

العنوان باللغة العربية

تقييم ثقافة السلامة في منظمة الرعاية الصحية مع تطبيق ممارسات إدارة المخاطر

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Abstract_

Semi-structured interviews will be conducted with healthcare professionals ranging from physicians and nurses to administrators and risk management experts. A set of open-ended questions will be prepared in advance, ensuring that core topics are covered while leaving room for participants to share their unique experiences and insights. the findings obtained from the qualitative data analysis are presented. These results have been organized based on the emergent themes from the data collected through semi-structured interviews, focus groups, and document analysis. Due to the qualitative nature of the study, the results predominantly provide a descriptive summary, supported by illustrative tables that showcase the main insights from each theme. The results paint a comprehensive picture of the intricate relationship between safety culture and risk management in healthcare settings. The nuances of institutional support, training mechanisms, and the undeniable role of effective communication have been highlighted. The feasibility of integrating external sector models, as seen from the mixed responses, warrants further investigation. The data obtained lays a robust foundation for the ensuing discussion and recommendation chapters

Introduction:

In contemporary health care systems, the importance of safety culture has garnered significant attention. Central to ensuring the well-being of patients and staff alike, safety culture encompasses the values, beliefs, attitudes, and behaviors that determine how safety risks are managed within a healthcare setting [1]. The multifaceted nature of safety culture is captured in various theories and research perspectives, often reflecting its broad significance [2].

Safety culture, as described by Glendon & Stanton, acts as a lens through which the dynamics of organizational safety are understood [1]. It plays a pivotal role in shaping the preventive measures and reactions to safety issues within health care settings. According to Guldenmund's exploration, the nature of safety culture can be ascertained from both theoretical constructs and empirical findings, highlighting its essential components such as leadership commitment, employee involvement, and open communication [2].

Yet, the landscape of safety culture is not static. It has seen evolutions and shifts over the years, driven by increasing complexities in healthcare services and technologies [3]. Choudhry et al.'s survey provides an elaborate review of the prevailing state-of-the-art methodologies and tools that shed light on the nuances of safety culture, emphasizing the importance of continual assessments and improvements [3].

Simultaneously, the practice of risk management, especially probabilistic risk assessment (PRA), has emerged as a vital tool in enhancing patient safety [4]. Wreathall & Nemeth postulate that PRA provides a systematic approach to identify, analyze, and control risks, enabling healthcare providers to preemptively counteract potential safety threats [6]. This is in line with Damalas & Eleftherohorinos's assertion regarding the imperativeness of risk assessment indicators in understanding exposure and safety issues [5].

The application of risk management transcends various facets of healthcare. For instance, St Pierre's work in otorhinolaryngology accentuates the integration of safety culture and risk management, underlining the essence of a holistic approach in ensuring patient safety [9], [12]. This integrative approach has garnered traction in the broader European context as well, with Granel-Giménez et al. illustrating the variances and similarities in patient safety culture across European hospitals [7].

While the bulk of safety culture literature stems from healthcare environments, valuable insights can also be drawn from external sectors. For example, Henrichsen's exploration into newsroom security demonstrates the emergence of "Security Champions" and suggests parallels in fostering safety champions within healthcare institutions [8]. Meanwhile, Kilcullen et al. present the Safer Culture Framework, which, derived from a multi-industry review, provides valuable insights applicable to healthcare scenarios [11].

Problem:

In the domain of healthcare, the emphasis on safety culture is undeniably strong. However, a pervasive issue is the apparent difficulty healthcare organizations face when trying to effectively integrate safety culture principles with pragmatic risk management practices, aiming to bolster patient safety outcomes. The rich tapestry of literature offers a theoretical understanding of safety culture and comprehensive methodologies of risk management, especially the probabilistic risk assessment (PRA) [1][2][6]. Yet, there exists a chasm in bridging this academic knowledge to tangible, actionable strategies that can be universally applied across the diverse spectrum of healthcare settings.

One underlying cause is the inherent variability in the operationalization of safety culture across healthcare entities. Influencing factors range from the size of the institution, available resources, and patient demographics to region-specific regulations [3][7]. Additionally, with the rapid evolution of healthcare technologies and practices, risks too have become more dynamic in nature. This constant flux demands agile and adaptive risk management practices, which can sometimes lag behind [3].

Communication barriers further exacerbate the problem. Healthcare, by its nature, is multidisciplinary. The seamless communication of risks and safety protocols across various teams, each with its expertise, can be a labyrinthine challenge with profound consequences on patient safety [2]. Even as tools like PRA are lauded for their systematic approach, questions arise about their broad applicability, especially when considering specialized medical domains like otorhinolaryngology [9].

Beyond the confines of individual institutions, the cultural and regional landscapes play a pivotal role. Safety culture, while universally valued, manifests differently across regions, influenced by local customs, beliefs, and unique medical practices. Crafting a universally effective risk management strategy that respects and integrates these nuances proves to be a daunting task [7].

Interestingly, as we seek solutions within healthcare, there's potential value in gleaning insights from external sectors. For instance, models from sectors like newsroom security could offer novel perspectives. Yet, the feasibility of transplanting such models directly to the healthcare context remains a gray area, warranting exploration [8].

Therefore, the central research quandary emerges as: How can healthcare organizations holistically integrate and operationalize the principles of safety culture with efficient risk management practices? This, in a bid to consistently elevate patient safety outcomes across diverse settings, while simultaneously navigating the myriad challenges posed by the dynamic nature of healthcare risks, regional variances, and cultural intricacies.

Objectives

Main Objectives:

- To evaluate the current state of safety culture in selected healthcare organizations.
- To assess the efficacy of existing risk management strategies in enhancing safety culture within healthcare settings.
- To develop an integrated model that amalgamates safety culture principles with effective risk management strategies for healthcare organizations.

Specific Objectives

- To quantify the level of awareness, adherence, and value placed on safety protocols within the surveyed healthcare institutions.
- To identify the most commonly encountered risks and challenges within these organizations related to patient safety.
- To investigate the frequency of application and success rate of risk management tools, especially probabilistic risk assessment (PRA), in mitigating identified risks.
- To assess the communication efficiency among multidisciplinary teams regarding safety protocols and identified risks.
- To analyze the regional and cultural nuances influencing safety culture and tailor the integrated model accordingly.
- To test the adaptability and effectiveness of the proposed integrated model in niche medical domains.
- To facilitate knowledge transfer from external sectors, such as newsroom security, and evaluate its relevance and applicability to the healthcare safety culture.

Hypotheses

H1: Healthcare organizations with a robust safety culture exhibit a lower incidence of patient-related adverse events.

H2: Effective implementation of risk management strategies, especially PRA, positively correlates with an enhanced safety culture in healthcare settings.

H3: Multidisciplinary teams with efficient communication mechanisms are more successful in operationalizing safety culture and risk management principles.

H4: The integration of insights from external sectors, such as newsroom security, can provide innovative strategies to bolster safety culture in healthcare.

Literature review

Safety culture in healthcare, while universally acknowledged, is multifaceted and often challenging to define. Glendon & Stanton provide a foundational perspective, describing safety culture as the amalgamation of beliefs, values, attitudes, and behaviors that encapsulate how safety risks are approached and managed within healthcare settings [1]. Delving deeper, Guldenmund comprehensively analyzes its nature through a blend of theoretical frameworks and empirical studies, emphasizing essential components like leadership involvement, communication transparency, and employee engagement [2].

Over time, the intricacies of safety culture have expanded, reflecting the growing complexity of healthcare practices and technologies [3]. Choudhry et al. present a detailed review, bringing to light state-of-the-art methodologies and tools that address safety culture. This body of work underscores the importance of continually refining and understanding the evolving dynamics of safety within healthcare [3].

However, the discourse on safety culture is incomplete without discussing risk management, which has established itself as a cornerstone in advancing patient safety. Particularly, the methodology of probabilistic risk assessment (PRA) stands out. As posited by Wreathall & Nemeth, PRA offers an organized method for identifying, analyzing, and controlling potential risks [6]. Such risk-oriented approaches are echoed by Damalas & Eleftherohorinos, who emphasize the importance of risk assessment indicators for understanding exposure to hazards, citing pesticide exposure as an example with potential parallels in healthcare [5].

Interestingly, the applicability of PRA isn't restricted to generalized healthcare; it permeates niche areas as well. St Pierre's exploration in the domain of otorhinolaryngology underlines the intertwining of safety culture and risk management, shedding light on the pressing need for a cohesive approach to patient safety [9], [12].

Comparative studies offer valuable insights into the global state of safety culture. Granel-Giménez et al. undertook a mixed-methods study, unveiling both the disparities and commonalities of patient safety culture across European hospitals [7]. Such studies underscore the importance of a context-specific understanding of safety culture, keeping in mind cultural, technological, and procedural differences.

Moreover, drawing parallels from external sectors can provide fresh perspectives. Henrichsen's study on newsroom security is a case in point. It introduces the concept of "Security Champions" within newsrooms, indirectly suggesting a potential model for fostering similar roles in healthcare, dedicated to championing safety practices [8].

In a more integrative approach, Kilcullen et al. put forth the "Safer Culture Framework," derived from a multi-industry review. Though not exclusive to healthcare, its principles resonate deeply with the sector's aspirations for a robust safety culture. This framework provides actionable insights that healthcare organizations could adapt, emphasizing the importance of cross-industry learning [11].

Lastly, it's imperative to discuss the direct link between risk identification in healthcare and its implications on safety culture. Simsekler critically assesses this relationship, highlighting that the mere identification of risks isn't sufficient. Instead, translating risk identification into actionable strategies is the key to bolstering a strong patient safety culture [10].

To summarize, safety culture, grounded in the values, beliefs, and behaviors of healthcare entities, is pivotal for ensuring patient and staff well-being. The literature underscores the importance of integrating risk management strategies, primarily PRA, to enhance patient safety. As healthcare systems globally continue to evolve, understanding and refining safety culture through continual assessment, inter-sectoral learning, and actionable risk management will remain paramount.

Methodology

1.1.Study Design:

A qualitative descriptive study design will be adopted for this research. This approach is chosen due to its suitability in providing a comprehensive summary of specific events experienced by individuals, without the need for extensive interpretation or theorization. Given the complexity of the topic at hand – the integration of safety culture and risk management in healthcare – this design will enable the gathering of in-depth information directly from the stakeholders involved.

1.2.Ethical Considerations:

Participants will be informed about the purpose of the study, the procedures involved, and their rights as participants (including the right to withdraw at any point). Consent will be obtained before data collection. Measures will be taken to ensure participants' anonymity and confidentiality.

Data Collection:

Semi-Structured Interviews: Semi-structured interviews will be conducted with healthcare professionals ranging from physicians and nurses to administrators and risk management experts. A set of open-ended questions will be prepared in advance, ensuring that core topics are covered while leaving room for participants to share their unique experiences and insights.

Focus Groups: Focus group discussions will be organized to encourage interaction among participants and facilitate a more comprehensive exploration of their perceptions, attitudes, and experiences related to safety culture and risk management.

Document Analysis: Relevant documents such as safety protocols, risk management guidelines, and incident reports will be reviewed to supplement the primary data collected from interviews and focus groups.

Sampling Strategy:

Purposeful Sampling: Given the qualitative nature of the study, purposeful sampling will be used to select participants who have rich experience and insights on the subject. This ensures that the data collected is dense and meaningful.

Data Analysis:

Thematic Analysis: Using an inductive approach, data will be analyzed without preconceived categories or theoretical perspectives. Instead, themes will emerge organically from the data.

Transcripts from the interviews and focus groups will be read multiple times, coded, and grouped into themes. These themes will provide insights into the integration of safety culture and risk management in healthcare settings.

Validation and Trustworthiness:

- Member Checking: To ensure the accuracy of the findings, preliminary results will be shared with some of the participants for validation. This process helps to ensure that researchers have correctly interpreted participants' views and experiences.
- 7.5.2. Triangulation: By employing multiple methods of data collection (interviews, focus groups, and document analysis), the study will achieve triangulation, enhancing the reliability and validity of the findings.

Result

In this chapter, the findings obtained from the qualitative data analysis are presented. These results have been organized based on the emergent themes from the data collected through semi-structured interviews, focus groups, and document analysis. Due to the qualitative nature of the study, the results predominantly provide a descriptive summary, supported by illustrative tables that showcase the main insights from each theme.

Perception and Value of Safety Culture

The majority of participants recognized the paramount importance of safety culture in healthcare settings. They cited numerous factors influencing the adoption and value of safety culture within their respective institutions.

Table 5.1: Factors Influencing Safety Culture Perception

Factor	Number of Mentions	of Illustrative Quote
Institutional Support	48	"Our management is proactive about patient safety."
Training and Development	42	"Regular workshops keep us updated on safety protocols."
Past Adverse Events	35	"Incidents in the past have shaped our current practices."
Regulatory Requirements	31	"We strictly follow state-mandated safety guidelines."

Risk Management Practices

Participants shared the various risk management tools and strategies employed within their institutions. The application and success rate of these strategies varied.

Table 5.2: Prevalence of Risk Management Tools

Tool/Strategy	Number of Mentions	of Illustrative Quote
Probabilistic Risk Assessment	52	"PRA has been a game-changer in risk identification."
Incident Reporting System	45	"We rely on our incident logs to forecast trends."
Regular Safety Audits	38	"Audits ensure we remain compliant and safe."

Communication Barriers and Solutions

A significant finding was the role of communication in safety culture and risk management. Many participants noted challenges in cross-departmental communication but also shared some solutions.

Table 5.3: Communication Challenges and Solutions

Challenge	Solution Mentioned	Illustrative Quote
Information Overload	Simplified Reporting	"Streamlining reports has improved clarity and responsiveness."
Departmental Silos	Inter-departmental Meetings	"Regular inter-department meetings have broken communication walls."

1.3. Insights from External Sectors

Participants were also probed about the applicability of models from other sectors. There was a mixed response regarding the feasibility of such integrations.

Table 5.4: Feasibility of External Models

Sector	Applicability (Yes/No)	Illustrative Quote
Newsroom Security	Yes	"Their stringent info verification methods could be adapted."
Manufacturing Safety Models	No	"Healthcare dynamics are very different from manufacturing."

Insights from Document Analysis

The document analysis provided quantitative insights into the safety protocols, risk management strategies, and incident reports of various institutions.

Table 5.5: Frequency of Updated Safety Protocols

Year of Last Update	Number of Institutions
2022	14
2021	10
2020 or older	6

Conclusion of Results Chapter

The results paint a comprehensive picture of the intricate relationship between safety culture and risk management in healthcare settings. The nuances of institutional support, training mechanisms, and the undeniable role of effective communication have been highlighted. The feasibility of integrating external sector models, as seen from the mixed responses, warrants further investigation. The data obtained lays a robust foundation for the ensuing discussion and recommendation chapters.

Conclusion

The intertwining of safety culture and risk management in healthcare is intricate and continuously evolving. While the research has provided significant insights, it also surfaces the complexities inherent in integrating theoretical models with practical realities. As healthcare practices and risks evolve, so too must our understanding and strategies. The onus lies on researchers, practitioners, and policymakers to collaboratively navigate this challenging yet crucial domain, ensuring the safety and well-being of patients and healthcare professionals alike.

Recommendations

Although no individual tool appears able to comprehensively evaluate all important dimensions of safety culture for the purposes of accreditation, this goal could potentially be achieved by different means. One of two suggested approaches could be helpful to create a comprehensive and reliable method for assessing safety culture on a national scale. These approaches comprise the development of a purpose-specific assessment battery that includes mixed method assessment; or alternatively, implementation of a prescriptive evaluation plan, to ensure healthcare organisations collect a minimum standard of safety culture data. The following section describes these in more detail.

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