

Application of Root Cause Analysis to Improve the Safety of Patients: A Case Study of Adverse Event

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Objective

Head trauma and limb fracture are common consequences of falls in children. The aim of this study was to describe the adverse event with falls children in hospitalized. We used root cause analysis to survey the adverse event on practices relevant to improving patient safety.

Methods

The setting of this study was about a 24-bed pediatric oncology ward in northern regional teaching hospital in Taiwan from January, 2010 to November, 2013. The first applied instrument was based on literatures review. We would retrospectively chart review and “reporting system of medical incidents” describing in detail the adverse event and activities to leading up this. Then, we constructed the event diagram to show the steps in the process where fail maybe. We were made based on these root cause to avoid adverse events.

Results

The total errors events 23 adverse events (Systemic errors:2; personal errors: 21).

We found those questions:

- 1.Children are largely dependent on the age of the child is main risk factor. Mean age of the children was 5.8 years old. More than half of all fall-related childhood injuries occur among children age 3 years (about 56.6%).
2. Lack of main caregiver on the alert (lack of main caregiver watched closely) is a common cause of falls (about 86%).

Conclusions

Falls are a leading cause of children morbidity, mortality and high risk of interruption or delaying chemotherapy in cancer patients. Based on our results, we suggested to provide appropriate the tools to educate children and main caregivers of the potential risk of falls and was to develop individualized management plans of care to reduce risk for high risk children.