

The Effect Of Emergency Department Staff Hourly Rounding On Clients' Satisfaction

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Abstract

Background: Patient satisfaction in the high-pressure environment of the emergency department (ED) is heavily influenced by staff responsiveness, communication, and attentiveness. Hourly rounding, a structured practice of proactive patient checks, has been proposed as a strategy to improve the patient experience by anticipating needs and enhancing engagement.

Methods: A quantitative, quasi-experimental study was conducted to evaluate the effect of a structured hourly rounding protocol on patient satisfaction. A sample of 150 adult ED patients was selected using purposive sampling. Data on patient satisfaction were collected in two phases—pre- and post-intervention—using a validated questionnaire that measured overall satisfaction and specific dimensions like communication, responsiveness, and comfort. Data were analyzed using descriptive and inferential statistics.

Results: The implementation of hourly rounding led to significant improvements in all measured areas of patient satisfaction. The proportion of patients reporting being "Very Satisfied" overall increased from 20% to 50%. Satisfaction with staff communication rated as "Excellent" rose from 16.7% to 46.7%. Perceptions of staff responsiveness rated as "Excellent" increased from 13.3% to 43.3%. Furthermore, excellent ratings for comfort and safety increased fourfold, from 10% to 40%.

Conclusion: The findings demonstrate that the systematic implementation of hourly rounding by ED staff significantly enhances patient satisfaction across multiple domains, including communication, responsiveness, comfort, and safety. This proactive, structured approach is an effective intervention for improving the patient experience and overall quality of care in emergency settings.

Introduction

Background

Emergency departments (EDs) are critical points of care in healthcare systems, often serving as the first point of contact for patients experiencing acute medical conditions. The nature of emergency care is inherently fast-paced, unpredictable, and high-pressure, which can make consistent, personalized attention challenging. In such environments, patient satisfaction is frequently influenced by factors such as perceived responsiveness, communication quality, and timely interventions. Staff engagement and

structured care practices play a crucial role in shaping the overall patient experience in these settings (Brosinski & Riddell, 2020).

Patient satisfaction in the emergency department is multifaceted, encompassing both clinical outcomes and experiential aspects of care. Beyond the medical treatment itself, elements such as clear communication, emotional support, and a sense of being attended to significantly impact how patients perceive their care. When patients feel that staff are attentive and proactive, it fosters trust, reduces anxiety, and improves adherence to treatment plans. Conversely, delays, lack of communication, and perceived neglect can lead to dissatisfaction, complaints, and even adverse outcomes (McFarlan et al., 2019).

Hourly rounding, sometimes referred to as intentional or proactive rounding, is a structured nursing practice in which staff regularly check on patients at set intervals. The practice aims to anticipate patient needs, identify potential issues early, and maintain continuous engagement. In the context of emergency care, hourly rounding may include checking on patient comfort, pain levels, vital signs, positioning, safety, and informational needs. By providing predictable, consistent interactions, rounding can reduce patient anxiety and create a perception of attentiveness and reliability in the care team (Gliner et al., 2022).

The implementation of hourly rounding in emergency departments has been increasingly explored as a strategy to improve patient-centered care. Given the high patient turnover and variable acuity in EDs, proactive staff engagement can help address both visible and subtle patient needs that might otherwise be overlooked. Staff are able to intervene before minor issues escalate, which not only enhances patient comfort but also contributes to a more efficient workflow and reduced incident reports. The presence of structured rounding protocols also provides clarity to staff roles and responsibilities, potentially reducing task ambiguity (Özhanlı & Akyolcu, 2020).

Communication is a core component of patient satisfaction, and structured rounding offers an opportunity to enhance it. During hourly rounds, staff can provide updates on waiting times, test results, and treatment plans, which mitigates the frustration associated with uncertainty. Patients often report higher satisfaction when they perceive that healthcare professionals are accessible and attentive, and when their questions and concerns are addressed proactively. This ongoing dialogue strengthens the therapeutic relationship between patients and staff, fostering a more positive experience even in high-stress situations (Alshehhi et al., 2023).

Patient safety and quality of care are closely linked to the frequency and quality of staff interactions. Regular rounding allows early detection of complications, potential falls, or clinical deterioration, which is particularly relevant in emergency settings where patients' conditions can change rapidly. By routinely assessing patient status and needs, staff can intervene promptly, thereby reducing adverse events and enhancing the overall safety environment. This proactive approach reinforces patients' confidence in the care they receive and contributes indirectly to their satisfaction (Wang et al., 2024).

From a staff perspective, hourly rounding can promote efficiency and reduce workload stress. By scheduling regular check-ins, staff may anticipate needs before they become urgent, preventing last-minute crises that disrupt workflow. This systematic approach can improve time management, enhance team coordination, and reduce reactive problem-solving, which in turn may positively influence the quality of care delivered. Satisfied, less-stressed staff are more likely to provide attentive and compassionate care, further enhancing patient satisfaction (Aleksandrovskiy et al., 2022).

Patient satisfaction is increasingly recognized as an important metric for healthcare quality and organizational performance. Hospitals and EDs are under growing pressure to demonstrate high-quality patient experiences, which influence reputation, patient loyalty, and even reimbursement. Strategies that actively improve satisfaction, such as hourly rounding, are therefore not only beneficial for patients but also align with institutional goals and regulatory expectations. Understanding the relationship between rounding and satisfaction can help administrators and clinical leaders make informed decisions about staffing, workflow, and training (Leamy et al., 2023).

While the benefits of hourly rounding have been studied in inpatient settings, its application in emergency departments presents unique challenges and opportunities. The unpredictable patient volume, variable acuity, and rapid turnover in EDs necessitate modifications to traditional rounding protocols to ensure feasibility and effectiveness. Investigating how structured hourly interactions influence patient perceptions in this environment can provide valuable insights into best practices for emergency care delivery and patient-centered service design (Will et al., 2019).

Ultimately, enhancing patient satisfaction in emergency departments requires a multifaceted approach that integrates timely medical care with structured, empathetic staff interactions. Hourly rounding represents a promising practice to bridge this gap by ensuring regular engagement, proactive problem-solving, and clear communication. By systematically addressing patients' physical, informational, and emotional needs, emergency staff can foster a supportive environment that improves both patient experience and overall care quality. Research into this intervention can guide evidence-based strategies to optimize satisfaction outcomes in high-pressure healthcare settings (Choe et al., 2021).

Methodology

Study Design

A quantitative, quasi-experimental design was employed to evaluate the effect of emergency department staff hourly rounding on clients' satisfaction. The study aimed to measure differences in patient satisfaction before and after the implementation of a structured hourly rounding protocol. This design allowed the researchers to observe outcomes under real-world clinical conditions while controlling for time-dependent variables and comparing pre- and post-intervention data.

Study Population and Sample

The study population consisted of adult patients who received care in the emergency department during the study period. Inclusion criteria were adults aged 18 years or older, conscious and able to communicate, and who consented to participate. Exclusion criteria included patients with critical conditions requiring immediate interventions, cognitive impairments, or those who were discharged or transferred before completing the survey. A purposive sampling technique was used to select participants to ensure that the sample represented patients exposed to both standard care and the hourly rounding intervention. The final sample size was calculated using power analysis to achieve adequate statistical significance for detecting differences in satisfaction scores.

Intervention

The intervention consisted of implementing a structured hourly rounding protocol for emergency department staff, including nurses and support personnel. Staff were trained to conduct systematic checks every hour, focusing on patient comfort, pain management, vital signs monitoring, repositioning, safety concerns, and addressing patient questions. Standardized checklists were used to ensure consistency and adherence to the rounding protocol. The intervention was carried out over a defined period, during which staff maintained logs of each rounding activity to monitor compliance.

Data Collection Instruments

Patient satisfaction was measured using a structured, validated questionnaire that captured multiple dimensions of the patient experience, including communication, responsiveness, comfort, and overall perception of care. The questionnaire employed a Likert scale ranging from strongly dissatisfied to strongly satisfied. Additional demographic and clinical information, such as age, gender, and reason for visit, was collected to account for potential confounding factors. Data collectors, who were trained research assistants, administered the questionnaires at discharge to capture patients' immediate perceptions of care.

Data Collection Procedure

Data were collected in two phases: pre-intervention and post-intervention. In the pre-intervention phase, patient satisfaction was measured under standard care conditions without hourly rounding. Following the implementation of the rounding protocol, post-intervention data were collected using the same questionnaire and procedure to ensure comparability. Staff compliance with hourly rounding was monitored daily, and any deviations were documented. All data were anonymized to maintain patient confidentiality and stored securely for analysis.

Ethical Considerations

Ethical approval was obtained from the institutional review board before conducting the study. Participants were informed about the study's purpose, procedures, and their rights, including the right to withdraw at any time without affecting their care. Written informed consent was obtained from all

participants. Confidentiality was strictly maintained, and data were de-identified prior to analysis. The study adhered to ethical principles for research involving human subjects.

Data Analysis

Collected data were analyzed using statistical software. Descriptive statistics were used to summarize demographic characteristics and satisfaction scores, including means, standard deviations, and frequency distributions. Inferential statistics, such as paired t-tests or Wilcoxon signed-rank tests, were applied to compare pre- and post-intervention satisfaction scores. Subgroup analyses were conducted to explore differences across demographic and clinical variables. Statistical significance was set at $p < 0.05$.

Reliability and Validity

The questionnaire was tested for internal consistency using Cronbach's alpha, and pilot testing was conducted to ensure clarity and comprehension. The data collection process was standardized to reduce measurement bias, and staff received training to maintain uniformity in rounding activities. Triangulation of data sources, including patient feedback and staff rounding logs, was used to enhance validity and reliability.

Limitations

Potential limitations were acknowledged, including the quasi-experimental design, which may limit causal inference. Patient satisfaction is a subjective measure that can be influenced by multiple factors beyond the intervention. Staff compliance and patient characteristics were carefully monitored to minimize confounding, but uncontrolled variables may have affected the outcomes.

Results

This study aimed to assess the effect of implementing hourly rounding by emergency department staff on patient satisfaction. Data were collected from 150 patients before and after the intervention. The results are presented in terms of demographic characteristics, overall patient satisfaction, and satisfaction across specific dimensions such as communication, responsiveness, comfort, and safety. Comparisons were made between pre- and post-intervention phases to evaluate changes associated with the rounding protocol.

Table 1: Demographic Characteristics of Study Participants (n = 150)

Characteristic	Frequency	Percentage (%)
Gender		
Male	80	53.3
Female	70	46.7
Age (years)		
18–30	45	30.0
31–50	60	40.0
51–70	35	23.3
>70	10	6.7
Reason for Visit		
Medical	90	60.0
Trauma	60	40.0

The majority of participants were male (53.3%) and aged between 31 and 50 years (40%). Most visits were for medical reasons (60%), while trauma cases accounted for 40% of the sample. The demographic distribution was balanced, allowing for meaningful comparison between pre- and post-intervention satisfaction levels.

Table 2: Overall Patient Satisfaction Pre- and Post-Hourly Rounding (n = 150)

Satisfaction Level	Pre-Intervention	Post-Intervention
Frequency	%	Frequency

Very Satisfied	30	20.0
Satisfied	50	33.3
Neutral	40	26.7
Dissatisfied	20	13.3
Very Dissatisfied	10	6.7

Post-intervention, 50% of patients reported being “Very Satisfied,” a substantial increase from 20% pre-intervention. The proportion of dissatisfied or very dissatisfied patients decreased from 20% to 6.6%, indicating a significant improvement in overall satisfaction after the implementation of hourly rounding.

Table 3: Patient Satisfaction with Staff Communication Pre- and Post-Intervention (n = 150)

Communication Level	Pre-Intervention	Post-Intervention
Frequency	%	Frequency
Excellent	25	16.7
Good	60	40.0
Fair	40	26.7
Poor	25	16.6

Communication satisfaction improved markedly following the intervention. Patients rating staff communication as “Excellent” increased from 16.7% to 46.7%, while those reporting “Poor” communication dropped from 16.6% to 3.3%. This demonstrates that hourly rounding effectively enhanced patient perception of staff attentiveness and clarity.

Table 4: Patient Satisfaction with Responsiveness Pre- and Post-Intervention (n = 150)

Responsiveness Level	Pre-Intervention	Post-Intervention
Frequency	%	Frequency
Excellent	20	13.3
Good	50	33.3
Fair	50	33.3
Poor	30	20.0

Patient perception of staff responsiveness improved significantly after hourly rounding. The proportion of “Excellent” ratings rose from 13.3% to 43.3%, indicating that structured, regular check-ins reduced patient waiting times and enhanced timely attention to needs.

Table 5: Patient Satisfaction with Comfort and Safety Pre- and Post-Intervention (n = 150)

Comfort/Safety Level	Pre-Intervention	Post-Intervention
Frequency	%	Frequency
Excellent	15	10.0
Good	55	36.7
Fair	50	33.3
Poor	30	20.0

Patient satisfaction with comfort and safety increased substantially following the intervention. Ratings of “Excellent” increased fourfold, from 10% pre-intervention to 40% post-intervention. This suggests that hourly rounding allowed staff to address comfort issues and safety concerns proactively, reducing discomfort and potential risks.

Discussion

The results of this study indicate that implementing hourly rounding by emergency department staff had a significant positive effect on patient satisfaction. Post-intervention data showed substantial increases in overall satisfaction scores, particularly in dimensions such as communication, responsiveness, and safety. These findings align with prior research demonstrating that structured and proactive staff

engagement can enhance patient experiences in high-acuity settings (Brosinski & Riddell, 2020; Alshehhi et al., 2023).

Patient satisfaction is multifactorial, influenced by both clinical care and interpersonal interactions. Hourly rounding provides a structured opportunity for staff to address patient needs proactively, reducing feelings of neglect and improving perceptions of care quality (McFarlan et al., 2019). Our findings, where 50% of patients reported being “Very Satisfied” post-intervention compared to 20% pre-intervention, reinforce the role of predictable, consistent staff interactions in shaping patient perceptions.

Communication between staff and patients improved notably after the intervention, with ratings of “Excellent” rising from 16.7% to 46.7%. Effective communication is a critical determinant of satisfaction, as patients in emergency departments often experience anxiety and uncertainty (Özhanlı & Akyolcu, 2020). Regular staff check-ins not only provide information about care and procedures but also reassure patients that their needs are acknowledged and prioritized.

The enhancement of staff responsiveness was also evident, as patients perceived more timely attention to their needs following hourly rounding. The proportion of patients rating responsiveness as “Excellent” increased from 13.3% to 43.3%. These findings mirror those of Gliner et al. (2022), who linked proactive nurse rounding to improved patient outcomes, including reduced adverse events and heightened patient satisfaction.

Comfort and safety, important dimensions of patient-centered care, were significantly improved after implementing the rounding protocol. Ratings of “Excellent” for these domains increased fourfold, indicating that structured monitoring allows early identification of discomfort, pain, and safety concerns. Such proactive care has been shown to reduce patient falls and other safety incidents, which are critical metrics in emergency settings (Gliner et al., 2022; Leamy et al., 2023).

Hourly rounding also reinforces the humanistic aspect of care, which patients value highly. Wang et al. (2024) found that perceived humanistic care in emergency settings was strongly associated with overall patient satisfaction. Our study supports this observation, as patients consistently reported feeling more attended to and supported post-intervention, reflecting enhanced empathy and personalized attention from staff.

The role of nursing and interprofessional teamwork is central to the success of rounding interventions. Coordinated efforts among nurses, technicians, and ancillary staff can create a seamless care experience, reducing delays and missed opportunities for patient engagement (Will et al., 2019). In our study, staff adherence to the rounding schedule was critical to achieving improvements in satisfaction scores, highlighting the importance of clear roles and responsibilities.

Previous research has also emphasized the feasibility of hourly rounding in high-volume emergency departments. Brosinski and Riddell (2020) demonstrated that structured rounding could be successfully implemented without compromising workflow or patient throughput. Similarly, our findings indicate that regular check-ins can coexist with the dynamic demands of emergency care, providing measurable benefits to patient experience.

The reduction in neutral or dissatisfied responses after the intervention suggests that even minor, routine interactions can substantially influence patient perceptions. Choe et al. (2021) reported that targeted interventions, such as hold teams or rounding protocols, reduced dissatisfaction by addressing unmet patient needs, a finding consistent with our results.

Patients with acute medical conditions often prioritize timely information and attention to comfort. Hourly rounding ensures that questions regarding procedures, wait times, and pain management are addressed promptly, which can mitigate stress and improve overall satisfaction (McFarlan et al., 2019; Özhanlı & Akyolcu, 2020). Our study confirms that such structured engagement enhances both patient perceptions and the quality of care delivered.

The study also highlights the potential of hourly rounding to support continuous quality improvement initiatives. Systematic patient interactions provide ongoing feedback that can inform care protocols, staff training, and workflow optimization (Alshehhi et al., 2023). Incorporating patient feedback into daily practice ensures that interventions are responsive to patient priorities and reinforces a culture of patient-centered care.

Intentional rounding has been linked to improvements beyond satisfaction, including patient safety, reduced falls, and shorter hospital stays (Leamy et al., 2023). While our study focused on satisfaction

metrics, the improvement in safety and comfort ratings suggests that these additional benefits may also occur in emergency department settings when structured rounding is applied.

Qualitative insights from prior studies emphasize that patients value attentiveness, respect, and reassurance during emergency care (Aleksandrovskiy et al., 2022). Hourly rounding provides repeated opportunities for staff to demonstrate these behaviors, which likely contributed to the significant improvements in communication and overall satisfaction observed in our study.

Our findings also demonstrate that proactive engagement reduces variability in patient experiences. Prior research has noted that satisfaction can fluctuate widely depending on individual staff availability and attention (Will et al., 2019). By implementing standardized hourly rounds, care delivery becomes more consistent, reducing disparities in patient experience.

The generalizability of our findings is supported by similar results in diverse settings. Studies conducted in the UAE, the US, and China have all reported positive effects of structured rounding on patient satisfaction (Alshehhi et al., 2023; Wang et al., 2024; Brosinski & Riddell, 2020). This consistency underscores the robustness of hourly rounding as a strategy to enhance patient-centered care in emergency departments worldwide.

Conclusion

The implementation of hourly rounding by emergency department staff significantly improved patient satisfaction across multiple dimensions, including communication, responsiveness, comfort, and safety. The structured, proactive approach facilitated consistent engagement with patients, reduced dissatisfaction, and enhanced perceptions of care quality. These findings support the adoption of hourly rounding as an effective intervention to improve patient experience and overall quality of care in emergency settings, aligning with evidence from both local and international studies.

References

1. Brosinski, C., & Riddell, A. (2020). Incorporating Hourly Rounding to Increase Emergency Department Patient Satisfaction: A Quality Improvement Approach. *Journal of emergency nursing*, 46(4), 511–517. <https://doi.org/10.1016/j.jen.2019.08.004>
2. McFarlan, S., O'Brien, D., & Simmons, E. (2019). Nurse-Leader Collaborative Improvement Project: Improving Patient Experience in the Emergency Department. *Journal of emergency nursing*, 45(2), 137–143. <https://doi.org/10.1016/j.jen.2018.11.007>
3. Gliner, M., Dorris, J., Aiyelawo, K., Morris, E., Hurdle-Rabb, D., & Frazier, C. (2022). Patient Falls, Nurse Communication, and Nurse Hourly Rounding in Acute Care: Linking Patient Experience and Outcomes. *Journal of public health management and practice : JPHMP*, 28(2), E467–E470. <https://doi.org/10.1097/PHH.0000000000001387>
4. Özhanlı, Y., & Akyolcu, N. (2020). Satisfaction of Patients with Triage and Nursing Practice in Emergency Departments. *Florence Nightingale journal of nursing*, 28(1), 49–60. <https://doi.org/10.5152/FNZN.2020.18041>
5. Alshehhi, R. A., Ahmed, F. R., Al Yateem, N., & Selgado, A. (2023). Proactive Patient Rounding Impacts on Patient Satisfaction in UAE. *Open Nursing Journal*, 17, Article e187443462307090. <https://doi.org/10.2174/18744346-v17-230717-2023-72>
6. Wang, W., Liu, X., Shen, X., Zhang, J., Zhang, F., Liao, L., He, X., & Liu, Y. (2024). Emergency patients' satisfaction with humanistic caring and its associated factors in Chinese hospitals: a multi-center cross-sectional study. *Frontiers in public health*, 12, 1414032. <https://doi.org/10.3389/fpubh.2024.1414032>
7. Aleksandrovskiy, I., Ganti, L., & Simmons, S. (2022). The Emergency Department Patient Experience: In Their Own Words. *Journal of patient experience*, 9, 23743735221102455. <https://doi.org/10.1177/23743735221102455>
8. Leamy, M., Sims, S., Levenson, R., Davies, N., Brearley, S., Gourlay, S., Favato, G., Ross, F., & Harris, R. (2023). Intentional rounding: a realist evaluation using case studies in acute and care of older people hospital wards. *BMC health services research*, 23(1), 1341. <https://doi.org/10.1186/s12913-023-10358-1>
9. Will, K. K., Johnson, M. L., & Lamb, G. (2019). Team-Based Care and Patient Satisfaction in the Hospital Setting: A Systematic Review. *Journal of patient-centered research and reviews*, 6(2), 158–171. <https://doi.org/10.17294/2330-0698.1695>

10. Choe, B., Basile, J., Cambria, B., Youssef, E., Podlog, M., Mathews, K., Berwald, N., & Hahn, B. (2021). The Effect of a Nursing Hold Team on Patient Satisfaction for Admitted Patients Discharged Directly From the Emergency Department. *Cureus*, 13(8), e17100. <https://doi.org/10.7759/cureus.17100>