

Difference of Offensive Behaviors, Stress, and Burnout among Nurses by type of Department

Hyo-Jin Won*¹

¹*Department of Nursing, Baekseok Culture University, Cheonansi, 31065, Korea*

Abstract

This paper identifies and compares the degree of offensive behaviors, stress, and burnout of nurses in general and special departments. The survey included 542 nurses from 19 general wards and 19 special departments in 6 hospitals in Korea. The differences of stress and burnout by demographic characteristics were measured by t-test and ANOVA. T-test was performed to compare the degree of offensive behaviors, stress, and burnout between the two groups. Offensive behaviors on general departments were significantly higher than for nurses on special departments. Stress and burnout on special departments were significantly higher than for nurses on general departments. The differences in offensive behaviors, stress, and burnout were found in general and special departments. Different strategies between general and special departments are needed at the organizational level, such as compensation schemes and education programs.

Keywords: Nurses; Offensive behaviors; Stress; Burnout; Department.

*Corresponding Author :

Name : Hyo-jin Won

Email : hjwon@bscu.ac.kr

Contact : +82-010-7279-5955

Fax : +82-041-550-2314

Date of Submission : 04-10-2020

Introduction

Recently, International Council of Nurses argued that there is a need to develop and implement an efficient strategy to reduce violence, the behavior damaging dignity of nurse, against nurse in hospital as violence interrupts provision of high-quality nursing service and threatens the safety of patients (Luparell S., 2011). Violence is the use of physical force so as to injure, and damage. As for the Australia 29.0%-63.0% of nurses experienced bullying within 12 months of their career (Rutherford A et al., 2004), while 72.6% of American nurses experienced workplace

bullying during their entire career(Berry P A et al., 2011). 81.1% of nurses who experienced verbal violence considered resignation, 65.1% wished to transfer(Kwon H J et al., 2007).On top of that, there is a need to pay attention and develop countermeasures for workplace bullying as it causes increase of stress, decrease of job satisfaction, demoralization, decrease of task efficiency and nursing quality(Cleary M et al., 2010).

Due to changes in medical environment based on complexity, diversity of modern society, the quality of medical service has been emphasized, and nurses are required to not only provide high-quality nursing service, but also to manage their emotions, facial expressions and gestures. When nurses are unable to cope with such changes and meet the demand, they experience burn-out symptom along with stress. And as the patients from the tertiary hospital, the upper grade general hospital, complain about the nursing services due to their high expectations, cause serious stress for nurses(Choi J S et al., 2012). Stress to some degree helps the role performance of nurse, and motivates the individual development and increase of productivity, but chronic stress leads to burnout of nurse, and cause negative impact on nurse, the nursing service and the organization(Yoon G S et al., 2005). Laschinger H K et al.(2010) proposed follow-up studies as the workplace bullying and burnout has close relationship but the relevant studies were insufficient. Also the burnout of nurse seemed to have collective trend which exhibits significant difference in accordance with hospital ward(Bakker A B et al., 2005).

As each hospital ward has different nursing style and details, it is expected that offensive behaviors, stress, and degree of burnout which nurses working in general and special departments experience could vary. However, in studies subjecting nurses in Korea, most of the studies did not put limits on department, or limited the study subjects in accordance with new nurses, scrub nurses, and as the measurement scales are different, there was limitation in comparing the offensive behaviors, stress, and burnout of nurses based on department. In addition, it was confirmed that the most common attacker was nurse (52.9%), followed by doctor (23.0%) and patient (17.8%)(Lee Y J et al., 2013) and this study would like to confirm this.

Therefore, this study aims to apprehend the degree of offensive behaviors coming from nurses and the stress and burnout which nurses from small and medium scale general hospital experience by separating the cases into general and special units. Based on the study result, the study aims to recognize the problem which nurses from small and medium scale general hospital experience who often experience turnover due to intense labor and manpower shortage to provide a fundamental material to develop efficient program which could solve the problem in advance.

Materials and Methods

Participants

This study selected 6 hospitals in South Korea of 300-500 bed size which agreed with the purpose of the study and the nurses were conveniently sampled from nursing units. A total of 542 nurses working in 38 nursing units including general wards, emergency rooms, intensive care units, operating rooms, were included. A total of 590 copies were distributed, of which 542 copies were recovered (recovery rate: 91.9%).

Instruments

The demographic characteristics questionnaire included gender, age, educational level, years in nursing, years on present unit, and shift patterns. To measure offensive behavior, stress, and burnout, the COPSQ (Copenhagen Psychosocial Questionnaire) II developed by Pejtersen J H et al.(2010) modified and supplemented by June K J et al.(2013) into Korean version Copenhagen social psychological work environment measurement tool (COPSQ-K) was used. Offensive behavior means that nurses receive from nurses, consisted of 5 items rated through a Likert 5 point scale, as 1 'no' and 5 'yes, daily'. The higher the average score, the higher the degree of offensive behavior. In present study, the Cronbach's α was .97. Stress consisted of 5 items rated through a Likert 5 point scale, as 1 'not at all' and 5 'all the time', and the scores of each scale were calculated as 0, 25, 50, 75, 100. The higher the average score, the higher the degree of stress. The present study revealed that the Cronbach's α for this study was .92, and for the study by June K J et al.(2013) was .79. Burnout consisted of 5 items rated through a Likert 5 point scale, as 1 'not at all' and 5 'all the time', and the scores of each scale were calculated as 0, 25, 50, 75, 100. The higher the average score, the higher the degree of burnout. In this study, the Cronbach's α was .94, and in the study by June K J et al.(2013), Cronbach's α , was .94.

Statistical analysis

To assess the demographic characteristics of the study participants and the degree of offensive behavior, stress, and burnout, descriptive statistics were conducted. T-test and ANOVA were conducted to evaluate the differences in stress and burnout according to the general characteristics. To examine the differences of the offensive behaviors, stress, and burnout by department types, t-test was performed.

Results

Demographic characteristics

The demographic characteristics of the participants are shown in Table 1. The average age of the nurses was 27.5 years. The age group with the largest number of nurses was the more than 25 years and <30 years age group. The majority of the respondents were female. The average work experience in a hospital was 4.94 years and years on present unit was 3.1 years. The

majority of shiftpatterns in general departments were 3 shifts (90.2%). Special departments showed similar results with 3 shifts (54.6%) and else (45.4%).

Stress and burnout by demographic characteristics

Table 2 shows the differences of stress and burnout by the respondents' demographic characteristics. As a result, there was a difference in stress according to years in nursing ($F=3.67$, $p=.026$), and years on present unit ($F=3.82$, $p=.023$). Stress was higher in nurses having <2 years in comparison to nurses having more than 5 years of clinical experience on present unit.

Also, the degree of burnout was significantly different in terms of age ($F=4.03$, $p=.018$), years in nursing ($F=3.71$, $p=.025$), years on present unit ($F=5.18$, $p=.006$), and shiftpatterns ($t=-2.43$, $p=.016$). Burnout was higher in nurses of < 25 years old group than more than 30 years age group. Also, <2 years of clinical experience on present unit was higher than more than 5 years of experience and else was higher than 3 shifts in burnout.

Distribution of offensive behaviors

Table 3 shows the distribution of offensive behaviors. Nurses who experienced offensive behaviors more than once during the last 12 months were 'Threats of violence (27.7%)', 'Physical violence (18.4%)', 'Bullying (20.9%)', 'Unpleasant teasing (31.5%)', and 'Conflicts and quarrels (31.4%)'.

Differences of the variables bytypes of department

Comparison of offensive behaviors, stress, and burnout of the participants is shown in Table 4. Nurses in general departments reported significantly higher threats of violence ($t=2.86$, $p=.004$), physical violence ($t=3.86$, $p=.000$), bullying ($t=3.86$, $p=.009$), unpleasant teasing ($t=3.09$, $p=.002$), and conflicts and quarrels ($t=2.16$, $p=.031$) than nurses in special departments. Nurses in general departments reported significantly lower stress ($t=-2.63$, $p=.009$) and burnout ($t=-2.85$, $p=.005$) than nurses in special departments.

Discussion

This study was conducted to apprehend the degree of offensive behaviors, stress and burnout which nurses from general and special departments experience, and to confirm the difference between the groups. As for the general characteristics of nurse, large number of them was the diploma (86%) regarding the level of education, and showed a result that there are large number of nurses with diploma in general hospitals, and nurses with bachelor's degree were employed in tertiary hospitals(Choi J S et al., 2012). In general departments, most of the duty was in three shifts (90.2%), while in special departments, 54.6% of nurses were in three shifts and 45.4% were in fixed schedule or double shifts which verified the different types of work schedule by

department.

As the result, the offensive behaviors which nurse experience were in order of ‘unpleasant teasing (31.5%)’, ‘Conflicts and quarrels (31.4%)’, ‘Threats of violence (27.7%)’, ‘Bullying (20.9%)’, and ‘Physical violence (18.4%)’. 220 nurses from 4 general hospitals, the frequent violence experience was verbal violence (91.5%), physical threats (67.0%), physical violence (17.5%)(Bae Y H et al., 2015). In the study of Han J H et al.(2013) which recruited 400 nurses from 5 general hospitals, bullying was 1.55 (± 0.42) out of 5 point scale, which verified similar results with this study. The result confirmed that the bullying consistently existed in public space where the patients are treated. This led to physical, mental suffering of nurses, influenced to turnover and turnover intention, and caused to increase negative working environment in medical institutions(Rutherford A et al., 2004; Berry P A et al., 2011). Despite the need for the change in awareness about the workplace bullying, bullying became part of nursing community so the active intervention of organization beyond the simply individual adjustment is being stressed(Rutherford A et al., 2004; Berry P A et al., 2011). American Association of Critical-Care Nurses (AACN) saw the rapidly increasing workplace bullying originates from ineffective communication and unprofessional relationship, and argued that there is a need to remove threat factors of nursing by boosting employee morale and securing manpower based on safe working environment and good organization culture built by leader of hospital(McNamara S A., 2012). Violence must be prevented by running education program about violence prevention and countermeasures for nurses, and report policy must be prepared and applied for nurses' safety.

Furthermore, the offensive behavior damage of nurses working in general departments was significantly higher compared to the nurses in special departments. This is considered as while the special unit nurses have lesser chance of interaction with other nurses, more independent and conduct professional task after being trained for specific tasks, the general ward nurses interact with other nurses in ward after certain period of training which leads to their responses of experiencing more offensive behavior from other nurses. The degree of physical threats varied significantly in accordance with work place(Bae Y H et al., 2015). The department with largest number of nurses who experienced physical threat was medical wards (n=36, 65.5%) while the highest response rate came from ER (n=16, 100%)(Bae Y H et al., 2015). The outcome differs from this study result which apprehended that the general ward nurses experience more violence than special units. In the study of Bae Y H et al.(2015) is limited in comparing with this study result as its study sample of each department is too insufficient, there is a need to confirm this through replication research.

Stress showed statistically significant difference in accordance with the clinical career in

current department. It was higher in nurses having more than 5 years of clinical career in comparison to nurses having <2 years of clinical career. In a study(Park S W et al., 2005) subjecting 426 nurses from 2 university hospitals, lower clinical career led to higher stress which corresponded to the study result. On the other hand, the study result showed difference with the study(Yoon G S et al., 2005) outcome that the subject with more than 3 years of career in comparison to <3 years of career had higher level of stress and another study(Choi J S et al., 2012) outcome that the higher level of work experience led to higher stress. The stress factors of nurse are diverse and complex which could vary based on individual living condition, personality, cultural background of nurses, but there is a need to put an effort to solve the stress of nurses working in general hospital. Also, as for the stress, it was 60.34 out of 100 in general ward, while it was 65.97 out of 100 in special units which confirmed the significantly higher stress of nurses working in special departments. In the study(Park S W et al., 2005) result which confirmed the ICU nurses were more stressed than surgical ward or complex ward nurses. The result demonstrated that nurses working in special departments experience more stress as they are more exposed to emergency situation related to the life of patient, and required to own professional technology and knowledge for quick and precise decision. Therefore, there is a need to conduct in-depth analysis on the cause of high stress of special department nurses, and the differentiated wage, improved working environment or proper arrangement of working schedule are considered to relieve stress.

As for the burnout, there was statistically significant difference in accordance with age, total working experience, clinical career on present unit, and shiftpatterns. This outcome corresponded to study results which confirmed that nurses in their 20s rather than 40s(Yoon G S et al., 2005), and nurse with work experience less than 10 years rather than more than 10 years(Yoon G S et al., 2005), and nurses with younger age(Han J H et al., 2013) and less working experience(Han J H et al., 2013)had higher degree of burnout. As nurses with younger age and lower experience are more likely to feel burnout due to trial and error, there is a need to consider age and working experience when developing burnout prevention program. Also, as for the burnout, it was 63.61 out of 100 in general department while it was 69.82 out of 100 in special department which confirmed significantly higher degree of burnout of nurses working in special departments. It is the same result of nurses working in ICU experiencing frustration and burnout as they are exposed to stressful situation such as being required to provided skilled nursing and concentrated observation, decision making required in instable or critical condition of patient 24 hours, and frequent occurrence of emergency nursing condition(Lewis D J et al., 1992). In the study of Son Y J et al.(2013) subjecting nurses working in ICU and the study of

Yang J H et al.(2009) subjecting ER nurses, the burnout degree of nurses was higher than that of general ward nurses which supports this study result. However, it is limited in explaining the study results to confirm whether the difference is statistically significant, because the other study tool was used. Thus, this study result is significant as it empirically confirmed the difference of burnout subjecting nurses working in general and special departments.

The limitation of this study is that as it gathered study subjects by convenience sampling, the study result cannot be generalized to entire nurses, and it did not consider various influential factors to offensive behaviors, stress and burnout.

Conclusion

This study is to apprehend the degree of offensive behaviors, stress and burnout subjecting nurses working in general hospitals, and to examine the difference between general and special departments. As the result, nurses working in general departments experienced more offensive behaviors, while nurses working in special departments experienced more stress and burnout. All nursing managers of medical institutes must be recognize the violence potential in organization, and must promote healthy working environment based on mutual respect to improve the close relationship among nurses. As the domestic studies in this filed are insufficient due to the sensitive topic, there is a need to put continuous academic effort for in-depth explanation. Furthermore, when developing program to reduce stress and burnout of nurses, there is a need to consider clinical career, and to approach with differentiated pent considering the characteristics of department. It is expected that this study prepares an opportunity to recognize that offensive behavior in workplace is a behavior beyond simple individual conflicts, be utilized as a fundamental material of developing countermeasures of organization to decrease the occurrence of offensive behavior, and contributes to establishment of desirable policy. It is necessary to carry out repeated research that enlarges the scale of nurses and institutions and analyze the effect of unit level as well as individual level of nurses.

References

1. Bae, Y. H. and Lee, T. W., 2015. Relationship of experience of violence and professional quality of life for hospital nurses.*Journal of Korean Academy of Nursing Administration*, 21(5), pp.489-500.<http://dx.doi.org/10.11111/jkana.2015.21.5.489>
2. Bakker, A. B., Le Blanc, P. M. and Schaufeli, W. B., 2005. Burnout contagion among intensive care nurses.*Journal of Advanced Nursing*, 51(3),pp.276-287.

3. Berry, P. A., Gillespie, G. L., Gates, D. and Schafer, J., 2011. Novice nurse productivity following workplace bullying. *Journal of Nursing Scholarship*, 44(1), pp.80-87. <http://dx.doi.org/10.1111/j.1547-5069.2011.01436.x>
4. Choi, J. S. and Park, S. M., 2012. Comparison of job stress, hardness, and burnout of nurses between advanced general hospitals and general hospitals. *The Journal of the Korea Contents Association*, 12(3), pp.251-259. <http://dx.doi.org/10.5392/JKCA.2012.12.03.251>
5. Cleary, M., Hunt, G. E. and Horfall, J., 2010. Identifying and addressing bullying in nursing. *Issues Mental Health Nursing*, 31(5), pp.331-335. <http://dx.doi.org/10.3109/01512840903308531>
6. Han, J. H., Yang, I. S. and Yom, Y. H., 2013. An empirical study on burnout in clinical nurses: Focused on bullying and negative affectivity. *Journal of Korean Academy of Nursing Administration*, 19(5), pp.578-588. <http://dx.doi.org/10.1111/jkana.2013.19.5.578>
7. June, K. J. and Choi, E. S., 2013. Reliability and validity of the Korean version of the Copenhagen psycho-social questionnaire scale. *Korean Journal of Occupational Health Nursing*, 22(1), pp.1-12. <http://dx.doi.org/10.5807/kjohn.2013.22.1.1>
8. Kwon, H. J., Kim, H. S., Choe, K. S., Lee, K. S. and Sung, Y. H., 2007. A study on verbal abuse experienced at medical centers. *Clinical Nursing Research*, 13(2), pp.113-124.
9. Laschinger, H. K., Grau, A. L., Finegan, J. and Wilk, P., 2010. New graduate nurses' experiences of bullying and burnout in hospital settings. *Journal of Advanced Nursing*, 66, pp.2732-2742. <http://dx.doi.org/10.1111/j.1365-2648.2010.05420.x>
10. Lee, Y. J., Lee, M. H. and Bernstein, K., 2013. Effect of workplace bullying and job stress on turnover intention in hospital nurses. *Journal of Korean Academy of Psychiatric and Mental Health Nursing*, 22(2), pp.77-87. <http://dx.dor.org/10.12934/jkpmhn.2013.22.2.77>
11. Lewis, D. J. and Robinson, J. A., 1992. ICU nurses coping measure: response to work-related stress. *Crit Care Nurse*, 12(2), pp.18-23.
12. Luparell, S., 2011. Incivility in nursing: The connection between academia and clinical settings. *Critical Care Nurse*, 31(2), pp.91-95. <http://dx.doi.org/10.4037/ccn2011171>
13. McNamara, S. A., 2012. Incivility in nursing: unsafe nurse, unsafe patients. *Association of Perioperative Registered Nurses Journal*, 95(4), pp.535-540. <http://dx.doi.org/10.1016/j.aorn.2012.01.020>
14. Park, S. W. and Kim, K. B., 2005. A study of role-conflict, stress and job satisfaction of nurses according to their current work posts. *Journal of East-West Nursing Research*, 11(1), pp.65-74.
15. Pejtersen, J. H., Kristensen, T. S., Borg, V. and Bjorner, J. B., 2010. The second version of the Copenhagen psychosocial questionnaire. *Scandinavian*

Journal of Public Health, 38(3),pp.8-24.<http://dx.doi.org/10.1177/1403494809349858>

16. Rutherford, A. and Rissel, C., 2004. A survey of workplace bullying in a health sector organization. *Australian Health Review*, 28(1), pp.65-72.
17. Son, Y. J., Lee, Y. A., Sim, K. N., Kong, S. S. and Park, Y. S., 2013. Influence of communication competence and burnout on nursing performance of intensive care units nurses. *Journal of Korean Academy of Fundamentals of Nursing*, 20(3), pp.278-288.<http://dx.doi.org/10.7739/jkafn.2013.20.3.278>
18. Yang, J. H. and Jung, H. Y., 2009. Relationship between violence response, coping, and burn out among emergency department nurses. *Journal of Korean Academy of Fundamentals of Nursing*, 16(1), pp.103-111.
19. Yoon, G. S., and Kim, S. Y., 2005. Influences of job stress and burnout on turnover intention of nurses. *Journal of Korean Academy of Nursing Administration*, 16(4), pp.507-516.

Table 1: Demographic characteristics (N=542)

Classification		General (n=214) n(%)	Special (n=328) n(%)	M(SD)
Gender	Female	202(94.4)	282(86.0)	
	Male	12(5.6)	46(14.0)	
Age(yr)	<25	80(37.4)	83(25.3)	27.5(4.65)
	25-29	91(42.5)	156(45.6)	
	≥30	43(20.1)	132(24.4)	
Educational level	Diploma	184(86.0)	255(77.7)	
	≥Baccalaureate	30(14.0)	73(22.3)	
Years in nursing	<2	48(22.4)	72(22.0)	4.9(3.91)
	2-4	78(36.4)	111(33.8)	
	≥5	88(41.1)	145(44.2)	
Years on present unit	<2	80(37.4)	115(35.1)	3.1(2.33)
	2-4	98(45.8)	127(38.7)	
	≥5	36(16.8)	86(26.2)	
Shift patterns	3 shifts	193(90.2)	179(54.6)	
	Else	21(9.8)	149(45.4)	

Table 2: Stress and burnout by demographic characteristics (N=542)

Classification		Stress				Burnout			
		General M(SD)	Special M(SD)	Total M(SD)	t or F	General M(SD)	Special M(SD)	Total M(SD)	t or F
Gender	Female	59.96(26.61)	66.40(21.21)	63.71(23.80)	-0.11	63.06(27.25)	70.57(20.66)	67.43(23.90)	-0.19
	Male	66.67(25.47)	63.31(16.44)	64.01(18.45)		72.92(27.22)	65.22(18.62)	66.81(20.65)	
Age(yr)	<25 ^a	66.33(25.36)	67.17(21.65)	66.76(23.47)	2.90	69.38(25.54)	72.36(20.31)	70.89(23.00)	4.03 [*] a>c
	25-29 ^b	57.83(27.62)	67.03(19.80)	63.64(23.36)		61.26(28.90)	70.83(19.76)	67.31(23.94)	
	≥30 ^c	54.51(24.68)	63.00(20.97)	60.23(22.51)		57.85(25.45)	65.66(21.36)	63.12(22.97)	

Educational level	Diploma ≥Baccalaureate	60.36(27.27) 60.21(21.87)	66.23(19.96) 65.07(22.89)	63.77(23.45) 63.65(22.60)	0.05	63.69(27.83) 63.13(24.03)	70.56(19.36) 67.21(23.84)	67.68(23.50) 66.02(23.85)	0.64
Years in nursing	<2 2-4 ≥5	61.46(25.96) 66.03(24.12) 54.69(27.97)	70.83(21.68) 64.86(19.46) 64.40(20.71)	67.08(23.83) 65.34(21.45) 60.73(24.12)	3.67*	64.19(26.13) 69.15(24.45) 58/38(29.47)	74.05(21.05) 69.76(19.23) 67.76(20.87)	70.10(23.61) 69.51(21.48) 64.22(24.83)	3.71*
Years on present unit	<2 ^a 2-4 ^b ≥5 ^c	61.56(25.65) 62.44(26.55) 51.91(27.50)	70.27(19.34) 64.47(21.55) 62.43(20.10)	66.70(22.49) 63.58(23.82) 59.32(22.93)	3.82* a>c	65.86(25.93) 65.31(27.47) 53.99(28.35)	73.48(18.24) 69.78(20.70) 64.97(22.04)	70.35(21.99) 67.83(23.93) 61.73(24.47)	5.18** a>c
Shift pattern	3 shifts Else	59.46(27.08) 68.45(19.51)	66.41(23.63) 65.44(16.34)	62.80(25.70) 65.81(16.73)	-1.63	62.63(27.92) 72.62(18.60)	69.55(23.50) 70.13(16.11)	65.96(26.08) 70.44(16.40)	-2.43*

*p<0.05; **p<0.01; ***p<0.001

Table 3: Distribution of offensive behaviors (N=542)

Classification		No n(%)	Yes, a few times n(%)	Yes, monthly n(%)	Yes, weekly n(%)	Yes, daily n(%)
Threats of violence	Have you been exposed to threats of violence from a nurse at your workplace during the last 12 months	392 (72.3)	51 (9.4)	28 (5.2)	27 (5.0)	44 (8.1)
Physical violence	Have you been exposed to physical violence from a nurse at your workplace during the last 12 months	442 (81.6)	28 (5.2)	11 (2.0)	10 (1.8)	51 (9.4)
Bullying	Have you been exposed to bullying from a nurse at your workplace during the last 12 months	429 (79.1)	38 (7.0)	12 (2.2)	9 (1.7)	54 (10.0)
Unpleasant teasing	Have you been exposed to unpleasant teasing from a nurse at your workplace during the last 12 months	371 (68.5)	87 (16.0)	22 (4.1)	19 (3.5)	43 (7.9)
Conflicts and quarrels	Have you been involve in quarrels or conflicts from a nurse at your workplace during the last 12 months	372 (68.6)	89 (16.4)	19 (3.5)	13 (2.4)	49 (9.1)

Table 4: Differences of the variables by type of department

Variables		General M(SD)	Special M(SD)	t
Offensive behaviors	Threats of violence	1.87(1.46)	1.54(1.11)	2.86**
	Physical violence	1.79(1.48)	1.35(1.02)	3.80***
	Bullying	1.84(1.49)	1.38(1.05)	3.86***
	Unpleasant teasing	1.87(1.41)	1.53(1.05)	3.09**
	Conflicts and quarrels	1.82(1.43)	1.57(1.08)	2.16*
Stress		60.34(26.53)	65.97(20.61)	-2.63**
Burnout		63.61(27.28)	69.82(20.45)	-2.85**

*p<0.05; **p<0.01; ***p<0.001