

Gender Differences in Job Stress and Stress Coping Strategies among Korean Nurses

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Abstract

Gender differences among nursing professionals were investigated in the area of job stress and stress coping strategies. Seventy six male nurses and 93 female nurses from 3 general hospitals were participated in this study. Korean job stress measurement developed by Chang (2005) and stress coping measurement modified by Yim (1994) were used. Using SPSS 22.0 program, gender differences in the level of job stress and coping strategies were compared by frequency, percentage, and independent t-test. Furthermore, the level of job stress and coping strategies according to the duration of work experience between male and female nurses were compared. The overall levels of job stress were significantly higher among male nurses than female nurses. In specific, the stress level from interpersonal conflict was higher among male nurses. According to duration of work, male nurses working more than 5 years showed higher level of job stress than female nurses in the area of autonomy, interpersonal conflict, and lack of reward. For coping strategies, more male nurses working more than 5 years used challenging, emotion focused, and avoidant coping strategies. In conclusion, male nurses have more difficulties in interpersonal conflicts than female nurses. The longer male nurses worked, the higher and broader their job stress level became. Therefore, specific continuing education program only for male nurses should be developed and implemented.

Keywords: Job stress, Nurse, Coping, Strategy

1. Introduction

In a rapid changing modern society, the focus of health care has moved from the treatment and management of diseases into the maintenance and improvement of health among general population. As results, general expectations about the role of nurses to contribute to health promotion increased. Higher standards for the nursing professionals resulted in increasing the level of job stress among clinical nurses, and currently a nursing job is regarded as one of the stressful occupations [1].

Despite, the proportion of male nurses has rapidly increased during the last 5 years due to the difficulty to obtain stable jobs for young generation and increased social demands for medical services [2]. Male nurses are different from traditional female nurses in many ways and they may be different in responding job stress and stress coping strategies. Male nurses have a difficulty in overcoming the social consensus of nursing as a female job. Furthermore, they might have difficulties in fitting into the nursing system in which most of the members were women. In general, health care systems in Korea are rigid and vertical organization and male nurses may have difficulty adapting to this. Excessive job stress can lead to absenteeism, higher turnover rate, higher job dissatisfaction and consequent reduction in job productivity.

Therefore, this study was conducted to identify gender differences in job stress and coping strategies among male and female nurses. Also, gender differences in job stress according to duration of work were investigated.

2. Methods

2.1. Design and Sample

A cross-sectional survey design was used for this study. A convenience sample of 169 nurses was recruited. Seventy six male nurses and 93 female nurses from 3 general hospitals located in Seoul and Gyeonggi province were participated in this study. Physician's assistants, surgeon's assistants, and nursing administrators were excluded in order to maintain the homogeneity of sampling population. Sufficiency of the number of subjects for this study was estimated by using G*power 3.1.7 program with medium effect size ($d=.50$), a power of .80 and a two-tailed alpha of .05 [3].

2.2. Measurements

Korea Occupational Stress Scale (KOSS) developed by Chang [4] was used to identify the level and area of job stress among male and female nurses. The scale consists of 43 items in 8 subcategories: physical environment, job demands, job autonomy, interpersonal conflicts, job insecurity, organizational system, lack of reward, and workplace culture. Physical environment means the risk of routine surrounding of the workers including general hazard from the type of work, contamination of air, or physical burden. Job demands include pressure on time limit, increase in workload, individual responsibility, or excessive job burden. Job autonomy includes technical discretion and autonomy, business predictability, and the authority to perform such duties. Interpersonal conflicts include overall support and specific supports of colleague and superiors. Job insecurity includes job opportunities and employment instability. Organizational system evaluates the organization's strategic and operational framework, resources, conflicts within the organization, and rational communication. Lack of reward means that assessing the degree of respect that the worker expects compensation for his work including intrinsic motivation, respect, inadequate expectations. Workplace culture is a collective assessment that Korean collectivism tradition, irrational communication system, and informal work culture act as a stressor. Each item consists of 4-point Likert type scale. Higher score means higher level of job stress. The Cronbach's alpha of the instrument in this study was .747.

In order to identify coping strategies against job stress, the way of coping checklist developed by Folkman and Lazarus [5] and modified by Yim [6] was used. It consists of 45 items in 3 subcategories: challenging coping strategy, emotion focused coping strategy, and avoidant coping strategy. Challenging coping strategy means an active, strategic, and positive response including setting up a specific action plan and active commitment and focused and doing one's best. Emotion focused coping strategy means comfort themselves and relieve tension by imaging a better case and encourage themselves. Finally avoidant coping strategy includes showing interest in another thing to get out of work or to get help to other people. Each item consists of 5-point Likert type scale. Higher score in one subcategory means that the person prefers that area of stress coping strategies. The Cronbach's alpha of the instrument in this study was .917.

2.3. Data Analysis

Using SPSS 22.0 program, general characteristics of participants were analyzed by descriptive statistics. In order to identify gender differences in job stress and stress coping strategies, independent t-test were conducted among male and female nurses. Furthermore, to estimate gender differences in job stress according to duration of work, three groups of nurses depending on work experience (1-2 years; 3-4 years; ≥ 5 years) were identified and independent t-test for each group were conducted.

3. Results

3.1. General Characteristics

There were 76 male nurses (45%) and 93 female nurses (55%) in this study. Fifty one nurses (30.2%) have worked less than 2 years, 60 nurses (35.5%) between 3-4 years, and 58 nurses (34.2%) have worked more than 5 years (Table 1).

The total stress level of 169 nurses in this study was 2.68 ± 0.19 . This level was higher than the stress level of 2.47 ± 0.25 in a previous study of 433 nurses working at a university hospital [7]. However, this level was also lower than the stress level of 2.78 ± 0.79 of nurses working in hospitals with no guardians [8] and 3.12 of nurses working in general hospitals [9].

In specific, job stress level of male nurses was significantly higher than that of female nurses (2.71 ± 0.19 vs. 2.65 ± 0.19 , respectively, $t = -2.081$, $p = .039$) (Table 2). This finding is contrary to the previous finding that level of job stress of male nurses was 2.41 ± 0.30 as compared to 2.47 ± 0.25 of female nurses [7]. Also, in a study of 804 workers in large-sized companies, the job stress level of female workers was higher than that of male workers [10]. In order to clearly identify the difference in job stress according to gender, more studies should be conducted.

Among the subcategories of job stress, the stress level of male nurses from interpersonal conflicts was significantly higher than that of female nurses (3.08 ± 0.37 vs. 3.00 ± 0.36 , respectively, $t = -1.467$, $p = .044$) although the difference was marginal. Also, there were no differences in subcategories of job stress level including physical environment, job demands, job autonomy, job insecurity, organizational system, lack of reward, and workplace culture. Although it is difficult to identify gender difference in job stress subcategories since this issue was not widely studied, this finding indicates that male nurses may have a different major stressful area in job stress.

Regarding stress coping strategies, the scores of overall stress coping strategies were higher among male nurses than female nurses. This means male nurses are more actively cope with stress than female nurses. More male nurses used challenging coping strategies than female nurses (3.36 ± 0.38 vs. 3.17 ± 0.49 , respectively, $t = -2.615$, $p = .010$). And although it was not statistically significant, more male nurses also used emotion focused coping strategy and avoidant coping strategy. Interestingly, while female nurses scored highest on emotion focused coping strategy, male nurses scored highest on challenging coping strategy. This result identifies that gender difference exists in stress coping strategy therefore a gender sensitive job support system should be developed to improve job retention of male nurses.

Table 1. General Characteristics of the Participants

Characteristics	Category	n	%
Gender	Male	76	45
	Female	93	55
Duration of Work (years)	1-2	51	30.2
	3-4	60	35.5
	5-6	39	23.1
	7-9	8	4.7
	≥ 10	11	6.5

Table 2. The Level of Job Stress and Coping Strategies among Korean Male and Female Nurses

Characteristics	Category	Male Nurses (M±SD)	Female Nurses (M±SD)	t	p
Job Stress	Physical environment	2.82±0.41	2.78±0.39	-.565	.361
	Job demand	2.87±0.27	2.83±0.24	-.975	.256
	Autonomy	2.75±0.38	2.54±0.40	-3.398	.169
	Interpersonal conflict	3.08±0.37	3.00±0.36	-1.467	.044
	Job insecurity	2.48±0.36	2.51±0.32	.536	.491
	Organizational system	2.50±0.42	2.44±0.48	-.792	.314
	Lack of reward	2.53±0.35	2.47±0.39	-1.160	.225
	Work culture	2.63±0.46	2.60±0.54	-.352	.368
	Total	2.71±0.19	2.65±0.19	-2.081	.039
Stress coping strategies	Challenging coping	3.36±0.38	3.17±0.49	-2.615	.010
	Emotion focused coping	3.33±0.43	3.19±0.50	-1.938	.330
	Avoidant coping	3.28±0.45	3.09±0.48	-2.664	.898

3.2. The Level of Job Stress and Coping Strategies According to Duration of Work

Among nurses working less than 2 years, only job stress level of female nurses in organizational system area was significantly higher than that of male nurses (2.31 ± 0.39 vs. 2.58 ± 0.41 , respectively, $t = 2.302$, $p = .026$) (Table 3). This finding is contrary to the previous findings that male nurses were more unsatisfactory for rigid and vertical organizational structure than female nurses [2]. However, since male nurses were relatively small group in organization system, they could be easily promoted when they were excellent in one area. On the other hand, female nurses were numerically superior therefore they had to become much competitive to be promoted and this might be more stressful situation for female nurses. More details on job stress could be identified in future studies.

Among nurses working between 3 to 4 years, job stress level of male nurses in job autonomy area was significantly higher than that of female nurses (2.82 ± 0.35 vs. 2.43 ± 0.43 , respectively, $t = -3.875$, $p = .001$). This result could be associated with previous finding that job stress level of nurses was highest among nurses between 1 to 4 years of work experience [7]. After a couple of years of nursing work in a specific area, nurses became seeking autonomy to make their own judgements and decisions on clinical nursing practice, and if there was limit on practicing this autonomy, it could be a stressful situation. However, due to gender specific characteristics, male nurses seemed to be more disturbed than female nurses on this limitation.

Among nurses working more than 5 years, job stress levels of male nurses were significantly higher than those of female nurses in the area of autonomy, interpersonal conflicts, organizational system, and lack of reward. As a result, a total stress level of male nurses was significantly higher than that of female nurses (2.82 ± 0.18 vs. 2.68 ± 0.19 , respectively, $t = -2.846$, $p = .006$). Furthermore, all 3 types of stress coping strategy levels of male nurses were significantly higher than those of female nurses. These findings explained relatively higher turnover intention of male nurses who have worked more than 5 years [2]. In their study of 150 male nurses, job satisfaction and organizational commitment were slowly increased until 5 years of work experience showing decreasing turnover intention. However, after more than 5 years of work experience, job satisfaction level rapidly decreased even less than that of the first year and organizational commitment level also slightly decreased. Accordingly, turnover intention became relatively higher. In their regression analysis, organizational commitment was the most important factor

explaining turnover intention. Future studies to investigate factors influencing organizational commitment should be conducted.

Table 3. The Level of Job Stress and Coping Strategies among Korean Male and Female Nurses according to Duration of Work

Characteristics	Category	Male Nurses (M±SD)	Female Nurses (M±SD)	t	p
Duration of Work (1-2 years)					
Job Stress	Physical environment	2.80±0.39	2.75±0.41	-.466	.643
	Job demand	2.86±0.28	2.80±0.23	-.753	.455
	Autonomy	2.49±0.42	2.40±0.37	-.834	.408
	Interpersonal conflict	3.19±0.41	3.13±0.51	-.439	.663
	Job insecurity	2.33±0.35	2.41±0.30	.874	.386
	Organizational system	2.31±0.39	2.58±0.41	2.302	.026
	Lack of reward	2.38±0.32	2.54±0.34	1.724	.091
	Work culture	2.61±0.50	2.42±0.52	-1.313	.195
	total	2.62±0.16	2.63±0.13	.179	.858
Stress coping strategies	Challenging coping	3.19±0.37	3.19±0.38	.035	.972
	Emotion focused coping	3.30±0.49	3.33±0.41	.188	.852
	Avoidant coping	3.23±0.49	3.15±0.39	-.623	.536
Duration of Work (3-4 years)					
Job Stress	Physical environment	2.79±0.43	2.82±0.39	.300	.766
	Job demand	2.89±0.30	2.81±0.20	-1.207	.232
	Autonomy	2.82±0.35	2.43±0.43	-3.875	.001
	Interpersonal conflict	3.01±0.37	2.98±0.30	-.289	.774
	Job insecurity	2.48±0.31	2.50±0.35	.251	.803
	Organizational system	2.52±0.37	2.45±0.51	-.632	.530
	Lack of reward	2.53±0.36	2.43±0.43	-.995	.324
	Work culture	2.60±0.50	2.65±0.55	.368	.714
	Total	2.71±0.19	2.63±0.22	-1.313	.194
Stress coping strategies	Challenging coping	3.35±0.34	3.19±0.58	-1.291	.204
	Emotion focused coping	3.27±0.41	3.25±0.56	-.219	.827
	Avoidant coping	3.23±0.40	3.16±0.53	-.608	.546
Duration of Work (≥ 5 years)					
Job Stress	Physical environment	2.87±0.43	2.77±0.38	-.897	.374
	Job demand	2.87±0.23	2.88±0.28	.130	.897
	Autonomy	2.93±0.23	2.73±0.35	-2.674	.010
	Interpersonal conflict	3.09±0.32	2.93±0.23	-2.225	.030
	Job insecurity	2.66±0.37	2.59±0.31	-.704	.484
	Organizational system	2.69±0.44	2.35±0.50	-2.563	.013
	Lack of reward	2.73±0.28	2.45±0.40	-2.772	.008
	Work culture	2.71±0.39	2.71±0.53	-.037	.971
	Total	2.82±0.18	2.68±0.19	-2.846	.006
Stress coping strategies	Challenging coping	3.58±0.39	3.16±0.51	-3.221	.002
	Emotion focused coping	3.44±0.39	3.04±0.51	-3.079	.003
	Avoidant coping	3.43±0.49	2.99±0.51	-3.152	.003

4. Conclusion

Male nurses have experienced more job stress than female nurses and there were difference in the area of job stress between male and female nurses. This difference was relatively small area of job stress among less than 4 year of work experience. However, among more than 5 years of work experience, gender difference was visible in various areas of job stress and stress coping strategies. Therefore distinct continuing education programs appropriate for male nurses should be developed and implemented.

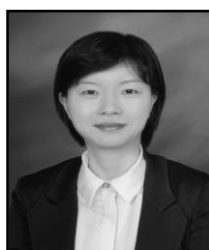
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