

# The Factors affecting Burnout of the Small and Medium Hospital Nurses

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## Abstract

**Background/Objectives:** The purpose of this study was to identify the factors affecting burnout among nurses in small and medium sized hospitals.

**Methods/Statistical analysis:** A Participants in the study were 200 nurses. As the instruments, a subscale of the Professional Life of Quality Scale and structured questionnaire on self-esteem and job satisfaction was used. Data were analyzed using descriptive statistics, and hierarchical regression.

**Findings:** The mean scores of burnout, self-esteem, compassion satisfaction, and secondary traumatic stress were  $2.68 \pm 0.63$ ,  $3.48 \pm 0.75$ ,  $3.49 \pm 0.68$ , and  $2.77 \pm 0.53$  respectively. And also, the mean score job satisfaction was  $3.53 \pm 0.57$ . As a result of hierarchical regression analysis, Of the variables added in Model 3, only the reward system was a significant factor affecting burnout. Self-esteem, compassion satisfaction, and secondary traumatic stress were also statistically significant factors affecting burnout.

**Improvements/Applications:** The current study suggests that in order to solve the burnout of nurses, secondary traumatic stress should be alleviated, and the reward system in hospitals of Korea should be improved.

**Keywords:** Burnout, Compassion satisfaction, Secondary traumatic stress, Self-esteem, Job satisfaction

## Introduction

A hospital is a place where various occupations provide medical services and are maintained by professional personnel. In health care environments, there is a growing interest in not only patient care but also service satisfaction and quality of care. Since nurses represent the largest number of staff in hospitals, efficient staff management for nurses is very important. According to the survey by Korean Hospital Nurses Association<sup>[1]</sup>, the average turnover rate of nurses was 16.8%, and the turnover rate of nurses in small and medium sized hospitals was higher than that of the upper grade general hospital. In upper grade general hospitals, the main causes of turnover were maladjustment, marriage, childbirth. But in small and medium hospitals,

turnover to other hospitals was the main cause<sup>[1]</sup>. Hospitals with 200 to 300 beds have a poorer working environment and welfare benefits than upper grade general hospitals, and the high turnover rate of nurses causes the remaining nurses to become overworked. As a result, small and medium sized hospitals continue to lack nurse manpower<sup>[2]</sup>. In addition, the overwork and stress of nurses remaining in hospitals can increase burnout.

Burnout is a form of reaction that occurs when one can no longer deal with stress, which causes negative self-concepts, work attitudes, and loss of interest in patients<sup>[3]</sup>. This exhaustion can lead to decreased work motivation or work efficiency, which can increase the likelihood of causing medical accidents and lead to frequent absences and high turnover rates<sup>[4]</sup>.

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Compassion satisfaction is the pleasure of helping others, and it is a pleasant feeling that results from the goodwill of one's colleagues and the ability to help

others<sup>[5]</sup>. People with high compassion satisfaction can reduce burnout by acting as a source of strength to continue working even if their work conditions are very dangerous or high in stress<sup>[6]</sup>. Traumatic stress has a different response pattern depending on whether the stressor is primary or secondary. Secondary traumatic stress is an emotion that arises from knowing about a traumatic event experienced by another meaningful person<sup>[7]</sup>. Lack of adequate treatment for these secondary traumatic stresses causes burnout<sup>[8]</sup>. Nurses can experience secondary traumatic stress in contact with patients who have experienced traumatic events<sup>[9]</sup>.

Another factors affecting burnout is self-esteem. The higher self-esteem, the higher the organizational commitment and job satisfaction, and the lower the intention to turnover<sup>[10]</sup>. Brouwers et al<sup>[11]</sup> found that high self-esteem could be an effective means of preventing burnout in conflict caused by emotional labor. Jurado et al<sup>[12]</sup> also found that the higher the self-esteem, the lower the burnout.

Job satisfaction is a positive influence on job performance as a positive attitude about the job <sup>[13]</sup>. In particular, the job satisfaction of nurses has a positive effect on the reduction of nurse turnover rate, patient satisfaction<sup>[14]</sup>. Therefore, job satisfaction can be a factor of job involvement and motivation <sup>[15]</sup>, and if job satisfaction decreases, burnout increases <sup>[16]</sup>. Therefore, this study was to identify the factors affecting burnout.

## Method

The subjects of the study were two small and medium hospital nurses. To measure burnout,

compassion satisfaction and secondary traumatic stress was used Professional Quality of Life Scale(ProQOL-5) revised by Stamm<sup>[17]</sup>. The tool was approved through the website, and the Korean version was used. The self-esteem scale developed by Rosenberg<sup>[18]</sup> was used by Jon <sup>[19]</sup>, a tool adapted to the Korean situation. The job satisfaction of nurses was assessed the Minnesota Satisfaction Questionnaire (MSQ) Short Form Korean Version developed by the Institute of Vocational Psychology Research at the University of Minnesota<sup>[20]</sup>. The tools are composed of sub domain such as work itself, prospects, sense of achievement, reward system, and human relations.

All data were statistically analyzed using SPSS 23.0. Descriptive statistics, t-test, ANOVAs were conducted and hierarchical regression analysis identified the factors affecting burnout. All subjects completed the informed consent form and agreed to participate prior to administering the study. Participants also received information on this study including research aims, possible risks, and collection procedures.

## Result

### 1. General characteristics of the subjects

The sample data consisted of 200 nurses, 11 males (5.5%), and 189 females (94.5%). Of the 200 nurses, 103 nurses (51.5%) did not have a religion, and 48.5% had a religion. Most participants worked 3 shift duty (121, 60.5%).The Burnout showed a statically significant difference according to age group (F=7.138, p=.001), religion (t=2.441, p=.016), working style(t=3.048, p=.003) and position (t=2.572, p=.012).

**Table 1. General Characteristics**

Variables	Categories	N	%	Mean	SD	t/F(p)
Gender	Male	11	5.5	2.81	.73	.626 (.544)
	Female	189	94.5	2.67	.63	
Age group	21-30	104	52.0	2.82	.59	7.138 (.001)
	31-40	49	24.5	2.66	.69	
	More than 41	47	23.5	2.41	.57	
Religion	Don't have	103	51.5	2.79	.62	2.441 (.016)
	Have	97	48.5	2.57	.62	
Level of Education	College (3yr)	85	42.5	2.74	.63	1.088 (.278)
	University (4yr)	115	57.5	2.64	.63	

Cont... Table 1. General Characteristics

Working style	3 shift work	121	60.5	2.79	.65	3.048 (.003)
	Fixed work	79	39.5	2.52	.57	
Position	Staff nurse	156	78.0	2.74	.63	2.572 (.012)
	Head nurse or manager	44	22.0	2.47	.59	

2. Descriptive statistics and correlations

The mean scores of burnout, self-esteem, compassion satisfaction, and secondary traumatic stress were 2.68±0.63, 3.48±0.75, 3.49±0.68, and 2.77±.53 respectively. And also, the mean score job satisfaction was 3.53±.57 and work itself, prospects, sense of achievement, reward system and personal relations of sub domain were 3.67±.71, 3.40±.86 3.97±.73, 2.72±.68, 3.88±.78 respectively. Burnout was significantly negatively related to self-esteem ( $r = -.768, p < .001$ ), compassion satisfaction ( $r = -.732, p < .001$ ).

Table 2. Descriptive Statistics

Variables	Mean ± SD	Min	Max	Range
Burnout	2.68±.63	1	4.40	1-4.40
Self-esteem	3.48±.75	1.40	5	1.4-50
Compassion satisfaction	3.49±.68	1.60	5	1.6-50
Secondary traumatic stress	2.77±.53	1.60	5	1.6-50
Job satisfaction(total)	3.53±.57	1.75	5	1.75-5
Work itself	3.67±.71	1.50	5	1.50-5
Prospects	3.40±.86	1	5	1-5
Sense of achievement	3.97±.73	2.25	5	2.25-5
Reward system	2.72±.68	1	5	1-5
Personal relations	3.88±.78	1.50	5	1.50-5

Table 3. Correlations among variable

	Burn-out	Self-esteem	Compassion satisfaction	Secondary traumatic stress
Self-esteem	-.768**	1		
Compassion satisfaction	-.732**	.647**	1	
Secondary traumatic stress	.422**	-.308*	.799	1

\*\*p<.001, \*p<.01

3. Factors influencing the burnout of the nurses

The hierarchical regression analysis was conducted to examine the factors affecting burnout. Model 1 included religion, work style, position and age group. Model 2 added self-esteem, compassion satisfaction, and secondary traumatic stress to Model 1, and Model 3 added 6 subdomain of job satisfaction. Multi collinearity was found to be acceptable through tolerances and VIF. In Model 2, self-esteem, compassion satisfaction and secondary traumatic stress were found to be factors significantly associated with burnout. The adjusted explanatory power was 77.1% and increased by 69.5% compared to Model 1. Of the variables added in Model 3, only the reward system was a significant factor affecting burnout. Self-esteem, compassion satisfaction, and secondary traumatic stress were also statistically significant factors affecting burnout. The adjusted explanatory power was 79.0% and increased by 0.5% over Model 2.

**Table 4. Factors affecting nurses' burnout**

Variables	Model 1		Model2		Model3	
	$\beta$	T	$\beta$	T	B	t
(constant)		19.00		20.89		20.02
Religion	-.123	-1.79	-.019	-.53	-.012	-.33
Work style	-.137	-1.79	-.020	-.53	-.021	-.55
Position	-.025	-.31	.044	1.11	.031	.77
Age group	-.170	-2.26*	.034	.85	.034	.87
Self-esteem			-.332	-6.56***	-.341	-6.56***
Compassion satisfaction			-.536	-11.06***	-.513	-7.95***
Secondary traumatic stress			.332	8.74***	.344	8.09***
Work itself					0.62	1.03
Prospects					.003	.08
Sense of achievement					-.015	-.26
Reward system					-.111	-2.75**
Personalrelations					-.020	-.47
R <sup>2</sup> ( adj R <sup>2</sup> )	.095(.076)		.779(.771)		.790(.776)	
F (F Sig.)	5.109(.001)		96.370(.000)		58.566(.000)	

\*\*\*p<.001, \*\*p<.01, \*p<.05

## Discussion

The burnout experience of nurses not only harms their own health<sup>[21]</sup>, but also reduces the quality of patient care<sup>[22]</sup>. Due to these problems, especially small and medium-sized hospitals with high turnover rates, should be concerned about burnout of nurses.

In present research, the level of burnout was 2.68 point (range 1-5) indicating a moderate level and it was similar to those of Lee's study<sup>[23]</sup>. And also, compassion satisfaction, and secondary traumatic stress were similar to of Cho and Park's study<sup>[24]</sup>. In addition, the average score of job satisfaction was 3.53 and the reward system had the lowest satisfaction level with an average of 2.72 among the sub scales. These results, the lowest scores in the reward system have been consistently

reported in most other studies measuring nurse job satisfaction<sup>[25-26]</sup>. Moreover, the results showed that predictors of burnout were self-esteem, compassion satisfaction, and secondary traumatic stress.

Compassion satisfaction is an emotional reward that nurses can feel, and because it acts as a mitigating factor to reduce burnout<sup>[6]</sup>, it can be a fundamental factor to improve nursing services. Wagaman and his colleagues found that it was possible to increase empathy through education<sup>[27]</sup>. Increased compassion satisfaction can be expected to have a positive impact on patient and hospital organization by increasing the quality of care. In order to increase nurses' empathy satisfaction, nurse' leaders should recognize the importance and impact of compassion satisfaction, and make efforts to increase the empathy satisfaction capability of nurses.

In order to decrease nurses' burnout, it is necessary to mediate factors such as secondary traumatic stress, low self-esteem and compassion satisfaction. Trauma can occur not only for individuals who have directly experienced a traumatic event (primary victims), but also for aid specialists who have been indirectly exposed to trauma while witnessing damage or providing assistance to the primary victim. Nurses who are in close contact with patients who are victims of various traumatic events may experience secondary traumatic stress<sup>[28]</sup>. Increased secondary traumatic stress negatively affects a variety of physical and mental health<sup>[29]</sup> and leading to increased burnout<sup>[28]</sup>. Nursing managers should endeavor to reduce burnout by monitoring secondary traumatic stress.

Previous studies<sup>[10,12]</sup> emphasized the importance of self-esteem as a variable to alleviate burnout, and this study supports the results. Lee and Hong<sup>[30]</sup> reported that the higher the self-esteem, the more positive the thinking, the higher the achievement and life satisfaction. As a result, it is necessary to increase nurses' self-esteem to reduce burnout.

Of the subscales of job satisfaction added in Model 3, only the reward system was a significant factor affecting burnout. These results mean the importance of compensation as affecting factor for burnout. In the previous study, the rate of turnover was high when the salary satisfaction and job satisfaction of small and medium hospital nurses were very low<sup>[16,26]</sup>. Therefore, it is necessary to increase the satisfaction level through appropriate compensation to small and medium hospital nurses.

Burnout is a topic that has been studied for a long time, but it is still an unsolved challenge. As the complexity of society changes, the influencing factor of burnout can also change. Therefore, it is necessary to reinforce the psychological capacity of nurses through educational programs for improving the awareness of individuals and hospital organizations. As a result, the factors affecting burnout were identified as compassion satisfaction, secondary traumatic stress, self-esteem, and reward system. Therefore, in order to reduce burnout of small and medium sized hospital' nurses, it is necessary to develop and apply an intervention program considering these factors.

This study was conducted for nurses working in two hospitals with less than 300 beds, so there are limitations to generalizing these results to all nurses. However,

this study suggests that in order to solve the burnout of nurses, compassion satisfaction and self-esteem should be improved, secondary traumatic stress should be alleviated, and the reward system should be improved. If the nurse managers such efforts, nurses working in hospitals with 200 to 300 beds will help improve their work motivation, provide high quality nursing services, and address the shortage of nursing staffs.

## Conclusion

This study was attempted to examine the factors affecting burnout of nurses. The results of hierarchical regression analysis showed that the reward system, Self-esteem, compassion satisfaction, and secondary traumatic stress was a significant factor affecting burnout.

In order to resolve the burnout of a nurse, it should be a review of the compensation system. In addition, efforts to increase compensation satisfaction, self-esteem and to alleviate secondary trauma stress are needed.

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**Conflict of Interest:** Nil

## References

1. Cae KS, No WJ, Park MM, Jeung EJ, Jo OO. Survey on the status of hospital nursing staffing. Hospital Nurses Association. 2013
2. Kim YM, Kang YS. The relationship among career plateau, self-efficacy, job embeddedness and turnover intention of nurses in small and medium sized hospitals. Journal of the Korea Academia-Industrial Cooperation Society. 2013;14(10): 5078-5090. <http://dx.doi.org/10.5762/KAIS.2013.14.10.5078>
3. Maslach C. and Schaufeli WB. Historical and conceptual development of burnout. Series in Applied Psychology: Social Issues and Questions. Professional Burnout: Recent Developments in Theory and Research. 1993;1-16.
4. Lim DS and Cho BH. The study on stress, hardiness, and professional burnout of intensive care unit nurses. Journal of Korean Academy of Fundamentals of Nursing. 2007;14(1):120-127..
5. Figley CR and Stamm BH. Psychometric review

- of compassion fatigue self-test; Measurement of stress, trauma and adaptation. Lutherville, MD: Sidran Press. 1996.
6. Stamm BH. Measuring compassion satisfaction as well as fatigue: Developmental history of the compassion satisfaction and fatigue test. New York: Brunner-Routledge. 2002.
  7. Figley CR. Compassion fatigue , New York: Bruner/ Mazel.1995.
  8. James RK., & Gilliland BE. Crisis intervention strategies. Stamford, CT: Brooks/Cole. 2001.
  9. Choi MO, Song WY. The effects of the exposure on traumatic events, occupational qualities, and psychosocial resources on the compassion fatigue and burnout, *The Korean Journal of Clinical Psychology*. 2009; 28: 262.
  10. Kang YS, Choi YJ, Park DL, Kim IJ. A study on nurses' self-leadership, self-esteem, and organizational effectiveness. *Journal of Korean Academy of Nursing Administration*. 2010;16(2): 143-151. <https://doi.org/10.11111/jkana.2010.16.2.143>
  11. Brouwers A, Evers WJ, Tomic W. Self-efficacy in Eliciting Social Support and Burnout among Secondary-School Teachers. *Journal of Applied Social Psychology*. 2001;31(7):1474-1491
  12. Jurado M, Pérez-Fuentes C, Linares G. et. al. Health Professionals according to Their Self-Esteem, Social Support and Empathy Profile. *Frontier Psychology*.2018;9:424. doi:10.3389/fpsyg.2018.00424.
  13. Adams, A., & Bond, S. Hospital nurses' job satisfaction, individual and organizational characteristics. *Journal of Nursing Management*. 2000;32:536-543.
  14. Abdullah Al Maqbal M. Factors that influence nurses' job satisfaction: a literature review. *Nursing Management*. 2015;22 (2):30-37.<https://doi.org/10.7748/nm.22.2.30.e1297>
  15. Aiken LH, Clarke SP, Sloane DM, Lake ET, Cheney T. Effects of hospital care environment on patient mortality and nurse outcomes. *The Journal of Nursing Administration*. 2008; 38(5):223-229. <http://dx.doi.org/10.1097/01.NNA.0000312773.42352.d7>
  16. Jeong JH, Kim KH, Kim JS. The risk factors influencing turnover intention of nurses. *Journal of Korean Academy of Nursing Administration*. 2008;14(1):35-44.
  17. Stamm BH(2009). The concise ProQOL manual. The concise manual for the professional quality of life scale. Retrieved from [http://proqol.org/uploads/ProQOL\\_Concise\\_2ndEd\\_12-2010.pdf](http://proqol.org/uploads/ProQOL_Concise_2ndEd_12-2010.pdf)
  18. Rosenberg M. Society and Adolescent Self-image. Princeton: Princeton University Press. 1965.
  19. Jon, B. J. Self-esteem: A test of its measurability. Unpublished manuscript, Yonsei University. Seoul. 1974
  20. Vocational Psychology Research in Minnesota University. Manual for the Minnesota satisfaction Questionnaire - Korean Short Version. [internet]. Retrieved from <http://vpr.psych.umn.edu/instruments/msq-minnesota-satisfaction-questionnaire>
  21. Vahey, D. C., Aiken, L. H., Sloane, D. M., Clarke, S. P., & Vargas, D. Nurse burnout and patient satisfaction. *Medical Care*, 2005;42(Suppl 2), II57- II66. <http://dx.doi.org/10.1097/01.mlr.0000109126.50398.5a>
  22. Jennings, B. M. (2008). Work stress and burnout among nurses: Role of the work environment and working conditions. In R. G. Hughes (Ed.), *Patient safety and quality: An evidence-based handbook for nurses* (pp. 137- 158). Rockville, MD: Agency for Healthcare Research and Quality.
  23. Lee, S.H. (2018). Effect of Burnout, Verbal Abuse Experience, and Social Support on Job Embeddedness in the Small and Medium Sized Hospital Nurses. *Journal of Digital Convergence*, 16(12). 477-487, 2018
  24. Cho GY, Park SJ. The Influence of Compassion Fatigue, Compassion Satisfaction, and Hardiness of Burnout in Small and Medium-sized Hospital Nurses. *Journal of Fisheries and Marine Sciences Education*. 2019;31(2), pp. 510~523, 2019.
  25. Jeong, J H., Kim, JS., & Kim, KH.The risk factors in influencing turnover intention of nurses. *Journal of Korean Academy of Nursing Administration*, 2008;14: 35-44.
  26. Lee HN., Lee SY, Lee, M.A. A study of nurses' job satisfaction. *Journal of East-West Nursing Research*. 2009;15(2): 91-101.
  27. Wagaman MA, Geiger JM, Shockley C and Segal EA. The role of empathy in burnout, compassion satisfaction, and secondary traumatic stress among social workers. *Social Work*. 2015; 60(3), 201~209.

<https://dx.doi.org/10.1093/sw/swv014>

28. Lee JM, Yom YH. Effects of work stress, compassion fatigue and compassion satisfaction on burnout in clinical nurses. *Journal of Korean Academy of Nursing Administration*. 2013;19(5):689-697.
29. Crabbe JM, Browley DM, Boffard KD, Alexander DA, Klein S. Are health professionals getting caught in his crossfire? The personal implications of caring for trauma victims. *Emergency Medicine Journal*. 2004;21(5):568-572.
30. Lee BJ, Hong SO. The effect of older people's leisure activities on their self-esteem and life satisfaction. *Tourism Research of Northeast Asia*. 2012;8(2):139-156.