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＜ Original ＞

Conflicts among public health nurses managers in Japan: The reality of conflicts and influencing factors

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Abstract

Objectives: The purpose of this study was to determine the actual situation of conflicts as perceived by public health nurses (PHN's) managers working in Japanese local governments, it's effect on the performance of their managerial duties, and the factors that contribute to these conflicts.

Methods: We conducted a mail survey using a self-administered questionnaire on 384 PHN's managers in 14 prefectures selected by stratified random sampling. The questionnaire items covered the basic characteristics of respondents, conflict awareness, and conflict-handling style of PHN's managers. The analysis included descriptive statistics and a test of the difference in average scores A stepwise multiple regression analysis was conducted using the basic characteristics of respondents, conflict-handling styles as explanatory variables, and conflict awareness frequency as dependent variables. The study data were analyzed using IBM SPSS Ver. 25 statistical analysis software with a two-tailed significance level of <5%.

Results: Of 242 (63.0%) responses to the questionnaire received 223 (61.5%) were valid. A total of 51 respondents (21.6%) were aware of the high frequency of conflicts, while the mean proportion of all work occupied by the conflict-handling fraction was 24.3%. The most common style of dealing with conflicts was "understanding each other's ideas; integrating " at 69 (29.2%), followed by "avoiding arguments; avoiding " at 63 (26.7%), and "respecting each other's goals; integrating" at 48 (20.3%). Multiple regression analysis was used to examine the factors influencing the frequency of perceived conflict. The results showed a positive association with the percentage of work "managerial work fraction," and a negative association with "the number of subordinate occupations," ""integrating" of coping styles," "superiors' occupation," and "population size".

Conclusion: Approximately 20% of PHN's managers frequently perceived conflicts in their job performance and 1/4 of their workload comprised dealing with them. The "integrating" style is considered a method that leads to a solution that is fully satisfactory to both parties in a cooperative manner.

It was suggested that the choice of a desirable coping style by PHN's managers may help in the performance of their duties.

keywords: public health nurses (PHN's), manager, workplace conflict, handling style

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I. Introduction

In recent years, Japan has seen remarkable demographic changes due to advances in medical care and a rapidly aging population with declining birthrates. As a result, community health issues are becoming more serious, including changes in the structure of disease and an increase in the number of people receiving care at home. In addition, health risk management events that are extremely likely to have an immediate and serious impact on the lives and health of local residents, such as serious disasters and outbreaks of infectious diseases, are also becoming more frequent. These changes

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in community issues continue to increase the demand for community-based medical, health, and welfare services [1].

In Japan, PHN's working for local governments are at the forefront of efforts to solve these community health issues. The regions to which these PHN's working for local governments are assigned are broadly classified into prefectures and municipalities. PHN's working in municipalities, as employees close to local residents, are mainly engaged in work related to direct resident services, such as maternal, child, adult, elderly, and nursing care. On the other hand, PHN's working in prefectures are responsible for health issues that require a high level of expertise, such as intractable diseases, mental health, and infectious diseases, as well as technical assistance to municipalities. As described above, the primary duties of PHN's vary depending on the department to which they belong. However, the legal systems on which PHN's assigned to any of these organizations base their activities have changed rapidly as community conditions have changed. As a result, PHN's are now being assigned to various local government departments including public health, welfare, and education; and are required to leverage their professional expertise as members of a multidisciplinary organization. With this change, PHN's have more opportunities to collaborate with a variety of professionals. Furthermore, in just seven years, from 2009 to 2015, the number of PHN's appointed to managerial positions ("PHN's managers"), where they are expected to play a key role in advancing public policy, has nearly doubled [2].

Meanwhile, Japan's government faced tightening budgets to fund its fiscal and administrative operations due to the effects of a declining and aging population, a decrease in the number of reproductive-age adults, and adverse economic conditions.[3]. This has meant that employees working for local governments, including PHN's, are expected to achieve consistent results by streamlining their work within the organization. In particular, the PHN's manager is expected to fulfill two distinct roles: nurse and administrator. As a result, PHN's managers frequently face tasks that require negotiation, not only to manage their subordinates, but also to reach consensus with various stakeholders inside and outside the organization [4].

Such negotiations due to disagreements between self and others are called "conflicts." and are said to be inevitable in any society. In general, it is said that the negative impact of job-related conflicts in social organizations is significant, with 24-60% of a manager's time and energy being spent on dealing with conflicts [5]. However, when managers are able to deal with conflicts effectively, the performance of the organization improves; therefore, the leader is said to be the key person [6].

Previous studies referring to conflict in the nursing profession have recognized that it is a commonly encountered event for nurses who aim to provide high-quality care [7]. It has also been suggested that one of the factors contributing to the serious shortage of nurses in Europe and the United States is workplace conflicts [8,9]. Furthermore, it has been pointed out that there is a need to improve the skills of nurse managers to constructively manage inevitable conflicts among nurses [10,11]. As mentioned above, in other countries, there have been few studies focusing on conflicts among nurses working in hospitals that share an understanding of the existence of conflicts derived from job performance, which is considered common knowledge in general society, and the importance of the role of managers in dealing with these conflicts.

In contrast, in Japan, the only research on conflicts targeting the nursing profession exists in the previously described study [12], which targeted head nurses, and is being conducted mainly in the fields of social psychology and health psychology [13-15]. Furthermore, there is no research on conflicts faced by PHN's, either domestically or internationally.

Against this background, we thought it would be meaningful to clarify the actual situation of conflicts among PHN's managers, since conflicts are an unavoidable event in society, and the response of management is particularly important. Therefore, the authors conducted an interview survey [16] with eight PHN's managers as a preliminary study. The results revealed the existence of various conflicts during the performance of their duties and the reality of their struggles to cope with them. However, the authors felt that a survey of a larger number of PHN's managers was necessary to clarify the actual situation of PHNs' perceptions of and coping with conflicts in managerial positions.

II. Aim

The purpose of this study was to determine the actual situation of conflicts as perceived by PHN's managers working in Japanese local governments, it's effect on the performance of their managerial duties, and the factors that contribute to these conflicts.

III. Method

1. Population and sampling

The job requirements of PHN's differ according to the type of government and characteristics of the region they inhabit.

As such, the job requirements of PHN's managers and the nature of PHN's manager conflict awareness are also

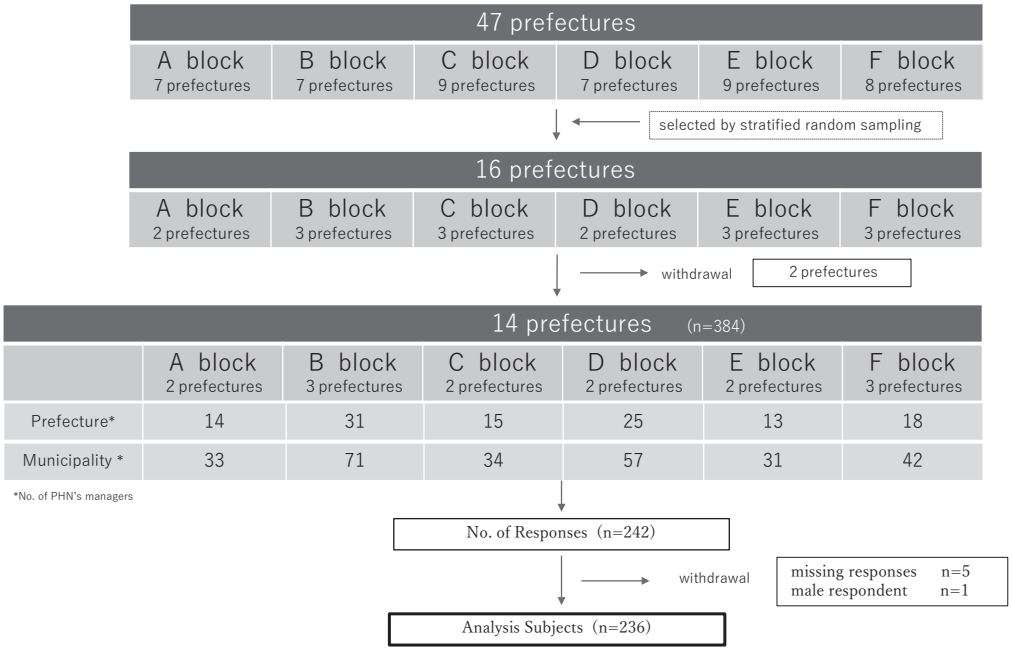

Figure 1 The sample selection flow chart

presumably influenced by regional characteristics and the type of organization to which they are assigned.

Furthermore, the placement of PHNs in management positions working in local governments in Japan varies depending on the type of local government administration and the region. To ensure the distribution of this questionnaire to PHN's managers, it was necessary to identify the affiliation of the target population. Therefore, in conducting this survey, the following procedure was used to select the subjects. There are 47 prefectures in Japan throughout the country. First, after dividing these into six regional blocks, 16 prefectures were selected by stratified random sampling. Next, the purpose of the study was explained to the central government officials in charge of each of the selected prefectures, and they were asked whether or not they would be willing to share information on the assignment of PHN's managers under their government. Finally, consent was obtained from the central government officials in charge of 14 prefectures, and local government health nurses under these prefectures were selected for the survey. (Fig. 1)

2. Survey method

The survey was conducted between December 2018 and February 2019 using a self-administered mail-in questionnaire.

3. Survey details

(1) Demographic and background characteristics

Personal characteristics (e.g., age, basic education level, job position, years of PHN's or managerial experience, advisor, subordinates, etc.), organizational characteristics (e.g., government facilities, assigned department, population size, etc.)

(2) Extent of conflict awareness

The survey asked about the frequency with which PHN's managers experience conflicts with others in their daily managerial work that require a response. The survey responses were developed based on the opinions of PHN's managers who had cooperated in a previous survey[15]. They were asked to select one of the following options: "Almost daily," "Several conflicts per week," "One conflict per week," "Several conflicts per month," "One conflict per month," or "Other," based on what they felt was most appropriate during the performance of their current duties.

(3) Extent of conflict handling

In the survey question on conflict handling, PHN's managers were asked to subjectively describe the amount of time dedicated to conflict handling as a mean proportion (%) of all routine work (100%) ("conflict handling fraction").

(4) Selection of conflict handling style

The survey question asking PHN's managers to select their conflict- handling style utilized the "Handling Interpersonal Conflict Inventory" (HICI) scale [17],which was developed based on the two-dimensional model of five conflict-handling styles described by Rahim and Bonoma[18] .This model serves as a scale for handling differences in opinion into five styles differentiated on two basic dimensions: concern for self, indicating the degree to which a

person attempts to satisfy his/her own concern; and concern for others, indicating the degree to which a person attempts to satisfy others' concerns. The "integrating" style indicates a high concern for self and others, the "avoiding" style indicates a low concern for self and others, the "forcing" style indicates a high concern for self and low concern for others, the "yielding" style indicates a low concern for self and high concern for others, and the "compromising" style indicates an intermediate concern for self and others. (Fig. 2) This scale has been adopted by many researchers, and its efficacy as a measure of conflict handling has been validated [19].

At the time of the present study, no scale existed for measuring the handling of conflict, specifically in populations such as working adults, managers, and nurses; and the HICI scale was the only instrument developed in Japan that was capable of grasping the two-dimensional, five-style model, which is why it was selected for use in this study. In consideration of the study's objective, the subject term "friend" used to describe the "yielding" style in Question 4 of the survey was modified to "other party." Furthermore, a preliminary survey was conducted with the cooperation of several PHN's managers and the following descriptions were modified based on the results. Specifically, the "integrating" style description "reaching a decision of benefit to both parties," was changed to "proposing a solution of benefit to both parties" and "supporting each other's objectives" was changed to "respecting each other's intentions." The "compromising" style description "asserting that each party put their opinions aside" was changed to "attempting to find a compromise to avoid an impasse."

The handling of conflicts typically differs depending on the parties involved and their circumstances. The survey questions on conflict awareness were therefore worded to elicit a response on "the action and perspective that you generally tend to adopt." As in previous studies applying the HICI scale, responses to scale questions were worded using a four-point Likert scale consisting of "Always:-3," "Often:-2," "Sometimes:-1," and "Never:-0."

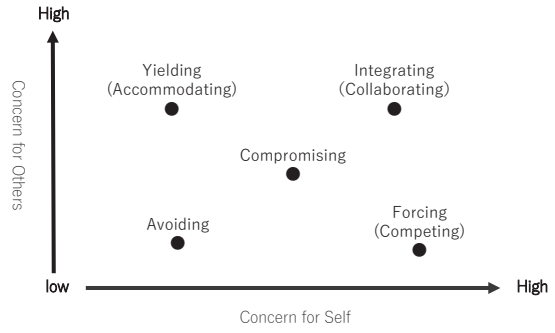

Figure 2 Conflict management style 2 dimensional,5-style model [18]

Some studies have described the five categories of conflict styles of conflict as Collaborating instead of Integrating, Competing instead of Forcing, and Accommodating instead of Yielding [20]. In this study, however, we adopted Kato's scale [17] representation.

4. Date Analysis

Descriptive statistics were calculated for the respondents' background characteristics, conflict awareness frequency, conflict handling fraction, and modified HICI.

For the modified HICI, means and standard deviations (SD) were calculated for each subscale, and Cronbach's alpha was calculated for correlations between the factors and the overall HICI scale.

The conflict awareness frequency and conflict handling fraction were referred to as the data variability, mean, and median, respectivery, after calculating descriptive statistics. Based on the results, the frequency of conflict awareness frequency was assigned as "high group" for respondents who recognize conflicts "more than twice per week" and "low group" for those who recognize conflicts less frequently. Respondents who answered "20% or more" were assigned to the "high group" and those who answered "less than 20%" were assigned to the "low group" for the conflict handling fraction. The association between these factors and HICI selection was evaluated using the Mann-Whitney U test.

The associations of PHN's managers with individual and assigned department factors were evaluated using the chi-squared test or Fisher's exact test.

The analysis of factors related to perceived frequency of conflicts among PHN's managers was conducted using the stepwise method of multiple regression analysis. In the analysis, basic attributes and conflict handling styles were used as explanatory variables, while the perceived frequency of conflicts was used as the explained variable.

Survey data were analyzed using the statistical analysis software IBM SPSS Ver. 25 at a two-sided significance level $<5\%$.

IV. Ethical considerations

The cooperation request explained to the participants in writing the study's aim, the protection of anonymity, and the free will of individuals cooperating in the research. This study was approved by the ethical committee of the National Institute of Public Health, Japan (NIPH-IBRA#12220)

V. Results

1. Demographic (Table 1)

The survey questionnaire form was distributed to 384 PHN's managers.

A total of 242 questionnaire forms were collected (63% recovery rate), of which 236 forms contained valid responses (61.5% valid response rate). Mean years of PHN's experience and managerial experience was 31.4 ± 4.5 years and 4.3 ± 3.1 years, respectively, and mean proportion of work consisting of managerial tasks ("managerial work fraction") was 70.8 ± 25.4%. In the course of their work, a total of 51 PHN's managers (21.6%) had experienced a high conflict awareness frequency of "at least several times per week"

Table 1 Summary of descriptive statistics of demographic and background characteristics; comparison by municipality type (n=236)

Characteristic			Government facility (n=236)	
			Prefecture (n=73)	municipality (n=163)
		Mean±SD	Mean±SD	Mean±SD
Age (yr)		55.1±3.6	56.9±2.4	54.3±3.7
Years of PHN experience		31.4±4.5	33.6±3.3	30.4±4.6
Years of managerial experience		4.3±3.1	4.0±2.6	4.5±3.3
Years in current position		2.9±2.3	3.2±2.4	2.8±2.2
Managerial work fraction		70.8±25.4	72.4±20.9	70.0±27.2
No. of previous positions		1.1±0.4	1.0±0	1.1±0.4
No. of close advisors		2.3±1.0	2.2±1.0	2.3±1.0
No. of subordinates		13.4±16.0	10.7±11.4	14.7±17.6
No. of subordinate occupations		3.0±1.2	3.2±1.4	2.9±1.2
No. of non-permanent staff		6.4±10.4	1.9±1.4	8.5±11.9
Conflict handling fraction		24.3±18.4	24.5±18.0	24.2±18.7
		n (%)	n (%)	n (%)
Basic education level	Training school/vocational college	210(89.0)	66 (90.4)	144 (88.3)
	Junior college/Non-degree course	19 (8.1)	5 (6.8)	14 (8.6)
	Undergraduate	6 (2.5)	1 (1.4)	5 (3.1)
	Postgraduate	1 (0.4)	1 (1.4)	0 (0.0)
Highest qualification	Training school/vocational college	187 (79.2)	53 (72.6)	134 (82.2)
	Junior college/Non-degree course	21 (8.9)	6 (8.2)	15 (9.2)
	Undergraduate	15 (6.4)	5 (6.8)	10 (6.1)
	Postgraduate	13 (5.5)	9 (12.3)	4 (2.5)
Job position	Subsection manager	34 (14.4)	8 (11.0)	26 (16.0)
	Assistant section manager	44 (18.6)	10 (13.7)	34 (20.9)
	Section manager	144 (61.0)	53 (72.6)	91 (55.8)
	Department or bureau manager	12 (5.1)	1 (1.4)	11 (6.8)
Role model	No	107 (45.3)	17 (23.3)	90 (55.2)
	Yes	128 (54.2)	56 (76.7)	72 (44.2)
Secondary) Model occupation	PHN	94 (73.4)	43 (58.9)	51 (31.3)
	Administrative	26 (20.3)	9 (12.3)	17 (10.4)
	Physician	6 (4.7)	4 (5.5)	2 (1.2)
Population size	<200,000 ppl	171 (72.5)	27 (37.0)	144 (88.3)
	≥200,000 ppl	65 (27.5)	46 (63.0)	19 (11.7)
Superior's occupation	Physician	39 (16.5)	35 (47.9)	4 (2.5)
	Administrative	164 (69.5)	31 (42.5)	133 (81.6)
	PHN	16 (6.8)	3 (4.1)	13 (8.0)
	Other	16 (6.8)	4 (5.5)	12 (7.4)
Conflict frequency	Low-frequency (≤once/week)	185 (78.4)	55 (75.3)	130 (79.8)
	High-frequency (≥twice/week)	51 (21.6)	18 (24.7)	33 (20.2)

Cross-tabulation: Chi-squared test

†) Fisher's exact test

Intergroup means comparison; Mann-Whitney U test

***<0.001, **<0.01, *<0.05

Mean±SD: Mean ± Standard deviation; PHN: public health nursing.

Proportions for each characteristic (%) were calculated without imputation ofmissing values.

(high group). Mean amount of time dedicated to conflict handling as a proportion (%) of all work ("conflict handling fraction") was 24.3 ± 18.4%.

2. Selection of conflict handling style (Table 2)

Among the 20 questions on the modified HICI scale, the questions for which "Always" was the most common response were "Understanding each other's ideas to achieve the best outcome (integrating)" in 69 (29.2%) respondents, "Refraining from arguing as much as possible (Avoiding)" in 63 (26.7%) respondents, and "Respecting each other's intentions (Integrating)" in 48 (20.3%) respondents.

On the other hand, the questions for which more than half of the respondents selected "Never" were "Doing as the other party wishes (yielding)" in 160 (67.8%) respondents, "Attempting to win one's position (forcing)" in 148 (62.7%) respondents, and "Attempting to push through one's opinion" in 121 (51.3%) respondents.

3. Results of descriptive statistics on selection of conflict-handling style (Table 3)

The scale used in this study was a modified version of the HICI scale, with some of its expressions. The factor structure of the scale was similar to the results of a scale developer's study [19], and we confirmed that there was no effect of modifying some linguistic expressions of the scale. Next, we calculated the mean, SD, internal consistency, and inter-factor correlations for each of the five style subscales, as in existing studies.

As a result, inter-factor correlations were of r=0.10 to

Table 2 Results and simple summary of modified HICI scale responses (n=236)

Q	Style	Question	Never		Sometimes		Often		Always	
			n	%	n	%	n	%	n	%
1	Compromising	Attempting to find common ground of each opinion	10	4.2	117	49.6	94	39.8	15	6.4
2	Yielding	Acquiescing to the other party's demands	62	26.3	144	61.0	29	12.3	1	0.4
3	Compromising	Attempting to find a compromise to avoid an impasse	6	2.5	76	32.2	127	53.8	27	11.4
4	Yielding	Accommodating the other party's intentions	29	12.3	134	56.8	71	30.1	2	0.8
5	Forcing	Trialing various methods to push through one's opinion	43	18.2	116	49.2	67	28.4	10	4.2
6	Integrating	Reaching a decision to benefit both parties	2	0.8	45	19.1	148	62.7	41	17.4
7	Integrating	Attempting to find a mutually-satisfactory conclusion	4	1.7	52	22.0	139	58.9	41	17.4
8	Avoiding	Attempting to avoid a difference of opinions	114	48.3	92	39.0	25	10.6	5	2.1
9	Integrating	Respecting each other's intentions	3	1.3	38	16.1	147	62.3	48	20.3
10	Integrating	Understanding each other's ideas to achieve the best outcome	0	0.0	32	13.6	135	57.2	69	29.2
11	Avoiding	Refraining from arguing as much as possible	9	3.8	52	22.0	112	47.5	63	26.7
12	Compromising	Attempting to find points of mutual compromise	5	2.1	53	22.5	134	56.8	44	18.6
13	Forcing	Seeking an outcome beneficial to one's self	95	40.3	114	48.3	24	10.2	3	1.3
14	Forcing	Attempting to win one's position	148	62.7	78	33.1	8	3.4	2	0.8
15	Compromising	Attempting to agree on compromized common ground	6	2.5	67	28.4	133	56.4	30	12.7
16	Avoiding	Attempting to avoid a clash of opinions with the other party	28	11.9	82	34.7	93	39.4	33	14.0
17	Yielding	Doing as the other party wishes	160	67.8	68	28.8	6	2.5	2	8.0
18	Yielding	Recognizing the other party's opinion	3	1.3	66	28.0	139	58.9	28	11.9
19	Avoiding	Attempting to avoid confrontation	8	3.4	42	17.8	141	59.7	45	19.1
20	Forcing	Attempting to push through one's opinion	121	51.3	107	45.3	5	2.1	3	1.3

Underline: HICI scale modifications

Table 3 Modified HICI scale descriptive statistics; inter-factor correlations

	Integrating	Forcing	Yielding	Avoiding	Compromising	Mean	SD	Alpha
Integrating	1.00					8.06	2.06	0.59
Forcing	0.15*	1.00				2.87	1.93	0.69
Yielding	0.22**	0.10	1.00			4.24	1.61	0.59
Avoiding	0.26**	0.10	0.50**	1.00		6.14	2.23	0.60
Compromising	0.54**	0.22**	0.39**	0.33**	1.00	6.94	1.90	0.58

HICI scale; four questions per subscale, four-point Likert scale from 0 to 3 (total score out of 12)

Mean=Average score; SD=Standard deviation; Alpha=coefficient

**<0.01, *<0.05

r=0.54 and the alpha coefficient of each subscale was between 0.58 and 0.69, while Cronbach's alpha coefficient for the entire scale was 0.70.

In a previous study by the developer of this scale, it was pointed out that there were problems with the discriminant validity of the "integrating" style and "compromising" styles, and the "avoiding" and "yielding" styles.

In the results of this study, the overall supervisory coefficients for the "integrating" and "compromising" styles, and the "avoiding" and "yielding" styles were r = 0.54 and 0.50, respectively; which were similar the highest correlation coefficient between conflict-handling.

The aggregate results for each scale in this survey showed that the conflict-handling with the most responses was "integrating" style, followed by "compromising," "avoiding," "yielding," and then "forcing."

4. Investigation of factors related to selection of conflict handling style (Table 4)

In terms of the relationship between background characteristics of PHN's managers and their selection of conflict handling style, no significant differences were seen for any of the "integrating" or "avoiding" questions.

The "forcing" style of handling conflict was selected by a significantly higher proportion of respondents in the high-frequency conflict awareness group than those in the low-frequency conflict awareness group ($p<0.01$).

The relationship between the background characteristics of PHN's managers and their choice of the "compromising" style of conflict coping was examined. The results showed that, as with the "forced" style of conflict coping, respondents in the high conflict awareness group were significantly more likely to choose this style than respondents in the low conflict awareness group ($p<0.05$).

Among the organizational factors, a significantly higher proportion of PHN's managers working in government with a population of ≥200,000 people selected the "compromising" style than those working in the government with a population of <200,000 people ($p<0.05$).

Upon examining the relationship between the background

Table 4 Relation between respondent background characteristics & selection of conflict handling style (n=236)

Item		Subtotal		Integrating			Forcing			Compromising			Yielding			Avoiding		
		n	%	Mean	SD	*p* -value	Mean	SD	*p* -value	Mean	SD	*p* -value	Mean	SD	*p* -value	Mean	SD	*p* -value
Demographic & background characteristics																		
Age (yr)	≤55	111	47.0	8.08	2.04	0.624	2.82	1.87	0.715	7.03	1.93	0.491	4.39	1.67	0.190	6.24	2.33	0.486
	≥56	125	53.0	8.04	2.10		2.91	1.98		6.86	1.88		4.11	1.55		6.04	2.14	
Years of PHN experience	≤30	82	34.7	8.05	1.80	0.952	2.80	1.79	0.712	6.78	1.74	0.359	4.33	1.70	0.542	6.24	2.26	0.587
	≥31	154	65.3	8.06	2.20		2.90	2.00		7.02	7.98		4.19	1.56		6.08	2.22	
Years of managerial experience	<5	114	48.3	7.99	2.05	0.625	2.78	1.95	0.499	6.97	1.88	0.772	4.40	1.72	0.137	6.29	2.39	0.306
	≥5	122	51.7	8.12	2.09		2.95	1.91		6.90	1.93		4.09	1.49		5.99	2.06	
Managerial work fraction	<80%	81	34.3	7.90	1.92	0.396	2.62	1.59	0.117	6.86	1.88	0.674	4.27	1.64	0.836	6.00	2.31	0.501
	80% or above	155	65.7	8.14	2.14		3.00	2.07		6.97	1.91		4.23	1.60		6.21	2.19	
Basic education level	Training school/junior college	235	99.6	8.04	2.05	0.056	2.86	1.93	0.269	6.93	1.90	0.277	4.23	1.61	0.275	6.12	2.23	0.198
	Undergraduate/Postgraduate	1	0.4	12.00	.		5.00	.		9.00	.		6.00	.		9.00	.	
Highest qualification	Training school/junior college	223	94.5	8.01	2.04	0.158	2.83	1.86	0.255	6.95	1.90	0.745	4.25	1.62	0.840	6.17	2.20	0.388
	Undergraduate/Postgraduate	13	5.5	8.85	2.41		3.46	2.90		6.77	1.96		4.15	1.41		5.62	2.69	
Previous work history	Yes	63	26.7	8.16	2.29	0.656	2.84	1.73	0.896	6.94	2.09	1.000	4.38	1.63	0.423	6.44	2.01	0.200
	No	173	73.3	8.16	2.29		2.88	2.00		6.94	1.83		4.19	1.60		6.02	2.30	
Job position	<Section chief	78	33.1	8.02	1.98	0.913	2.62	1.75	0.157	7.09	1.97	0.385	4.56	1.69	0.030*	6.21	2.05	0.737
	≥Section chief	158	66.9	8.07	2.09		2.99	2.00		6.86	1.87		4.08	1.55		6.10	2.32	
Role model	Yes	128	54.2	8.27	1.89	0.091	3.03	1.92	0.135	7.13	1.84	0.089	4.45	1.61	0.031*	6.36	2.14	0.107
	No	107	45.3	7.81	1.89		2.65	1.93		6.70	1.95		3.99	1.59		5.89	2.32	
Model occupation	PHN	94	39.8	8.26	2.19	0.236	3.31	1.91	0.004**	7.17	1.84	0.124	4.32	1.57	0.543	6.13	2.53	0.984
	Other occupation	142	60.2	7.93	2.01		2.58	1.89		6.78	1.93		4.19	1.64		6.14	2.21	
Close advisor	Yes	205	86.9	8.08	2.10	0.537	2.92	1.93	0.304	6.95	1.92	0.628	4.29	1.59	0.219	6.17	2.18	0.446
	No	30	12.7	7.83	1.86		2.53	1.91		6.77	1.72		3.90	1.77		2.56		
Conflict frequency	Low group: ≤once/week	185	78.4	7.98	2.06	0.285	2.58	1.87	0.002**	6.75	1.78	0.042*	4.16	1.58	0.274	6.08	2.29	0.594
	High group: ≥twice/week	51	21.6	8.33	2.09		3.40	1.93		7.28	2.07		4.40	1.66		6.24	2.12	
Conflict handling fraction	Low group: <20%	133	56.4	7.96	2.08	0.445	2.79	1.88	0.326	6.76	1.94	0.066	4.18	1.61	0.470	6.15	2.13	0.888
	High group: ≥20%	99	41.9	8.17	2.03		3.04	1.98		7.22	1.82		4.33	1.57		6.19	2.34	
Organizational factors																		
Government facility	Prefecture	73	30.9	8.34	2.17	0.159	2.99	2.04	0.531	7.45	1.86	0.005**	4.23	1.53	0.956	6.14	2.12	0.995
	municipality	163	69.1	7.93	2.01		2.82	1.88		6.71	1.88		4.25	1.65		6.13	2.28	
Population size	<200,000 ppl	171	72.5	7.96	2.07	0.227	2.72	1.90	0.053	6.67	1.93	0.020*	4.26	1.64	0.808	6.14	2.22	0.958
	≥200,000 ppl	65	27.5	8.32	2.05		3.26	1.95		7.40	1.76		4.20	1.54		6.12	2.26	
Superior's occupation	PHN	16	6.8	8.19	1.80	0.798	3.25	2.08	0.414	7.31	2.18	0.413	3.50	1.37	0.056	6.13	2.53	0.984
	Other occupation	220	93.2	8.05	2.09		2.84	1.92		6.91	1.88		4.30	1.62		6.14	2.21	
No. of subordinates	≤10	122	51.7	8.02	2.00	0.742	2.67	1.90	0.105	6.92	1.90	0.878	4.24	1.71	0.970	6.07	2.39	0.619
	≥11	114	48.3	8.11	2.14		3.08	1.94		6.96	1.91		4.25	1.51		6.21	2.05	
Total no. of subordinate occupations	<3	168	71.2	8.08	2.05	0.946	2.68	1.84	0.019*	6.85	1.92	0.253	4.20	1.55	0.507	6.17	2.17	0.594
	≥3	64	27.1	8.06	2.14		3.34	2.10		7.17	1.87		7.36	1.75		6.00	2.30	
No. of non-permanent staff	≤3	108	45.8	8.12	2.01	0.908	2.66	1.84	0.021*	7.09	1.83	0.243	4.31	1.63	0.659	6.10	2.11	0.807
	≥4	102	43.2	8.09	2.03		3.27	2.01		6.79	1.86		4.22	1.62		6.18	2.31	

Mann-Whitney U test

Mean=Average value; SD=Standard deviation; PHN: public health nursing.

***<0.001, **<0.01, *<0.05

Proportions for each characteristic (%) were calculated without imputation of missing values.

characteristics of PHN's managers and their selection of the "yielding" style of handling conflict, a significantly higher proportion of those occupying a lower position selected this style than those with a section manager or higher job position ($p<0.05$).

5. Investigation of factors affecting conflict awareness frequency and conflict handling fraction

(1) Single correlation results (Table 5)

To identify factors related to conflict awareness frequency and conflict processing time as a percentage of total work ("conflict handling fraction"), we referred to data variability, mean, and median values.

On the basis of these results, we assigned respondents whose conflict awareness frequency was once a week or less and those whose conflict handling ratio was 20% or less to the "low group." Those whose conflict awareness frequency was twice a week or more and those with a conflict handling ratio of 20% or more were assigned to the "high group."

Table 5 Relation between respondent background characteristics & conflict awareness frequency and conflict handling fraction (n=236)

				Conflict awareness frequency					Conflict handling fraction				
				Low group (n=185)		High group (n=51)			Low group (n=133)		High group (n=99)		
Item		n	%	n	%	n	%	*p*-value	n	%	n	%	*p*-value
Individual PHN factors													
Age (yr)	≤55	111	47.0	91	49.2	20	39.2	0.206	63	47.4	44	44.4	0.691
	≥56	125	53.0	94	50.8	31	60.8		70	52.6	55	55.6	
Years of PHN experience	≤30	82	34.7	66	35.7	16	31.4	0.568	49	36.8	30	30.3	0.329
	≥31	154	65.3	119	64.3	35	68.6		84	63.2	69	69.7	
Years of managerial experience	<5	114	48.3	91	49.2	23	45.1	0.605	71	53.4	41	41.4	0.084
	≥5	122	51.7	94	50.8	28	54.9		62	46.6	58	58.6	
Managerial work fraction	<80%	81	34.3	64	34.6	17	33.3	0.867	53	39.8	26	26.3	0.036*
	80% or above	155	65.7	121	65.4	34	66.7		80	60.2	73	73.7	
Basic education level	Training school/junior college	235	99.6	185	100.0	50	98.0	0.216[1)]	133	100.0	98	99.0	0.427[†)]
	Undergraduate/Postgraduate	1	0.4	0	0.0	1	2.0		0	0.0	1	1.0	
Highest qualification	Training school/junior college	223	94.5	176	95.1	47	92.2	0.486[1)]	124	93.2	95	96.0	0.565[†)]
	Undergraduate/Postgraduate	13	5.5	9	4.9	4	7.8		9	6.8	4	4.0	
Previous work history	Yes	63	26.7	47	25.4	16	31.4	0.394	44	33.1	19	19.2	0.025*
	No	173	73.3	138	74.6	35	68.6		89	66.9	80	80.8	
Job position	<Section chief	78	33.1	63	34.1	15	29.4	0.533	51	38.3	26	26.3	0.067
	≥Section chief	158	66.9	122	65.9	36	70.6		82	61.7	73	73.7	
Role model	Yes	128	54.2	99	53.5	29	56.9	0.698	68	51.1	58	58.6	0.350
	No	107	45.3	85	45.9	22	43.1		64	48.1	41	41.4	
Model occupation	PHN	94	39.8	72	38.9	22	43.1	0.586	51	38.3	41	41.4	0.685
	Other occupation	142	60.2	113	61.1	29	56.9		82	61.7	58	58.6	
Close advisor	Yes	205	86.9	165	89.2	40	78.4	0.033*	120	90.2	81	81.8	0.042*
	No	30	12.7	19	10.3	11	21.6		12	9.0	18	18.2	
Organizational factors													
Government facility	Prefecture	73	30.9	55	29.7	18	35.3	0.447	37	27.8	36	36.4	0.199
	municipality	163	69.1	130	70.3	33	64.7		96	72.2	63	63.6	
Population size	<200,000 ppl	171	72.5	141	76.2	30	58.8	0.014*	106	79.7	61	61.6	0.021*
	≥200,000 ppl	65	27.5	44	23.8	21	41.2		27	20.3	38	38.4	
Superior's occupation	PHN	16	6.8	8	4.3	4	7.8	0.733	7	5.3	9	9.1	0.325
	Other occupation	220	93.2	173	93.5	47	92.2		126	94.7	90	90.9	
No. of subordinates	≤10	122	51.7	103	55.7	19	37.3	0.020*	79	59.4	40	40.4	0.004**
	≥11	114	48.3	82	44.3	32	62.7		54	40.6	59	59.6	
No. of subordinate occupations	<3	168	71.2	137	74.1	31	60.8	0.063	96	72.2	69	69.7	0.882
	≥3	64	27.1	45	24.3	19	37.3		36	27.1	27	27.3	
No. of non-permanent staff	≤3	108	45.8	85	45.9	23	45.1	0.473	57	42.9	49	49.5	0.781
	≥4	102	43.2	76	41.1	26	51.0		56	42.1	44	44.4	

*p<0.05, **p<0.01

Chi-squared test

†) Fisher's exact test

Proportions for each characteristic (%) were calculated without imputation of missing values.

We then examined the relationship between each of these groups and the PHN's personal and organizational factors. The results showed that conflict awareness frequency differed significantly according to the background characteristics of whether or not the PHN's managers had a close advisor (Y/N) ($p<0.05$), the organizational factors of population size ($p<0.05$), and number of subordinates ($p<0.05$).

Furthermore, in addition to the above three variables (presence of a close advisor (Y/N) ($p<0.05$), organizational factors of population size ($p<0.05$), and number of subordinates ($p<0.01$)), the background characteristics of the percentage of managers and respondents' job experience (Y/N) significantly affected the conflict handling ratio. ($p<0.05$)

(2) Results of multiple regression analysis (Table 6)

To investigate the factors affecting the frequency of perceived conflicts among PHN's managers, a multiple regression analysis using the stepwise method was conducted with the dependent variable as the frequency of perceived conflicts and the explanatory variables as background characteristics and conflict-handling styles.

In consideration of multicollinearity through correlation analysis among the explanatory variables, four items were removed from this study: years of experience as a health worker, years of experience in the current position, number of subordinates, and percentage of conflicts handled.

As shown in Table 6, the results of the multiple regression analysis showed a positive association with managerial work fraction. On the other hand, there was a negative association with "number of subordinate occupations," "integrating" of conflict-handling styles," "superior's occupation (dummy variables: PHN's =0, others=1," and "population size (dummy variables: <200,000 ppl=0, ≥200,000 ppl=1)" (adjusted R2=0.397, $p<0.001$).

VI. Discussion

1. Characteristics related to selection of conflict-handling style

Although this study is limited in its ability to make simple comparisons because there are no studies on conflicts targeting PHN's, we would like to focus on previous studies from other countries on nursing managers because of their commonality as both managers and nurses.

The results of this study revealed that Japanese PHN's managers most frequently selected the "integrating" style as their conflict management style, followed by "compromising," "avoiding," "yielding," and "forcing" . Among these five styles, "integrating" is said to be the style expected to create the most desirable interrelationships [21]. In a study aimed at examining the conflict management styles of nursing managers working in Jordanian hospitals [22], the "integrating" style was chosen most often and the "forcing" style least often, supporting the results of this study. In addition, a study of nurse managers working in hospitals in other countries [23,24]also found that the "integrating" style was most commonly selected. Furthermore, this study reported that managers with diplomatic and conscientious personality traits selected the "integrating" style, while emotionally inconsistent managers selected the "avoiding" style. While both studies are similar in that the "integrating" style was the most frequently selected, the order of responses for the other conflict management skills is not entirely consistent.

On the other hand, in a survey of nursing managers working in Portuguese hospitals [25], the "forcing" style (original: force strategies) was the most common, while the "integrating" style (original: cooperative strategies) was paradoxically limited to once a month. Furthermore, 60% of the nursing managers in the survey indicated that they

Table 6 Association with conflict perception (Multiple-linear Regression: stepwise method)

	partial regression coefficient			95%CI for B		collinearity	
Independent Variables	non-standardization (B)	β	p-value	lower limit	upper limit	tolerance level	VIF
(constant)	8.483		<0.001	5.782	11.184		
Number of subordinate occupations	-0.463	-0.469	0.001***	-0.725	-0.201	0.909	1.100
Conflict handling style: integrating	-0.206	-0.408	0.003**	-0.336	-0.075	0.956	1.046
Superior's occupation (0=PHN, 1=others)	-2.820	-0.373	0.007**	-4.818	-0.823	0.915	1.093
Managerial work fraction	0.015	0.308	0.023*	0.002	0.027	0.919	1,088
Population size (0=<200,000 ppl, 1=≥200,000 ppl)	-0.745	-0.301	0.025*	- 1.390	- 0.100	0.94	1.064
coefficient of determination R^2 (ajusted R^2) 0.475 (0.397)							
F(5, 34) 6.140***							

dependent variables: conflict awareness frequency

Deleted Variables:age, yearsof managerial experience,no. of previous positions, No. of close advisors, No. of non-permanent staff,basic education level, goverment facility, model, supervisor job title, municipality type, job position,, conflict handling style forcing,compromising,yielding and avoidance

*<0.05. **<0.01. ***<0.001

have to deal with conflicts on a daily basis. Therefore, while recognizing the importance of dialogue, they tend to act compulsively in their daily work.

In the case of Japanese PHN's managers, the survey results revealed that those who were more frequently aware of conflicts were significantly more likely to choose the "forcing" style ($P<0.01$). This result can be interpreted as suggesting that managerial nurses who are frequently aware of conflicts have difficulty dealing with them according to the conflict style they consider desirable. Rahim [6] found that the "forcing" style (original; dominating) is more likely to be used when the issues involved in the conflict are minor or important to you, but is inappropriate when a quick decision is not required, he argues. It has been suggested that improved skills in effectively dealing with conflicts may lead to a reduction in perceived frequency.

On the other hand, the relationship between conflict-handling style and job position also revealed that section managers and below were more likely to choose the "yielding" style than section managers and above. This result is consistent with a previous study of nurses working in a Mississippi hospital [8], suggesting that the power balance associated with position and years of experience may also influence the choice of conflict-handling style.

In this study, for PHN's managers, only women were analyzed, but prior research has shown that men tend to choose the "forcing" (original; competing) type more than women [26].

As of March 2020, the male-to-female ratio of public health nurses in Japan was only about 3% of all public health nurses [27]. Although the number of male PHN has been increasing every year in recent years, it will be some time before a certain number of PHN's in management positions are appointed; it will be necessary to include gender differences in future studies. It is believed that nursing managers will be able to support themselves and others by appropriately handling conflicts [28]. In the future, there is a need to further examine the relationship between personality traits, working conditions, various other factors, and conflict-handling styles.

2. Perceptions of conflicts and influencing factors in PHN's managers

Approximately 20% of PHN's managers were aware of conflicts occurring at least twice per week in the course of performing their duties. And they spent approximately 25% of their work time to resolve the conflicts they recognized. In addition, the results of the examination of factors affecting the perception of conflicts showed that "number of job titles of subordinates," ""integration" of conflict-handling styles," "position of supervisor " and "population size" were negatively correlated. European and U.S. nursing managers devote approximately 20% of their work time to dealing with conflicts [29]. Therefore, the conflict-handling rate of Japanese PHN's managers is higher than that of Western nurse managers.

In general, in hospitals, nurses comprise the majority of the organization. However, within municipal organizations, the most common occupations are administrative staff, and PHNs are in the minority. In the results of the present survey, approximately 70% of the supervisors of PHN's managers were administrative staff. In the results of a previous survey conducted by the authors, the most common job title that perceived conflicts in PHN's managers was administrative staff [16]. A study focusing on the dilemma of staff PHNs in Japanese local governments showed differences, with administrative staff being more concerned with project procedures and PHN's more concerned with project content [30]. This highlight the need to share the purpose and effectiveness of a project. Therefore, for PHN's managers to effectively deal with conflicts with administrative staff, it would be beneficial for them to intentionally develop skills in dealing with conflicts that arise with administrative staff through their daily work, beginning when they are staff public health nurses.

On the other hand, the results of the analysis of factors affecting the perception of conflict showed a negative correlation with the "number of subordinate positions" and "population size." Generaly, the size of a municipality's population is proportional to the size of its organization. Therefore, it was assumed that the larger the size of the municipality in which the PHN's managers work, the greater the opportunity to recognize conflicts with various third parties inside and outside the organization, and the greater the recognition of conflicts, the more proportional it would be. However, the results obtained in this study were different. One possible reason for this may be that, in general, amicable work environments tend to have fewer interpersonal conflicts and are better able to fulfill their roles [31]. In other words, it is possible that the work environment and organizational climate, rather than simply the variety of job types or the number of people in the organization, may influenc the perception of conflicts. Alternatively, if the organizational size of the managerial health professional's work environment is large, and if there are many types of subordinate positions under his/her supervision, the environment can be paraphrased as a human environment in which they can demonstrate the wealth of skills and knowledge necessary to carry out organizational goals.

Therefore, the presence of a diverse professional workforce was considered to indicate a beneficial environment for management health professionals.

Furthermore, as mentioned in the introduction, owing to the recent increase in the complexity of community health issues in Japan, the organizational structure centered on public health centers is staffed by a diverse range of professions [32]. In a survey of public health nurses regarding their recognition of the importance of health activities [33], more than 80% of public health nurses recognized the importance of coordinating their organizations, and gained experience in working with multiple professions through daily activities. It was assumed that this background of community health administration and the results of public health nurses' activities to date had an impact on the level of recognition of conflicts.

VII. Research limitations and future directions

Since most of the interpretation of the results of this study is based on previous studies of nurses working in hospitals in other countries, there may be limitations to the presenting of characteristics of PHN's managers working in Japanese municipalities. In addition, it has been noted that studies conducted in other countries have also observed various contradictory results when demographic variables are taken into account [34], and one should be cautious about making simple comparisons with other cultures.

In addition, there have been no studies of conflicts targeting PHN, which may have led to differences in the understanding of the term "conflicts" among the collaborators of this study. Furthermore, the individual responses regarding the ratio of conflict awareness to conflict-handling styles depended on subjective evaluations, which may have been influenced by recall bias, which limits our ability to say that the results of this study are representative of the actual situation.

In the future, it is expected that the results of this study will be used as a basis for the development of a scale that reflects the actual situation of conflicts among PHN's managers, and for implementation research to clarify the relationship between conflict-handling styles and their effects on management work. In addition, further exploration through comparisons and development into a survey of the actual situation of conflicts among health workers overseas is desirable.

VIII. Conclusion

About 20% of PHN's managers frequently perceived conflicts in their job performance and 1/4 of their workload was in dealing with them.

Of the five handling styles for conflicts, the choice of "integrating" style, which is considered a win-win for both parties involved in the differences, was the most common.

However, PHN's managers, who frequently perceived conflicts were negatively associated with the "integrating" style choice. The results suggest that improving skills in dealing with differences in views of diverse stakeholders, even before becoming managers, may help PHN's managers, perform their managerial duties.

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Conflicts of interest

No conflicts of interest.

References

[1] 厚生労働省，編．厚生労働白書．平成30年版. 2019. p.365-372.
Ministry of Health, Labour and Welfare (Japan). [Kosei rodo hakusho Heisei 30nenban.] 2019. p.365-372. (in Japanese)

[2] 厚生労働省．平成24年度保健師活動領域調査：結果の概要. 2016.
Ministry of Health, Labour and Welfare (Japan). [Hokenshi katsudo ryoiki chosa.] 2016. (in Japanese)

[3] 総務省．平成31年度版「地方財政の状況」の概要. 2019. p.1-23.
Ministry of Internal Affairs and Communications (Japan). [White Paper on Local Public Finance. 2019. https://www.soumu.go.jp/main_content/000605636.pdf (in Japanese) (accessed2022-05-24)

[4] 佐伯和子，大野昌美，織田初江．保健福祉計画策定における保健師が認識する困難．北陸公衆衛生学会誌. 2006;33(1):42-46.
Saeki K, Ohno M, Oda H. [Difficulties faced by public health nurses in preparing community health and welfare plans.] Hokuriku Journal of Public Health. 2006;33(1):42-46. (in Japanese)

[5] Fiore T. Resolving workplace conflict. 4 ways to a win-win solution. 2004. https://www.zenbusiness.com/blog/4-ways-to-resolve-workplace-conflict/ (accessed 2022-08-05)

[6] Rahim MA. A strategy for managing conflict in complex organizsation. Human resolution. 1985;38(1):81-89.

[7] Johansen ML. Conflict management style, supportive work environments and the experience of work stress in emergency nurses. Journal of nursing management. 2016;24(2):211-218.

[8] Ahanchian MR. Conflict management styles among Iranian critical care nursing staff: a cross-sectional study. Dimensions of critical care nursing. 2015;34(3):140-145.

[9] Taylor B. Identifying and transforming dysfunctional nurse-nurse relationship through reflective practice and acion reserch. International journal of nursing practice. 2001;7(6):406-413.

[10] Whitworth BS. Is there a relationship between personality type and preferred conflict-handling styles? An exploratory study of registered nurses in southern Mississippi. Journal of nursing management. 2008;16(8):921-932.

[11] Jones L, Harden J, McKenna J. Can brief training improve managers' ability to deal with conflict? Nursing Times. 2019;115(3):28-32.

[12] 松浦正子，林千冬．看護師長のコンフリクト対処行動．日本看護管理学会誌. 2005;8(2):21-29.
Matsuura M, Hayashi T. [The conflict management style by nurse managers.] The Journal of the Japan Academy of Nursing Administration and Policies. 2005;8(2):21-29. (in Japanese)

[13] 大西勝二．職場での対人葛藤発生時における解決目標と方略．産業・組織心理学研究. 2002;16(1):23-33.
Ohnishi K. [The goals and strategies with regard to interpersonal conflicts in the workplace.] Japanese Association of Indutsrial Organizational Psychology Journal. 2002;16(1):23-33. (in Japanese)

[14] Moriizumi S, Takai J. The relationships between Japanese interpersonal conflict styles and their language expressions. The Journal of Social Psychology. 2010;150(5):520-539.

[15] Inoue A, Kawakami N. Interpersonal conflict and depression among Japanese workers with high or low socioeconomic status: findings from the Japan Work Stress and Health Cohort Study. Social Science & Medicine. 2010;71(1):173-180.

[16] 奥田博子，横山徹爾，武田文，曽根智史．行政の管理職保健師による職務遂行上に認知したコンフリクトへの対処．保健医療科学. 2019;68(3):259-269.
Okuda H, Yokoyama T, Takeda F, Sone T. [The process of coping with conflicts as recognized by managers of Public Health Nurses on the job performance.] Journal of the National Institute of Public Health. 2019;68(3):259-269. (in Japanese)

[17] 加藤司．大学生の対人葛藤方略スタイルとパーソナリティ，精神的健康との関連性について．社会心理学研究. 2003;18(2):78-88.
Kato T. [Styles of handling interpersonal conflict, personality, and mental health in undergraduate students.] Japanese Journal of Social Psychology. 2003;18(2):78-88. (in Japanese)

[18] Rahim MA, Bonoma TV. Managing organaizational conflict: A model for diagnosis and intervention. Psychological Reports. 1979;44(3):1323-1344.

[19] 加藤司．対人ストレスコーピング，対人葛藤方略と精神的健康との関連性―対人ストレスコーピング尺度の妥当性の検証―．現代社会研究. 2006;(4):3-9.
Kato T. [Coping behavior with interpersonal stress, interpersonal conflict strategy, and mental health: examining the validation of the interpersonal stress-coping inventory.] The journal of Contemporary Social Sciences. 2006;(4):3-9. (in Japanese)

[20] Rahim MA. A measure of conflict styles of handling interpersonal conflict. The Academy of Management Journal. 1983;26(2):368-376.

[21] Friedman RA, Tidd ST, Currall SC, Tsai JC. What goes around comes around: the impact of personal conflict style on work conflict and stress. The international journal of conflict management. 2000;11(1):32-55.

[22] Hamdan ZAI, Ta'amneh IAAI, Rayan A, Bawadi H. The impact of emotional intelligence on conflict management styles used by jordanian nurse managers. Journal of nursing management. 2019;27(3):560-566.

[23] Gokoglan E, Bakar EO. The relationship between nurse managers' personality traits and their conflict management strategy preferences. Journal of nursing management. 2021;29(5):1239-1245.

[24] Hamdan ZAl, Shukri R, Anthony D. Conflict management styles used by nurse managers in the Sultanate of Oman. Journal of culinical nursing. 2011;20(3-4):571-580.

[25] Martins MM, Trindade LL, Vandresen L, Amestoy SC, Prata AP, Vilela C. Conflict management strategies used by Portuguese nurse managers. Revista Brasileira de Enfermagem. 2020;73(suppl 6):e20190336.

[26] Dahshan MEAE, Keshk LI. Managers'conflict management styles and its effect on staff nurses' turnover intention at Shebin El Kom Hospitals, menoufiya governorate. World journal of Medical Sciences. 2014;11(1):132-143.

[27] 厚生労働省．結果の概要. 1　就業保健師・助産師・看護師・准看護師．令和2年衛生行政報告例（就業医療関係者）の概況.
Ministry of Health, Labour and Welfare (Japan). [Kekka no gaiyo. 1. Shugyo hokenshi / josanshi / kangoshi / junkangoshi. Reiwa 2 nen eisei gyosei hokokurei (gyo iryo kankeisha) no gaikyo.] https://www.mhlw.go.jp/toukei/saikin/hw/eisei/20/dl/kekka1.pdf (in Japanese) (accessed 2022-08-05)

[28] Brinkert R. A literature review of conflict communication causes, costs, benefits and interventions in nursing. Journal of nursing management. 2010;18(2):145-156.

[29] McElhaney R. Conflict management in nursing administration. Nursing Management. 1996;27(3):49-50.

[30] 大森純子，宮崎紀枝，麻原きよみ，百瀬由美子，長江弘子，加藤典子，他．保健事業の展開において保健師と事務系職員の意見が異なる状況に関する質的分析．日本地域看護学会誌. 2007;9(2):81-86.
Omori J, Miyazaki T, Asahara K, et al. [Qualitative analysis of the conflicts with administrators experienced by public health nurses in planning and implementing public health programs.] Japan Academy of Community Health Nursing. 2007;9(2):81-86. (in Japanese)

[31] Rhoades L, Eisenberger R. Perceived organizational support: a review of the literature. The Journal of applied psychology. 2002;87(4):698-714.

[32] Katsuda N, Hinohara Y, Tomita K, Hamajima N. Structure and roles of public health centers (hokenjo) in Japan. Nagoya journal of medical science. 2011;73(1-2):59-68.

[33] Hirano M, Saeki K, Kawaharada M, Ueda I. Awareness of the importance of Public Health nursing activities in Japan. Journal of community health. 2011;36(5):765-771.

[34] Labrague LJ, Hamdan ZAI, McEnroe-Petitte DM. An integrative review on conflict management styles among nursing professionals: implications for nursing management. Journal of nursing management. 2018;26(8):902-917.

＜原著＞

管理職保健師のコンフリクトの実態
―コンフリクトの現状と影響を及ぼす要因―

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抄録

研究目的：本研究は，地域保健行政に従事する管理職保健師が，管理職としての職務遂行上に認知するコンフリクトの実態と，その要因を明らかにすることを目的とした．

研究方法：層化無作為抽出により選定した14都道府県下，384名の管理職保健師を対象に，自記式質問紙調査票を用いた郵送調査を実施した．主な調査内容は，基本属性，管理職の職務遂行上において認知するコンフリクトの実態，対処スタイルであった．分析方法は，記述統計，平均の差の検定，コンフリクトの認知頻度を従属変数，回答者の基本属性，コンフリクトの対処スタイルを説明変数とした重回帰分析（ステップワイズ法）を行った．統計解析にはSPSS Ver.25を使用し，両側検定5％を有意水準とした．

結果：回答数（率）は242（63.0％），有効回答数（率）は223（61.5％）であった．コンフリクトの認知頻度が高いと回答した者は51（21.6％）であった．全業務量に比し，コンフリクトへの対処のために要する時間の割合は平均24.3％であった．コンフリクトの対処スタイルは「お互いの考えを理解する”統合”」が69（29.2％）と最も多く，次いで「議論を回避する”回避”」63（26.7％），「お互いの目的を尊重する”統合”」48（20.3％）であった．重回帰分析を用いて，コンフリクトの認知頻度に影響を与える要因を検討した．その結果，管理職の業務割合との間に正の関連，部下の職種の数，対処スタイルの“統合”，上司の職種，人口規模の間に負の関連が認められた．

結論：管理職保健師の約２割が職務遂行上のコンフリクトを頻繁に認知し，その対処のために全業務量の1/4の時間を費やしていた．コンフリクトの対処スタイルの”統合”は，双方が満足する解決策を導く望ましい方法とされている．管理職保健師が，望ましい対処スタイルを選択することが，職務遂行上の一助となる可能性が示唆された．

キーワード：保健師，管理職，職務コンフリクト，対処スタイル