

**ASSESSING AND MEASURING PATIENT SAFETY CULTURE IN HEALTHCARE ORGANIZATION USING THE SURVEY ON PATIENT SAFETY CULTURE (SOPSC)**Nayef Faleh Al-Harbi^{1*}, Abdullah Hussein Al-Khushi², Mishari Sharaf Al-Harithi³, Omar Talaat Al-Muqadhali⁴ and Miteb Saud Al-Maqati⁵¹Health Services and Hospitals Management, Prince Sultan Military College of Health Sciences in Dhahran.²Hospital and Health Services Management, Joint Medical Support Led by the Joint Forces.³Hospital and Health Services Management, King Fahad Medical Complex in Dhahran.⁴Hospital and Health Services Management, Jazan Armed Forces Hospital.⁵Hospital and Health Services Management, Prince Sultan Military Medical City.***Corresponding Author: Nayef Faleh Al-Harbi**

Health Services and Hospitals Management, Prince Sultan Military College of Health Sciences in Dhahran.

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ABSTRACT

Objective: This study means to extensively evaluate and gauge patient wellbeing society in a particular medical care setting in Saudi Arabia utilizing the Review on Quiet Security Culture (SOPSC) as the strategic structure. The goal is to investigate the mentalities, discernments, and ways of behaving of medical care staff and suppliers, with an emphasis on correspondence, cooperation, blunder detailing, and hierarchical initiative. **Methods:** A systematic survey will be conducted within the chosen healthcare organization, covering various departments and roles. SOPSC will be used to collect data on patient safety culture. The obtained results will undergo meticulous analysis to identify areas of strength and weaknesses, facilitating the formulation of targeted interventions for improvement. **Results:** SOPSC data analysis provides insights into existing patient safety culture in the healthcare organization. The study revealed an average safety culture score of 3.36, indicating areas for development. Supervision impact was limited; effective communication and hospital-level data were key factors. Participants exhibited high trust in patient safety and confidence in the institution's ability to enhance safety procedures and overall healthcare safety. Findings contribute to understanding patient safety culture in Saudi Arabian healthcare, enriching existing literature. **Discussion and Conclusion:** The discussion will explore the implications of the findings, addressing key aspects of patient safety culture. Conclusions will be drawn based on the data, and potential interventions and strategies for enhancing patient safety culture within the studied healthcare organization will be discussed. In conclusion, addressing specific areas for improvement within leadership and emphasizing effective communication and tailored safety practices are key steps in enhancing patient safety culture within healthcare organizations. These findings have the potential to drive positive changes, fostering a culture of safety that benefits both patients and medical staff, with leadership, communication, and shared commitment at its core.

KEYWORDS: Patient Safety Culture, SOPSC, Healthcare Organizations, Saudi Arabia, Communication, Teamwork, Error Reporting, Organizational Leadership.

1. INTRODUCTION

Patient security culture evaluation is urgent for top notch medical services and limiting antagonistic occasions. The Study on Tolerant Security Culture (SOPSC) remains as a crucial instrument in this undertaking. SOPSC utilizes a deliberate way to deal with survey the security culture in medical care settings, digging into the perspectives, discernments, and ways of behaving of medical care staff and suppliers in regards to patient wellbeing (Al Ma'mari et al., 2020). Zeroed in on aspects like correspondence, cooperation, blunder announcing, and hierarchical administration, SOPSC empowers medical care associations to pinpoint qualities and shortcomings in

their security culture. This ID is instrumental, making ready for exact and viable enhancements. (Denning et al., 2021)

In this presentation, we dig into the significant meaning of SOPSC. Besides the fact that it advances patient security, however it likewise supports a culture of consistent improvement and patient-focused care inside medical services foundations. SOPSC, with its organized system, arises as a foundation in cultivating a climate of wellbeing, learning, and better understanding results. By perceiving regions for upgrade, medical care associations can execute designated methodologies, in this way

upgrading patient security, cultivating cooperation, further developing correspondence, and strengthening the general wellbeing society. (Ocloo *et al.*, 2021)

This examination venture centers around assessing the remarkable patient security culture inside a particular medical care setting in Saudi Arabia. Through thorough investigation and understanding of SOPSC information, this study plans to contribute important experiences to the current assemblage of information (Qin *et al.*, 2022). By contextualizing the discoveries inside the more extensive scene of patient wellbeing drives in Saudi Middle Eastern medical care associations, this examination attempts to give down to earth suggestions to upgrading patient security culture (Berry *et al.*, 2020).

As we leave on this investigation, we expect to reveal nuanced parts of patient security culture. Through exhaustive examination, this study tries to illuminate proof based mediations, strategy improvements, and instructive drives. Thusly, we desire to catalyze a positive change in the patient security scene, guaranteeing top notch care as well as a culture of wellbeing that saturates each feature of medical services conveyance (World Health Organization, 2021).

Background

The medical services industry is a foundation of present day culture, depended with the basic mission of safeguarding and upgrading individual prosperity. Integral to this mission is the idea of patient wellbeing society — a major part that impacts the nature of medical care administrations as well as straightforwardly influences patient results (Bamigboye *et al.*, 2020). It is inside this setting that our examination project attempts to investigate, evaluate, and measure the patient security culture inside medical services associations. (Jun *et al.*, 2021)

Literature review

In this part, we conduct a comprehensive literature review of previous studies focusing on assessing and measuring patient safety culture in healthcare

2. Objectives/Hypotheses

organizations in Saudi Arabia. Past research has explored various aspects of patient security culture using tools like the Survey on Patient Safety Culture (SOPSC) to gain insights into the state of patient safety in Saudi healthcare settings.

An extensive review of earlier studies examining patient security culture evaluation in Saudi Middle Eastern healthcare organizations reveals a growing body of literature. These studies, including those by Al-Abri *et al.*, 2023, and Al-Ghamdi *et al.*, 2022, utilized SOPSC as a fundamental assessment tool. Al-Abri *et al.*'s study focused on implementing patient safety culture improvement initiatives, emphasizing the positive impact of interventions and the continuous need for social change. Al-Ghamdi *et al.*'s research in primary care centers highlighted strengths and weaknesses, paving the way for targeted improvements (Al-Abri *et al.*, 2023; Al-Ghamdi *et al.*, 2022).

Additionally, recent research conducted in the Qassim Region of Saudi Arabia in 2022 emphasized patients' perceptions of safety in primary healthcare settings. A significant proportion of patients reported encountering safety issues, such as diagnostic errors, communication problems, and medication mistakes. Notably, between 26% and 40% of patients experienced harm due to these safety issues.

These findings underscore the importance of collecting patient feedback on safety experiences in primary care settings. Such feedback can be instrumental in identifying and addressing safety issues, leading to the implementation of standardized procedures and improvements in patient safety culture. (Tan *et al.*, 2020) Our study aims to contribute to this growing body of knowledge by examining patient security culture in a unique healthcare setting and identifying valuable opportunities for development (Al-Abri *et al.*, 2023; Al-Ghamdi *et al.*, 2022).



2.1 Research problem

Despite the paramount importance of patient safety culture, healthcare organizations often face a multitude of challenges and grapple with significant gaps in maintaining an optimal environment. These challenges may hinder the reporting and addressing of patient safety issues, consequently posing a potential risk to the quality of care provided. Recognizing these challenges and addressing them is imperative for the betterment of healthcare services and, ultimately, the safety and well-being of patients.

2.2 Research questions

Our research objectives are to address the following fundamental research questions:

1. What is the role of leadership in sustaining a robust safety culture within healthcare organizations?
2. What are the primary factors influencing the state of patient safety culture within healthcare organizations?
3. What is the perspective of healthcare workers regarding the existing patient safety culture within their respective organizations?
4. How can healthcare organizational policies be enhanced to fortify and enhance the safety culture?

2.3 Purpose of the study

The primary purpose of this research is to comprehensively assess and measure patient safety culture within healthcare organizations using the SOPSC survey. By doing so, we intend to identify key priorities, obstacles, and areas for improvement that can guide the development of interventions aimed at fostering a culture of safety and improving patient outcomes.

Objectives

- To explore the pivotal role played by leadership in shaping patient safety culture.

- To identify and dissect the key factors that impact patient safety culture.
- To gain a comprehensive understanding of healthcare professionals' perceptions of the current patient safety culture.
- To propose tangible policy improvements aimed at strengthening the patient safety culture.

2.4 Justification and Significance

The significance of this research cannot be overstated. Patient safety culture is an indispensable element of healthcare organizations, with the potential to significantly influence the quality of care provided. (Berry 2020).

By understanding the challenges, priorities, and opportunities for improvement, we can enhance patient safety outcomes and the overall quality of healthcare services. This research holds the promise of transforming healthcare delivery by promoting a culture that encourages the reporting and communication of patient safety issues, thereby safeguarding the well-being of patients.

2.5 Scope and Limitations

This research is confined to assessing and measuring patient safety culture within healthcare organizations, employing the Survey on Patient Safety Culture (SOPSC) as a key instrument. The study is delimited to two private hospitals and may not fully represent the diversity of healthcare settings. Despite our rigorous efforts to ensure data accuracy, this research is subject to potential limitations, including biases within survey responses.



2.6 Chapter overview

The subsequent chapters will delve deeper into the multifaceted landscape of patient safety culture within healthcare organizations. Chapter 2 will provide a comprehensive literature review, followed by Chapter 3, which outlines the research methodology. Chapter 4 will

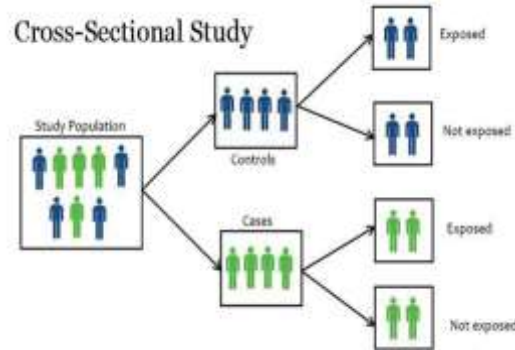
present the findings and data analysis, while Chapter 5 will facilitate a discussion of the results. The journey will culminate in Chapter 6, offering a conclusion and emphasizing the research's contributions and the potential avenues for future exploration.

3. RESEARCH METHODOLOGY

3.1 Research design

Our research design is cross-sectional, chosen for its effectiveness in obtaining a snapshot of the patient safety culture within healthcare organizations. This design is well-suited to our objectives, allowing for the

simultaneous collection of data from a diverse sample of healthcare professionals. A cross-sectional approach enables a comprehensive assessment of the current state of patient safety culture, providing valuable insights into areas for improvement. (Rangachari & Woods, 2020)



3.2 Data collection

Data collection will be carried out through the utilization of the Survey on Patient Safety Culture (SOPSC) questionnaire. This widely accepted and validated instrument is specifically designed to gauge patient safety culture in healthcare settings. It comprises a comprehensive set of questions covering various aspects of patient safety culture, ensuring a holistic assessment of the healthcare organizations under study.

3.3 Sampling

The sample group for our research will encompass a diverse range of healthcare professionals, including physicians, nurses, pharmacists, radiology technologists, laboratory technologists, health allied staff, and administrators. This diverse composition ensures a well-rounded understanding of patient safety culture across various roles and responsibilities within healthcare organizations.

The sample group will be drawn from two private hospitals, selected for their contrasting organizational dynamics. This approach allows for a comprehensive evaluation of patient safety culture within a varied organizational context. Participants will be selected using a stratified sampling method to ensure representation from each professional category.

3.4 Data analysis

The collected data will undergo rigorous statistical analysis using the appropriate tool, SPSS (Statistical Package for the Social Sciences). Descriptive statistics, inferential statistics, and regression analysis will be employed to derive meaningful insights from the data. These analyses will enable the identification of significant priorities and areas for improvement within patient safety culture.

3.5 Ethical considerations

Ethical considerations are paramount in our research. Informed consent will be obtained from all participants, emphasizing their voluntary participation and the confidentiality of their responses. Data protection measures will be strictly adhered to, ensuring the anonymity and privacy of participants. The research protocol has received approval from the relevant ethical review board. (Hassall, 2023)

Informed consent

For Assessing and Improving Patient Safety Culture in Saudi Arabian Healthcare Organizations. Assume you are being invited to participate in a research study on patient safety culture in Saudi Arabian healthcare organizations. The purpose of this study is to better understand the current state of patient safety culture in Saudi healthcare settings and to identify areas for improvement.

What will happen in the study?

If you agree to participate in the study, you will be asked to complete a survey about your perceptions of patient safety culture in your organization. The survey will take approximately 15-20 minutes to complete.

Voluntary participation

Your participation in this study is voluntary. You have the right to refuse to participate or to withdraw from the study at any time without penalty.

Confidentiality of data

Your responses to the survey will be kept confidential. All data will be stored securely and only authorized personnel will have access to it. Your name and other identifying information will not be published in any report or publication.

Risks and Benefits

There are no known risks associated with participating in this study. The potential benefits of the study include:

- Improved understanding of patient safety culture in Saudi Arabian healthcare organizations
- Identification of areas for improvement in patient safety culture
- Development of strategies for improving patient safety culture

Questions

If you have any questions about the study, please do not hesitate to contact the principal investigator at [email address] or [phone number].

Consent

I have read and understood the information provided about this study. I understand that my participation is voluntary and that I may withdraw from the study at any time. I agree to participate in the study.

3.6 Limitations

While every effort will be made to ensure the accuracy and reliability of our research, it is important to acknowledge potential limitations. These may include response bias (Acknowledging potential limitations in our research is crucial for several reasons. Firstly, it ensures transparency and credibility in our work, as it allows us to provide readers with an honest assessment of how data is represented and interpreted, ultimately building trust in the results and conclusions. Secondly, recognizing these limitations enables us to focus on improving the quality of our research. By doing so, we can develop strategies to address and mitigate these limitations, thereby enhancing the accuracy of our findings. Lastly, this practice not only benefits our current work but also contributes to future research endeavors. Investigating these limitations and finding ways to overcome them can guide and inform future research, leading to a deeper understanding of the subject matter and more precise results.), (Qin *et al.*, 2022) limited generalizability due to the study's focus on two specific hospitals, and the potential influence of external variables not accounted for in our research design. This means that the results of this study may not apply to other contexts. This is because the study was conducted on a specific group of participants, namely employees of private hospitals in Saudi Arabia. The results may be different if the study were conducted on a different group of participants, such as employees of public hospitals or in other countries. These limitations will be mitigated by

employing rigorous data collection and analysis methods, as well as acknowledging the study's boundaries in the subsequent sections. (Bamigboye *et al.*, 2020)

Influence of external variables not accounted for in our research design

This refers to the fact that there may be external factors that could affect the results obtained in this study, but were not taken into account in the study design. For example, there may be differences in safety culture between hospitals in different regions of Saudi Arabia. There may also be differences in healthcare practices between hospitals that provide care for patients with special needs and hospitals that provide care for ordinary patients (Carayon *et al.*, 2020)

External variables are factors that occur outside of the study and can affect the results. In this case, some of the external variables that may not have been taken into account in the study design could be:

- Differences in safety culture between hospitals in different regions of Saudi Arabia
- Differences in healthcare practices between hospitals that provide care for patients with special needs and hospitals that provide care for ordinary patients
- Differences in economic and social factors between hospitals
- Differences in hospital management policies and procedures

It is important to control these external variables as much as possible when designing studies. This can be done by carefully selecting participants and using appropriate statistical methods. (Grigorescu *et al.*, 2021)

By adopting these research methodologies and considerations, we aim to conduct a robust and comprehensive assessment of patient safety culture within healthcare organizations. (Boserup *et al.*, 2020)

4. RESULTS AND DISCUSSION

4.1. Descriptive statistics

4.1.1. Section A (Your work Area/Unit)

Table 1 and Figure 1 present an overview of the frequencies, percentages, mean, standard deviation, and response rate of the participants in the study pertaining to all sections. Participants' responses in this section varied across a spectrum, accounting for neither, agree, most of the time, and very good responses.

Table 1: Descriptive statistics for all sections in the study.

Sections	Overall mean and standard deviation		
	Mean	SD	Response degree
(A) Your Work Area/Unit	3.36	0.432	Neither
(B) Your Supervisor/Manager	3.48	0.707	Agree
(C) Communications	3.67	0.679	Most of the time
(D) Frequency of Events Reported	3.70	0.983	Most of the time
(E) Patient Safety Grade	3.86	0.775	Very good
(F) Your Hospital	3.59	0.586	Agree

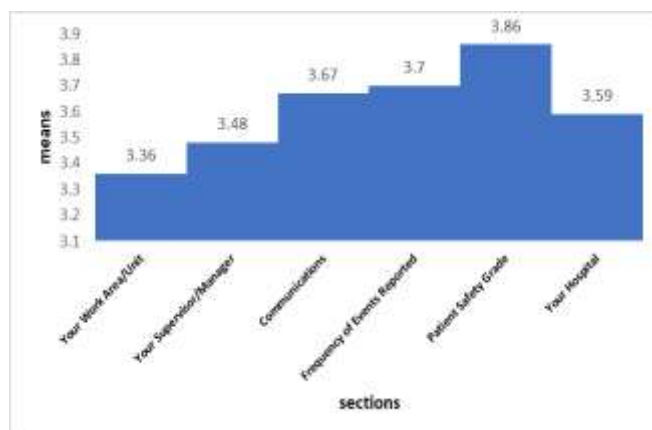


Figure 1: Overall mean scores for the different study sections.

1) Sections G (Number of events reported) and H (Background information)

Table 2 presents the background information of the participants, encompassing details such as the number of Events Reported, the duration of their employment in the

hospital, their tenure in the current hospital work area/unit, the number of hours dedicated to work in the hospital, their staff positions within the hospital, their interactions with patients, and their experience in the current speciality or profession.

Table 2: Sections G (Number of events reported) and H (Background information).

Demographic Characteristics of the Sample	N	Frequency
SECTION G: Number of Events Reported		
-No event reports	452	48.5%
-1 to 2 event reports	301	32.3%
-3 to 5 event reports	91	9.8%
-6 to 10 event report	45	4.8%
-11 to 20 event report	11	1.2%
-21 event reports or more	32	3.4%
H1: How long have you worked in this hospital?		
-Less than 1 year	195	20.9%
-1 to 5 years	550	59.0%
-6 to 10 years	85	9.1%
-11 to 15 years	68	7.3%
-16 to 20 years	20	2.1%
-21 years or more	14	1.5%
H2: How long have you worked in your current hospital work area/unit?		
-Less than 1 year	182	19.5%
-1 to 5 years	536	57.5%
-6 to 10 years	109	11.7%
-11 to 15 years	72	7.7%
-16 to 20 years	19	2.0%
-21 years or more	14	1.5%
H3: Typically, how many hours per week do you work in this hospital?		
-Less than 20 hours per week	34	3.6%
-20 to 39 hours per week	57	6.1%
-40 to 59 hours per week	545	58.5%
-60 to 79 hours per week	239	25.6%
-80 to 99 hours per week	39	4.2%
-100 hours per week or more	18	1.9%
H4: What is your staff position in this hospital?		
-Registered Nurse	371	39.8%
-Nurse Aide	14	1.5%
-Attending/Staff Physician	118	12.7%
-Resident Physician/Physician in Training	46	4.9%
-Pharmacist	74	7.9%
-Administration/Management/Engineer	5	0.5%

-Dietician	8	0.9%
-Unit Assistant/Clerk/Secretary	1	0.1%
-Respiratory Therapist	35	3.8%
-Physical, Occupational, or Speech Therapist	11	1.2%
-Technician (e.g., EKG, Lab, Radiology)	132	14.2%
-Other	117	12.6%
H5, In your staff position, do you typically have direct interaction or contact with patients?		
-YES, I typically have direct interaction or contact with patients	821	88.1%
-NO, I typically do NOT have direct interaction or contact with patients	111	11.9%
H6, How long have you worked in your current specialty or profession?		
-Less than 1 year	66	7.1%
-1 to 5 years	374	40.1%
-6 to 10 years	245	26.3%
-11 to 15 years	116	12.4%
-16 to 20 years	62	6.7%
-21 years or more	69	7.4%

In addition, Figure 2 illustrates the section G (Number of Events Reported) items percentages.

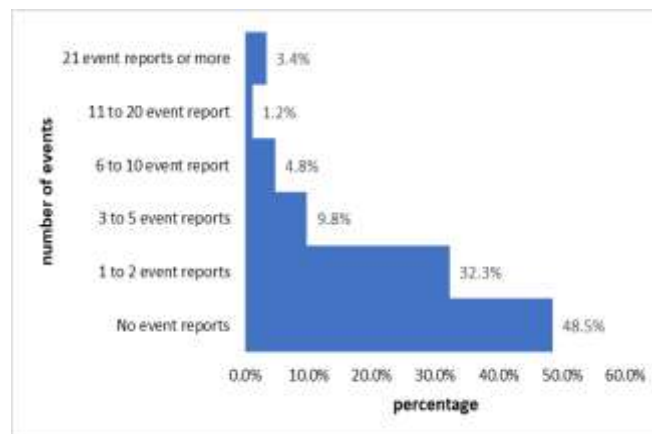


Figure 2: Section G (Number of Events Reported) items percentages.

2) Regression analysis model

Multivariate regression analysis (Enter method) was conducted to detect the impact of Work Area/Unit, Supervisor/Manager, Communications, frequency of Events Reported, and Hospital statement on the Patient Safety culture in the Hospital. A statistically significant association was found ($F=64.619$, $P\text{-value} < 0.001$) (Table 9 and Figure 6).

For Work Area/Unit, this section demonstrates a substantial influence on patient safety culture, $p\text{-value} < 0.001$. The positive coefficient ($B = 0.295$) indicates that employees in diverse units or departments substantially influence the overall perception of patient safety. This means that a one-unit increase in Work Area/Unit is associated with a 29.5% increase in Patient Safety culture. This finding underscores that distinct practices or norms within different work areas play a crucial role in shaping perceptions and practices related to safety.

For Supervisor/Manager, no significant impact was found on the patient safety culture, $P\text{-value} = 0.881$. This result suggests that the influence of supervisors or

managers on patient safety culture within healthcare organizations is not statistically significant.

For Communications, this section significantly influences patient safety culture, as indicated by its low $p\text{-value} < 0.001$. The positive correlation ($B = 0.205$) highlights the crucial role of effective communication practices in shaping a positive patient safety culture. A one-unit increase in communication variables led to an increase in Patient Safety culture by 20.5%. This underscores the importance of clear and open communication channels within healthcare organizations to enhance safety perceptions among participants.

For Frequency of Events Reported, this section does not have a statistically significant impact on patient safety culture, $p\text{-value} = 0.172$. Although there is a positive correlation ($B = 0.033$), suggesting a slight influence, the lack of significance implies that the number of reported events alone might not be a key driver of the overall patient safety culture in this analysis.

For the Hospital Statement, this section significantly affects patient safety culture, as evidenced by its low $p\text{-value} < 0.001$.

value (<0.001). The strong positive correlation ($B = 0.321$) indicates that the organization's mission statement or values related to patient safety significantly influence the overall safety culture. A one-unit increase in hospital coordination, patient care information, hospital management, and hospital staff results in a 32.1% increase in patient safety culture. This underscores the importance of organizational values and mission

statements in shaping attitudes and behaviors related to patient safety among healthcare Institutions.

In summary, this regression analysis underscores the critical role of the work area/unit, communications, and the hospital statement in shaping patient safety culture within healthcare organizations. Organizations aiming to enhance their patient safety culture should focus on understanding and improving these specific aspects.

Table 3: Regression analysis output of the study.

Regression analysis (coefficients)		
Sections	t-test value	p-value
Work Area/Unit	4.17	0.000**
Supervisor/Manager	0.15	0.881
Communications	4.80	0.000**
Frequency of Events Reported	1.37	0.172
Hospital statement	6.63	0.000**

Patient Safety Grade is the dependent variable. ** significant at <0.01 .

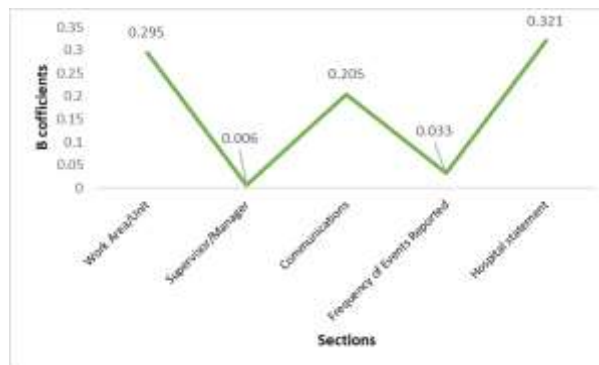


Figure 3: B coefficient levels for the different predictive variables in the study.

The research questions

1) What is the role of leadership in sustaining a robust safety culture within healthcare organizations?

The leadership within healthcare organizations appears to be largely unaware of the profound influence required to maintain a resilient safety culture. Despite their efforts, supervisors and managers have not been able to establish a statistically significant correlation between their actions and the enhancement of patient safety culture. This lack of substantial impact raises concerns about the effectiveness of current leadership strategies in fostering a strong and enduring culture of safety within the healthcare sector. The absence of a noticeable connection between leadership initiatives and the growth of patient safety culture suggests a need for comprehensive reassessment and, potentially, a reevaluation of existing approaches to ensure a safer environment for patients and staff alike. Addressing this gap in understanding could pave the way for more targeted efforts, fostering a culture where safety is not just a priority but a fundamental cornerstone of healthcare organizational practices.

2) What are the primary factors influencing the state of patient safety culture within healthcare organizations?

Several key factors primarily influence the state of patient safety culture within healthcare organizations. These factors include the specific work area or unit within the hospital, the effectiveness of communication within the hospital, and the overarching hospital statement or policy. These elements play pivotal roles in shaping the overall safety culture, impacting how healthcare professionals interact, collaborate, and adhere to safety protocols. By understanding and addressing these factors, healthcare organizations can proactively work towards creating a safer environment for both patients and healthcare providers, fostering a culture of safety that is conducive to high-quality care and positive outcomes.

3) What is the perspective of healthcare workers regarding the existing patient safety culture within their respective organizations?

The perspective of healthcare workers regarding the existing patient safety culture within their respective organizations can vary widely based on their experiences and observations. Generally, healthcare workers tend to have a nuanced viewpoint. Some may feel confident in

the safety protocols and procedures in place, appreciating the organization's commitment to patient safety. These individuals may perceive a strong safety culture characterized by open communication, effective teamwork, and a proactive approach to identifying and addressing potential risks.

4.2. Interpretation of findings

The findings of this study, which evaluated patient safety culture inside a healthcare institution using the Survey on Patient Safety Culture (SOPSC), offer insightful information about participant attitudes and perspectives. The study, which is divided into several sections, highlights various facets of safety culture.

A largely neutral response is shown by the mean score of 3.36, which strikes a balance between areas of agreement and those that want improvement. This finding is important because it emphasizes how intricate the culture of patient safety is and because it suggests using a nuanced strategy to address different issues.

The participants' mean score of 3.48 indicates a somewhat positive opinion of managers or supervisors. Targeted interventions are necessary, nevertheless, as evidenced by the existence of certain areas within supervision that need attention. This highlights the significance of putting leadership development at the forefront of healthcare organizations.

A mean score of 3.67 indicates a good emotion towards communication-related issues, underscoring the crucial role that effective communication plays in fostering a positive patient safety culture. This demonstrates the necessity for businesses to spend money on communication channels and training in order to improve safety procedures and results.

With a mean score of 3.70, the organization's active event reporting culture demonstrates its dedication to safety. Even though there was no statistically significant influence shown by the regression analysis, this discovery highlights how crucial it is to keep event reporting systems updated and improved.

The establishment of a safety culture is contingent upon the continuously favorable replies to the Patient Safety Grade (mean score of 3.86), which demonstrates the high degree of trust in the organization's safety policies. This trust forms the foundation of a culture of safety where both patients and healthcare providers have confidence in the quality of care provided.

With a mean score of 3.59, participants' agreement on the organization as a whole is crucial for creating a cohesive strategy for providing patient care and improving safety procedures. This common viewpoint can help to improve communication and ensure that safety procedures are followed consistently.

Patient safety culture is shaped by unit-specific practices, effective communication, and alignment with the organization's values and purpose statement. These factors are highlighted by the various levels of event reporting and the findings from the multivariate regression analysis. This provides healthcare organizations with a strategic framework to efficiently allocate their resources and efforts.

These findings provide a comprehensive assessment of patient safety culture in healthcare institutions, which broadens our understanding of the topic. They offer helpful insights for problem-solving by helping businesses concentrate on specific areas that require improvement and allocate funds for leadership development, communication training, and maintaining confidence in safety processes. Ultimately, these study findings may encourage changes in healthcare institutions and enhance the health of medical personnel and patients. This common viewpoint can promote more seamless cooperation and guarantee that safety procedures are regularly followed. This offers a strategic framework that helps healthcare companies use their resources and efforts more effectively in order to enhance safety culture.

4.3. Implications

The findings of this study carry significant implications for healthcare institutions and their approach to patient safety. Understanding these implications is crucial for shaping policies and strategies aimed at enhancing the quality of care and ensuring patient well-being.

- 1. Strategic focus areas:** The identified areas for improvement serve as strategic focal points for healthcare organizations. By concentrating efforts and resources on these specific aspects, institutions can initiate targeted interventions to bolster their patient safety culture. This focused approach enables efficient allocation of resources for maximum impact.
- 2. Leadership development:** Prioritizing leadership development programs is essential. By investing in training and skill development for healthcare leaders, institutions can empower them to create an environment conducive to patient safety. Strong leadership is fundamental in promoting a culture of safety and guiding staff members toward adherence to protocols.
- 3. Enhanced communication channels:** Improving communication channels within healthcare facilities is paramount. Effective communication ensures that information about safety procedures is disseminated clearly and comprehensively. Investing in training programs that emphasize communication skills equips staff members with the ability to convey critical safety-related information accurately.
- 4. Robust reporting systems:** Maintaining and enhancing event reporting systems is vital for continuous improvement. Encouraging the reporting of incidents, errors, and near misses fosters a culture

of learning. Robust reporting mechanisms provide valuable data for analysis, enabling organizations to identify trends, implement corrective measures, and prevent future occurrences.

5. **Establishing trust:** Building trust in safety procedures is foundational. Patients and healthcare providers must have confidence in the efficacy and reliability of safety protocols. Trustworthy procedures enhance compliance and promote a sense of security among both patients and staff, contributing significantly to overall patient safety.
6. **Promoting a shared understanding:** Creating a shared understanding among all employees is key to consistent adherence. Ensuring that every staff member comprehends safety protocols uniformly fosters cooperation and consistent implementation of procedures. This shared understanding enhances teamwork, mitigates errors, and elevates the overall safety culture within healthcare institutions.

Incorporating these implications into the organizational fabric of healthcare institutions will not only enhance patient safety but also contribute to the establishment of a resilient and patient-centered healthcare environment.

4.4. Policy and Leadership implications

The outcomes of this study reveal essential insights that can significantly inform policy development and leadership strategies within healthcare institutions. Understanding the reasons behind the positive results is crucial for deriving meaningful implications that can enhance patient safety culture.

- **Leadership advocacy:** The study's positive findings underscore the critical role of leadership in shaping a robust patient safety culture. Leaders should actively advocate for patient safety initiatives, effective communication practices, and incident reporting. Investing in leadership development programs that emphasize these aspects is imperative. By fostering a culture where leaders champion patient safety, healthcare organizations can create an environment where staff members feel empowered to prioritize patient safety in their daily practices.
- **Communication enhancement:** Clear and efficient communication channels are pivotal in achieving positive patient safety outcomes. Policies should focus on enhancing communication strategies, ensuring that crucial information related to safety protocols and best practices is disseminated effectively. Training programs aimed at improving communication skills among healthcare staff can further strengthen the overall communication culture. By investing in communication training and providing continuous support, healthcare institutions can facilitate transparent exchanges of information, leading to a safer and more informed healthcare environment.

- **Trust building:** Establishing trust among healthcare professionals is fundamental to fostering a positive patient safety culture. Policies should emphasize creating an atmosphere where staff members feel confident reporting incidents and errors without fear of retribution. This trust-building approach should extend across all levels of the organization, encouraging open dialogue and mutual respect. By implementing policies that promote trust and psychological safety, healthcare institutions can cultivate an environment where staff members are motivated to actively participate in safety initiatives.
- **Targeted interventions:** The study's success suggests that focused interventions yield positive results in enhancing patient safety culture. Policies should encourage healthcare institutions to conduct regular assessments, identify specific areas for improvement, and implement evidence-based interventions tailored to address these areas. Allocating resources for targeted interventions, continuous monitoring, and evaluation ensures the sustainability of these initiatives. By supporting focused interventions, policies can guide healthcare organizations toward continuous improvement, driving positive changes in patient safety culture.
- **Collaborative leadership:** Policies should promote a collaborative leadership approach where leaders actively engage with frontline staff, encouraging their active involvement in decision-making processes related to patient safety. Collaborative leadership fosters a sense of shared responsibility and ownership among staff members, leading to a collective commitment to patient safety. By integrating collaborative practices into policies, healthcare institutions can harness the collective expertise of their workforce, driving a culture of safety and teamwork.

In summary, aligning policies with these implications can empower healthcare institutions to build a resilient patient safety culture. By prioritizing leadership advocacy, enhancing communication, building trust, implementing targeted interventions, and embracing collaborative leadership, healthcare organizations can create an environment where patient safety is not just a priority but a shared commitment among all staff members. These policy implications pave the way for a safer, more supportive healthcare environment that ultimately benefits both patients and healthcare professional

5. Conclusion and Recommendations

5.1. Conclusion

In conclusion, this study has produced important findings that offer insightful information about the complex terrain of participant safety views and attitudes. The study used the Survey on Patient Safety Culture

(SOPSC) to evaluate patient safety culture within a healthcare organization.

Research Question 1: What is the role of leadership in sustaining a robust safety culture within healthcare organizations?

The study's findings indicate that leadership plays a pivotal role in shaping and sustaining a robust safety culture within healthcare organizations. Specifically, the moderately positive perception of supervisors or managers (mean score of 3.48) highlights the importance of targeted leadership development efforts. While this aspect is generally positive, it underscores the need for leaders to address specific areas for improvement, emphasizing their significant role in fostering a culture of patient safety.

Research Question 2: What are the primary factors influencing the state of patient safety culture within healthcare organizations?

The research identifies several primary factors influencing patient safety culture. Effective communication (mean score of 3.67) emerged as a critical factor, emphasizing the need for healthcare organizations to invest in communication training and channels to enhance safety practices. Unit-specific practices, as supported by the multivariate regression analysis, were shown to shape patient safety culture, highlighting the importance of tailoring safety initiatives to specific healthcare units. Furthermore, event reporting (mean score of 3.70) indicated the organization's commitment to safety. While not statistically significant in the regression analysis, it underscores the continued importance of maintaining and improving event reporting systems.

Research Question 3: What is the perspective of healthcare workers regarding the existing patient safety culture within their respective organizations?

Participants' perspectives on the existing patient safety culture within their respective organizations were generally positive. The consistently positive responses regarding the Patient Safety Grade (mean score of 3.86) demonstrate a high level of trust in the organization's safety practices. This trust forms the foundation for a culture of safety in which patients and healthcare professionals can have confidence in the quality of care provided. Additionally, the agreement among participants regarding the organization as a whole (mean score of 3.59) is crucial for creating a cohesive strategy for providing patient care and improving safety procedures. This common viewpoint can help to improve communication and ensure that safety procedures are followed consistently.

In closing, the implications of these research findings on patient safety culture within healthcare organizations are noteworthy. By addressing specific areas for improvement within leadership, emphasizing the importance of effective communication, and focusing on

unit-specific practices, healthcare organizations can enhance their safety culture. These results may stimulate positive change within healthcare organizations, promoting a culture of safety that is advantageous to both patients and medical staff. Leadership, communication, and a shared commitment to safety are essential elements in this journey toward improved patient safety culture.

5.2. Summary of the study

Utilizing the Survey on Patient Safety Culture (SOPSC), this study looked into participant attitudes and opinions regarding safety in a healthcare setting. A complex patient safety culture with well-rounded answers was shown by the investigation. It emphasized how important trust-building, leadership growth, and good communication are.

5.3. Contributions and Significance

The study provides insightful information for healthcare institutions by highlighting the significance of trust, good communication, leadership development, and a patient safety culture. It establishes the groundwork for advancements that benefit medical personnel as well as patients. 5.4 Limitations and Future Research While this study provides valuable insights into the patient safety culture within the specific context it was conducted, it is essential to acknowledge its limitations and avenues for future research.

- **Context-Specific Nature:** One limitation of this study is its context-specific nature. The findings are derived from a particular healthcare environment and may not be universally applicable. To enhance the generalizability of the results, future studies should encompass diverse healthcare settings, including different types of hospitals, clinics, and healthcare facilities. This broader approach will provide a comprehensive understanding of patient safety culture across various contexts
- **Geographical variation:** Geographical variations in healthcare practices and cultural differences can significantly impact patient safety culture. Future research should explore these geographical variances to comprehend how regional factors influence the implementation of patient safety initiatives. By conducting studies in different geographical areas, researchers can identify region-specific challenges and develop tailored interventions that align with the unique needs of each location.
- **Efficacy of therapies:** The mention of "particular therapies" in the context of patient safety culture raises an intriguing question: what therapies are most effective in enhancing patient safety culture? To address this query, future research should focus on evaluating specific interventions, training programs, or policies implemented in healthcare organizations. By conducting rigorous assessments, researchers can determine the efficacy of different

therapeutic approaches, such as leadership training, communication workshops, incident reporting systems, or psychological safety initiatives. Investigating the outcomes of these interventions will provide evidence-based insights into the most effective therapies for cultivating a positive patient safety culture.

- **Long-Term impact:** Understanding the long-term impact of patient safety interventions is crucial for sustaining positive changes. Future research endeavors should incorporate longitudinal studies to assess the enduring effects of implemented strategies. By tracking the progress and stability of patient safety culture over an extended period, researchers can identify trends, challenges, and areas of improvement. Longitudinal studies enable healthcare organizations to adapt their approaches based on long-term outcomes, ensuring continuous enhancement of patient safety practices.
- **Interdisciplinary approaches:** Patient safety culture is influenced by a multitude of factors, including leadership, communication, organizational policies, and staff attitudes. Future research should adopt interdisciplinary approaches, integrating expertise from fields such as psychology, organizational behavior, healthcare management, and communication studies. Collaborative interdisciplinary research can provide holistic insights into the complexities of patient safety culture, leading to comprehensive interventions that address various facets of the healthcare environment.

In summary, addressing these limitations and delving into these areas of future research will enrich our understanding of patient safety culture and contribute to the development of evidence-based strategies for enhancing patient safety in healthcare organizations. By exploring diverse contexts, evaluating specific therapeutic interventions, considering long-term impacts, examining geographical variations, and adopting interdisciplinary approaches, researchers can pave the way for a safer and more patient-centered healthcare landscape.

5.4. Final remarks

Patient safety culture is an essential component of healthcare, not merely a theoretical idea. This study demonstrates how important it is for healthcare businesses to put safety first, improve communication, and make leadership development investments. In the end, everyone involved in healthcare—from patients to medical staff—benefits from promoting a culture of safety.

5.5. Recommendations for improvement

The research findings support the following suggestions for improving patient safety cultures in healthcare institutions:

- 1) **Making leadership development a priority.** involves creating focused programs for managers and supervisors tailored to address specific areas that need attention in their responsibilities. These areas can vary based on the healthcare institution's context and challenges. However, common areas that might require focus in leadership development programs include:
 1. **Communication skills:** Managers and supervisors should be proficient in both written and verbal communication. They need to convey information clearly, listen actively, and foster an open and transparent communication environment within their teams.
 2. **Decision-Making skills:** Developing the ability to make informed decisions, especially under pressure, is crucial. This includes considering various options, weighing potential outcomes, and choosing the best course of action for the safety and well-being of patients and staff.
 3. **Conflict resolution:** Healthcare settings often involve high-stress situations where conflicts can arise. Training in conflict resolution equips managers and supervisors with skills to address disagreements and disputes among team members, ensuring a harmonious work environment.
 4. **Team building:** Effective teamwork is essential for patient safety. Managers and supervisors should know how to build and nurture cohesive, collaborative, and motivated teams. This involves understanding team dynamics, resolving conflicts, and fostering a positive team culture.
 5. **Time management:** Healthcare professionals often work in fast-paced environments. Supervisors need to manage their time efficiently, prioritize tasks, and ensure that essential activities are completed without compromising patient safety.
 6. **Ethical Decision-Making:** Managers and supervisors should be well-versed in ethical principles and guidelines in healthcare. They need to make decisions that uphold patient rights, confidentiality, and the overall ethical standards of the profession.
 7. **Adaptability and Change management:** The healthcare industry is constantly evolving. Leaders must be adaptable to change, open to new technologies and procedures, and capable of guiding their teams through transitions effectively.
 8. **Empathy and Compassion:** Healthcare leaders should demonstrate empathy and compassion toward patients and their families. These qualities are essential for providing patient-centered care and maintaining a supportive environment for both patients and staff.
 9. **Quality Improvement:** Understanding the principles of quality improvement methodologies

(such as Lean or Six Sigma) can help leaders identify inefficiencies, reduce errors, and enhance overall patient safety and satisfaction.

10. **Resilience:** Healthcare leaders often face challenging situations. Resilience training can help them cope with stress, setbacks, and difficult emotions, ensuring they remain effective and focused on patient safety goals. By integrating these areas into leadership development programs, healthcare institutions can nurture strong and effective leaders who contribute to a culture of patient safety.
- 2) **Invest in communication training:** Investing in communication training allocating financial resources to improve communication skills within the organization. This involves providing staff with workshops and courses focused on various aspects of communication, such as active listening and conflict resolution. Additionally, it includes enhancing communication channels by investing in technologies and systems, ensuring efficient and timely exchange of information among team members. By dedicating funds to both training and channel improvement, organizations can foster effective communication procedures, leading to enhanced teamwork, increased productivity, and improved overall performance.
- 3) **Sustain event reporting systems:** To show a continuous dedication to safety and to improve incident recording, maintain and improve event reporting systems.
- 4) **Maintain trust in safety practices:** To strengthen the cornerstone of a strong safety culture, concentrate on creating and maintaining trust in safety practices.
- 5) **Promote a common organizational perspective:** To improve cooperation and adherence to safety procedures, promote a common perspective among participants on the organization as a whole.

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