

Evaluation of Nursing Work Performance of Nurses in Long-Term Care Hospitals

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Abstract

Background/Objectives: This study aimed to investigate nursing work performance of nurses in long-term care hospitals and to analyze the effect of the factors on nursing work performance to improve the quality.

Methods/Statistical analysis: This is a descriptive survey research. The data from nurses that have been working for more than 6 months at long-term care hospitals in G were analyzed by descriptive statistics, t-test, ANOVA, Schéffe's test, Pearson's Correlation coefficients and Multiple regression with the IBM SPSS statistics 23.0 Program.

Findings: The result of this study show that nursing work performance had a statistically significant positive correlation with interpersonal relations, psychological Resilience, and job satisfaction. The result of the multiple regression analysis show that psychological resilience, job satisfaction and interpersonal relations were influencing on the nursing work performance.

Improvements/Applications: This study is to improve the nursing service of nurses in long-term care hospitals, and for effective management in terms of organization, check the relevance of interpersonal relations, psychological resilience, job satisfaction, and nursing work performance, and identify the impact on nursing work performance

Keywords: Nursing work performance, Interpersonal relations, Psychological resilience, Job satisfaction, Long-term care hospitals, Nurses

1. Introduction.

Long-term care hospital is a place of multi-dimensional nursing from holistic nursing to physical environment management. Thus the nurses in the hospital not only provide direct nursing to the elderly patients, but also play the various roles such as safe environment management [1]. Nurses provide the direct service closest to the patients, so the work efficiency of nurse is directly linked to the overall efficiency of hospital [2], and to improve the quality of nursing, it is very important to improve the nursing work performance [3].

Nurses provide direct nursing targeting the patients and guardians, and cooperate and adjust among each departments to play the essential role in the interpersonal relations in hospital [4]. Nurses in long-term care hospital conduct general nursing works for patients, and task management and monitoring of nursing aides such as care workers [5], so their interpersonal skills are very important.

Nurses are exposed to various stressful situation [6, 7], It was reported that nurses who has high resilience respond flexibly to stress and has decreased exhaustion and turnover intention [8, 9]. Thus, to improve the quality of nursing, psychological resilience is one of the essential capability that the nurses should have [10].

Job satisfaction is one of the element for the nursing resource management in hospital [11], nurses with higher job satisfaction take their duty optimistically, easily immerse oneself to the organization with less possibility to turnover which leads to improved productivity [12].

Up to date, most of the researches that confirmed the nursing work performance and relationship targeted nurses from general hospital, and there are insufficient number of researches that studied the influential factors to nursing work performance of nurses from long-term care hospitals. Also, there is barely a study that investigated on the relevance among the interpersonal relations, psychological resilience, job satisfaction and nursing work performance of long-term care hospital nurses.

Thus, this study aims to provide the reference to establish a measure to improve the quality of nurses working in long-term care hospitals by confirming the relevance of interpersonal relations, psychological resilience, job satisfaction and nursing work performance for the efficient management of organization, and apprehend the influence to nursing work performance for the efficient management of organization and improvement of nursing service.

2. Materials and Methods

This is a descriptive survey study to improve the nursing service of nurses in long-term care

hospitals in a situation where the hospitals are rapidly increasing as the society changes to an aging society, and for effective management in terms of organization, the relevance of interpersonal relations, psychological resilience, job satisfaction, and nursing work performance and identify the impact on nursing work performance.

2.1. Study subjects

This study targeted nurses with more than 6 months of work experience in long-term care hospitals from 17 hospitals located in Gyeongsangnam-do. 240 nurses who voluntarily participated in this study and understood the purpose of this study were randomly selected.

The sample size was determined by using the G-power 3.1.9.2 program according to the sampling formula of Cohen, Effect size .15 (medium), significance level (α) .05, power (1- β) Considering 95% and 14 predictors, the number of samples required for regression analysis was 194. Taking into account the questionnaire that is incomplete and will not be collected by conducting a questionnaire for long-term care hospital nurses with many various tasks, a questionnaire was distributed to 240 people, taking into account the dropout rate of about 20%, referring to the previous study. Among the collected questionnaires, 224 copies of the questionnaire were used for analysis, excluding 4 copies of the questionnaire indicating rejection in the consent to use personal information and 4 insufficient questionnaires.

2.2. Research Tools

2.2.1. Interpersonal relations

The tool of interpersonal relations used is Relationship Change Scale (RCS) developed by Guerney [13], translated by Mun [14] and revised by Chang [15]. It contains a total of 18 questionnaires and each questionnaire used 5-point Likert Scale, meaning higher score with higher Interpersonal relations. Cronbach's α of the tool was .86 at the time of its development. .88 in this study.

2.2.2. Psychological resilience

The instrument of psychological resilience was made by Park & Park [16]. It contains a total of 30 questionnaires and each questionnaire used 5-point Likert Scale, meaning higher score with higher Psychological Resilience. Cronbach's α of the tool was .85 at the time of its development and .95 in this study.

2.2.3 Job satisfaction

Job satisfaction tool was developed by Slavitt, Stamps, Piedmont & Hasse [17], translated and factor-

analyzed by Park, Sung-Ae, Yun [18] and modified by An [19] It contains a total of 30 questionnaires and each questionnaire used 5-point Likert Scale, meaning higher score with higher job satisfaction. Cronbach's α of the tool was .87 at the time of its development. And .87 in this study.

2.2.4 Nursing work performance.

The tool of nursing work performance was created by Go, Lee & Im [20]. It contains a total of 17 questionnaires and each questionnaire used 5-point Likert Scale, meaning higher score with higher nursing work performance. Cronbach's α of the tool was .92 at the time of its development. And .92 in this study.

2.3. Data collection methods and ethical considerations

The data for this study was collected from December 10, 2018 to February 15, 2019, and it was approved by the IRB of C University(CSIRB-2018028). The researcher obtained approval via phone call from long-term care hospital in Gyeongsangnam-do, and made visit to publically recruit the participants, and conducted survey to the participants who agreed to participate. After receiving the written consent from the participants, they were asked to fill the survey, and it was processed anonymously with enclosed sealed envelope so that the participants enclose the survey in the envelope and submit them. The contents of survey was done anonymously for the data collection. For the security, the data coding was encrypted, and the computer of head researcher was locked with password to block any access. The data will be stored in a storage with lock for 3 years since the termination of study, and it will be proceeded to disposal. The survey to 5 to 15 minutes.

2.4. Data Analysis

The collected data were analyzed using by SPSS/win 23.0 program. Mean and standard deviation were used for interpersonal relations, psychological resilience, job satisfaction and nursing work performance of nurses in long-term care hospitals. T-test and ANOVA were used for the differences of interpersonal relations, psychological resilience, job satisfaction and nursing work performance of nurses in long-term care hospitals. by general characteristics; and Pearson correlation coefficient was used for correlations among variables. Multiple regression analysis was used to investigate the degree of effect on nursing work performance of the subject.

3. Results and Discussion

3.1. Interpersonal relations, psychological resilience, job satisfaction, nursing work performance of subjects

[Table 1] shows that the average score of interpersonal relations of the subject was 3.56 ± 0.39 point. In sub-dimension, Intimacy was the highest (3.69) and Openness was the lowest (3.40). The average score of Psychological Resilience of the subject was 3.69 ± 0.47 point. In sub-dimension, Situational pattern (3.77) was the highest and dispositional pattern (3.57) was the lowest. The average score of Job satisfaction of the subject was 3.15 ± 0.38 point. In sub-dimension, Interaction factor was the highest (3.66) and Pay factor was the lowest (2.66). The average score of nursing work performance of the subject was 3.73 ± 0.41 point. In sub-dimension, Competency was the highest (3.81) and Application of nursing process was the low.

Table 1. Interpersonal relations, psychological resilience, job satisfaction, nursing work performance of subjects

Variable	Number of item	M±SD
Interpersonal relations	18	3.56±0.39
Psychological resilience	30	3.69±0.44
Job satisfaction	30	3.15±0.38
Nursing work performance	17	3.73±0.41

3.2. Differences of nursing work performance by general characteristics

[Table 2] shows that the nursing work performance of the subject with individual's general characteristics had a statistically significant difference with gender ($t=-2.45$, $p<.015$), age ($F=10.65$, $p<.001$), marital status ($t=4.12$, $p<.001$), final education ($F=6.76$, $p<.001$), the position at workplace ($F=5.46$, $p=.001$), type of work at ($F=6.85$, $p<.001$), total clinical career ($F=9.00$, $p<.001$), career in long-term care hospital ($F=3.80$, $p<.024$).

Table 2. Differences of nursing work performance by general characteristics (N=224)

Characteristic	Categories	M±SD	t or F	Schéffe's test	p
Gender	Male	3.42±0.42	-2.45		.015
	Female	3.74±0.41			
Age	< 30 ^a	3.48±0.43	10.65	a<c, d	<.001

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	30 ~ 39 ^b	3.65±0.39		b<d		
	40 ~ 49 ^c	3.81±0.39				
	≥50 ^d	3.89±0.34				
Marital status	Married	3.78±0.39	4.12		<.001	
	Single	3.51±0.41				
Religion	Protestantism	3.82±0.38	1.97		.101	
	Catholicism	3.88±0.31				
	Buddhism	3.72±0.45				
	None	3.67±0.41				
	Etc.	3.61±0.39				
Final education	College ^a	3.73±0.42	6.76	b<a, c, d	<.001	
	University ^b	3.52±0.40				
	RN-BSN ^c	3.83±0.35				
	Graduate school ^d	4.02±0.24				
Position	General nurse ^a	3.67±0.41	5.46	a<c	.001	
	Charge nurse ^b	3.82±0.43				
	Head nurse ^c	3.96±0.37				
	Director of nurse ^d	3.77±0.34				
The type of work	3 shift ^a	3.64±0.39	6.85	a, d<b	<.001	
	1 shift ^b	3.86±0.39				
	Night shift ^c	3.63±0.39				
	2 shift(D/E) ^d	3.58±0.43				
Total clinical career (years)	≤ 5 ^a	3.50±0.42	9.00	a<c, d, e b<e	<.001	
	5 < ~ ≤ 10 ^b	3.62±0.40				
	10 < ~ ≤ 15 ^c	3.82±0.36				
	15 < ~ ≤ 20 ^d	3.86±0.36				
	>20 ^e	3.91±0.36				
Career in Long-term care hospital (years)	≤ 3 ^a	3.65±0.41	3.80	a<b	.024	
	3 < ~ ≤ 6 ^b	3.84±0.42				
	>6 ^c	3.76±0.39				

3.3. Relationships among the Study Variable

[Table 3] shows that The interpersonal relations of the subject according to said individual's general characteristics had a statistically significant difference with final education ($F=6.61$, $p<.001$), the type of work ($F=4.04$, $p=.008$), number of beds ($F=3.39$, $p=.035$), the Psychological resilience of the subject with individual's general characteristics had a statistically significant difference with age ($F=6.65$, $p<.001$), marital status ($t=3.21$, $p=.002$), religion ($F=4.51$, $p=.002$), final education ($F=7.11$, $p<.001$), the type at workplace ($F=7.23$, $p<.001$), total clinical career ($F=2.97$, $p=.020$), number of beds ($F=6.93$, $p=.001$). the job satisfaction of the subject with individual's general characteristics had statistically meaningful difference with final education ($F=5.08$, $p=.002$), the type of work at workplace ($F=2.77$, $p=.042$), total clinical career ($F=2.95$, $p=.021$). the nursing work performance of the subject with individual's general characteristics had a statistically significant difference with gender ($t=-2.45$, $p<.015$), age ($F=10.65$, $p<.001$), marital status ($t=4.12$, $p<.001$), final education ($F=6.76$, $p<.001$), the position at workplace ($F=5.46$, $p=.001$), type of work at ($F=6.85$, $p<.001$), total clinical career ($F=9.00$, $p<.001$), career in long-term care hospital ($F=3.80$, $p<.024$).

Table 3. Relationships among the Study Variable (N=224)

Variables	IR	PS	JS	NWP
	r(p)	r(p)	r(p)	r(p)
IR	1			
PS	.67 (<.001)	1		
JS	.34 (<.001)	.42 (<.001)	1	
NWP	.53 (<.001)	.66 (<.001)	.47(<.001)	1

IR : Interpersonal Relations; PS: Psychological Resilience ; JS : Job Satisfaction ; NWP: Nursing Work Performance

3.4. Influential factors on nursing work performance

[Table 4] shows the factors affecting nursing work performance of the objects. According to the correlation analysis, nursing work performance had a statistically significant positive correlation with interpersonal relations, psychological Resilience, and job satisfaction. The result of the multiple regression analysis of the factors affecting nursing work performance, the regression model was statistically significant. Psychological resilience ($\beta=.42$, $p<.001$), job satisfaction ($\beta=.21$, $p<.001$), interpersonal relations ($\beta=.17$, $p=.008$) were influencing on the nursing work performance, and the explanatory power ($F=23.17$, $p<.001$) among these variables was 54.6%.

Table 4. Factors affecting nursing work performance (N=224)

Variables	B	SE	β	t	p	TI	VIF
(constant)	0.66	0.24		2.78	.005		
Gender	0.12	0.10	.06	1.22	.224	.84	1.19
Marital status	0.04	0.06	.04	0.66	.508	.65	1.53
Final education	-0.01	0.05	-.01	-0.18	.858	.81	1.23
Position	0.07	0.05	.07	1.38	.168	.85	1.18
The type of working	-0.03	0.06	-.02	-0.47	.642	.88	1.14
Age	0.04	0.05	.04	0.72	.473	.56	1.79
total clinical career(year)	0.09	0.06	.09	1.47	.143	.60	1.66
Career in Long-term care hospital (year)	0.06	0.05	.07	1.22	.222	.59	1.69
Interpersonal relations	0.18	0.07	.17	2.69	.008	.52	1.92
Psychological resilience	0.39	0.06	.42	6.07	<.001	.45	2.20
Job satisfaction	0.23	0.06	.21	4.01	<.001	.80	1.25
Adjusted R ² = 0.546, F= 23.17, p<.001, Durbin-Watson = 1.82							

*Dummy variable; Gender-male=0, Marital status single=0, Final education -College, University =0, Position-nurse, Charge nurse, The type of working-nightshift=, Age: < 30=0, Total clinical career(year)- ≤ 5 =0, Career in Long-term care hospital(year)- ≤ 3 year=0

4. Conclusion

As for the most influential factor to nursing work performance of nurses in Long-term care hospitals was psychological resilience, and it is considered to play a significant role to nurses who are in various stressful conditions such as lack of human resources and excessive work. Psychological resilience dynamically changes through environmental element and interaction, thus there is a need to provide various training and programs to improve psychological resilience.

Job satisfaction, one of the influential factor of nursing work performance requires strategies such as nursing condition, appropriate distribution, human resource management and administrative approach, and it is expected that the nursing work performance can make higher by improving the working environment. Also, interpersonal relations, another influential factor to nursing work performance plays an important role when the nurses in long-term care hospitals not only take care of patients, but also manage and monitor the nursing aides such as caregivers who are older than

nurses. Thus, to improve interpersonal relations, there is a need to use programs that will maintain positive relationships among various employees.

This study has analyzed the influential factors to the nursing work performance of nurses in long-term care hospitals. As the result, to improve the nursing work performance of nurses in long-term care hospital, there is a need to improve psychological resilience in various stressful situations in the field, increase the job satisfaction such as salary and working environment, and improve the interpersonal relations among hospital employees. Also, there is a need to provide organizational, political support such as assessment system, working environment and relevant programs to improve the nursing work performance of nurses in long-term care hospitals.

In this study, we analyzed the factors affecting Nursing work performance at Nurses in Long-term Care Hospital, and found that to enhance Nursing work performance at Nursing in Long-term Care Hospital, we improved psychological resistance in various stress situations. In addition, organizational and policy support should be provided, such as related programs and work environment and evaluation systems, to promote the Nursing work performance of long-term care hospitals.

First, nursing work performance is suggested to repeat research based on the size and region of nursing hospitals, as it may vary depending on the characteristics of nursing hospitals.

Second, repeated research is suggested to identify additional people who affect Nursing work performance at Nurses in Long-term Care Hospital.

Third develop a program to promote Nursing work performance at Nurses in Long-term Care Hospital and propose an arbitration study to verify its effectiveness.

5. Revelation

“This manuscript is a revision of the first author’s master’s thesis.”

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