**Sentinel Event Literature Review**

Ashley McGuire

Jacksonville State University

NU350: Professional Roles

Dr. Wooten

March 4th, 2023

 Sentinel events in the hospital plague quality measures but serve as useful for accurate reporting of incidences for improvement. Research of recently evaluated sentinel events is insightful because it enlightens real cases and the raw statistics behind these occurrences. Falls are a great risk in the acute care setting as they can result in serious injury, permanent disfiguration, or death in some instances. Since numerous patients fall daily, I did research on fall rates in the hospital and possible factors influencing the falls. The purpose of this paper is to review the literature surrounding patient falls, which are sentinel events that should not happen because preventable measures can be taken to greatly reduce them. The scope of this review assesses how often falls occur and what variables could be affecting the continual incidence of falls using different articles on the topic. There are several articles on hospital fall rates that are available in CINAHL, so I chose two for this review. From the literature on falls in the hospital, the results show that falls occur anywhere from 0.4-9 falls per 1,000 patient days, or medially 1.5 per 1,000 patient days while 25-50% of fallers suffer injury along with the discovery that age, mobility impairment, surgery, nurse staffing, and proportion of new nurses all influence fall prevalence (Kim et.al, 2022).

 The first article reviewed addresses fall rates by specialties and risk factors for falls in the hospital. It is a retrospective study of inpatient falls within a single hospital with several specialties to draw a conclusion of overall falls in acute care as well as to model risk factors for falls including secondary diagnoses. The researchers reviewed the electronic health record of 114,951 patients from 2014-2016 and found 841 falls on record. This is an occurrence rate of 1.5 falls out of 1,000 patient days with a rate of injury of 0.4 per 1,000 patient days (Heikkila et.al, 2022). Binary logistic regression model analysis was used to find potential risk factors. The conclusion from this analysis was that acute care falls occur mostly in patients with neurological diagnoses and least in surgical patients. Factors increasing falls are advanced age, emergency arrival, hospital transfer, and prolonged hospital stay. Pneumonia and dementia were found to be contributing factors, but on a secondary level (Heikkila et.al, 2022). These results and conclusion are ideal for consideration, but there are limitations in the research.

Inconsistencies, omissions, and errors in these results include falls being underreported in hospitals and systemic reporting for secondary diagnoses being incomplete. This means that covariates of interest were not considered, such as medication, incontinence, gait difficulties, and decreased vision. Limitations are present; however, the article is not flawed in its findings. The literature included accurate numbers and percentages, was deep and thorough in the investigation methods, and is relevant to clinical practice. Conclusions of the article create the potential for educational opportunities to improve healthcare professionals’ treatment of falls and uncover preventative interventions for falls to include in care. Other pieces of literature available for research dive into factors specifically by patients and organizations that can increase fall prevalence.

 To further my review of hospital falls as a sentinel event, I chose a multicenter retrospective observational study concerning fall risk factors. The study investigates patient-level and organizational-level factors influencing in-hospital falls. The researchers used the national healthcare database and supplement it with organizational data obtained through a survey. Data extraction and survey were conducted between July and August of 2020 (Kim et.al, 2022). A mixed-effect logistic regression model was used to analyze the factors that cause in-hospital falls. Overall, 43,286 patients admitted into 86 hospitals were included and the fall rate came to 0.85 per 1000 days (Kim et.al, 2022). Patient-level factors of age, mobility impairment and surgery along with organizational-level factors of nurse staffing and proportion of new nurses were significant factors influencing falls (Kim et.al, 2022). The conclusion of the researchers is that various fall prevention strategies should be considered to reduce falls, depending on relevant patient factors. Further, corrective measures such as new nurse training and proper staffing levels should be employed to address organizational factors (Kim et.al, 2022). With these results and conclusions, healthcare professionals can identify possible risk factors, although, there are limitations to this study.

 Inconsistencies, omissions, and errors in these deductions include use of patient’s data from a secondary database, not including all variables, lack of data on previous patient falls, limited information on patient medication, and not classifying fall severity. Even though there are limitations, the study on patient and organizational fall risk factors is accurate and thorough in the investigation of separate risk factors. It is also in depth with the assessment of different facilities and patient population. The relevance is that proactive fall management in the hospital is crucial to ensure patient safety. Considering that the number of patients with fall risk is increasing due to aging, organizational factors should be supported to provide quality care for these patients. Therefore, nurse leaders should primarily ensure an appropriate level of nurse staffing and need to make efforts to strengthen clinical competency of nurses, particularly new graduates. Falls are a sentinel event, so healthcare professionals should minimize any risk possible that could enhance the chance of these occurrences.

 Hospital falls are dangerous but preventable instances. The goal of this literature review is to find research on current fall rates and what causes them in order to discover ways to prevent the sentinel event of patient falls in the acute setting. In the fall rates and risk factors study, the highest percentage of falls occurred in internal medicine patients and were associated with length of stay, body mass index, mode of arrival, reasons for admission, specialty variances, secondary diagnoses and any operation during hospital stay (Heikkila et.al, 2022). In the study on patient-level and organizational-level factors influencing falls, the significant organizational-level factors were found to be nurse staffing and number of newly graduated nurses, while patient age, mobility impairment and surgery were found to be the most significant patient-level factors (Kim et.al, 2022). Both literature works show that increasing age is a heavy risk factor for falls and that fall rates are approximately one per one thousand patient days. I believe that with these discoveries, care can better be provided if fall precautions are put in place upon admission for patients with fall risk factors. Unit directors should evaluate their staffing according to the current patient population on the unit. This research could make an immense difference in fall rate and injuries in the acute care setting if safety procedures are closely followed and further developed to minimize risk of falls.

**Resources**

Heikkilä, A., Lehtonen, L., & Junttila, K. (2022). Fall rates by specialties and risk factors for falls in acute hospital: A retrospective study. *Journal of Clinical Nursing*. <https://doi-org.lib-proxy.jsu.edu/10.1111/jocn.16594>

Kim, J., Lee, E., Jung, Y., Kwon, H., & Lee, S. (2022). Patient‐level and organizational‐level factors influencing in‐hospital falls. *Journal of Advanced Nursing*, *78*(11), 3641–3651. <https://doi-org.lib-proxy.jsu.edu/10.1111/jan.15254>