

Healthcare Professional's Perception towards Patient Safety Culture and Practices: A Qualitative Study

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Abstract

Background: Ensuring patient safety is a crucial aspect of healthcare quality. The cultural and practical aspects of this concept are intertwined with the shared values, attitudes and behaviors within a healthcare organization that decides their level of commitment towards achieving better outcomes for their patients. The culture in both perception and application by medical practitioners holds immense importance not only for patients' well-being but also presents an impact on overall healthcare performances. To put into effect methods for maintaining effective safety strategies, it becomes indispensable to study the perception and practices on patient safety by healthcare professionals. However, there remains a scarcity of research exploring this in public hospitals located within the Najran Region, in Saudi Arabia. **Aims:** The purpose of this particular qualitative study was to investigate what healthcare professionals think about both the culture and practices in place regarding patient safety. **Methods:** The methods employed for this research included using a descriptive phenomenological approach, where semi-structured interviews were conducted with 20 healthcare professionals who were chosen intentionally. **Results:** After conducting thematic analysis, certain key themes associated with patient safety culture and practices emerged. This analysis revealed complex dynamics surrounding these themes. **Conclusions:** Ultimately, the findings from this study are indicative of how essential it is to pay attention to patient safety culture and practices when trying to improve healthcare quality at public hospitals located within Najran Region. **Recommendations:** Based on the study's discoveries, it is recommended that healthcare institutions put their resources into implementing ongoing programs aimed at bolstering patient safety. Furthermore, they should foster an environment of communication and effective teamwork to promote successful outcomes. Additionally, policies that prioritize learning from errors instead of laying blame can encourage a culture of justice. Lastly, hospital leaders could improve overall practices related to patient safety by displaying a high level of commitment. These recommendations offer guidance for healthcare providers and administrators in making progress toward establishing safer environments for patients in their care.

Keywords: Patient Safety Culture, healthcare professionals, Saudi, qualitative.

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INTRODUCTION

Modern healthcare has a strong emphasis on the establishment and cultivation of a resilient safety culture geared towards protecting patients. Patient safety culture is characterized by collectively held values, beliefs and norms shaping individual attitudes and actions with regard to patient safety within an organization or group (Singer et al., 2003). As a dynamic and crucial part of healthcare, it permeates daily operations while significantly influencing patient outcomes. Numerous research studies have confirmed the powerful relationship between a steadfastly maintained culture

centered on safeguarding patient safety and favorable patient outcomes (Sammer et al., 2010; Weaver et al., 2013). These empirical investigations reveal how fostering such a positive safety culture decreases medical errors, minimizes adverse events, bolsters overall quality care standards, and enhances patient satisfaction levels.

In order to foster and uphold a safety culture, healthcare professionals play an indispensable role. Positioned at the forefront of patient care, their outlooks, thoughts, and operations have a profound influence on this vital aspect (Nieva & Sorra, 2003). This is because they directly handle the patients, make several judgments

and execute safety procedures that bring into life the notion of safety culture.

Significance of the Study

This study's importance stems from the fact that it concentrates on healthcare experts' perceptions of patient safety culture and their real practices. Consequently, it has the potential to aid in creating efficacious techniques for enhancing patient safety. Through experts' perceptions, this could act as an indicator of an organization's overall state regarding safety culture while offering essential ideas about where focus is needed. Regarding practical implementation, healthcare professionals' actions can provide valuable insights into what works well and needs adjustment.

Many studies suggest that favorable attitudes towards patient safety culture are closely associated with improved patient outcomes. For instance, Aiken *et al.* (2012) note a correlation between hospitals prioritizing patient safety and decreased rates of patient mortality and adverse events. Moreover, according to Weaver *et al.*, (2013), healthcare professionals who hold optimistic views towards their hospital's safety culture are also less likely to be involved in incidents concerning safeguarding patients' welfare. Nonetheless, the number of studies on the perceptions of these frontline healthcare workers are still inadequate to paint a picture of the global healthcare workforce. Specifically, from literature, there are very few studies on this particular topic in the Middle East more so Saudi Arabia. As such, the significance of this study is to fill this gap by concentrating on public hospitals located within Najran Region in Saudi Arabia.

Aim of the Study

The primary objective of this research is to investigate healthcare professionals' outlook on patient safety culture and practices at public hospitals located in the Najran Region, Saudi Arabia. This region boasts a diverse population comprising both patients and medical experts and is witnessing significant growth and progress amidst its healthcare facilities. By delving into the mindset and conduct of healthcare personnel towards safeguarding patient safety, this study may serve as a valuable resource for shaping strategies geared towards enhancing the overall culture of patient safety. This could ultimately lead to better health outcomes for patients as well as fewer costs borne by the healthcare system resulting from negative incidents in the healthcare environment.

Research Question/s

The primary research inquiry is:

How do healthcare practitioners perceive and implement protocols for patient safety in their respective work environments?

In order to explore this critical topic, this research question will be broken down into sub-questions.

1. *How do healthcare professionals regard the cultural climate surrounding patient safety at their particular workplace?*
2. *What particular measures and techniques do they execute to ensure utmost protection for patients in their care?*
3. *How does the prevailing culture of patient safety influence these specific practices?*

These questions are intended to further enrich our understanding about cultivating a positive patient safety culture. They shed light on strategies geared towards reaffirming our commitment to achieving best practices throughout all levels of the healthcare industry.

METHODS

This study was conducted in the public hospitals located in Saudi Arabia's Najran Region. This particular area was chosen for its varied populace and the substantial improvements and modifications taking place in health care. Public healthcare facilities were chosen as they cater to a vast array of patients, experience exceptional difficulties related to resources and patient safety concerns. Consequently, this environment proved optimal to explore current healthcare workers' beliefs and actions.

Research Design

To delve deep into the perceptions of healthcare professionals regarding patient safety, a descriptive phenomenological qualitative research design was employed. This approach served the purpose of understanding the phenomena under investigation at an exploratory level. This methodology facilitates generating rich information through nuanced and comprehensive details (Creswell & Poth, 2018). The descriptive element held particular importance in aiding participants' experience capture without any presuppositions that might influence their perception construction about patient safety practices (Husserl, 1970). Additionally, this research design's qualitative nature allowed healthcare professionals' voices to be heard and offered an inclusive perspective. This would enable stakeholders like policymakers and administrators to acquire exclusive insights associated with the healthcare sector.

Participants Recruitment

In this investigation, a sub-set of twenty healthcare experts who work in public hospitals were selected. Factors considered during selection leaned on the experience related to the phenomenon under exploration. The broad selection encompassed multiple practitioners from various professions within the numerous fields involved with patient care, including doctors and nurses among other allied health workers. A range of methods were obtained by the research team to ensure participation. Candidates were contacted through electronic mail - where they received information around the study's objectives, procedures and need for voluntary

contribution. This was followed up with correspondence directed towards confirming eligibility before interviews could be successfully scheduled.

Data Collection

Semi-structured interviews were utilized to gather data for this study. An interview protocol, specifically created for the study, guided the process with open-ended questions and probes concerning patient safety culture and practices. The interviews offered a balanced approach by ensuring consistency across all respondents, while simultaneously allowing flexibility to address newly emerging issues in-depth (DiCicco-Bloom & Crabtree, 2006). To commence each interview, general questions were posed before focusing on specific topics to delve further into participant perceptions and actions. Confidentiality was prioritized during the entire process as participants were interviewed in private spaces. Using audio recording equipment for verbatim transcriptions after securing permissions covered every crucial detail discussed in the interviews confirming complete accuracy and attention to detail throughout the process.

The semi-structured interview format allowed us to provide guidance while also affording each participant individual exploration with regard to their unique experiences and perspectives. Our team cautiously crafted the guide by amalgamating research questions with an extensive study of patient safety literature. The interview guide was made to stimulate honest feedbacks while urging participants towards detailed elaboration of their viewpoints through specific events from personal experience. The interview guide provided fluidity and gave room to delve deeper into unexpected or intriguing responses. Flexibility is one of the primary benefits associated with semi-structured interviews. It gives researchers an impetus for exploring new ideas and themes borne during conversations. Importantly, by providing participants with a consistent set of questions, devoid of rigidity and ideal for exploration and free-thinking, an even playing field was created for them to share their viewpoints on similar topics.

Credibility

To guarantee accurate results that reflect the phenomenon under examination, this study emphasized the importance of internal validity or credibility. Lincoln and Guba's model of trustworthiness in qualitative research guided this mission by employing strategies such as member-checking, peer debriefing, and a reflective journal throughout the research process (Enworo, 2023). One crucial strategy utilized to enhance data accuracy was member-checking or participant validation. After each interview, participants received either a transcript or detailed summary of their contributions for review. This system enabled them to confirm, expand upon or clarify their responses to ensure authentic representation within collected data. Moreover,

they had the opportunity to correct any inaccuracies or misunderstandings. This helped significantly towards boosting overall data validity.

The research team employed peer debriefing as a means of encouraging reflexivity and establishing the credibility of their study. To do so, the group regularly convened to assess, deliberate, and scrutinize various processes including data collection, analysis, and interpretation. This invaluable practice enabled researchers to highlight any potential biases or shortcomings by exposing their initial thoughts and preliminary findings for review by colleagues. Moreover, ongoing dialogue among peers ensured that emerging themes in the study reflected genuine data rather than making assumptions imposed strictly by the researchers. While carrying out the research work, meticulous records about decisions made, possible prejudices raised during interactions with participants were kept in a reflexive journal. The aim of this was for critical reflection on outcomes obtained thus far while paying close attention to emerging themes and how researchers can creatively contribute towards shaping results derived from their researched topics. Maintaining self-awareness throughout study added a layer of transparency as well as stringency to enhance reliability on output conclusions thereby increasing research credibility.

Ethical Considerations

The study was rooted firmly in the moral principles governing human research safeguarded in the Declaration of Helsinki (World Medical Association, 2013). The principles laid out here include respecting individuals' dignity, kindness, and implementing justice. The study meticulously adhered to all these guidelines throughout the research process. Before undertaking the investigation, adequate measures were taken to have a sound proposal that complied with ethical standards for human research by passing through an institutional review board. Thus, it intended to safeguard participants' rights and welfare by implementing proper data collection tools and participant consent forms as part of its protocols.

Ensuring informed consent was a pivotal aspect of the research project. To this end, every participant received an exhaustive consent form that outlined in detail the aims, procedures and nature of the study alongside possible upsides or drawbacks and their rights as participants. Participants' voluntary involvement was emphasized along with their prerogative to withdraw from the study without consequence. Additionally, confidentiality and anonymity regarding data were underscored, which prompted only those who comprehended and assented via signing to be part of the investigation. The team took utmost care to maintain data confidentiality throughout by meticulously deleting usernames or disfiguring key identity features on journal entries relevant to each participant interviewed thereby

maintaining anonymity. In addition, comprehensive measures including secure storage guaranteed that only authorized personnel like researchers had access to the data. This helped avert any chance of traceability back for each individual surveyed while securing privacy concerns.

Data Analysis

This study utilized thematic analysis for the data analysis using the latest version of Nvivo software. When data collection concluded, transcripts were scrutinized using thematic analysis. This strategy focuses on identifying potential patterns or themes present in the data before quantifying their relevance through rigorous exploration. Researchers approached this task by reading the transcripts for a deeper understanding of the collected information. The first step involved studying transcriptions as initial ideas were noted down alongside them throughout reading. This helped highlight major trends within the data, providing valuable insights for subsequent distinct stages of review.

After collecting the data, the researchers began generating preliminary codes for analysis. In this process, each element of the collected information was systematically scrutinized and intriguing aspects were coded using both inductive and deductive protocols based on the established study objectives and research questions. Every code encapsulated a cogent idea or segment of data that corresponded to the research queries. As such, the initial codes were classified into

possible themes, combining interconnected codes together. After examining each theme thoroughly through comparison with all coded excerpts from the entirety of the information gathered, they were then refined accordingly. The objective was to ensure precision by comprehensively reflecting underlying trends in accordance with our research goals.

After identifying the major themes, each theme was named and given a definition that encapsulated its essence and relevance to the research questions. Sub-themes were discovered within these principal themes, further demonstrating the subtopics or various facets of each main theme. Conclusively, an additional analysis was carried out in order to refine the details of each theme along with the overall tale of this investigation which linked back to both research queries and existing literature concerned with patient safety.

RESULTS

The sample composition was diverse as it consisted of physicians, nurses, and allied health professionals. Given their unique roles within the healthcare space, we were granted expansive insight into patient safety culture and practices. We selected those participants who displayed considerable understanding and involvement with safety measures in their respective workplaces; thus enriching our investigation's overall outcomes.

Table 1

Demographic Characteristics	Frequency	Percentage (%)
Age Group 25-35 years	7	35
Female	11	55
Profession - Nurses	8	40
5-10 Years of Experience	6	30
Department - General Medicine	7	35

Table.1 provides an overview of the demographic profile of the bulk of participants. It encompasses various attributes including age, gender, field of work, professional role and years of experience within their respective departments. Participant ages ranged from 28 to 57 years old and possessed a wide representation that reflects multigenerational diversity with an average age recorded at 37.5 years. This particular dispersion ranges across a plethora of experiences, perceptions, and attitudes regarding patient safety while accommodating diverse stages in one's career path. Furthermore, our sampled participants' gender distribution remained almost equal which mirrors actual demographics found employed within healthcare professions throughout Saudi Arabia. The importance lies in representing the balanced views between genders due to each person's distinctive experiences deeply entrenched within various

sociocultural factors that impact individual attitudes towards patient safety practices.

The majority of participants who took part in this study were nurses, although doctors and allied healthcare professionals also contributed. The diverse roles and perspectives of these healthcare workers on patient safety reinforced the data collected, providing a comprehensive view based on experiences and varied outlooks. With varying levels of professional experience ranging from three to 25 years or more, there was an all-encompassing understanding of the evolution of patient-safety culture over time along with modern trends and practices.

In addition, the extensive range of collected data from various sources underscores the qualitative research's complexity. This variety offers a wide spectrum of perspectives and encounters that add to an

enhanced understanding of both public hospitals' patient safety culture and practices located in Saudi Arabia's Najran Region. Consequently, these findings serve as an

essential foundation for more detailed and precise analyses regarding the inquiry at hand.

Table 2

Interview Guide Questions	Purpose
"Can you describe what patient safety means in your role?"	To explore participants' understanding and perception of patient safety in the context of their professional role.
"Can you give examples of patient safety practices that you engage in?"	To gain insight into the specific actions and behaviors participants engage in to ensure patient safety.
"Can you discuss any training or education you've received related to patient safety?"	To understand the role of training and education in shaping participants' patient safety practices.
"Have you observed any changes in patient safety practices over the course of your career?"	To identify changes or trends in patient safety practices over time.
"Can you share any challenges or barriers you've encountered in practicing patient safety?"	To uncover potential issues or obstacles that can hinder patient safety efforts.
"Can you discuss how your team or department addresses patient safety?"	To explore the collective approach to patient safety at the team or department level.

Table 2 shows an interview guide utilized in the study.

Throughout the pilot testing phase of our study, we made iterative refinements to our guide. Our goal was to ensure that the survey questions were clear and captured all necessary data for addressing our research

questions. By continuously refining this guide, we successfully facilitated significant conversations around patient safety and ultimately produced a wealth of valuable data from which key themes were extracted.

Table 3

Major Themes	Sub-themes
Understanding and Prioritization of Patient Safety	Patient-centered care
	Safety protocols and guidelines
	Error reporting and learning
Communication and Teamwork	Interprofessional collaboration
	Openness and transparency
	Feedback culture
Leadership Support	Administrative backing
	Role modelling
	Resource provision
Training and Education	On-the-job training
	Continuous professional development
	Patient safety curricula
Challenges and Barriers to Patient Safety	Workload and staff shortage
	Resistance to change
	Lack of awareness and understanding

In analyzing the interview data collected through Braun and Clarke's (2006) methodological approach, we discovered several themes encompassing distinct patterns in the participants' perspectives and practices of patient safety culture. Table 3 offers a comprehensible overview of our findings that highlights significant insights. Each theme was individually labeled to reflect its underlying aspects within the interview data. Leadership support, communication and teamwork, understanding, prioritization of patient safety culture,

challenges or barriers faced by healthcare workers were amongst dominant features throughout our analysis process. The complex nature of our investigation is distilled into easily digestible content for readers aiming to gain foundational awareness surrounding debates on patient safety practices recounted through these conversations and lived experiences in their day-to-day work with patients.

The patient safety culture and practices reveal a multi-faceted nature, supported by several themes with multiple sub-themes. Take, for instance, the theme of 'understanding and prioritization of patient safety', which included sub-themes such as 'patient-centered care', 'safety protocols and guidelines' as well as 'error reporting and learning'. These sub-themes bring to light various ways in which understanding and prioritizing patient safety was demonstrated through the participant's roles. Furthermore, themes such as 'communication and teamwork' alongside 'leadership support', hold numerous subthemes that showcase essential aspects linked to each broad theme. The individual factors that contribute to these bigger concepts come to the forefront through their specific classification into these diverse sub-themes.

When examining the theme of "challenges and barriers to patient safety," various sub-themes arise, such as "workload and staff shortage," "resistance to change," and "lack of awareness and understanding." These instances serve as examples of how healthcare professionals face an array of hurdles when striving to keep their patients safe. The existence of various sub-themes highlights the complexity of addressing issues around maintaining patient safety.

The table presented herein delves into the intricate perception and conduct of healthcare professionals when it comes to patient safety culture. By gaining exclusive insights particular to the Najran Region, Saudi Arabia, while still bearing resemblance to existing literature on patient safety, these themes and sub-themes afford an all-encompassing look at patient safety practices. They thus provide a solid foundation for future discourse regarding these topics and their implications in the following section by painting a vivid picture of patient safety attitudes throughout public hospitals in this region.

DISCUSSION

Our study's results align with prior literature regarding healthcare professionals' comprehension and emphasis on patient safety (Nieva & Sorra, 2004). The participants exhibited a profound understanding of patient safety's crucial impact on healthcare provision, which highlights the significance that patient safety holds in their respective professional roles. This viewpoint is further affirmed by sub-themes like 'patient-centered care,' 'safety guidelines and protocols,' and 'reporting and learning from mistakes.' One response encapsulating this theme was;

“As a nurse, I place a premium on ensuring patient safety. My efforts also involve creating an environment where patients feel secure and contented. While adhering to protocols and following guidelines are important, my focus is always the welfare of the patient. Taking care of them entails advocating for their interests, being alert to any missteps or close calls whilst in their care, but also picking up knowledge and valuable lessons from such

experiences. For me, safeguarding patient health implies an ongoing watchful attitude; it stresses promoting communication transparency as well as reliable partnerships among team members. Ultimately what comforts me most is placing my patients at the vanguard of every outcome we make when providing medical attention to guarantee first-class healthcare provisions for them.”

These findings correspond with the World Health Organization's Patient Safety Curriculum Guide, which emphasizes the importance of patient security to optimal medical service delivery (WHO, 2011). The significance of strong communication and teamwork in promoting a robust safety culture was another key theme that emerged from our study. A response from one of the participants summarized what most of them highlighted.

“As members of our department, we all hold a responsibility in ensuring the safety of our patients. Through prioritizing transparent communication and teamwork in all aspects of our work, we continually strive to maintain top-tier standards. By routinely holding team meetings, we create an open forum for discussing past patient safety incidents, sharing knowledge and strategizing action plans. This inclusive approach facilitates an environment conducive to learning and collaboration; ultimately allowing us to operate seamlessly as a team towards safeguarding our patients' wellbeing with utmost care.”

This discovery aligns with earlier studies outlining the significance of proficient communication and cooperation within healthcare settings. Leonard et al. (2004) posited that sound communication and collaboration are critical to forestalling errors, heightening patient contentment, and tempering unfavorable patient results. Furthermore, our findings align with Manser's (2009) review which establishes a clear connection between positive teamwork dynamics, effective communication, and improved patient safety outcomes. In essence, thriving healthcare teams depend on seamless coordination through efficient protocols of communication to deliver better results.

The research conducted also pinpointed leadership support as a key theme. This has also been highlighted in previous studies that underscored the importance of dedicated leaders in cultivating a sense of safety culture within healthcare settings (Frankel et al., 2008). Our study further emphasizes the need for administrative support, role modeling, and provision of resources, all integral aspects of effective leadership to establish a patient safety culture. A transcript excerpt from one of the respondent highlighted this theme.

“To me, leadership is of utmost importance when it comes to ensuring safety for all patients. In the department where I work, our manager dedicates herself towards enforcing and upholding patient safety

practices. She sets a standard of excellence by modeling best practices, keeps tabs on our tasks diligently, and allocates necessary resources needed for training without hesitation. As an added bonus, she advocates an open-door policy which encourages us subordinates to share any concerns or recommendations that relate to standards for patient care. Ultimately, her proactive involvement in our efforts boosts morale and stimulates the entire team's commitment to ensuring patient safety as a top priority."

There was also particular emphasis on 'training and education' in our findings given its paramount importance to achieve perpetual enhancement of patient safety standards. Harnessing continuous professional development, on-the-job training and incorporating patient safety concepts into educational curricula were noted by participants as central practices necessary for perpetuating optimized levels of care. This is congruent with prior research. For instance, the Institute of Medicine (2010) establishes that ongoing education can lead to greater comprehension and utilization of essential safe practice principles leading to overall better medical practices.

Finally, this study also highlighted several barriers to ensuring patient safety, such as workload, opposition to change and insufficient knowledge. Tackling these impediments will require a multifaceted approach that involves not only providers in healthcare but also significant policy-level interventions at the institutional level (Donaldson *et al.*, 2000). These discoveries have crucial implications for practice since they highlight how vital it is for healthcare organizations to establish an environment of security that bolsters transparency, cooperation, constructive leadership styles while promoting perpetual learning. Therefore, healthcare institutions need a deliberate strategy that goes above and beyond prioritizing patients' well-being by ensuring sufficient resources allocation effectively coupled with championing patient-centered approach principles to positively impact public health.

This study plays a major role in understanding safety practices and culture when it comes to patient healthcare professionals within the Najran region of Saudi Arabia. Its valuable insights can be expanded and applied on various levels with considerable accuracy. This makes it useful for improving patient safety across multiple regions. These findings not only fall in line with current conversations surrounding this topic but also assist other researchers building on their existing knowledge base. Taken together, this study is highly relevant to future policies, interventions or programs aimed towards promoting culture that prioritizes patients' safety.

CONCLUSION

The objective of this qualitative research was to explore how healthcare providers perceive and practice

patient safety culture within public hospitals located in the Najran region, Saudi Arabia. The utilization of a descriptive phenomenological approach enabled us to gather insights that add value to the existing body of knowledge regarding patient safety practices. Consequently, our study's significant findings point towards the need for patient safety culture as an essential element in improving healthcare quality standards. Our participants exhibited clear insight and recognition of the priority of ensuring patients' safety consistently falls within their roles. This observation implies a robust foundation for maintaining high levels of safety, demonstrating that healthcare experts understand the significance of upholding optimal patient outcomes. This aligns with past researches identifying security cultures as vital factors correlated with desirable health care outcomes (Donaldson *et al.*, 2000).

This study's results reveal that both effective communication and teamwork play crucial roles in fostering a positive safety culture. The participants emphasized the importance of collaboration, transparency, and openness in their practice. These findings further corroborate the fact that high-quality communication and teamwork significantly contribute to better patient safety outcomes (Leonard, Graham, & Bonacum, 2004). The significance of supportive leadership also emerged as another major theme. It highlighted its fundamental role in nurturing a positive safety culture by reinforcing existing literature on engaged and supportive leadership that facilitates safe healthcare practices (Frankel *et al.*, 2008). Our findings indicate that healthcare leaders must model practices related to patient safety while providing adequate resources that promote and reward best practices. A clear focus on improving patient safety should exist at all times for successful implementation.

The study's findings have made it abundantly clear that continuous training and education play a critical role in guaranteeing patient safety. The participants involved highlighted the necessity of ongoing professional development, advocating for all-encompassing patient safety curricula alongside on-the-job training. Spotting workload issues, resistance to change, and lack of awareness as some key challenges persisting within the field were also noted. This further reiterates the need for systematic strategies aimed at overcoming these hurdles while simultaneously creating an environment that fosters a culture of patient safety within healthcare settings. The study is thus compounded evidence towards strengthening this cultural shift. This shift is towards reinforcing principles that substantiate excellence in providing preventive care services whilst equally propagating constant growth through educational and developmental opportunities.

To sum up, the research presented in this study holds a significant contribution to the discussions around patient safety culture. It offers an intricate

comprehension of how healthcare professional perceive and engage with such culture in Saudi Arabia's Najran Region. The study establishes that there is a crucial need for instilling robust patient safety practices among healthcare workers through efficient communication channels, encouraging leadership while seeking to tackle challenges through well-thought-out action strategies.

Recommendations

The study's discoveries suggest a few measures to improve patient safety culture and protocols within the public hospitals of Saudi Arabia's Najran Region. One key initiative is to enhance patient safety instruction. The findings highlight the value of ongoing professional advancement and integrating patient safety curricula into medical education. Training programs should encompass both theoretical knowledge and practical expertise, centering on the significance of ensuring patients' well-being, common causes of medical errors, techniques for avoiding mistakes, and establishing a safe culture. These educative drives have potential to advance healthcare professionals' proficiency in caring for patient safety while bolstering self-confidence, contributing significantly toward advancing well-being (Clancy, 2009).

Promoting effective communication and teamwork should be a top priority in healthcare institutions, as highlighted by the study's findings. The value of collaboration and openness for fostering a positive safety culture was emphasized. To achieve this, institutions must develop communication standards, collaborate among different professions and implement team-based care models. Maintaining an environment of mutual respect and transparency can contribute to improved patient safety results through reduced errors. Leadership greatly impacts the success of implementing a workable safety culture within healthcare organizations. Leaders at all levels ought to display their unwavering commitment to ensuring patients' welfare is safeguarded while providing essential resources needed to function. Safety-promoting behaviors are rewarded under effective leadership, leading to greater transparency which allows teams to learn from each other's mistakes continuously during problem-solving processes. This promotes continuous improvement.

Dealing with workload concerns and employee shortages is another critical aspect of promoting patient safety. The results of this study revealed that high levels of responsibility and insufficient staffing can put patients at risk. For this reason, hospitals must ensure proper levels of staffing, prioritize work-life equilibrium, and implement strategies for efficient management of tasks. In fact, implementing operational enhancements to increase productivity could help relieve task-related issues in a way that benefits the well-being of patients (Donaldson *et al.*, 2000). Lastly, promoting change and innovation within an organization is essential. Resistance to equivocation serves as a barrier towards patient health

protection initiatives. It is important therefore for healthcare organizations to cultivate climates where learning opportunities are encouraged alongside feedback mechanisms so that professionals are engaged in processes that lead to big decisions.

Limitations

While the findings of this study highlight how patient safety is approached and perceived in healthcare settings. There were a few limitations. The first limitation was sample size. The sample size of only 20 healthcare professionals is not large enough. This could hinder how wide-ranging these results are applicable. It is important to note that qualitative research seeks a deep exploration rather than statistical representation. As such, the results should be cautiously considered when applying them to diverse contexts or more extensive populations. Moreover, as this study focused solely on public hospitals within Saudi Arabia's Najran region, its implications might not apply necessarily to various geographical locations or private healthcare facilities. Patient safety culture can vary widely depending on both socio-cultural and organizational structures present in each setting. Future research endeavors could utilize larger and varied samples from several locations. This would make more accurate conclusions about global patient safety trends.

Although the study provides important insights into patient safety culture, its reliance on self-reported data from healthcare professionals may be subject to social desirability bias. Participants who feel inclined to present themselves or their organizations in a positive light can potentially affect the authenticity of their responses. Future researchers could incorporate additional data sources including patient feedback, observational data and safety records to provide an even more comprehensive understanding of this topic. It is noteworthy that despite these limitations, the study offers valuable information about healthcare professionals' practices and perceptions as they relate to patient safety culture. This insight can aid in formulating effective strategies and interventions aimed at enhancing patients' safety within healthcare facilities.

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Availability of data and materials

The data sets generated and analyzed during the current study are available on request due to privacy/ethical restrictions.

Declaration of interest statement

The authors declare that they have no competing interests.

Compliance with ethical standards

All procedures performed in study were in accordance with the ethical standards of the institutional and/or national research committee

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Conflict of Interest:

The authors declare that they have no conflicts of interest

Informed consent: All participants signed an informed consent form before engaging in the study.

Author contributions: All authors contribute in concept and design of the study, Acquisition of data and data analysis, critical revision of the manuscript and final approval of the version to be submitted. So they were equally as the first author.

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