

The Effects of Hourly Rounding by Nursing Staff on Patient Safety and Satisfaction: Implications for Clinical Practice and Healthcare Administration

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Abstract

Hospital admissions present significant challenges for patients and their families, often leading to feelings of vulnerability and dependence. Hourly rounding by nursing staff has emerged as a potential strategy to improve patient safety and satisfaction by proactively addressing patient needs. This systematic review evaluated 16 published studies on the impact of hourly rounding on patient satisfaction, call light usage, and patient falls. A comprehensive search was conducted in databases such as Medline, EMBASE, and CINAHL. The studies were analyzed for methodological rigor, outcomes, and applicability to clinical practice. The findings indicate that hourly rounding significantly enhances patient satisfaction and reduces call light usage, highlighting a direct correlation between proactive nursing care and improved patient perceptions of responsiveness. Units with initially low satisfaction scores experienced the most substantial improvements, emphasizing the potential benefits of implementing hourly rounding in such contexts. While the review revealed a low to moderate level of evidence regarding the efficacy of hourly rounding, the consistency of positive outcomes across multiple studies suggests that this practice can meaningfully enhance patient experiences in hospital settings. Nurse administrators are encouraged to adopt hourly rounding protocols tailored to their specific environments, acknowledging the need for further research to optimize implementation strategies.

Keywords: *Hourly Rounding, Patient Safety, Patient Satisfaction, Nursing Care, Healthcare Quality.*

Introduction

Hospital admissions impose considerable hardship on patients and their families. Patients confront perplexing medical disorders necessitating tests and treatments from physicians, nurses, and other healthcare professionals, which relegates them to dependent positions and renders them socially and emotionally vulnerable. They are obligated to seek aid with fundamental necessities such as relocation, nourishment, and elimination. Patients, unfamiliar with hospital protocols and how to address their needs, use the main resource available to them: the nurse call button. Expectations and perceptions of reaction to this kind of communication may vary based on the rationale for starting the request. For instance, if a patient inquires about a planned treatment, a little waiting period may be permissible. For a patient administered a diuretic, suffering bladder distension and urgency, a little delay for restroom help may seem excessively prolonged. Deliberately monitoring patients at regular intervals, often referred to as hourly rounding, has been proposed as a fundamental strategy to meet essential patient demands while improving patient safety and comfort (1).

Published findings indicate that systematic and intentional rounding by nursing enhances patient satisfaction (2). This discovery is particularly pertinent in the contemporary context of value-based buying, when payments are directly linked to patient satisfaction metrics (3). Nursing responsiveness significantly influences a patient's care experience during hospitalization and is reflected in the majority of patient satisfaction surveys. The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)

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survey, a publicly disclosed instrument that influences Medicare payment rates, includes two items pertaining to nurse response (4-6).

The use of proactive and routine assessments of hospitalized patients to mitigate anxiety has been included into nursing courses since the mid-1970s, albeit lacking official trial evaluations. Recently, Woodard elucidated a foundational justification for proactive rounding inside the "help uncertainty" concept (5). Patients who cannot understand the nursing process and are unable to anticipate a nurse's availability for physical and emotional support may fear that their urgent needs will go unaddressed. Anxiety levels escalate, and maladaptive coping strategies may be used (e.g., excusing oneself to the restroom quickly after using pain medication). By proactively addressing fundamental requirements such as restroom access, posture, pain management, and the accessibility of personal things via a systematic approach, nurses may alleviate patient anxiety and reduce confusion about assistance (1).

Systematic and proactive nurse rounding not only alleviates patient anxiety and panic but is also linked to a reduction in call light use. Surveys including nurses and patients reveal that pain management, personal help, restroom assistance, and equipment alerts (e.g., intravenous pumps) are among the top five reasons for activating the call bell (6, 7). Systematic hourly rounding that covers these critical "Ps" may enable nurses to provide better responsive and uninterrupted care.

The only comprehensive evaluation of organized rounding therapies to date is a narrative review published by Hughes in 2023 (8). She determined that hourly rounding decreased call light use and enhanced patient happiness, although did not disclose the quantitative findings. Due to the evaluation's absence of recent evidence and critical information about the treatments, we conducted an updated systematic review to facilitate evidence-based decision-making within the hospital and health system contexts.

Implementing regular hourly rounding in nursing practice may provide challenges for nurse administrators due to many factors, especially amid unclear future hospital payment rates. Nurse administrators must assess changes in nurses' time allocation and ascertain if augmenting staffing levels is necessary and would provide advantages that surpass associated expenses (9-13). Nursing leaders must comprehend the evidence advocating for alterations in nursing care delivery methods and use it to secure the endorsement of other hospital and health system managers (14). Systematic evaluations of clinical evidence effectively educate stakeholders about the usefulness of modifications in nursing practice. This systematic evaluation of hourly nursing rounds equips hospital nurse administrators with the evidence required for informed decision-making about program implementation and nursing resource allocation.

Methods

A search was conducted in Medline, EMBASE, and CINAHL for published research, including systematic reviews.

Analysis and Consequences for the Nurse Executive

This systematic evaluation of 16 published publications demonstrates considerable evidence that hourly rounding positively impacts patient satisfaction, call light use, and the incidence of patient falls. The advantages in patient satisfaction ratings and perceived responsiveness seem to be more pronounced in units with poor baseline performance, so corroborating the concept of a ceiling effect regarding the influence of hourly rounding. The use of systematic review technique revealed significant limits regarding the application of the findings, which may have gone unnoticed if the publications had been examined with less care. Understanding concerns like as methodological bias, publication bias, and generalizability may provide nurse administrators valuable insights into the research as they contemplate using it as a basis for adopting hourly rounding in their organizations.

This evaluation revealed significant diversity in the research methods, namely regarding the execution of the experiments and the measurement of findings. Interventions continuously focused on the "four P's": pain management, toileting or bedpan requirements, patient placement, and the comforting presence of

the nurse. Nonetheless, discrepancies existed in the frequency of rounding and the persons doing the rounds (registered nurses vs support workers), which may be a significant factor for nurse executives to consider. No research offered data for comparing the efficiency of these modifications, save for the hourly and bi-hourly rounding in Meade's study as previously mentioned.

The methodological techniques of the research analyzed may introduce bias favoring hourly rounding and/or limit their generalizability to units outside the study context. It is noteworthy that none of the research used a randomized design; rather, they utilized a pre-post study approach. Pre-post research designs have little capacity to account for the effects of contemporaneous treatments or changes that may have happened alongside the study intervention (15). Consequently, a definitive causal link between the execution of hourly rounds and the research findings cannot be established. This constraint is especially pertinent if units exhibiting notably low patient satisfaction or responsiveness ratings are more inclined to use hourly rounding. Regression to the mean indicates that these specific units are likely to improve independently of any alterations in care, complicating the ability of nurse executives to ascertain the genuine effect of the intervention and to strategize future efforts (16).

A body of data primarily consisting of pre-post research is also more susceptible to publication bias. Investigators may refrain from pursuing publication when practice changes fail to yield the intended outcomes; furthermore, to promote the adoption of these practices, authors of published studies might highlight their most favorable results while neglecting those that do not support their intervention (17-24).

Nurse executives should ascertain if the authors adhered to a priori research protocols when assessing published reports of pre-post studies (25-27). Only a limited number of research in this systematic review indicated the use of such a strategy, hence the degree of potential reporting bias remains uncertain. An example is the research by Meade et al., which indicated that findings from about one-third of participating institutions were omitted due to over 5% of data pieces being absent from their logbooks (1).

The selection, training, and oversight of workers in the research may have introduced bias and limited generalizability. In Kessler's research (21), project management diligently sought to assure optimal staff adherence to the hourly rounding procedure, which included bi-weekly meetings about the program and requiring staff members to sign commitments to fulfill the rounds. Kessler's research has a degree of intervention and resource availability that is beyond what is generally accessible in most clinical settings, complicating replication for nurse administrators. In Berg's study (22), several staff members refused to agree to the inclusion of their shift records in the research. The efficacy of the hourly rounding program for the patients of these staff members may render the study's reported findings an inaccurate reflection of the program's overall impact.

Furthermore, bias may emerge when nurses are aware that their performance and the effects of a practice modification are being scrutinized for research objectives. If data collection occurs just during the last week of each month, as shown in the research by Culley et al. (23), staff may have less incentive to implement the hourly rounding program in the intervening weeks. Automated data gathering, often used to assess call light utilization, facilitates more comprehensive data acquisition and mitigates the possibility of bias. The choice of units may restrict the generalizability of the results (28-30). Berg et al. (22) chose a unit characterized by a consistent patient population and acuity, creating an environment conducive to the implementation of practice improvements. Woodard et al. (5) chose a medical-surgical unit where the charge nurse performed scripted rounds, maintaining a patient-nurse ratio of 3:1 during the day and 4 or 5:1 at night throughout 12-hour shifts. The nurse's authoritative role during the rounding intervention and the comparatively low patient ratio are other credible reasons for the rise in patient satisfaction. Table 1 represents the summary of key findings on hourly rounding.

Table 1. The Summary of Key Findings on Hourly Rounding

Outcome Measure	Impact of Hourly Rounding	Details	Supporting Evidence
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Patient Satisfaction	Significant improvement in patient satisfaction levels, particularly in units with initially low satisfaction scores.	-Patients reported feeling more attended to and valued. -Consistent interaction reduced anxiety and improved communication between staff and patients.	Meade et al., (1): Satisfaction scores improved by 25% in units implementing hourly rounding. Mulugeta et al., (2): Enhanced HCAHPS scores.
Call Light Usage	Reduction in call light usage due to proactive care addressing pain, toileting, and positioning needs.	-Patients relied less on call lights to address needs. - Nurses could plan care more efficiently, reducing unnecessary interruptions.	Tzeng & Yin, (6): Call light usage reduced by 38%. Saleh et al., (20): Call light frequency dropped by 29% in medical-surgical units.
Patient Falls	Decrease in patient falls by ensuring timely responses to patient needs and frequent mobility assistance.	-Proactive toileting and mobility checks reduced the likelihood of patients attempting to move unassisted. - Improved safety through frequent visual checks.	Tucker et al., (25): Fall rates decreased by 23%. Olrich et al., (24): Patient falls reduced by 30% post-implementation of hourly rounding.
Nursing Workflow	Enhanced nursing efficiency and decreased interruptions in care delivery.	-Nurses spent less time responding reactively to patient requests. -Tasks were completed in a structured manner, improving workflow and team coordination.	Tea et al., (29): Nurses reported a 15% improvement in workflow efficiency. Kessler et al., (21): Positive feedback from staff on reduced stress.
Patient Safety	Increased overall safety by addressing high-risk factors for falls and pressure ulcers through consistent monitoring.	-Hourly checks ensured early identification of issues like skin breakdown or unmet toileting needs. - Reduced likelihood of safety incidents caused by unattended patients.	Tucker et al., (25): Safety events reduced by 15%. Meade et al., (1): Improvement in prevention of pressure ulcers.
Implementation Challenges	Variability in frequency and personnel conducting rounding may affect outcomes and generalizability.	-Some studies reported inconsistent adherence to rounding protocols. - Staff workload and attitudes influenced the success of implementation.	Berg et al., (22): Adherence ranged from 60% to 85%. Hughes, (8): Staff resistance was noted in high-pressure environments.

Conclusions

This systematic review highlights the multifaceted impact of hourly rounding on patient safety and satisfaction within hospital settings. While the evidence base is characterized by varying methodological quality, the consensus is clear: implementing structured hourly rounding can lead to significant improvements in patient experiences. Notably, patients reported higher satisfaction levels and perceived greater responsiveness from nursing staff, which is critical in an era where value-based care is paramount.

The reduction in call light usage is another noteworthy outcome, suggesting that proactive nursing interventions can effectively anticipate and meet patient needs, thereby minimizing the frequency of

requests for assistance. This not only enhances the patient experience but may also alleviate some of the workload pressures faced by nursing staff, as fewer call lights can lead to a more manageable work environment.

However, the review also identified several limitations within the existing literature. The predominance of pre-post study designs raises concerns about potential biases and the inability to establish definitive causal relationships. Furthermore, the variability in rounding frequencies and the roles of nursing personnel performing the rounds complicate the interpretation of results. These factors underscore the necessity for more rigorous, randomized controlled trials to provide a clearer understanding of the impact of hourly rounding.

or nurse administrators, the findings present a compelling case for integrating hourly rounding into routine nursing practices. However, successful implementation requires careful consideration of staffing levels, training, and resource allocation. Developing standardized protocols and fostering a culture that prioritizes patient-centered care will be essential for maximizing the benefits of hourly rounding.

Future research should focus on standardizing rounding practices, exploring the roles of different nursing personnel, and assessing long-term impacts on patient outcomes. By addressing these areas, healthcare organizations can enhance the effectiveness of hourly rounding initiatives, ultimately leading to improved patient care and satisfaction.

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تأثير الجولات التمريضية كل ساعة على سلامة المرضى ورضاهم: انعكاسات على الممارسة السريرية وإدارة الرعاية الصحية

الملخص

الخلفية: تمثل الإقامة في المستشفى تحديات كبيرة للمرضى وأسره، مما يؤدي غالبًا إلى الشعور بالضعف والاعتماد. ظهرت الجولات التمريضية كل ساعة كإستراتيجية محتملة لتحسين سلامة المرضى ورضاهم من خلال تلبية احتياجاتهم بشكل استباقي.

الطرق: تم تقييم 16 دراسة منشورة حول تأثير الجولات التمريضية كل ساعة على رضا المرضى، واستخدام أجراس الاستدعاء، وحوادث سقوط المرضى. تم إجراء بحث شامل في قواعد بيانات مثل Medline و CINAHL و EMBASE، وتم تحليل الدراسات من حيث الدقة المنهجية والنتائج وقابليتها للتطبيق في الممارسة السريرية.

النتائج: تشير النتائج إلى أن الجولات التمريضية كل ساعة تُحسن بشكل كبير رضا المرضى وتُقلل من استخدام أجراس الاستدعاء، مما يُبرز العلاقة المباشرة بين الرعاية التمريضية الاستباقية وتحسين تصور المرضى للاستجابة لاحتياجاتهم. وقد شهدت الوحدات ذات درجات الرضا المنخفضة في البداية التحسينات الأكثر وضوحًا، مما يؤكد الفوائد المحتملة لتطبيق جولات تمريضية كل ساعة في مثل هذه السياقات.

الخلاصة: رغم أن المراجعة أظهرت مستوى منخفضًا إلى متوسط من الأدلة بشأن فعالية الجولات التمريضية، إلا أن التوافق في النتائج الإيجابية عبر العديد من الدراسات يشير إلى أن هذه الممارسة يمكن أن تُحسن بشكل ملموس تجارب المرضى في بيئات المستشفيات. يُشجع مدراء التمريض على اعتماد بروتوكولات للجولات التمريضية كل ساعة مصممة خصيصًا لبيئاتهم الخاصة، مع الإقرار بالحاجة إلى مزيد من الأبحاث لتحسين استراتيجيات التنفيذ.

الكلمات المفتاحية: الجولات التمريضية كل ساعة، سلامة المرضى، رضا المرضى، الرعاية التمريضية، جودة الرعاية الصحية.