of emotional exhaustion, and conflict with supervisors was significantly and positively associated with intensity of emotional exhaustion. Conflict with coworkers and conflict with clients were also significantly and positively associated with both intensity and frequency of depersonalization. None of the social support scores was significantly related to any MBI scores. In the analyses of conflict with clients' families, results were almost the same as in the first model; conflict with clients' families was significantly and positively associated with both

Table3. Multiple regression analyses on conflicts with supervisors, coworkers and clients, social support by supervisors, coworkers, family and friends (independent variables) and job burnout (dependent variables)[a]

Variables	Emotional Exhaustion		Depersonalization		lack of Personal Accomplishment	
	intensity β	frequency β	intensity β	frequency β	intensity β	frequency β
Age	-.10	-.01	-.18	-.27*	-.32**	-.25*
Working type (daytime=1, shift=0)	.16	.09	.13	.23*	-.03	-.01
Employment type (full time=1, part time=0)	.24	.34*	-.04	.00	-.01	-.06
Working hours per week	-.16	-.10	-.04	.06	.03	.10
Conflict with supervisors	.24*	.10	.15	.08	-.13	.00
with coworkers	.18	.08	.27**	.26*	-.21	-.23
with clients	.31**	.36**	.50**	.44**	.10	-.01
Social support by supervisors	.05	.04	-.01	.12	.03	.05
by coworkers	.06	.00	.07	.08	-.22	-.25
by family	-.02	.04	-.08	-.05	-.13	-.22
by friends	-.06	.00	.12	.12	.16	.16
Adjusted R square	.30**	.21**	.36**	.29**	.16**	.11*

a: There are data missing due to uncomplete response to MBI (n=106 and 96 for intensity and frequency, respectively), β=partial standardized regression coefficient. *: $p<.05$, **: $p<.01$.

intensity and frequency of emotional exhaustion and depersonalization ($p<.05$).

The item in the questionnaire with the closest correlation with emotional exhaustion and depersonalization (r=.34 and .46, respectively, $p<.05$) was the one referring to conflict with clients, i.e. "Clients behave selfishly or uncooperatively." Among the items dealing with conflict with members of client's family, the one which showed the closest correlation with emotional exhaustion and depersonalization (r=.39 and .38, respectively, $p<.05$) was "Client's family depends too heavily on you."

Discussion

In our sample of home care workers, conflicts with clients or clients' families were significantly associated with emotional exhaustion and depersonalization. This might be attributed to a disruption in the relationship between the client and the service provider, which could be an essential part of burnout[35]. Affirmative responses to the item "Clients behave selfishly or uncooperatively" had the highest correlation with emotional exhaustion and depersonalization. It is possible that lack of cooperation from clients may be the leading cause of burnout. Conflict with clients did not significantly correlate with the lack of personal accomplishment. It has been suggested that a crisis in self-efficacy leads to a reduction in personal accomplishment[13], which often occurs independently of emotional exhaustion and depersonalization[17]. The present study supports previous findings that emotional exhaustion and depersonalization result from overwork and social conflict[36].

Conflict with clients' families is also a factor in emotional exhaustion and depersonalization in the present study, which has not been reported in previous studies. Affirmative responses to the item "The client's family depends too heavily on you" had the highest correlation with emotional exhaustion and depersonalization. This may reflect discrepancies in role expectations between members of clients' family and home care workers, which have been indicated as a source of interpersonal conflict[37, 38]. Excessive dependence on the home care workers appears to result more frequently in burnout by leading to job overload. Moreover, it has been indicated that interpersonal conflict with clients' families increases when responsibilities overlap[39] or when the roles of family members and health care workers are rigidly defined[40, 41]. A lack of shared perspective between family caregivers and health care workers has also been suggested as the basis of conflict with members of the client's family[42]. Therefore, burnout could be prevented by defining and agreeing on the roles of members of client's family and home care workers.

Supervisory conflict was positively associated with emotional exhaustion, but supervisory support was not significantly associated with any dimensions of burnout. Supervisory conflict may lead to an increase in job demands, which is generally associated with emotional exhaustion[17], caused by disturbed communication between workers and a supervisor. In general,

interpersonal conflicts are more likely to be associated with psychological distress than they are with social support[26]. Agreeing with this observation, the present study revealed that supervisory conflict is more important than supervisory support among home care workers. Previous reports indicated that formal support, such as that from a supervisor, increases burnout, whereas informal support, such as that from family or friends, decreases it[43]. Supervisory support was not significantly related to burnout as observed in a previous study[44]. Leiter[15] reported that professional support plays a dual role in alleviating and aggravating burnout and that unpleasant supervisory contact was positively related to emotional exhaustion. This may be the reason for the insignificant association between supervisory support and burnout in the present study, although social support generally has a beneficial effect on mental health.

Coworker conflict was significantly associated with depersonalization but not with emotional exhaustion. Coworker support was not significantly associated with burnout; therefore supportive interaction, as well as supervisory support, may be a weaker predictor of burnout than conflictive interaction. One study reported that a better relationship with coworkers was associated with decreased depersonalization[16], although the study did not separately measure negative and positive aspects of the relationship. Coworker conflict may prevent workers from being honest with coworkers, which could lead to suppression of emotion. This probably causes depersonalization, which is considered as suppression of emotional interactions with others in order to cope with job demands[45]. Alternatively, depersonalization might cause individuals to develop negative and cynical attitudes toward coworkers[7], resulting in conflict with coworkers. These hypotheses should be tested in a future study.

Social support from family or friends in the present study showed no significant association with any dimensions of burnout, although previous reports indicated that informal support, such as that from family or friends, decreases burnout[43]. Informal support may have only a weak effect on burnout in the area of work.

The present study has some flaws, however. Although the actual response rate was satisfactory (80%), the participation rate was low (56%). Many of the MBI were rendered ineligible because the participants had failed to complete them. Consequently, the subjects analyzed were younger and had shorter job experience than the others. Furthermore, the questionnaire was not so widely distributed to those had irregular work or night work, so that the closeness of the observed associations might have been under estimated. Further studies are necessary to confirm the findings of the present study. The scale of conflict with clients' families was not sufficiently validated in the present study. It is possible that home care workers could not distinguish between members of client's family and clients, and that items of conflict with clients' families were drawn up differently from those of conflict with clients. More valid standards should be developed for the measurement of interpersonal conflict among home care workers.

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Appendix 1:

Conflict with supervisors:

1. Supervisors behave selfishly and inconsistently.
2. Supervisors don't understand my job.
3. Supervisors discriminate from another coworker.
4. Supervisors force the way of thinking and doing.

Conflict with coworkers:

1. I disagree with a opinion of my coworkers on my job.
2. Communication with coworkers is poor.
3. Coworkers behave emotionally.

Conflict with clients:

1. Clients behave selfishly or uncooperatively.
2. Clients don't understand what I'm saying.
3. Clients behave high-handedly.
4. Clients don't understand that it is good for themselves.

Conflict with clients' families:

1. Client's family asks for services that are not included in the care plan.
2. Client's family depends too heavily on you.
3. Client's family behaves high-handedly.
4. Client's family doesn't understand that it is good for clients.

Response options for the items of conflicts were 1 (not at all), 2 (occasionally), 3 (sometimes) and 4 (always).

Appendix 2:

Social support by supervisors:

1. How easily can you talk to your supervisor?
2. How much can you rely on your supervisor when there are difficulties?
3. How much does your supervisor recognize and value your job?
4. How much does your supervisor cooperate with you to solve when there are difficulties?
5. How much support do you receive from your supervisor?

Social support by coworkers:

1. How easily can you talk to your coworker?
2. How much can you rely on your coworker when

there are difficulties?
3. How much does your coworker recognize and value your job?
4. How much does your coworker cooperate with you to solve when there are difficulties?
5. How much support do you receive from your coworker?

Social support by family
1. How easily can you talk to your family?
2. How much can you rely on your family when there are difficulties?
3. How much does your family recognize and value your job?
4. How much does your family cooperate with you to solve when there are difficulties?
5. How much support do you receive from your family?

Social support by friends
1. How easily can you talk to your friend?
2. How much can you rely on your friend when there are difficulties?
3. How much does your friend recognize and value your job?
4. How much does your friend cooperate with you to solve when there are difficulties?
5. How much support do you receive from your friend?

Response options for the items of social support were 1 (not at all), 2 (a little), 3 (fairly) and 4 (very much).

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