

A Study of Recognize and Practice about Delirium in the General Hospital Nurses

Kyu Ho Lee¹ Mee Lan Park^{2*} and Gu Young Kim³

¹ RN, MSN, Kangbuk Samsung Hospital, Republic of Korea

² Nursing Director, PhD, Kangbuk Samsung Hospital, Republic of Korea

³ Nursing Manager, MSN, Kangbuk Samsung Hospital, Republic of Korea
03181, 29 Saemunan-ro, Jongno-gu, Seoul, Korea
roybrain2@naver.com

Abstract. The purpose of this study was to determine recognition and corresponding practices of nurses regarding delirium; also, to determine the correlation between these two factors among nurses in a general hospital. This descriptive correlational study was conducted to provide basic data for the development of a tool that can assesses high-risk delirium groups. The subjects of the study were 206 bedside nurses who were working at medical surgical units, intensive care units, and emergency rooms in a general hospital. The approval of the Institutional Review Board was obtained before carrying out the study. The data was statistically analyzed through frequency, percentage, average, standard deviation, Pearson's correlation, t-test, and ANOVA using PASW Statistic 18. The correlation between recognition and corresponding practices of nurses was statistically significant ($p < .001$). A higher level of recognition resulted in higher level of practices among the nurses. The nurses' ability to identify high-risk delirium groups was considered as the most important preventive factor; therefore, it is necessary to develop a tool for nurses to use easily in order to identify high risk delirium group.

Keywords: Delirium, Nurse's recognition, Nurse's practice

1 Introduction

Delirium is a complex neuropsychiatric syndrome characterized by acute onset of disturbance of consciousness and fluctuating change in cognition, attention and perceptual disturbance [1]. It is the most common reason for acute cognitive dysfunction in hospitalized older people. In overseas countries, delirium occurred in about 10~30% of medical patients and 10~40% of elderly patients [2].

In Korea, delirium occurred in the following: 58% of elderly patients older than 60 years old; 22~44% of ICU patients; 7~10% of surgical patients; and 34% of cancer patients [3]. If delirium affected an elderly patient, it was reported that the incidence of complications increased due to declining cognitive and physical functions.

* Corresponding Author

Moreover, the length of hospital stay was extended or mortality rate increased due to worsened condition of the disease [4].

Therapeutic intervention for delirium rarely had any beneficial effect on the patient; however, there was a report that preventive intervention of delirium reduced its incidence, duration, and other symptoms [5]. Thus, it is important to detect delirium at an early stage and prevent the worsening of the disease. Accordingly, it is necessary to implement periodic monitoring of groups at high risk for developing delirium. The nurses spend much time beside patients and have continuous and frequent contact with them. Thus, nurses can detect delirium in early stage and provide them with appropriate care. The nurses' caring activity is very important to monitor the status of people having high risk of delirium and also it is effective to prevent people's disease.

Nonetheless, many nurses lack the ability to assess delirium due to insufficient knowledge about of the condition [6]. Nurses fail to distinguish delirium from dementia, depression, or mental disorder and they do not properly recognize occurrence of delirium in their patients [7]. Consequently, they fail to provide sufficient nursing care.

Therefore, this study aimed to understand the nurses' ability to identify delirium and their corresponding practices regarding this condition. The nurses who participated in the study directly cared for patients in a general hospital. Moreover, the correlation of these factors was analyzed in order to develop an assessment tool for high-risk delirium groups, and the basic data were utilized to develop a preventive intervention program.

2 Method

2.1 Research Design

This descriptive correlational study verifies the correlation between nurse's recognition level and corresponding practices in the treatment of delirium in general hospitals. Approval of the K General Hospital (IRB No: 2015-04-002) was obtained prior to the conduct of the study.

2.2 Subjects

The subjects of the study were 206 bedside nurses who understood the purpose of the study and agreed to participate. They were conventionally sampled from medical surgical units, ICUs and an emergency room of the K General Hospital located in Seoul. The fact that it was possible to stop answering the survey questionnaire in the middle of the study was also explained to them.

2.3 Instrument and Reliability

For the measurement of recognition and corresponding practices regarding delirium, the instrument of Park and Gu [8] that revised and supplemented the instrument

developed by Suh and Yoo [9] was used. The reliability in this study was Cronbach's $\alpha=.92$.

2.4 Data Collection and Analysis

The data collection was carried out through self-reporting and the time consumed for answering the questionnaire was approximately 15 ~ 20 minutes. The period of data collection was from April 22, 2015 to May 22, 2015. Using the G*POWER 3.1 program, 240 persons were primarily determined as the total number of subjects in consideration of the drop-out rate. A total of 199 subjects satisfied the significance level (alpha) 0.05 and effect size 0.20. However, a total of 206 survey questionnaires, excluding 34 uncollected forms, were used for the final data analysis.

In the data analysis method, general characteristics of the nurses were analyzed through frequency and percentage by using the program PASW Statistic 18. The nurses' recognition and corresponding practices regarding delirium were analyzed through descriptive statistics, ANOVA, and T-test. The correlation between recognition and corresponding practices on delirium was analyzed through Pearson's correlation.

3 Result

The average age of the subjects was 27.34 ± 4.00 years old and average working period was 57.19 ± 51.03 months. Regarding the service department, 74.3% majority of the nurses were from the medical surgical units while 25.7% of nurses were from special units.

The average recognition of delirium was shown to be 82.26 ± 8.74 points out of 100 points, and average practice score was reported to be 74.43 ± 12.17 points out of 100.

Regarding the nurse's working period, there was not significant statistical differentiation between the nurses' recognition ($p=.473$) and corresponding practice ($p=.489$) for delirium. Regarding the nurse's department, there was not significant statistical differentiation between the nurses' recognition ($p=.359$) and corresponding practices ($p=.304$) for delirium.

Regarding of delirium intervention, the nurses having high recognition carried out better corresponding practices. It means that there is a statistically significant correlation between the nurses' recognition and corresponding practices ($p<.001$).

4 Conclusion

In summary, there was statistically significant correlation between the nurses' recognition and corresponding practices regarding delirium ($p<.001$). Since the nurses' level of performance increased with a corresponding increase in their ability to identify delirium, preventive nursing intervention should be implemented in order for the nurses to easily recognize the high-risk delirium groups in the clinical setting.

Therefore, it is necessary to develop and implement a program that can screen high-risk delirium groups so that the nurses can easily recognize the target patients.

At the same time, a standardized interventional program that can effectively intervene the screened high-risk delirium patients should be developed.

References

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders: DSM-IV-TR. Arlington VA: American Psychiatric Association (2000)
2. Brown, C. H. t., & Dowdy, D.: Risk factors for delirium: are systematic reviews enough?. *Crit Care Med*, vol. 43, pp. 232-233 (2015)
3. Yu, M.Y., Park, J.W., Hyun, M.S., Lee, Y.J.: Factors Related to Delirium Occurrence among the Patients in the Intensive Care Units. *Journal of Korean Clinical Nursing Research*, vol. 14, pp. 151-160 (2008)
4. Lee, S.S.: Psychiatric Characteristics of Hospitalized Referred Cancer Patients: A Retrospective Study for 5 Years. *Journal of the Korean Society of Biological Therapies in Psychiatry*, vol. 18, pp. 246-255 (2012)
5. Milisen, K., Lemiengre, J., Braes, T., & Foreman, M.D.: Multicomponent intervention strategies for managing delirium in hospitalized older people: systematic review. *J Adv Nurs*, vol. 52, pp. 79-90 (2005)
6. Choi, E.J., Lee, H., Kim, I.A., Lim, Y.J., Lee, M.S., Kim, M.J.: Delirium Assessment Ability of Clinical Nurses. *J Korean Gerontol Nurs*, vol. 13, pp. 233-241 (2011)
7. Arnold, E.: Sorting out the 3 D's: delirium, dementia, depression: learn how to sift through overlapping signs and symptoms so you can help improve an older patient's quality of life. *Holist Nurs Pract*, vol. 19, pp. 99-104 (2005)
8. Park, Y.S., Gu, M.O.: The Development and Effects of Evidence-based Nursing Practice Guideline for Cancer Patients with Delirium. *Evidence and Nursing*, vol. 1, pp. 4-15 (2013)
9. Suh, H.J., Yoo, Y. S.: Intensive Care Unit Nurse's Knowledge, Nursing Performance, and Stress about Delirium. *Korean Journal of Adult Nursing*, vol. 19, pp. 55-65 (2007)