Review Article

Creating culture of safety: Risk management in healthcare and nursing

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Abstract

Healthcare service delivery is fundamentally difficult since it involves nuanced interactions between many different parties, cutting-edge technology, and complex clinical procedures. The vital necessity of patient safety and the reduction of potential dangers are becoming more and more obvious as the healthcare landscape changes. In order to promote a culture of safety within the realm of healthcare and nursing, this review paper critically analyses the function of risk management. In this comprehensive review, we examine the various facets of risk management and how critical it is to patient care. With a focus on patient-centeredness and on-going quality improvement, the transformation of healthcare systems from fragmented and episodic treatment models to integrated and preventative paradigms is the main objective of present study. Given their frontline presence and crucial role in patient care, the review clarifies the essential role of nursing professionals in risk management. It looks at how nurses' roles have evolved to include clinical practice, drug administration, infection control, and communication in detecting, assessing, and managing risks. The paper also emphasizes the need of interdisciplinary cooperation by demonstrating how effective risk management transcends conventional barriers and necessitates a group commitment to patient safety. Ultimately, the delivery of high-quality care is the cornerstone of the environment that healthcare organizations and nursing professionals may jointly establish by adopting a proactive approach to risk management.

Key words

Healthcare, Nursing, Patient safety, Risk management, Interdisciplinary collaboration.

Introduction

The need to protect patients and reduce risks is critical in the changing world of healthcare, where complex clinical procedures and cuttingedge technology collide and patient wellbeing is on the line. The delivery of healthcare services involves a complicated network of interactions between interdisciplinary teams, cutting-edge medical procedures, and extensive administrative frameworks. The necessity to foster a strong culture of safety has been more obvious as the healthcare industry develops, and the practice of risk management has emerged as a crucial strategy to accomplishing this essential objective. Patient safety has frequently been put on the back burner throughout the history of healthcare, with disastrous results for both people and organizations. However, acknowledging these historical difficulties has led to a paradigm shift in the management and provision of healthcare. The emphasis has shifted from emergency responses to negative events to preventive efforts meant to avoid them altogether. This evolution demonstrates the growing realization that patient safety is a crucial cornerstone around which the entire healthcare system must be built, rather than solely a result of good healthcare.

This review article explores the complex world of risk management in nursing and healthcare, with a focus on its role in establishing and promoting a culture of safety. We may trace the journey from traditional approaches to the more modern proactive and holistic tactics that serve as the foundation of a culture of safety by looking at the historical evolution of risk management practices within healthcare contexts. By highlighting how each component contributes to the realization of a safer and more effective healthcare environment, we hope to shed light on the crucial intersections between risk management, patient care, and nursing practice. Additionally, as healthcare delivery systems have developed, nursing has become increasingly important in the effort to ensure patient safety. As front-line healthcare practitioners, nurses have a special perspective from which to identify, evaluate, and address potential risks. They are in a prime position to help implement risk management methods due to their crucial role in patient care and comprehensive comprehension of clinical procedures. As a result, this article will explore the changing roles of nursing professionals in risk assessment, identification, and mitigation, emphasizing the crucial contributions they make to a culture of safety.

Modern technology has created new opportunities for risk management in the healthcare industry. These advancements have completely changed how risks are recognized, evaluated, and managed, from electronic health records that enable comprehensive patient information management to advanced predictive analytics. This review aims to provide a thorough understanding of the crucial role that risk management plays in the creation and maintenance of a culture of safety within healthcare and nursing contexts by combining historical perspectives, modern insights, and emerging technological innovations. By doing this, we hope to advance the conversation around patient safety more broadly, encourage

healthcare workers to make wise choices, and ignite a shared resolve to put patients' needs first.

The key of a successful safety culture

An effective safety culture incorporates a company-wide dedication to protecting everyone's safety and preventing harm. It includes accepted values, attitudes, behaviors, and customs that place a high priority on safety in all aspects of daily life. The development of a strong safety culture has become a critical factor in determining long-term performance as organizations struggle with challenges that are more complex and dynamic.

Leadership commitment

The cornerstone upon which a safety culture is constructed is leadership commitment to safety [1, 2]. Organizational leaders' unwavering commitment to ensuring a secure environment resonates throughout the entire workforce, fostering an ethos that emphasizes employee wellbeing and risk minimization. A leader cannot effectively lead with words alone. Employees must be able to see leadership commitment in action. Boards of directors can show their dedication to this goal by regularly and closely monitoring patient safety in the organizations they are responsible for [3]. This exposition explores the many facets of leadership commitment and sheds light on how it influences the attitudes, practices, and behaviors that collectively help to make the workplace safer.

A comprehensive strategy is one of the leadership measures that management may implement to promote a strong safety culture. According to Carnino [1], formal training is the first phase, where leaders receive thorough instruction to internalize the principles and specifics of safety culture concepts and practices. Leaders are given the tools they need to lead the organization with informed judgment thanks to this educational investment. Additionally, the organization's inclusion of safety as a top priority in its strategic objectives, in line with Carnino's

claim [1] and Shrivastava's foundational work (1992), underlines a conscious effort to incorporate safety principles into the organization's overall vision [4].

Leadership's commitment to ensuring patient safety is embodied in the adoption of comprehensive patient safety policies and procedures, as suggested by Spath (2000). These procedures enable staff members across hierarchies to understand the direct impact of their performance on patient safety by outlining plans for supervisor clear duty and accountability. According to Carnino's advice [1], safety rules should be reviewed and modified on a regular basis to keep them current and responsive to new difficulties.

A suggestion made by Carnino [1] to institutionalize safety as a priority within the meeting agenda demonstrates leadership's dedication to establishing a culture where safety is both a topic of conversation and a guiding principle. According to Carnino [1], encouraging a critical mindset towards safety issues emphasizes leadership's acceptance of various viewpoints and a culture that promotes critical inquiry. According to Carnino [1], the development of personal objectives targeted at improving safety within each of their individual spheres of responsibility further exemplifies leadership's commitment to safety. This unique investment strengthens a sense of accountability and ownership. As emphasized by Carnino and Spath (2000), careful observation of safety trends ensures a careful evaluation of the development of safety goals.

According to Carnino [1] acknowledging safety accomplishments even when there are no immediate safety concerns shows leadership is actively promoting a positive safety culture. According to Pizzi, et al. (2001) [5] and Spath (2000) [2], periodic evaluations of the organization's safety status and the definition of both short- and long-term safety objectives show leadership's commitment to continuous improvement and the development of a forwardlooking safety ethos [1, 5]. As stated by Pizzi, et al. (2001) [5] and Shrivastava (1992) [4], the allocation of resources for safety enhancement is the ultimate manifestation of leadership's commitment to safety [4, 5]. This financial commitment demonstrates a sincere interest in the health of the company and mirrors a commitment to fostering a safety culture that transcends abstract ideals and permeates all aspect of the business.

Communication

Effective communication emerges as the key to bringing about a culture of safety because it connects the various components of empowerment, responsibility, decision-making, and overall organizational resilience. The need for leadership to demonstrate a sincere commitment to patient safety and the development of a culture of safety is at the heart of effective communication. Transparent and reliable communication supports the acts of leadership, as described in the preceding sections. According to Pizzi, et al. (2001) [5], acknowledging the high-risk, error-prone nature of organizational activities shows a company's commitment address to risks head-on. Leadership delivers a strong message by publicly embracing these realities, which lays the path for fostering a culture where people feel empowered to actively contribute to maintaining safety. Effective safety cultures have communication lines that cut across organizational boundaries. The conveyance of safety-related information may be hampered by hierarchical communication that reflects authority gradients. The timely exchange of crucial insights is stifled by a rigid chain of command that is characterized by waiting for instructions and restricted upward communication. On the other hand, organizations with strong safety cultures adopt a democratic communication approach, encouraging free discussion throughout the organizational hierarchy and beyond functional boundaries.

Manasse H, et al. (2002) emphasize that all employees, regardless of status, are encouraged to participate to the collective vigilance against safety hazards, and this open-channel strategy is exemplified by encouraging staff to voice concerns and report dangers [7]. A culture of safety's emphasis on communication acts as a channel for organizational learning and change. When supported by open communication, nonhierarchical decision-making and restricted improvisation result in prompt interventions and well-informed reactions to developing hazards, as demonstrated by Moorman and Miner (1998) and Weick (1993) [8, 9].

Accountability and Empowerment

Empowerment and accountability stand out as crucial and interconnected pillars in the effort to promote a culture of safety because they help to build a safe and watchful organizational environment [6].

Within the context of safety culture, empowerment refers to providing people with the autonomy, power, and resources they need to actively participate in safety-related projects. Employees should be given the opportunity to recognize potential risks, voice their concerns, and participate in the creation of safety procedures. Carnino [1] emphasizes that empowerment results in increased vigilance and conscientiousness towards safety procedures in addition to boosting job satisfaction. This empowerment is not just a one-sided grant of power; rather, it is a dynamic process that entails promoting active engagement in creating safety norms and cultivating a sense of ownership.

By creating a structured framework where people take ownership of their actions, decisions, and results, accountability supports empowerment. Accountability establishes the parameters of responsibility within a safety culture, ensuring that people are aware of their responsibilities in sustaining safety standards. The significance of facility-wide patient safety policies and procedures that specify precise guidelines for supervisor accountability and duty is explained by Spath (2000) [2]. Such rules aid in a thorough understanding of how individual acts affect patient well-being in addition to offering a guide for moral behavior.

Rather than being separate ideas, empowerment and responsibility are intertwined threads that together form the foundation of a strong safety culture. People are given responsibility for the results of their activities when they are given the freedom to participate to safety procedures. Carnino [1], who emphasizes that true empowerment grows when individuals are held accountable for the results of their empowered decisions, captures this dynamic admirably. As a result, accountability supports and confirms empowerment, making it more than just a symbolic act and enshrining it in the realm of duty that can actually be carried out.

Incentive and awards

The intelligent application of rewards and incentives proves to be a potent instrument in the effort to promote a culture of safety and improve organizational performance. By coordinating individual and group actions with organizational goals, rewards and incentives are effective tools for modifying behavior. Organizations foster a culture where safe practices are encouraged and rewarded by associating them with material incentives. As a result of seeing a clear connection between their work and substantive praise, employees are more purposeful and motivated. Rewards communicate information about desirable performance, as Kerr (1975) emphasizes, and when used wisely, they act as catalysts for building a safety-centric mindset [10]. In order to create a culture where brilliance is not only recognized but also celebrated, incentives and rewards are crucial. Whether formal or informal, acknowledgment conveys the strong message that safety-conscious behaviors are valued and help the organization be resilient and successful. According to Pizzi, et al. (2001)

[5], the public presentation of safety results and awards gives safety consciousness a sense of purpose and pride. The organizational culture is permeated by this celebration of safety accomplishments, supporting the idea that safety is a key element of the organization's identity. Awards and incentives encourage ongoing learning and development in a culture of safety. As recommended by Pizzi, et al. (2001) [5], providing retraining without stigma or punishment when safety is involved demonstrates a commitment to using incentives as instruments for improvement and learning from mistakes. Employees who are rewarded for taking an active role in safety efforts become participants in the organization's learning process and are inspired to not only identify dangers but also to help develop solutions.

Training

Employees can be empowered with the skills to foresee, recognize, and successfully handle safety hazards through training. As recommended by Pizzi, et al. (2001) [5], safety orientation and ongoing training give people a fundamental awareness of safety concepts and empower them to proactively spot abnormalities and potential dangers. Training changes people from being passive observers to being proactive promoters of safety, helping to foster a culture where possible risks are identified and dealt with before they become more serious. Employees who have received effective training are better equipped to make decisions that support safety priorities. People who have received training are more equipped to assess risks, appraise circumstances, and make decisions that prioritize safety outcomes. According to Pizzi, et al. (2001) [5], employees who have received training in safety procedures are better equipped to foresee negative outcomes, eliminate avoidable mistakes, and lessen the effects of unforeseen difficulties. This empowerment strengthens a culture in which safety factors are integrated into every day decision-making. The foundation of nurturing a learning organization, where mistakes are turned

into chances for development, is training. Businesses that invest in teaching their employees how to identify and address issues adopt a mindset of constant learning and adaptability. The idea that training transforms workers into vigilant learners who actively seek to anticipate and correct potential safety risks is underscored by the example of operators at Diablo Canyon Nuclear Power Plant, who engage in rigorous training for a range of potential scenarios (Roberts and Bea, 2001) [6]. By developing a workforce that is flexible and skilled at addressing changing issues, training helps to increase organizational resilience. Employees who have received proper training are better able to adjust to changing conditions, put ideas into action quickly, and work together to address safety issues. The ideas of limited improvisation (Moorman and Miner, 1998; Weick, 1993) align with this adaptability, which is supported by training and allows staff members to handle emerging safety hazards in a novel way [8, 9].

Conclusion

As the backbone of healthcare delivery, nursing professionals have emerged essential as champions of patient safety and risk management. They function as sentinels by diligently monitoring and evaluating clinical procedures, standing up for patients, and working with interdisciplinary teams to proactively address hazards as a result of their frontline roles. Nurses play a vital role in creating a safer hospital environment by broadening their tasks to include risk identification, assessment, and mitigation. Additionally, new opportunities for improving patient safety have been opened up by the incorporation of technical advancements into risk management practices. Efficient information sharing is made possible by electronic health records, allowing healthcare professionals to base their judgments on thorough patient data. By using data to predict dangers before they materialize, predictive analytics enables prompt response. Healthcare personnel can perfect their

skills and improve their responses to high-risk circumstances in a safe environment via simulation training. These tools not only improve risk assessment's accuracy but also give healthcare teams the power to preventatively reduce potential harm. In conclusion, the effort to establish a culture of safety through effective risk management is on-going and necessitates the support of all parties involved in the healthcare ecosystem. It necessitates visionary leadership, cross-disciplinary cooperation, on-going learning, and an unwavering commitment to the health of patients. The principles outlined in this assessment emphasize that patient safety is not a negotiable feature of treatment but a fundamental requirement that necessitates undivided attention and deliberate action as we traverse the complexity of modern healthcare.

References

- Carnino A, Director, Division of Nuclear Installation Safety, International Atomic Energy Agency. Undated. Management of Safety, Safety Culture and Self Assessment. [Online]. Available: <u>http://www.iaea.org/ns</u> /nusafe/publish/papers/mng_safe.htm [ac cessed January 15, 2003].
- 2. Spath P. Does your facility have a "patient-safe" climate? Hospital Peer Review, 2000; 25: 80–82.
- IOM (Institute of Medicine). To Err Is Human: Building a Safer Health System. Washington, DC: National Academy Press, 2000.

- Shrivastava P. Preventing and coping with industrial crises. In: Shrivastava P, editor. ed., Bhopal: Anatomy of a Crisis. London: Paul Chapman Publishing Ltd., 1992.
- Pizzi L, Goldfarb N, Nash D. Promoting a culture of safety. In: Shojania K, editor; Duncan B, editor; , McDonald K, editor; Wachter R, editor., eds. Making HealthCare Safer: A Critical Analysis of Patient Safety Practices. Rockville, MD: AHRQ, 2001.
- 6. Roberts K, Bea R. Must accidents happen? Lessons from high-reliability organizations. Academy of Management Executive, 2001; 15(3): 70–78.
- Manasse H, Turnbull J, Diamond L. Patient safety: A review of the contemporary American experience. Singapore Medical Journal, 2002; 43(5): 254–262.
- Moorman C, Miner A. Organizational improvisation and organizational memory. Academy of Management Review, 1998; 23: 698–723.
- Weick K. Organization redesign as improvisation. In: Huber G, editor; , Glick W, editor. , eds. Organizational Change and Redesign, New York, NY: Oxford University Press, 1993.
- 10. Kerr S. On the folly of rewarding A while hoping for B. Academy of Management Journal, 1975; 18:769–783.