Improvement to prevent falls of Emergency Room patients

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Abstract

Purpose

Use the Root Cause Analysis to identify the causes and reasons which cause Emergency Room patients to fall during their visits. Develop and import different prevention and improvement measures to reduce the chances and series of fall of patients to enhance the quality of emergency care.

Method

Our emergency room, which is divided into emergency care and observation section, of the hospital is located in southern Taiwan. The majority of patients are either in critical condition or with mobility difficulties. Due to the acute break-out and condition needs, we constant have to perform emergency treatment and examination to extend patients life. It is also the main reason that causes the patients to fall. Between January and August of 2012, there are total of 25 cases of fall, which rank for level zero to three. One of those cases led to bone fracture. Because of this, we use Root Cause Analysis (RCA) to analyze the failure of process and issues to improve the procedures to reduce the occurrence of errors. By using RCA operating procedure, we identify the problems came from different factors. Staffs factors: Nursing staffs did not take assessment and preventive measurement for the risk of falling, lack of educational training, and lack of support from other staffs. Equipment factors: Lines of flow and sections are not clearly marked, rollaway beds are not properly functioned, warning signs of the slippery floors in the bathroom is not posted clearly, and bedpans slide off easily. Patients factors: Patients’ condition is weak and fall unconsciously. We need to research the reasons to transform people, environment and equipment. Assess improve measures are: execute assessment and fall prevention education(Figure 1, 2), adjust staff support, modify line of flow(Figure3, 4), regularly inspect bedpans and hospital beds, replace old hospital beds with adjustable beds for patients’ convenience(Figure5), remove the wheels on commode chairs(Figure6), and install anti-slip pads and display warning signs in the bathroom(Figure7).

Result

After various improvement and intervention of this study, the incidents have decreased to twelve from September, 2012 to August, 2013. Quality Control Nurse also assessed this project and confirmed the accuracy is at 100%. Overall fall prevention for the study subjects is 81%.

Conclusion

Through the process of improvement to investigate the reasons of falls, it directed to us that the awareness and education level still needed to be improved on hospital staffs, environment line of flow, equipment and others. By implementing RCA analysis and taking different measurement, and execution of the teamwork, there were no more incidents after 10 months of implementation and 3 months follow-up. Fall prevention not only saves the nursing staffs time to clean up after patients, it will also improve the quality care of patients.

Keyword: RCA Technique, fall prevention, emergency room