Nurses’ Anger Expression and Ways of Coping after Violent Experiences

Gyun-Young Kang¹ and Cha-Soon Choi²*

¹Department of Nursing, Kyungdong University, Wonju-si, Gangwon-do, Korea; mental74@kduniv.ac.kr
²Department of Taxation and Real Estate Studies, Namseoul University, Cheonan-city, Choongnam, Korea; chasoon59@nsu.ac.kr

Abstract

Background/Objectives: The present descriptive study examines anger expression and coping among clinical nurses who had experienced violence. Methods/Statistical Analysis: The participants of the study were 127 nurse practitioners from three medical facilities in J area and the data were collected from May 1, 2015 to June 15, 2015. The collected data were analyzed through t-test, ANOVA, Pearson’s correlation and multiple regression analysis. Findings: The results showed a significant positive correlation between the expression of anger experienced by the participants and their methods of coping after a violent experience ($r = .200$, $p = .024$). It was also found that the mode of anger expression that influenced coping was anger control ($\beta = .305$, $p = .001$). Improvements/Applications: Therefore, in order to ensure the effective delivery of nursing services, it is suggested that appropriate and effective systems be established that will aid in the prevention of and recovery from psychological and emotional pain among nurses who experience violence.

Keywords: Anger, Coping, Experience, Nurses, Violence

1. Introduction

1.1 Need for the Study

With today’s developing society in South Korea, increased standards of living and improved patients’ rights, recipients of nursing services expect quality medical services. However, these rising expectations and societal improvements have been accompanied by increased incidents of verbal abuse and physical violence by patients and their guardians.

The Korean Health and Medical Worker’s Union (KHMU)¹ conducted empirical workplace conditions research among 22,233 practitioners in 88 medical institutions nation-wide and found that 54.4% of hospital workers had experienced verbal abuse from patients and 46.2% from the guardians of patients, while 24.1% had experienced verbal abuse from doctors. Moreover, 11.7% of respondents had experienced physical violence, indicating the severity of the safety problems workers face at medical institutions. Notably, after operators (78.8%), nurses (61.4%) were exposed to the most violence among the respondents and their experience of verbal abuse from doctors (32.6%) rated higher than among other occupations. Nurses also experience high rates of physical violence (14.2%) and sexual harassment (13.4%) from patients, illustrating the seriousness of the nurses’ exposure to violence.

Previous studies have also found that nurses experience high levels of physical and verbal violence from patients and their guardians and that nurses form the occupational cluster that has the most exposure to violence in the hospital setting.²³. However, even after undergoing physical and mental distress due to violence, nurses are required to maintain therapeutic relationships with those recipients of nursing services who have used violence against them.
Experiences of violence lead to negative consequences such as decreased self-esteem among nurses, nursing staff turnover, a decline in patient nursing, decreased levels of job satisfaction and a threat to nurses’ mental health. This problem is not just a matter of personal psychological loss for nurses, but also relates to decreased job performance and a decline in nursing quality due to the turnover of experienced nurses, as well as financial losses for hospitals.

In one study of American nurses, 91% of participants reported that they had experienced verbal abuse within a month and in Australia, 83% reported having experienced violence from patients. Korean academia has also produced research on nurses’ experiences of violence. Most of these studies have focused on nurses in the emergency room or in the operating room and investigate burnout due to violence, intention to change jobs, job satisfaction and job stress. There is very little research on nurses in general wards or in special fields focusing on the aspects of their experience of violence and coping. There has also been a lack of comparative studies on nurses’ emotional responses, such as anger.

U.S. Department of Labor and Occupational Safety and Health Administration regulations stipulate that all work sites have the obligation to protect health professionals from threats of violence. These regulations include management plans for workplace violence such as the installation of compartmentalized rooms in case of violence. However, Korea currently has no legal or institutional foundations to protect health professionals from threats of violence. Due to this problem, a bill for a “protection law of medical personnel from violence” has been proposed, but has yet to be passed due to resistance and criticism regarding disputes about the provision of so-called special favors for medical personnel. When violence occurs in medical institutions where safety should be ensured, medical institutions, health and medical service personnel and patients can be harmed. Therefore, there is an urgent need for nation-wide measures to deal with violence toward medical personnel, which can influence the health and the lives of patients.

Moreover, there seems to be a lack of consideration of the emotional damage caused by violence, including depression, anxiety and anger. There is a need for a greater focus on the psychological and emotional pain of nurses exposed to violence, as well as measures to counteract this pain. More research is also required into how nurses cope with and respond to violence.

The purpose of the present study is to identify types of violence experienced by clinical nurses and to investigate nurses’ modes of expression of anger and their strategies for coping after such experiences. This study also aims to provide a baseline reference for establishing a system of appropriate coping and effective violence management practices to ensure the provision of effective nursing services and the prevention and recovery of psychological and emotional pain of nurses with experiences of violence.

1.2 Purpose of the Study
The present study aims to examine the types of violence, mode of anger expressions and aspects of coping that nurses undergo after a violent experience while working at a hospital. The specific purposes are, 1. To identify the types of violence nurses experience; 2. To examine the correlation between nurses’ mode of anger expressions and their coping after violence experiences; and 3. To investigate how anger expression affects coping after a violence experience.

2. Methods

2.1 Design of the Study
The present study is descriptive research examining the types of violence that nurses experience, their mode of anger expressions and their way of coping after experiencing violence.

2.2 Participants
The participants of the study were nurses from three medical institutions in J area, to whom the need and the purpose of the study were introduced. Written consent and data were collected from those who agreed to participate in the study. The participants were 99 nurses based on the G POWER 3.1.2 program with a significance level of .05, a statistical power of 90% and an effect size of .15. A total of 140 nurses were surveyed and from the collected survey responses, thirteen were eliminated due to great missing values and 127 were used as data in the final analysis.

2.3 Research Instruments
2.3.1 Types of Violence
The present study used Hwang’s scale of violence types, which was modified and supplemented by the present
researcher. Types of violence included verbal abuse and physical threats and violence. Information was gathered on whether participants experienced each type of violence and who the assailants of the violence were. The scale consists of sixteen items, with four on verbal abuse, five on physical threats and seven on physical violence. The Cronbach's alpha for the present study was .77.

2.3.2 Coping with Violence

The nurses’ coping strategies after experiencing violence were measured using Bae's scale based on the theory of Lazarus and Folkman. There were nine items for problem-focused coping and seven items for emotion-focused coping and each item was rated on a 5-point Likert scale. On the scale, 1 equaled 'strongly disagree'; 2 equaled 'disagree', 3 equaled 'neither agree nor disagree', 4 equaled 'agree' and 5 equaled 'strongly agree', with higher points indicating a better level of coping. The Cronbach's reliability of the original scale was .71. The reliability of the present study regarding the coping style after violence was .75.

2.3.3 Modes of Anger Expression

To measure nurses’ levels of anger, the Korean version of the State-trait Anger Expression Inventory (SAXI) was used. The SAXI was initially developed by and was translated and validated in Korea by. This scale consists of 44 items measuring the experience of anger: Ten items for state anger, ten for trait anger, eight for anger repression, eight for anger expression and eight for anger control. In the present study, only the 24 items on anger repression, anger expression and anger control were used. The reliability of the original scale was .73 for anger repression, .74 for anger expression and .81 for anger control. The reliability for the present study was .81, .78 and .75 for anger repression, expression and control, respectively.

2.5 Data Collection

Data were collected through a structured self-report survey from May 1, 2015 to June 15, 2015. The purpose and the method of the study were first explained to the head of the nursing department of the participating hospital to gain approval. Then the purpose of the study, confidentiality and possible withdrawal from the study were explained to the participants and written consent was collected before conducting the study. Approximately twenty minutes were spent on answering the survey and 127 surveys were used for the analysis, excluding the untrustworthy responses.

2.5 Data Analysis

The collected data were analyzed using the SPSS/WIN 21.0 statistical program and the percentage, mean and standard deviation of the general characteristics and actual experiences of violence were analyzed. The general characteristics of the participants and violence experience based on working conditions, mode of anger expression and coping style after experiencing violence were analyzed with a t-test and ANOVA. Pearson's correlation coefficients were used to find the correlations among variables and multiple regression analysis was used to analyze the factors influencing the coping styles of the nurses.

3. Result

3.1 General Characteristics of the Participants

The general characteristics of the participants include age, gender, marital status, current position, years of clinical career and place of work (Table 1). The age of 68 participants were in the 25-29 range, which showed the highest distribution (53.5%) and 125 of the participants were women (98.4%). There were 112 single people (88.2%) and 119 general nurses (93.7%). The working experience of 65 nurses ranged from 1-5 years (51.2%) and 29 worked in internal medicine, which showed the highest distribution (22.8%).

3.1.1 Experience of Violence, Mode of Anger Expression and Coping after Experiencing Violence based on the General Characteristics of the Participants

Participants' experiences of violence, their mode of anger expression and their way of coping after experiencing violence based on the general characteristics of the participants are shown in Table 1. The experience of violence showed significant differences for clinical experience (F = 5.219, p = .002) and place of work (F = 2.540, p = .018). Modes of anger expression showed no difference regardless of any general characteristic.
and coping after the experience of violence showed a significant difference regarding clinical experience ($F = 2.691, p = 0.49$).

### 3.2 Types of Violence Experienced by the Nurses

The participants were permitted multiple responses regarding the types of violence that they had experienced and the results are shown in Table 2. Based on multiple responses, verbal abuse included ‘being spoken down to’ (85%), ‘yelling’ (78.7%) and ‘insults’ (62.2%). Being spoken down to by the patients (48%) or their guardians (42.5%) and hearing insults from patients (42.5%) comprised high rates of verbal abuse. High rates of physical threat included ‘making an angry face’ (83.5%) and ‘stomping around in anger’ (67.7%). The highest percentage showed patients and their guardians making an angry face (42.5%) and stomping around (37.8%, 41.7%), but nurses also reported making an angry face (37%) frequently. As for physical violence, the scratching behavior (17.3%) of patients (16.5%) showed the highest score, with pushing behaviors (11.0%) of nursing colleagues being the second highest.

### Table 1. Experiences of violence, modes of anger expression and coping strategies after experiencing violence based on the general characteristics of the participants (N = 127)

| Characteristics          | Experience of Violence | Anger Expression Style | Coping after Experiencing Violence |
|--------------------------|------------------------|------------------------|-----------------------------------|
|                          | Mean±SD               | t/F | p     | Mean±SD       | t/F | p     | Mean±SD       | t/F | p     |
| Age                      |                        |     |       |               |     |       |               |     |       |
| 20-24                    | 26.92±2.63            | .709| .588  | 55.91±7.33    | .456| .768  | 48.44±6.24    | 2.022| .095  |
| 25-29                    | 26.04±3.05            |     |       | 55.35±6.39    |     |       | 49.80±7.02    |     |       |
| 30-34                    | 27.00±2.94            |     |       | 54.62±7.42    |     |       | 51.30±4.60    |     |       |
| 35-39                    | 26.00±2.30            |     |       | 53.20±6.42    |     |       | 42.00±11.42   |     |       |
| ≥ 40                     | 26.44±2.88            |     |       | 52.40±6.07    |     |       | 50.60±6.27    |     |       |
| Gender                   |                        |     |       |               |     |       |               |     |       |
| Female                   | 26.48±2.87            | 1.463| .146  | 55.17±6.60    | .905| .367  | 49.16±6.84    | 1.818| .071  |
| Male                     | 23.50±7.07            |     |       | 59.50±14.85   |     |       | 58.00±4.24    |     |       |
| Marital status           |                        |     |       |               |     |       |               |     |       |
| Unmarried                | 26.41±2.89            | .322| .748  | 55.41±6.74    | .800| .425  | 49.49±6.67    | .857| .393  |
| Married                  | 26.66±2.84            |     |       | 53.93±6.49    |     |       | 47.86±8.38    |     |       |
| Current position         |                        |     |       |               |     |       |               |     |       |
| Head nurse               | 47.80±8.41            | .293| .747  | 49.60±4.87    | 1.979| .143  | 26.20±2.59    | .020| .980  |
| Charge nurse             | 51.67±5.51            |     |       | 53.67±4.73    |     |       | 26.33±4.73    |     |       |
| Staff nurse              | 49.30±6.89            |     |       | 55.51±6.74    |     |       | 26.45±2.87    |     |       |
| Clinical career (years)  |                        |     |       |               |     |       |               |     |       |
| 1 ≤                      | 27.21±2.41            | 5.219| .002  | 55.83±7.01    | 1.862| .140  | 47.41±5.73    | 2.691| .049  |
| 1-5                      | 25.52±2.98            |     |       | 55.86±6.73    |     |       | 50.55±7.21    |     |       |
| 6-10                     | 27.93±2.69            |     |       | 52.47±5.19    |     |       | 50.60±3.98    |     |       |
| ≥11                      | 27.33±2.16            |     |       | 51.33±5.99    |     |       | 45.33±12.13   |     |       |
| Place of work            |                        |     |       |               |     |       |               |     |       |
| Medical ward             | 26.20±3.38            | 2.540| .018  | 56.27±6.43    | 1.182| .318  | 51.38±6.10    | 1.065| .390  |
| Surgical ward            | 26.33±2.20            |     |       | 54.29±6.13    |     |       | 49.58±6.39    |     |       |
| I.C.U.                   | 25.45±3.75            |     |       | 54.91±7.19    |     |       | 49.36±8.51    |     |       |
| E.R.                     | 26.07±2.06            |     |       | 54.50±9.40    |     |       | 48.93±5.29    |     |       |
| O.P.D.                   | 26.71±1.89            |     |       | 52.86±4.30    |     |       | 50.00±4.62    |     |       |
| O.R.                     | 26.56±2.65            |     |       | 58.22±3.67    |     |       | 48.11±5.40    |     |       |
| Psychiatric              | 23.33±3.44            |     |       | 60.16±7.65    |     |       | 52.17±4.58    |     |       |
| Other                    | 27.96±2.34            |     |       | 54.00±6.50    |     |       | 47.78±8.95    |     |       |
3.3 Correlation between Participants’ Mode of Anger Expression and Coping after Experiencing Violence

The mode of anger expression and the coping response after experiencing violence are shown in Table 3. The mode of anger expression and the coping after experiencing violence showed a significant positive correlation with a significance level of 5%. Anger repression, which is a sub-domain of mode of anger expression, showed a significant positive correlation with emotion-focused coping of violence, with a significance level of 1% and anger expression showed a significant negative correlation with problem-focused coping toward violence, with a significance level of 5%. Anger control showed a significant positive correlation with both problem-focused and emotion-focused coping of violence, with a significance level of 1%.

3.4 The Effect of Modes of Anger Expression on Coping after Experiencing Violence

To identify the sub-domain of anger expression that affects the coping of nurses after they experience violence, a multiple regression analysis was conducted, with coping after experiencing violence as the dependent variable and the three sub-domains of mode of anger expression as the independent variables.

The effect of modes of anger expression on coping after experiencing violence is shown in Table 4. The

| Type | Items | N(%) | Patient | Visitor | Doctor | Nurse |
|------|-------|------|---------|---------|--------|-------|
| Verbal abuse | Insult | 79(62.2) | 54(42.5) | 34(26.8) | 19(15.0) | 20(15.7) |
| | Speaking down to someone | 108(85) | 61(48.0) | 54(42.5) | 33(26.0) | 29(22.8) |
| | Yelling | 100(78.7) | 52(40.9) | 51(40.2) | 28(22.0) | 31(24.4) |
| | Threat | 21(16.5) | 10(7.9) | 15(11.8) | - | 2(1.4) |
| Physical threats | Taking a stance hit | 40(31.5) | 25(19.7) | 8(6.3) | 2(1.6) | 11(8.7) |
| | Making an angry face | 106(83.5) | 54(42.5) | 54(42.5) | 24(18.9) | 47(37.0) |
| | Taking a stance to throw an object | 34(26.8) | 21(16.5) | 11(8.7) | 4(3.1) | 7(5.5) |
| | Stomping around in anger | 86(67.7) | 48(37.8) | 53(41.7) | 19(15.0) | 34(26.8) |
| | Kicking objects | 43(33.9) | 26(20.5) | 19(15.0) | 6(4.7) | 7(5.5) |
| Physical violence | Hit by a thrown object | 6(4.7) | 5(3.9) | - | 1(0.8) | - |
| | Grabbed | 2(1.6) | - | 2(1.6) | - | - |
| | Kicked | 16(12.6) | 12(9.4) | 1(0.8) | - | 3(2.4) |
| | Scratched | 22(17.3) | 21(16.5) | - | 1(0.8) | 1(0.8) |
| | Pushed | 16(12.6) | 1(0.8) | 3(2.4) | 1(0.8) | 14(11.0) |
| | Bitten | 9(7.1) | 9(7.1) | - | - | - |
| | Spat | 11(8.7) | 11(8.7) | - | - | - |

Table 3. Correlation between nurses’ modes of anger expression and coping after experiencing violence

| Anger expression mode | Coping Responses after Violence |
|-----------------------|--------------------------------|
| Anger In | Anger Out | Anger Control | Coping after Violence | Emotion-Focused Coping after Violence | Problem-Focused Coping after Violence |
| 1.00 | .855**(.000) | .579*(.000) | .399*(.000) | .200*(.024) | -.016(.855) | .391**(.000) |
| Anger In | 1.00 | .288*(.001) | .234*(.008) | .199*(.025) | -.051(.568) | .440*(.000) |
| Anger Out | 1.00 | -.312*(.000) | -.147(.100) | -.185(.307) | -.005(.957) | |
| Anger Control | 1.00 | .372*(.000) | .268*(.002) | .300*(.001) | |
| Problem-Focused Coping after Violence | 1.00 | .842*(.000) | .634*(.000) | |
| Emotion-Focused Coping after Violence | 1.00 | |

*p<0.05, **p<0.01
anger-control coefficient score ($\beta = .305$) showed a high t score of 3.2777, indicating that anger control is one of the anger expression factors that significantly affects coping after experiencing violence. The significance level was 1% (Table 4).

Table 4. The effect of anger expression style on coping after experiencing violence (N = 127)

| Anger Expression Style | Coping after Violence | t  | p     |
|------------------------|-----------------------|----|-------|
| Anger-Repression       | .156                  | 1.686 | .094 |
| Anger-Expression       | -.097                 | -1.021 | .309 |
| Anger-Control          | .305                  | 3.277 | .001 |

R²=.159, F=7.767, p=.000

4. Discussion

The present study was conducted to identify violence experienced by nurses and to understand their methods of anger expression and ways of coping with violence so that baseline data could be provided for the protection of nurses against and recovery from psychological and emotional pain.

The findings indicate that nurses experienced a great deal of verbal abuse. Previous studies have also reported a high rate of experiences of verbal abuse by nurses$^{4,16}$. This finding indicates that the majority of nurses are not free from violence and that the occurrence rate of violence has decreased little despite increases in societal concerns regarding violence.

In addition, the participants were found to have experienced verbal abuse from patients and their guardians, including being spoken down to (85%), being yelled at (78.7%) and being insulted (42.5%).17,18 Also showed similar results regarding types of verbal abuse such as talking down, yelling and insults by patients and their guardians. Moreover, 91% of American nurses, 83% of Australian nurses and 72% of Swiss nurses have experienced verbal abuse from patients and their guardians$^{5,6,19}$, illustrating the seriousness of nurses' experiences of verbal abuse around the world. This high incidence of violence seems to be due to lenient social regulations and laws regarding verbal abuse compared to physical violence and sexual assault. Speaking down to others seems to be used to show one's social status or to impair others' self-esteem and coercive language is used to have one's demands met.

Moreover, it was found that patients, patients' guardians and nursing colleagues showed threatening behaviors such as stomping around with an angry face. In additions, the results of this study show that physical violence, such as being scratched by patients or pushed by colleagues is frequently occurring to nurses, a result similar to that of previous studies$^{17,18}$. According to$^{14}$, patients and their guardians vent their dissatisfaction of medical services to nurses through violent behaviors. Violence among nursing colleagues is reported to be due to nurses considering other nurses not as their colleagues but as their subordinates and disregarding them and also due to communicative misunderstandings among medical staff members. Since the organizational culture of nurses is hierarchical, there is high possibility of directive communication being perceived as violence. Therefore, there is a need to establish systematic measures to create an organizational culture of respect.

Such experiences of verbal and physical violence damages the mental health of nurses, leads to burnout and decreases job performance skills, causing a decline in nursing quality. Ultimately, as experiences of violence negatively impact nursing performance, active violence prevention as well as attention and interventions are needed to prevent mental health issues among nurses.

Spielberger$^{14}$ notes that anger is an emotional state consisting of subjective feelings such as tension, fury and rage and is regulated through the activation of the autonomic nervous system. The present research examined the relationship between the anger expression occurring from nurses' experiences of violence and their coping after the experience. According to the study's findings, there was a significant positive correlation between mode of anger expressions and coping after experiencing violence ($r = .200$, $p = .024$) and anger control affected coping after experiences of violence ($\beta = .305$, $p = .001$). Prior research has also shown that after experiencing violence, nurses performed their duties as if nothing had happened, repressed their anger or ignored uncomfortable emotions while wishing escape from reality$^{19,20}$. Due to the nature of their work of providing medical services to patients, nurses are required to always smile and express kindness and this leads nurses to suppress or ignore their anger even after violent experiences.

Ultimately, nurses' experience of violence will lead to negative outcomes including not only the declined quality
of nursing services, but also decreased job satisfaction, burnout and career changes. Therefore, active measures are needed for the prevention of violence to ensure effective nursing and professionalism. Establishing such a violence prevention and management system can be a way to secure the psychological and mental stability of nurses and lead to quality nursing services for service recipients and the management of nursing personnel. The results of the present study show that nurses’ problem of violence is ultimately an issue of nursing service recipients and nursing sites and so efforts are required to prevent violence.

The limitation of the study is that it only focused on nurses in a single area, limiting the generalizability of the results.

5. Conclusion and Implications

The present research is a descriptive study that examined the types of violence experienced by nurses, their mode of anger expression and their ways of coping after experiencing violence. Based on the results, nurses’ mode of anger expressions and ways of coping after violent experiences showed a significant positive correlation, while anger control affected methods of coping after experiencing violence. Therefore, efforts should be made to establish a prevention system for the problem of violence against nurses. The study’s implications for further research are twofold. First, in order to enhance external validity, future studies should include nurses from various areas. Second, repeated research should be conducted on the relationships among nurses’ experiences of violence, modes of anger expression, ways of coping after experiencing violence and organizational outcomes.

6. Acknowledgment

Funding for this paper was provided by Namseoul University.

7. References

1. Korean Health and Medical Worker’s Union. 2013 Survey report on Medical Work’s. Press release. Seoul: Korean Health and Medical Worker’s Union; 08/22/2013
2. Kim MY, Kim SH, Lim SH. A study of workplace violence by nurses. Nursing Science. 2005; 17(2):33–44.
3. Kisa S. Turkish nurses experience of verbal abuse at work. Archives of Psychiatric Nursing. 2008; 22(4):200–7.
4. Cho YH, Hong YR, Kim AM, Kim MK, Lee HJ, Han AK, Kim EJ. Experience of verbal abuse, emotional response and ways to deal with verbal abuse against nurses in hospital. Korean Journal of Occupational Health Nursing. 2011; 20(3): 270–8.
5. Sofield L, Salmond SW. Workplace violence: A focus on verbal abuse and intent to leave organization. Orthopaedic Nursing. 2003; 2(4):274–83.
6. Hills D. Relationships between aggression management training, perceived self-efficacy and rural general hospital nurses experience of patient aggression. Contemporary Nurse. 2008; 31(1):20–31.
7. Yang JH, Youn JH. Relationship between violence response, coping and burnout among emergency department nurses. The Korean Journal of Fundamentals of Nursing. 2009; 16(1):103–11.
8. Cho JY, Lee YW, Kim HS, Kim SH. Relationships among response for violence experience, hardiness and job satisfaction of nurses working in emergency department. Korean Journal Adult Nursing. 2011; 23(5):494–502.
9. Roh YH, Yoo YS. Workplace violence, stress and turnover intention among perioperative nurses. The Journal of Korean Academic Society of Adult Nursing. 2012; 24(5):489–98.
10. U.S. Department of Labor and Occupational Safety and Health Administration. Guidelines for preventing workplace violence for healthcare and social service workers (No. OSHA 31408-01R). Washington, DC: Author; 2004.
11. Hwang SS. A study on correlation between clinical nurses’ experience of violence and their self-esteem. [Master’s Thesis]. Kangwon University; 2008.
12. Lazarus R, Folkman R. Stress, appraisal and coping. NY: Behavioral Science Books; 1984.
13. Bae AR. The relationships among verbal abuse experience, emotional response, coping and emotional intelligence in hospital nurses. [Master’s Thesis]. Gyeongsang National University; 2012.
14. Spielberger DD, Klasner SS, Solomon EP. The experience, expression and control of anger. Individual difference, stress and health psychology. NY: Spring verlag; 1988. p. 89–108.
15. Chon KK, Hahn DW, Lee CH, Spielberger CD. Korean adaptation of state-trait anger expression inventory: Anger and blood pressure. Journal of Health Psychology. 1997; 2(1):60–78.
16. Pai HC, Lee S. Risk factors for workplace violence in clinical registered nurses in Taiwan. Journal of Clinical Nursing. 2011; 20:1405–12.
17. Park HJ, Kang HS, Kim H, Kwon HK. Exposure to workplace violence and coping in intensive care unit nurses. Journal of Korean Academy Psychiatric Mental Health Nursing. 2011; 20(3):291–301.
18. Kang MJ, Park IS. Types of violence and coping methods experience by general hospital nurses. Journal of Korean Clinical Nursing Research. 2015; 21(1):92–104.
19. Hahn S, Muller M, Needharn I, Dassen T, Kok G, Halffens RJ. Factors associated with patient and visitor violence experienced by nurses in general hospitals in Switzerland: A cross-sectional survey. Journal of Clinical Nursing. 2010; 19:3535–46.
20. Lee SH, Chung SE. Nurse's experience of verbal violence in hospital setting. Journal of Korean Academy of Nursing Administration. 2007; 13(4):526–36.