



KEY POINT SUMMARY

OBJECTIVES

This study used archived hospital data to determine the correlation of the call light use rate and the average call light response time with the fall rate, injurious fall rate, and patient satisfaction scores in acute inpatient care settings.

Are Call Light Use and Response Time Correlated With Inpatient Falls and Inpatient Dissatisfaction?

Tzeng, H. M., Yin, C. Y.
2009 | *Journal of Nursing Care Quality*
Volume 24, Issue 3, Pages 232-242

Key Concepts/Context

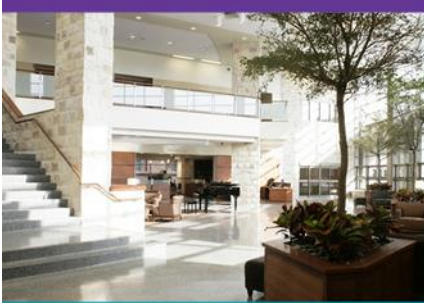
Inpatients use call lights to seek nurses' assistance. Although implied in patient safety, no studies have analyzed data related to the use of or response time to call lights collected by existing tracking mechanisms monitoring nursing practice.

Methods

This exploratory study was designed to determine the correlation of call light use rate per patient-day and the average call light response time with the total fall and injurious fall rates per 1000 patient-days and inpatient satisfaction scores. The research was conducted in four acute, adult inpatient care units (two medical, one combined medical-surgical, and one surgical) in a community hospital located in Michigan and used archived hospital data for analyses. The differences on study variables across three unit types were also explored.

Findings

Statistically significant differences in the mean values among the medical, surgical, and medical-surgical combined units on the call light use rate and three patient satisfaction scores ("help to the bathroom as soon as possible," "everything to help pain," and "pain well controlled"). After cross-validating the call light tracking data with the perspectives of nursing staff, patients, and family visitors toward patient-initiated call lights, interventions may be designed to promote safer hospital stays and improve patient satisfaction.



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Limitations

The relationship of staffing (skill mix and nurse-to-patient ratios) on the call light use rate and the response time was not explored. When analyzing the linkage separately by unit types, the sample sizes for each unit type were small which limits the generalizability of the outcomes. Further, this study did not address nurses' judgment or behaviors related to answering call lights, nor the motivations of surgical patients associated with call light use.

Design Implications

To decrease the frequency of call light use, reduce fall rates, and improve patient satisfaction, hourly rounds should be conducted with the primary goal being anticipation of the patient's needs. After integrating this study's findings and our observations, we conclude that encouraging call light use among surgical patients is a key to reducing injurious fall rates among this population. When selecting patient response systems, it is essential to analyze the contributing relationship of the call light use rate and the average call light response time with the total fall and injurious fall rates and inpatient satisfaction scores separately by the types of inpatient care units.