Influence of Quality of Nursing Work Life on Nurses' Turnover Intention: the Mediating Effect of Organizational Commitment

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Abstract

The top priority of this study was to identify how nurses' organizational commitment (OC) serves as a mediating factor between Quality of Nursing Work Life (QNWL) and turnover intention (TI) among Korean nurses. Three hundred thirteen registered nurses working in hospitals participated in this study. Mediating effect analysis was conducted to identify the relationship between QNWL, OC, and TI. The results revealed significant correlations between variables. OC showed a perfect mediating effect in the relationship between QNWL and TI. The results suggest that nurses' QNWL has a significant influence on the TI, which is mediated via OC.

Keywords: Nurses, turnover intention, Quality of life

Introduction

With a continuous increase of the aging population and the number of chronic illnesses every year, hospitals are trying to provide specialized and patient-oriented medical services.[1] Frequent changes in the medical environment can be a burden to nurses, reducing job satisfaction and increasing the turnover intention, with most countries suffering from a nurse shortage.[2–4] A lack of skilled nursing staff due to high nurse turnover rates leads to overtime work and higher patient-to-nurse ratios, as many patients to be cared for increases. In turn, the quality of medical services is reduced and efforts made on quality improvement and workforce development programs, such as training for new nurses, result in increased health service costs.[5]

The turnover intention is a response to job dissatisfaction and refers to the intention to move from one's current job to a new one; it is a variable that explains the actual turnover behavior.[6] To manage turnover intention, it is necessary to systematically grasp factors that affect the turnover intention from various perspectives.[7] Age, position, education level, marital status, working status, career, and salary are factors affecting the turnover intention.[8] Situational variables include QNWL, OC, job satisfaction, and job stress.[9]

QNWL is a very important factor for employees. In recent years, hospital administrators have been trying to identify and improve the indicators that affect the QNWL in order to prevent the loss of competent nurses. QNWL refers to harmony of work and personal life, including elements required by nurses in order to work satisfactorily in their workplace; therefore, it can be viewed as a reliable and valuable concept that can be used to measure the QNWL of nurses and identify changes that need to be implemented to increase the productivity of the organization.[12] In general, QNWL was found to affect nurses' job satisfaction and turnover intention.[13] QNWL and turnover intention have been reported to be negatively correlated,[3,9,10] while QNWL

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and OC have been reported to be positively correlated.[14]

OC is closely related to how strongly the members trust and agree with the goals and values of the organization, how willing they are to do their best while at the organization, and how earnestly they wish to remain as staff members.[15] It has been identified as the most influential factor regarding nurses' turnover intention,[16] and a major attitude variable for nursing staff with a positive influence on organizational effectiveness.[17]

QNWL and OC influence each other, as do OC and the turnover intention. An intermediating effect of emotional OC on the relationship between the QNWL and the turnover intention was found for university professors and other employees.[18,19] However, no studies have explored the possible intermediating effect of OC on the relationship between QNWL and the turnover intention among nurses. Therefore, this study aimed to identify how nurses' OC serves as a mediator between the QNWL and the turnover intention.

Material and Method

Study design and sample

This was a descriptive study aiming to analyze the relationship between QNWL, OC, and the turnover intention and to confirm how nurses' OC serves as an intermediary between the QNWL and the turnover intention.

Three hundred and thirteen general nurses in Seoul and Gyeonggi Province for more than one year participated in this study. Nurses working in general institutions are usually not satisfied with their job during their first year[20]; thus, nurses with less than 12 months of experience were excluded from this study owing to differences in job satisfaction due to length of service.[20]

Ethical Considerations

This study was approved by the Institutional Ethics Committee of Y University (IRB No. 2014-0061-1). Participants were requested to sign an informed consent form before taking part in the survey.

Measures

Quality of nursing work life

The Korean version of the QNWL tool[21] based on Brooks'[11] QNWL tool was used in this study. This measure has 36 items in four sub-domains. The higher the score, the higher the QNWL.[21] The internal consistency of the original tool[11] was .37–.88, while the Cronbach's α of the QNWL-K[21] was .69–.93.

Organizational commitment

To measure nurses' OC, this study adopted a tool designed by Mowday et al.[15] and translated by Kim.[22] This tool includes 15 items. Higher scores reflect higher OC. The reliability of the original instrument measured with Cronbach's α was .82 to .93, and .89 in the study by Kim.[22] Cronbach's α in this study was .82.

Turnover Intention

We used a modified tool by Park[23] to measure nurses' turnover intention by adding four questions from the tool used by Lawler.[6] Lower scores reflect lower turnover intention. Cronbach's α was .88 in the study by Park,[23] and .85 in the present study.

Data Analysis

Data were collected over one month from May 1 through 30, 2015. In the final analysis, 313 questionnaires were used.

SPSS 24.0 program was used to analyze the data. T-tests and ANOVA were performed to analyze the differences in variables by nurses' characteristics, and Scheffé's test was performed for post-hoc comparisons. Pearson's correlation coefficient was used to analyze the relationship between QNWL, OC, and turnover intention. Finally, we examined the mediating effect of OC using the procedure of Baron and Kenny,[24] and verified the significance of the mediation effect with the Sobel test.

Results and Discussions

Descriptive statistics

The QNWL of nurses showed a significant difference according to the following general characteristics: marital status ($t = 2.50$, $p = .013$), hospital type ($t = 5.43$, $p = .005$). OC showed significance for age ($F = 10.87$, $p < .001$), education level ($F = 10.30$, $p < .001$). Turnover Intention showed significant differences for marital

status (t = -3.88, p < .001), age (F = 10.47, p < .001), total clinical career (F = 2.96, p < .033). (Table 1).

Correlations between variables

Significant positive correlations between QNWL and OC (r = .63, p < .001), and between QNWL and nurses' turnover intention (r = -.43, p < .001) were found. (Table 2)

In order to determine the intermediating influence of OC on the relationship between QNWL and turnover intention, the three-step analysis procedure developed by Baron and Kenny[24] was used (Table 3). The Sobel test showed that OC had served as a significant mediator in the relationship between QNWL and the turnover intention (Z = -8.07, p < .001; Figure 1).

Table 1. Differences in Quality of Nursing Work Life, Organizational Commitment, and turnover intention According to Participant Characteristics (N = 313).

Characteristics	Categories	N	(%)	QNWL		Organizational commitment		Turnover Intention	
				M ± SD	t or F (p)	M ± SD	t or F (p)	M ± SD	t or F (p)
Total		313	(100.0)	3.77±0.57		3.02±0.47		3.40±0.82	
Gender	Male	11	(3.5)	4.02±6.61	1.51	3.32±0.62	1.63	3.47±0.88	.33
	Female	302	(96.5)	3.76±0.57	(.133)	3.01±0.49	(.133)	3.40±0.82	(.742)
Age	≤29 a	153	(48.9)	3.69±0.53	2.49	2.88±0.39	10.87	3.56±0.75	10.47
	30–39 b	117	(37.4)	3.74±0.54	(.084)	2.98±0.45	(<.001)	3.50±0.78	(<.001)
	≥40 c	43	(13.7)	3.89±0.62		3.22±0.47	a,b<c	3.03±0.86	a>b,c
Education level	College (3 years)a	116	(37.1)	3.68±0.55	2.48	2.87±0.45	10.30	3.46±0.77	1.06
	Bachelor (4 years)b	177	(56.5)	3.82±0.56	(.085)	3.08±0.46	(<.001)	3.46±0.77	(.348)
	Master's degreec	20	(6.4)	3.86±0.66		3.31±0.40		3.18±0.89	
Marital status	Married	104	(33.2)	3.89±0.63	2.50	3.14±0.51	2.94	3.15±0.88	-3.88
	Single	209	(66.8)	3.71±0.52	(.013)	2.97±0.44	(.004)	3.52±0.76	(<.001)
Hospital type	Tertiary	94	(30.0)	3.93±0.60	5.434	3/26±0.43	20.505	3.40±0.91	1.75
	General	154	(49.2)	3.69±0.53	(.005)	2.90±0.44	(<.001)	3.46±0.75	(.176)
	Hospital with less than 300 beds	65	(20.8)	3.74±0.55		2.96±0.47		3.24±0.82	
Total clinical experience (years)	1-3 a	60	(19.2)	3.79±0.49	.70	3.06±0.37	3.63	3.46±0.79	2.96
	3-5 b	61	(19.5)	3.68±0.59	(.168)	2.90±0.47	(.013)	3.61±0.77	(.033)
	5-10 c	98	(31.3)	3.72±0.57		2.97±0.47	b<d	3.39±0.79	b>d
	≥10 d	94	(30.0)	3.87±0.57		3.13±0.50		3.23±0.87	
Salarya	<30a	120	(38.3)	3.62±0.53	7.66	2.88±0.44	20.66	3.43±0.77	9.79
	30-50 b	155	(49.5)	3.83±0.54	(.001)	3.04±0.42	(<.001)	3.50±0.76	(<.001)
	≥50 c	38	(12.1)	3.97±0.69	a,b<c	3.40±0.52	a,b<c	2.87±0.97	b>a,c
Children	Without children	228	(72.8)	3.71±0.54	-2.88	2.97±0.45	-2.90	3.51±0.79	3.90
	Children	85	(27.2)	3.92±0.61	(.004)	3.14±0.48	(.004)	3.11±0.83	(<.001)

[a]Korean currency: million won; QNWL: quality of nursing work life; M: mean; SD: standard deviation.

Table 2. Correlational Relationships between QNWL, Organizational Commitment, and Turnover Intention (N = 313).

Variables	QNWL	Organizational commitment	Turnover Intention
	r (p)	r (p)	r (p)
QNWL	1	.63 (<.001)	-.43 (<.001)
Organizational commitment		1	-.61 (<.001)
Turnover intention			1

Table 3. Mediating Effect of Organizational Commitment on the Relationship between QNWL and Turnover Intention (N = 313).

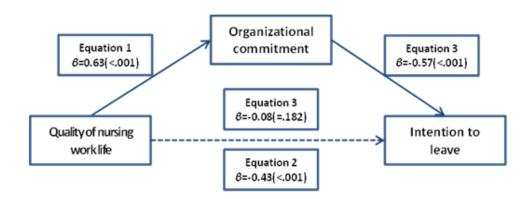| Equations	B	β	T	p	Adj.r2	F	p
1. QNWL → OC	0.22	0.627	14.18	<.001	0.39	201.05	<.001
2. QNWL → TI	0.07	0.43	8.43	<.001	0.18	71.02	<.001
3. QNWL, OC→ TI					0.38	95.11	<.001
4. QNWL→ TI	0.01	0.08	1.34	.182			
5. OC → TI	0.26	0.57	9.86	<.001	0.38	187.96	<.001

Figure 1. Model showing the Influence of Quality of Nursing Work Life on the Turnover Intention and the Mediating Effect of Organizational Commitment.

Discussion

The average score of turnover intention was 3.4 out of 4.00. This is relatively high compared to the turnover intention score of 2.96 found among nurses in small-sized hospitals obtained using the same tool by Hwang and Kang.[7] The general characteristics that showed a difference in turnover intention were age, marital status, children, and clinical career. Turnover intention was higher for those aged below 29, single, without children, and with clinical experience between 3–5 years and a higher salary. These results were supported by a previous study.[25] Nurses with clinical careers of 3–5 years tend to perceive their work as repetitive rather than experiencing

increased confidence. Therefore, differentiated policies and efforts are needed to lower the turnover intention among nurses.

In this study, there were statistically significant correlations between QNWL, OC, and the turnover intention. QNWL and OC showed a very strong positive correlation. Additionally, QNWL and the turnover intention were negatively correlated, as previously noted.[9,27] OC and the turnover intention showed a strong negative correlation, which adds to the body of literature suggesting that OC is the strongest correlated factor among those negatively correlated with the turnover intention.[7]

Our results showed that OC functioned as a significant mediator between QNWL and the turnover intention. This implies that OC is a critical factor in the relationship between QNWL and the turnover intention. OC can be increased by increasing QNWL, and the turnover intention can be decreased by increasing OC. In addition to the demonstrated mediating effects of OC in relation to nurses' perceptions of work environment and turnover intention.[1] This study confirmed the full mediating effect of OC between QNWL and the turnover intention. Therefore, hospital administrators need to understand the relationships between these variables in order to reduce nurses' turnover rates. Career development courses are needed to improve the relationship between multidisciplinary teams working together in hospitals, and customized welfare system should be strengthened in order to increase QNWL. Furthermore, employee management strategies that reflect the existing hospital system should be developed to enhance the overall QNWL, toward the aim of fostering a healthy work/life balance for nurses.[19,27]

This study has several significant implications. First, we confirmed the degree of QNWL of Korean nurses, which is an important concept for enhancing organizational productivity through the harmonization of work and personal life. Second, by analyzing the intermediating influence of OC in the relationship between QNWL and turnover intention, which is closely related to the quality and cost of medical services, we deepened our understanding of the turnover intention and provided basic data for the development of interventions. Third, by using the QNWL-K based on

Brooks'[11] QNWL tool, which is widely used in Asian countries comparisons of the same items are made possible. However, since this study was conducted with nurses working in hospitals in Seoul and its metropolitan area, there is a limitation to the generalizability of the results.

Conclusion

The findings of this study revealed that QNWL and OC were positively correlated, whereas OC and turnover intention were negatively correlated. OC was also found to fully mediate the relationship between QNWL and the turnover intention. Therefore, policies and organizational efforts to raise QNWL should be developed to increase OC.

Since this study examined the relationship between QNWL, OC, and the turnover intention, we propose further empirical studies to identify the factors affecting QNWL, which will be useful for the development of intervention programs for improving it. Additionally, we propose a follow-up study to identify QNWL levels and influential factors for nurses working in various fields as well as hospitals.

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