

Organizational Climate for Health to Enhance Psychological Safety in Nursing Organizations

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ABSTRACT

In this study, we examined the relationship between psychological safety and organizational health promotion support for nurses to determine the organizational climate for health that enhances psychological safety. A web questionnaire was administered to nurses working in hospitals in Japan with items on attributes, health promotion support, and psychological safety. The survey was conducted in March 2022, and the data from 377 nurses were analyzed. Many items related to the organizational climate of health and health promotion efforts were significantly correlated with psychological safety scores ($p < 0.05$). The items requiring priority improvement were “high interest for health and safety of hospital organizations” and “high interest in creating a healthy working environment for hospital organizations.” Thus, it is important to consider how to make the health support system known and promote its use so that nurses can continue working in a healthy and motivated manner. In addition, as the psychological safety of mid-level and staff nurses is low, it is important to consider specialized support for them.

Keywords: Psychological safety, Health promotion, Nursing organizations, Organizational climate for health

INTRODUCTION

As medical care becomes more sophisticated and responds to the increasingly diverse needs of patients, the roles of nurses have become more diverse and complex. The number of medical institutions where nurses work is expanding from hospitals and clinics to visiting nursing stations and nursing care facilities. As nurses' roles and scope of work expand, an increasing number of them experience mental health problems because of the stress caused by these duties. Over the past few years, the turnover rate for nurses has remained between 10% and 11%; however, recently, the turnover has increased due to the new coronavirus, highlighting the problem of a shortage of nurses (Japan Nursing Association, 2023). Strengthening efforts to prevent nurses from becoming mentally ill or leaving their jobs is an urgent issue.

The Japan Nursing Association has published occupational safety and health guidelines to continuously provide safe and high-quality nursing care and promote the creation of a workplace environment in which people can engage in health promotion (Japan Nursing Association, 2018). Many companies are working on health management (Ministry of Economy, Trade and Industry, 2022), viewing employee health management from a business perspective and strategically implementing health practices. It has been reported that it can revitalize organizations by increasing employee vitality and productivity (Kuribayashi et al., 2018). Recently, an increasing number of medical and social medical corporations have been certified as excellent health management corporations. Furthermore, psychological safety (Edmondson, 1999) has attracted attention as a measure for preventing turnover and promoting retention. A workplace with high psychological safety leads to revitalization of the organization, such as improved employee engagement and performance, and has been reported to have beneficial mental health effects such as alleviating employee stress (Miyairi, 2022). Psychological safety in medical settings is also related to medical safety (Tatsumi, 2020). By creating a medical environment with high psychological safety, we can expect to improve the health of medical workers, revitalize organizations, and improve medical safety.

Therefore, in this study, we clarify the relationship between organizational culture related to health, such as organizational and individual health awareness and health promotion support, and psychological safety in medical institutions.

METHOD

An online survey was conducted targeting full-time nurses working in hospitals in Japan with more than 100 beds. The survey was conducted in March 2022, and valid responses were obtained from 377 people, based on the response time and straight-line cut of responses. The survey included questions about personal attributes, such as age and years of service, health culture indicators (Takahashi et al., 2022), and psychological safety (Edmondson, 1999; Inaba et al., 2021).

Ethical approval was obtained from the ethics committee of the institution with which the principal investigator is affiliated. The web survey start screen clearly stated the purpose of the survey and indicated that clicking the response button constituted consent.

RESULT

The attributes of the subjects (Table 1) were: 17.2% were male, 82.8% were female, their average age was 43.1 ± 9.6 years, and their average number of years of employment was 12.6 ± 8.8 years. Sorting psychological safety scores in descending order of age, the participants were in their 50s, 20s, 40s, and 30s, and the years of work were 20 or more, less than 5 years, 10 to 19 years, and 5 to 9 years. There was a significant difference between executives and staff ($F(3,019) = 0.000$). Additionally, there was a tendency for the scores to be lower when preschool children were present ($p < 0.05$).

Table 1. Rate of attributes and correlation with psychological safety (PS).

Attribute item		n	%	PS score mean	PS factor β	
Gender	male	65	17.2%	28.9	0.814	
	female	312	82.8%	29.8		
Age	20's	36	9.5%	30.1	0.069	
	30's	106	28.1%	29.0		
	40's	131	34.7%	29.1		
	over 50's	104	27.6%	30.8		
Years of service at their hospital	less than 5 years	66	17.5%	30.2	-0.169	
	5 - 9 years	95	25.2%	28.8		
	10 - 19 years	142	37.7%	29.4		
	over 20 years	74	19.6%	30.8		
Post	staff nurses	268	71.1%	28.8	1.701 ***	
	chief nurses	81	21.5%	31.3		
	manager nurses	28	7.4%	32.5		
Number of hospital beds	100 beds	87	23.1%	29.5	0.019	
	200 beds	86	22.8%	30.0		
	300 beds	67	17.8%	29.8		
	400 beds	42	11.1%	29.5		
	over 500 beds	95	25.2%	29.4		
Working hours per week	less than 40 hours	82	21.8%	30.2	-0.097	
	40 - 49 hours	204	54.1%	29.9		
	50 - 59 hours	56	14.9%	28.6		
	over 60 hours	35	9.3%	28.5		
Presence of preschool children	yes	85	22.5%	28.7	1.111 *	
	no	292	77.5%	29.9		
Parental care	yes	19	5.0%	29.9	0.615	
	no	358	95.0%	29.6		
***p<.001, **p<.01, *p<.05.				R ²	0.05	
				Δ R ²	0.02	*

Next, it checked their awareness of health promotion measures at their workplace, and 12.2% of the nurses responded that they fully understood the contents of their health maintenance and promotion policies. "Procedures for dealing with health problems" was understood by 31.8% and "Support system for returning to work after long leave" by 44.3%. Comparing the scores for known/unknown health promotion measures, the psychological safety scores of the known group were significantly higher for all items ($p < 0.01$). Health promotion initiative (Table 2) was examined with 10 items regarding support and initiatives from the workplace, 3 items regarding support from superiors and senior nurses, 2 items regarding support from colleagues, and 5 items regarding own efforts. In descending order of the percentage who agreed or strongly agreed with the idea of health promotion, they received support from their workplaces: "Providing a mental support system" and "Regular safety and health discussions," from their superiors: "Checking the physical condition" and "Supporting participation in health promotion," and from their colleagues: "Dealing with poor physical condition" and "Concern for each other's health" (Q2, 6, 11, 13–15). Contrariwise, the following forms of support were reported by less than 30%: "Providing health promotion programs," "Providing health information," "Participation in health promotion plans," "Reflecting staff opinions in health promotion plans," and "Introduction of equipment to establish exercise habits" (Q1, 3–5, 9).

Table 2. Rate of health promotion support and correlation with psychological safety (PS).

	Degree of Health Promotio	Relationship with PS r	PS factor β	
Support and initiatives from your workplace (the hospital)				
Q1	Providing health promotion programs	20.4%	0.243 *	-0.105
Q2	Providing a mental support system	51.5%	0.368 **	-1.186 ***
Q3	Providing health information	28.6%	0.255 **	-0.169
Q4	Participation in health promotion plans	22.0%	0.210 *	0.814
Q5	Reflecting staff opinions in health promotion plans	26.0%	0.271 **	0.131
Q6	Regular safety and health discussions	62.6%	0.097	0.251
Q7	Concern for staff health	40.8%	0.355 **	-0.358
Q8	Interest to creating a healthy work environment	41.6%	0.394 **	-1.657 ***
Q9	Introduction of equipment to establish exercise habits	14.1%	0.176	0.368
Q10	Active participation of management in health promotion initiatives	48.5%	0.305 **	-0.388
Support from your boss or senior nurse				
Q11	Checking the physical condition of subordinates	51.2%	0.321 **	0.062
Q12	Communicating the importance of health promotion	31.0%	0.276 **	0.454
Q13	Supporting participation in health promotion	51.2%	0.287 **	-0.751
Support from colleagues				
Q14	Dealing with poor physical condition	75.6%	0.449 **	-2.525 ***
Q15	Concern for each other's health	53.3%	0.272 **	-0.372
Initiatives to improve own health				
Q16	Talking about own health improvement efforts	30.2%	0.250 *	—
Q17	Encouragement of colleagues' health promotion efforts	31.0%	0.189	—
Q18	Participating in health promotion initiatives with colleagues	25.7%	0.166	—
Q19	Participation in community contribution activities	26.8%	0.098	—
Q20	Participation in hospital exercise promotion activities	27.6%	0.142	—
*** $p < .001$, ** $p < .01$, * $p < .05$.			R^2	0.30
			ΔR^2	0.27 ***

Furthermore, efforts to improve one's own health (Q16–20) were reported by around 25–30%. Confirming the correlation between efforts to promote health and psychological safety scores, 8 out of 10 workplace items were reported (Q1–5, 7, 8, 10), including provision of support, provision of information, interest, and participation. Finally, the items for support from superiors and colleagues (Q11–15) were all highly relevant. However, the relationship between one's own health promotion efforts and psychological safety was weak. Therefore, as it is highly related to support from workplaces, superiors, and coworkers, we conducted a multiple regression analysis with psychological safety as the dependent variable. “Providing a mental support system” (Q2), “Interest to creating a healthy work environment” (Q8), and “Dealing with poor physical condition” from colleagues (Q14) showed significant values.

Next, we examined the health promotion support that should be reinforced to increase the psychological safety of the organization through CS portfolio analysis (Figure 1). This analysis makes it possible to prioritize areas that need improvement by clarifying the status of efforts to promote health and the items that are emphasized (items that are strongly related to psychological safety). Health promotion support, which is considered a priority improvement item, was also identified. “Concern for staff health” (Q7) and “Interest in creating a healthy work environment” (Q8) have the highest priority, followed by “Reflecting staff opinions in health promotion plans” (Q5) and “Communicating the importance of health promotion” (Q12).

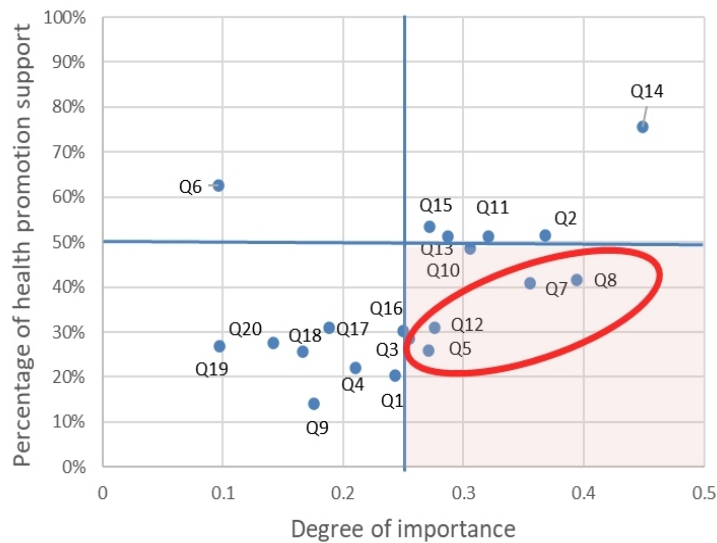


Figure 1: CS portfolio analysis of health promotion support.

DISCUSSION

Trends in Psychological Safety From the Perspective of Attributes

Comparing psychological safety scores based on participants' attributes, nurses in their 30s and 40s, nurses without a position, and nurses with preschool children felt that their workplace had low psychological safety. Until now, it has been thought that nurses who have only recently joined the profession or are young may lack confidence, be unable to say what they want to say, or find it difficult to speak up. However, the inexperienced nurses in this study had high psychological safety scores. Many hospitals use the preceptor system (one-on-one instruction) as the training style for new nurses, allowing them to feel free to ask the preceptor questions and receive detailed guidance, which was considered as maintaining psychological safety.

Psychological Safety and Health Organizational Climate

Although most hospitals have health promotion measures in place, only 10% of nurses were aware of "health maintenance and promotion policies" and only 30% were aware of "procedures for dealing with health problems." Considering that nurses who perceived psychological safety had significantly higher scores, it is necessary for organizations to proactively disseminate policies and coping procedures. Additionally, although there was a strong relationship between organizational health promotion support from hospitals, superiors, and coworkers and psychological safety, there were many support measures that respondents felt were not supported or were not being implemented. It is necessary to improve the organizational climate to raise awareness of health promotion. In particular, "Communicating the importance of health promotion" has a strong impact on psychological safety and

has been cited as an important improvement item. It is desirable to implement measures to promote health in the workplace, such as providing healthy menus. In addition, regarding “Concern for staff health,” which was a high-priority improvement item, it is desirable to incorporate a system in the workplace that allows the physical and mental health status of each nurse to be checked.

Discrepancies Between Organizational and Individual Perceptions

This study does not confirm the kind of health promotion and support hospital organizations provide. Depending on the strength of respondents’ health awareness, perceptions of support measures may differ even within the same organization. Therefore, by investigating the health promotion support provided by organizations and the level of awareness of the support measures introduced by hospitals within the same organization, we can understand the characteristics of organizational culture that enhance psychological safety.

CONCLUSION

This study investigated workplace health promotion support and psychological safety and considered support measures to increase psychological safety as a clue to solving the problems of mental stress and turnover due to the expansion of nurses’ duties and roles. The results of an online survey of regular employees working in hospitals with more than 100 beds revealed a strong relationship between organizational health promotion support and psychological safety. It was surmised that mental support in the workplace, creating a healthy work environment, and how colleagues responded when they felt unwell had an impact on psychological safety. For nurses to continue working with motivation and enthusiasm, it is essential to consider ways to make the system known and promote its use. In addition, because the psychological safety of mid-career nurses and nurses with no positions is low, it is important to consider specific support measures for them in order to revitalize organizations.

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