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Hourly Rounding and Medical-Surgical Patient Falls: A Review of the Literature

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ABSTRACT

Patient falls contribute to injuries, and longer hospital stays for patients in medical-surgical hospital units. Patient falls decrease patient safety, worsens patient outcomes, and increases hospital costs. The purpose of this review was to examine research literature to discover the impact of hourly rounding on the number of patient-falls occurring within medical-surgical units of the hospital. This is a literature review of 15 studies. Findings indicate that hourly rounding improves the quality of care, improves patient satisfaction rates and patient empowerment, and decreases patient fall rates. In conclusion, hourly rounding leads to a decrease in patient fall rates in the medical-surgical unit.

INTRODUCTION

Falls remain a common occurrence within a medical-surgical floor despite the use of screening tools, bed alarms, bed rails, and assistive devices. In one study, Walsh *et al.* [1] noted that in 1,263 medical surgical floors in the United States, patients fall 3.56 times per 1,00 patient days, with 26.1% of those falls resulting in an injury to the patient including, lacerations, fractures, intracranial bleeding, and death. Injuries related to falls resulted in 6.9 more days in the hospital and increased the cost by an extra $13,806 per fall [1]. With these extensive statistics, hospitals are trying to implement different strategies to decrease these incidents. One approach to reducing patient falls was to focus on intentional hourly rounding. By addressing the patient's needs every hour, the nurse can intervene before adverse outcomes occur. The purpose of this review was to analyze if hourly rounding on the medical-surgical floor is effective in reducing or preventing patient falls. The question created to answer the inquiry was: "On medical-surgical floors, how does hourly rounding affect patient falls compared to not performing hourly rounding?"

Background

Before 2008, hospitals were reimbursed for traumatic injuries following a patient fall during a hospital stay [2]. Since then, hospitals have been working diligently to decrease patient falls. A possible solution to preventing falls is implementing hourly rounding. In theory, hourly rounding will decrease patient falls because they will not get out of bed by themselves to retrieve something. It also creates opportunities for the nurse to ensure the patient is appropriately positioned in the bed. This research review will enable more information to be found on falls in medical-surgical units.

METHODS

This is a literature review, as it analyzes different literature to answer a pre-established question [3]. This review seeks to answer if hourly rounding decreases the chance of falls on the medical-surgical floors. Numerous databases were searched to obtain a minimum of 15 studies that addressed fall risks, hourly rounding, and fall prevention strategies used by medical units. Those studies were then analyzed to determine the hierarchy. All 15 studies have been used in this literature review to offer an array of information.

Three databases were used to collect the studies, including Google Scholar, EBSCO Host, and PubMed. All 15 studies were included for the review. Each study was analyzed and put into different levels of hierarchy. The first level contains meta-analyses, systematic reviews, and current practice guidelines. The second level has randomized controlled trials. Controlled trials without randomization are part of the third level. The fourth level includes cohort studies and case-controlled studies. The fifth level contains systematic reviews of descriptive studies, systematic reviews of qualitative studies, and correlational studies. The sixth level comprises of single descriptive studies, single qualitative studies, case series studies, case reports, and concept analysis. The final level consists of authorities' opinions, reports of expert committees, manufacturer's recommendations, and traditional literature reviews [3]. Three of the studies fell under level one for the level of evidence, one study was a level two, three studies used were level three, six of the studies fell under level four, one study was a level five, and one study was a level seven. Figure 1 visualizes, out of the seven levels, how many studies fell in each category.

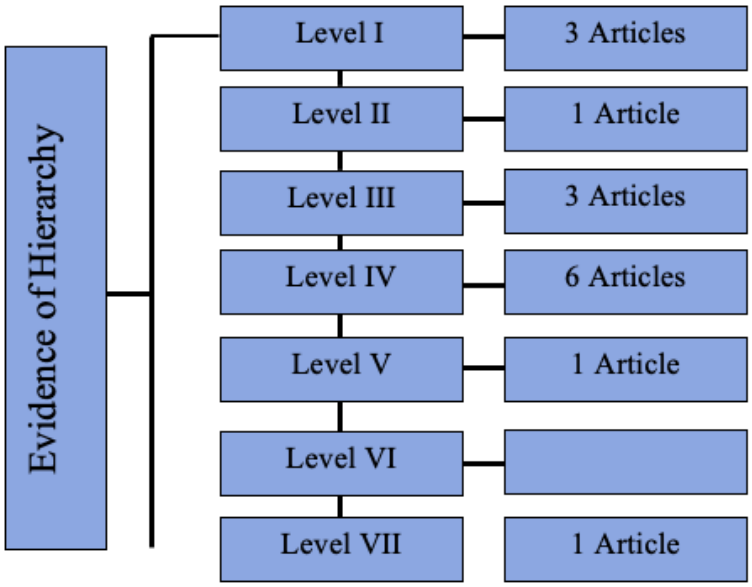

Figure No. 1: Levels of Evidence for Hourly Rounding and Patient Falls

Note: Level I is the highest, and level VII is the lowest category in the level of evidence

Fifteen studies were selected and used in the review. Seven of those studies had other interventions used to help decrease falls. Keywords common in the selected studies were “patient falls," "hourly rounding," and "fall rates.” The literature used for these studies were published between 2008-2020.

REVIEW OF THE LITERATURE

The findings gathered from the multiple literature sources are described in this section. This section summarizes the findings comprehensively. The main conclusions from the studies are analyzed and grouped to generate a better portrayal of research results. This literature review discusses the categorization, setting, and sample size of the studies. It also describes five major themes: hourly rounding improves the quality of care, hourly rounding improves patient satisfaction rates and empowerment, hourly rounding decreases patient fall rates, staff incentive programs and additional protocols increase nurse compliance, and hourly rounding reduced falls related to patients attempting to perform ADL's without assistive personnel.

Categorization of the Studies

A review of 15 studies revealed five major themes regarding hourly rounding. The study designs were considered based upon the document description, population size, and techniques used to collect data. These studies included systematic reviews of RCTs [4,5,], current practice guidelines [1], controlled trials without randomization [6,7,9-12], systematic reviews of descriptive studies [13,14], and opinions of authorities [15].

The Setting of the Studies

The observed setting in these studies is inpatient hospital units [1,2,4-6,8-15]. Research taken from the inpatient units provides an understanding of hourly rounding effects in acute care settings. The research was also completed in psychiatric settings and aged care facilities [7,14].

Sample Size of the Studies

The population size for the studies under review varied. Most of the studies included a population larger than 100 patients or survey respondents [1,4,6,8,9,11,13,14,16]. The sample size for one study included between 50 and 100 survey respondents [15]. Three sources pooled

data from a population between 25 and 50 patients or studies [2,5,7]. One study used multiple inpatient hospital wards with an unspecified patient population for each ward [10].

FINDINGS

Hourly Rounding Improves Quality of Care

The first main theme identified was that hourly rounding improves the quality of care [5,9,10,16]. The quality of care in patients who are rounded on hourly perceive that they have received better care than those who have not been rounded on frequently [9]. Hourly rounding was also shown to increase patient safety because the nurses are more aware of patients' risk factors and current needs [10]. Nurses are more responsive to patient needs with an increase in the implementation of intentional patient rounding [5].

Hourly Rounding Improves Patient Satisfaction Rates and Empowerment

Hourly rounding improves patient satisfaction rates because patients feel safer and better cared for [5,6,8-10,12,16]. Patients prefer to have their nurse check on them each hour rather than rely on the nurse responding to their call light. Patients and their families feel empowered and are more involved in their care when hourly rounding is implemented [8]. Patients are more vigilant when nurses frequently round and monitor patients [5]. Rounding has a profound impact on patients' perceptions of the care they receive [16].

Hourly Rounding Decreases Patient Fall Rates

Through all the studies found, it was shown that purposeful hourly rounding decreases fall rates within the acute care setting [1,2,4-16]. One study showed that implementing training on hourly rounding reduced fall rates from 3.21 to 1.14 within the study's span [11]. Hourly rounding increases the nurse's ability to identify risk factors for patient falls and provide patient-specific interventions [15]. Potential harms are decreased when nurses take "allocated time to care" for their patients [5].

Staff Incentive Programs and Additional Protocols Increase Nurse Compliance

Studies revealed that staff incentive programs and additional rounding protocols lead to increased nurse compliance related to hourly rounding [2,4,5,8,14]. Nurses were more likely to perform intentional hourly rounding and fall risk interventions when established incentive programs were present. Nurse accountability measures help nurses' compliance rates to complete hourly rounding [4]. The documentation of intentional patient rounding increases a nurse's attention to hourly rounding because it adds a measure of accountability [5].

Reduced Falls When Staff Assist Patient with ADLs

Studies have indicated that many patient falls are related to patients attempting to complete activities of daily living without the assistance of the healthcare team [1,5,7,9,15,16]. One study showed that 93.75% of falls occurred when patients attempted to get up to get something at the bedside or use the restroom [8]. The implementation of hourly rounding improves nurses' focus on patient-centered activities [9]. Patients are more likely to ask for assistance when the nurse frequently rounds [5]. Hourly rounding increases nurse attentiveness to individualized patient needs [16].

Summary of Findings

The purpose of this literature review was to discover if there was a relationship between patient fall rates and hourly rounding in the acute care setting. Fifteen studies were reviewed to discover common trends related to hourly rounding. Studies discussing hourly rounding in acute care settings revealed several emerging themes. Themes included (1) hourly rounding improves the quality of care, (2) hourly rounding improves patient satisfaction rates, (3) hourly rounding decreases patient fall rates, (4) staff incentive programs increase nurse compliance, (5) and hourly rounded reduced falls related to patients attempting to perform ADL’s without assistive personnel (see Figure 2).

Figure No. 2: Association Between Hourly Rounding and Patient Safety

The main question was, "on medical-surgical units, how does hourly rounding affect patient falls compared to not performing hourly rounding?" The findings show there is a decrease in patient fall rates when hourly rounding is implemented. Multiple factors, such as patient empowerment, reduced independent performance of ADL's, and increased quality of care may also impact this finding. Nurse compliance to hourly rounding can be improved through staff incentives, and protocols may be implemented, leading to improved patient safety.

DISCUSSION

This literature review took a broader look at hourly rounding and how it impacts the acute-care setting, especially in relation to patient fall rates. By utilizing research studies with levels of evidence found in categories I, II, III, and IV, decisions were made on the impact of hourly

rounding in nursing practice. This was a study explicitly geared to acute care and medical-surgical patients.

This study found themes regarding hourly rounding's clinical application: hourly rounding improves the quality of care, improves patient satisfaction rates and empowerment, and decreases patient fall rates [16]. The clinical implications of hourly rounding gathered from this study show that hourly rounding is beneficial in the patients' hospital experiences in the medical-surgical unit. Decreasing patient fall rates helps patients reach their care outcomes and goals with fewer complications and setbacks.

Strengths

This literature review contained many strengths. One strength was that hourly rounding is standard, so there is extensive research on the topic. This made it easier to find research material within the top levels of evidence. There were multiple levels of research and varying types of trials used to compose this literature review. Of the 15 research studies used, 13 were in the top four tiers of evidence. There were multiple viewpoints which allowed for a better perspective on how hourly rounding impacts care. The study revealed that most facilities view hourly rounding the same way and perform the same tasks. This made it easy to compare studies to one another. The number of studies made it easy to identify themes within the research and apply them to fall reduction in medical-surgical units.

Weaknesses

The main weaknesses of this review were the limited amount of time. Most studies have large amounts of research to discuss and support their findings. This review only used 15 studies and was written over a 14-week period. More time would have allowed for more in-depth analysis.

Recommendations

Recommendations associated with this literature review include further research. The use of more studies would offer a better discussion of data. It would also be beneficial to find more resources in the top four tiers of evidence. This evidence is found to be of the highest quality and offer the best data for analysis. It is always recommended to use the most current research

because nursing practices change over time. For optimum results, studies used should be from the previous three years.

CONCLUSION

Hourly rounding is beneficial for patients in inpatient medical-surgical care settings. Patient fall rates decrease as the rate of hourly rounding increases. Patients express increased satisfaction with their care, the quality of nursing care is improved, and falls related to independent ADL performance decrease. Offering incentive programs for rounding increases nurse compliance rates. Hourly rounding costs the hospital additional expenses related to nursing care on medical-surgical units, but it saves hospital's money pertaining to inpatient injuries recovery. Hourly rounding is an intervention that may be completed to decrease patient fall rates in acute care settings successfully.

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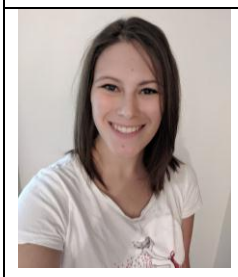	**Mattea C. Zuver** *Bethel University School of Nursing at Grace College Campus, Winona Lake, Indiana, USA*
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