

Job Stress and Stress Coping Strategies among Male and Female Korean Nurses

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Abstract. This study was conducted to identify the differences in job stress and stress coping strategies among male and female nurses in order to develop an effective job training program for novice nurses. Seventy six male nurses and 93 female nurses from 3 general hospitals were participated in this survey. Korea Occupational Stress Scale (KOSS) developed by Chang (2005) and Stress Coping Scale modified by Yim (1994) were used. Using SPSS 22.0 program, frequency, percentage, independent *t*-test were conducted. The overall job stress level of male nurses was significantly higher than that of female nurses. Also, the stress level from interpersonal conflict was higher among male nurses than female nurses. More male nurses chose defiant coping strategies than female nurses. In conclusion, gender might be a factor influencing the type of job stress and coping strategies. Therefore gender appropriate program should be included in a continuing education program for nurses.

Keywords: Job stress, Nurse, Coping, Strategy

1 Introduction

In a rapid changing modern society, the focus of health care moved from the disease treatment and management into health maintenance and improvement 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 a nursing job was included as one of the stressful occupations [1]. However, 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. Therefore this study was conducted to identify gender differences in job stress and coping strategies among male and female nurses.

2 Methods

2.1 Design and Sample

A cross-sectional survey design was used for this study. A total of 169 nurses from 3 general hospitals located in Seoul city and Gyeonggi province participated in this survey. A convenience sampling method was used. However, physician's assistants, surgeon's assistants, and nursing administrators were excluded in order to maintain the homogeneity of sampling population. The number of subjects needed in this study was calculated 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 with 8 subcategories: physical environment, job demands, job autonomy, interpersonal conflicts, job insecurity, organizational system, lack of reward, and workplace culture. It consists of 4-point Likert type scale. Higher score means higher level of job stress. The Cronbach's alpha of the instrument 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 with 3 subcategories: defiant coping strategy, emotion focused coping strategy, and evasive coping strategy. It 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 was .917.

2.3 Data analysis

Using SPSS 22.0 program, general characteristics of participants were analyzed by descriptive statistics. In order to identify the difference in job stress and stress coping strategies, independent *t*-test were conducted among male and female nurses.

3 Results

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 addition, job stress level of male nurses was significantly higher than that of female nurses (2.71 ± 0.19 vs. 2.65 ± 0.19 , respectively, $t = -2.081$, $p = .039$) in this study. Interestingly, the level of job stress of male nurses

was 2.41 ± 0.30 as compared to 2.47 ± 0.25 of female nurses in a previous study [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.

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 defiant 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 evasive coping strategy.

Table 1. General characteristics of the participants.

Variables	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 stress coping strategies among Korean 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 demands	2.87±0.27	2.83±0.24	-.975	.256
	Job autonomy	2.75±0.38	2.54±0.40	-3.398	.169
	Interpersonal conflicts	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
	Workplace 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	Defiant 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
	Evasive coping	3.28±0.45	3.09±0.48	-2.664	.898

4 Conclusion

Male nurses have experienced more job stress than female nurses and they have more stress from interpersonal conflicts. Also, there were differences in coping with those job stresses among male and female nurses. Distinct continuing education programs appropriate for male nurses should be developed and implemented.

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