

Emergency Nurses' Perception of Patient Safety Culture at King Saud Medical City

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Abstract

This research explores the perception of patient protection culture among emergency nurses at King Saud Medical City. The study examines key dimensions of safety culture, including teamwork, communication, error reporting, and leadership support. Utilizing a descriptive and analytical approach, data were collected via the Hospital Survey on Patient Safety Culture (HSOPSC), involving 210 nurses across pediatric, maternity, and general emergency departments. Findings indicate that 46.7% of nurses rated the safety culture as "acceptable," with 40% assessing it as "very good." Critical strengths include teamwork within units (74%) and leadership acknowledgment of safety adherence (76.67%). However, challenges persist, such as inadequate staffing levels (65.33%) and fear of punitive repercussions for errors (76%), which hinder open reporting. Additionally, communication breakdowns between hospital units (76.67%) were identified as a major issue. Demographic analysis revealed that younger nurses and expatriates face unique challenges, including lower perceptions of communication effectiveness. The research underscores the importance of fostering a non-punitive culture, improving interdepartmental communication, and implementing structured safety protocols. The study concludes that while a foundational understanding of safety culture exists, targeted interventions are needed to enhance communication, leadership engagement, and error reporting. These findings offer actionable insights for healthcare administrators to strengthen patient safety and improve the overall quality of care in emergency settings

Keywords: Patient Safety, Safety culture, Patient safety culture, Nursing

Introduction

Currently, one of the biggest problems facing the health care industry is providing safer care in complicated, high-pressure, and fast-paced workplaces (Aboshaiqah, 2020). As a prerequisite for the hospital's accreditation, patient safety is seen as a critical issue. Patient safety is defined as preventing harm to patients and places a strong emphasis on error prevention, learning from mistakes, and building a healthcare delivery system around a security culture that encompasses hospitals, organizations, and health professionals (Al-Amri, 2020). Creating a patient safety culture is essential to improving patient safety about the risks and outcomes in a healthcare system. As a result, medical facilities have been working nonstop to create policies that will promote a patient safety culture (Alrasheadi, 2022). According to (Rawas, 2023; Malak, 2022), the term "patient safety culture" describes the belief that certain values, attitudes, abilities, and behaviors are essential. It centers on the patient care procedures and personnel associated with an organization. A crucial element of high-quality healthcare is patient safety (Albalawi, 2020). Hospital professionals struggle to keep patients secure in the modern hospital environment, even

with continual vigilance. One of the biggest problems the healthcare sector is currently experiencing is patient safety.

Nursing research on nurses' perspectives of patient safety culture is lacking. Regarding nursing perspectives on patient safety culture, there is a deficiency in the literature (Han, 2020). Research on nurses' perceptions of patient safety culture will serve as the foundation for a framework and theory that will significantly clarify this idea (Kakemam et al, 2020). The science will be strengthened and expanded by new information, and when this information is uncovered and put to the test, it will give the science a more useful understanding of how nurses view the patient safety culture (Alsabri et al, 2022). In consequence, this will support the advancement of nursing participation in patient safety practices. As a result, patients will gain from a safe culture and nurses will become more knowledgeable about safety procedures.

Although there is a wealth of material on medical errors and patient safety, Saudi Arabian nurses know very little about how to prevent mishaps and provide patient safety in healthcare facilities. (Al Ma'mari et al, 2020). The current state of patient safety and the nurses' attitude to safety culture are described by the nurses' perspectives of the culture of safety that currently exists. In addition to providing a starting point for work, fostering a deeper understanding of nurses' opinions will help identify areas most in need of improvement and increase safety awareness throughout the various healthcare institution.

Research Questions

1. What is the level of applying dimensions of patient safety culture at King Saud Medical City?
2. What are the challenges regarding the patient safety culture at king Saud Medical City?
3. What are the strategies to enhance the level of patient safety culture at king Saud Medical City?
4. Is there any differences between nurses' opinion regarding to (challenges) can be attribute the demographic variables (Gender, Age, Level of education, and Nationality)?

Methodology

This study has employed an analytical and descriptive study design. This research has gathered the data and information required for the study. The current study has made use of both primary and secondary data, with the former being gathered via questionnaires. Additionally, secondary data (prior research and theoretical commentary) were gathered from a variety of publications and scientific journals. This section has provided a more thorough explanation of the research methodology employed, together with information on sample selection, measuring tools, research validity, reliability, statistical techniques employed, research constraints, and ethical issues.

Data Collection and Tool

Since English is the primary language spoken by all healthcare practitioners in king Saud Medical City, the original HSOPSC questionnaire in English was used in this study. Furthermore, several of the nurses are not from Arab nations and do not speak Arabic. A systematic questionnaire with two section was used to gather data. The survey takes 10 minutes to complete and data will be gathered from April to June 2023.

Settings

Participants for this research will include 100-150 convenience samples of male and female nurses working at King Saud Medical City, Saudi Arabia who will be selected randomly. Taking into consideration the demographic variables (age, gender, nationality, and years of experience).

Validity and Reliability

The content validity of the tool was tested by academic experts and researchers. With a content validity index of 85.30, it is deemed valid because a score of 0.79 or higher is deemed appropriate, a score between 0.79 and 0.70 is dubious and requires revision and correction, and a score below 0.70 is deemed inappropriate and ought to be eliminated. Additionally, 10 nurses will participate in an initial study to confirm the study questionnaire's face validity, comprehensibility, and relevance and to estimate the time required to complete it.

Data Analysis

The researchers have utilized the Statistical Package for the Social Science (SPSS) version 25 to code the data and do statistical analysis. The internal reliability of the study's instrument was evaluated using Cronbach's alpha correlation coefficient. The demographic characteristics were described in terms of frequency and percentages. Statistics that are descriptive, like mean and the majority of participants were non-Saudi nurses and female nurses.

Data Measurement

Understanding the level of measurement is necessary to choose the best analysis technique. Every measurement type has one or more suitable methods that can be used while other cannot. Ordinal scale was employed in this study. When ranking data, ordinal scales often use integers in either ascending or descending order. Neither absolute quantities nor an equal spacing between scales are indicated by numbers (1, 2, 3, 4, 5) assigned to the significant. They are just labels with numbers on them.

Results

The distribution of emergency nurses at King Saud Medical City indicates a significant focus on the General Emergency unit, which employs 50% (n=105) of the staff, followed by Pediatric Emergency [30% (n=63)], and Maternity Emergency unit [20% (n=42)]. Table (S1) shows item "Staff are concerned that the mistakes they make are recorded in their personnel files" was ranked first by having the highest proportional mean valued 76.00%. where item "This unit experiences challenges related to patient safety" was ranked eighteenth by having the lowest proportional mean valued 64.67%. In general, the items of the "Work Area/Unit" were statistically high with a proportional mean valued 71.48%.

The Number of Events Reported section provides valuable insights into incident reporting practices among nursing staff. A significant 40.0% (n=84) of respondents reported 6 to 10 events, indicating robust engagement in the reporting process, while 20.0% (n=42) noted 3 to 5 events. In contrast, 6.7% (n=14) reported no events, and another 6.7% (n=14) recorded 21 or more events, suggesting that some nurses may be reluctant to report incidents or may not encounter noteworthy events. However, it is crucial to investigate the factors contributing to both the no reports and high-report categories to further strengthen the safety culture and enhance patient care outcomes. Notably, 40.0% (n=84) of respondents have 1 to 5 years of nursing experience, indicating a

significant presence of relatively new nurses. In addition, 23.3% (n=49) have 11 to 15 years of experience, and 16.7% (n=35) have 6 to 10 years. The groups with 16 to 20 years and 21 years or more each account for 10.0% (n=21). The demographic breakdown of the nursing personnel is disclosed in the section on nationality. A smaller percentage, 60.0% (n=126), identify as non-Saudi, whilst 40.0% (n=84) identify as Saudi.

The Age section offers an overview of the age distribution among the nursing staff. The most significant segment, comprising 40.0% (n=84), is in the 26 to 30 years age group. The remaining age categories include 13.3% (n=28) for both the 21 to 25 years and 31 to 35 years groups, 20.0% (n=42) for those aged 36 to 40 years, and 13.3% (n=28) for individuals 41 years and older. Overall, the data suggests that the workforce is primarily composed of younger professionals, particularly in the 26 to 30 years bracket.

Table 1 shows that the p-value (Sig.) is greater than the level of significance $\alpha = 0.05$ for the fields "Work Area/Unit and Hospital", then there is insignificant difference among the respondents toward these fields due to primary work area or unit in hospital. It can be said that primary work area or unit in hospital has no effect on these fields.

Number of Events Reported	Frequency	Percent
No event reports	14	6.7
1 to 2 event reports	35	16.7
3 to 5 event reports	42	20.0
6 to 10 event reports	84	40.0
11 to 20 event reports	21	10.0
21 event reports or more	14	6.7
Total	210	100.0
How long have you worked as a nurse?	Frequency	Percent
Less than 1 year	-	-
1 to 5 years	84	40.0
6 to 10 years	35	16.7
11 to 15 years	49	23.3
16 to 20 years	21	10.0
21 years or more	21	10.0
Total	210	100.0
Nationality	Frequency	Percent
Saudi	84	40.0
None Saudi	126	60.0
Total	210	100.0
Age	Frequency	Percent
21years- 25years	28	13.3
26years- 30 years	84	40.0
31 years- 35 years	28	13.3
36 years – 40 years	42	20.0
41 years and above	28	13.3

There is a significant difference between the respondents' attitudes toward each area because of quantity of events recorded if the p-value (sig), is less than the level of significance=0.05 for each field (Table 2). Table 2 shows that perceptions regarding the Work Area/Unit and Hospital are relatively consistent across Pediatric, Maternity, and General Emergency units, with no significant differences found. However, there are clear disparities in the areas of Supervisor/Manager, Communications, and Frequency of Events Reported, where statistically significant differences were observed ($p = 0.000$).

Table 3 reveals significant differences in perceptions related to Work Area/Unit, Supervisor/Manager, Communications, and Frequency of Events Reported, all with p-values of 0.000. Respondents who reported no events tended to have more positive perceptions, while those reporting 11 to 20 events exhibited notably lower scores, indicating potential dissatisfaction with the safety culture.

Table 4 shows that the p-value (Sig.) is greater than the level of significance $\alpha = 0.05$ for the fields "Supervisor/Manager and Hospital", then there is insignificant difference among the respondents toward these fields due to nationality. For the other fields, the p-value (Sig.) is smaller than the level of significance $\alpha = 0.05$, then there is significant difference among the respondents toward these fields due to nationality. Table 4 presents the ANOVA test results related to perceptions based on the duration of nursing experience. The analysis reveals significant differences across all fields, with p-values between 0.005 and 0.000.

Table 5 displays the ANOVA test results that explore perceptions based on age groups. Notable differences are identified in Work Area/Unit ($p = 0.044$), Communications ($p = 0.001$), Frequency of Events Reported ($p = 0.000$), and Hospital ($p = 0.000$). The 26-30 age group generally reported higher perception scores, particularly regarding communication and overall hospital evaluations, while the younger nurses (21-25 years) showed lower scores, suggesting potential issues in their workplace experience. No significant differences were noted in the perceptions of Supervisor/Manager ($p = 0.456$).

Discussion

The findings of this study reveal that nurses at King Saud Medical City generally hold a positive perception of patient safety culture, but several critical challenges need to be addressed. The overall positive sentiment reflects a foundational understanding of safety protocols and a commitment to patient care among nursing staff. However, the fear of punitive repercussions for mistakes—a significant theme in this study—aligns with findings from Seljemo et al (2020), who emphasized that a punitive culture stifles open communication and learning opportunities within healthcare settings.

The high percentage of nurses rating the safety culture as "Acceptable" rather than "Excellent" indicates that while there are robust practices in place, there is also an acknowledgment of gaps that need attention. This finding resonates with the work of who observed that organizations often achieve a baseline level of safety but struggle to foster an environment that promotes continuous improvement and excellence in patient safety practices.

Moreover, the substantial concern regarding the fear of documentation of mistakes is particularly alarming. Such fear can lead to underreporting of incidents, ultimately compromising patient safety and the learning opportunities that arise from mistakes (Azyabi et al, 2020). This observation is consistent with the principles of a "just culture," which advocates for understanding the context of errors rather than solely attributing blame to individuals (Al-Mugheed et al, 2022). Thus, it is essential for hospital leadership to foster an environment where errors can be discussed

openly without fear of retribution. The implications of these findings are profound for clinical practice and organizational policy at King Saud Medical City. First and foremost, addressing communication barriers between hospital units is imperative. As noted, effective communication during patient transfers and between departments is critical for minimizing errors and ensuring continuity of care (Chou, & Tseng, 2020). To tackle the challenge of fear surrounding error reporting, King Saud Medical City should adopt a systematic approach to establishing a non-punitive reporting culture. This can be achieved by implementing anonymous reporting systems and regular safety forums where staff can discuss errors and near misses without fear of blame. Previous research by Ma et al, (2022), demonstrated that organizations that foster a culture of safety see increased reporting rates and enhanced learning from errors.

The differences in perceptions based on demographic variables such as age, nationality, and experience underscore the necessity for tailored interventions that address the unique needs of various nurse groups. The findings indicate that younger nurses tend to report lower perceptions of safety culture and communication, which may stem from a lack of confidence or experience in asserting their concerns. This suggests an urgent need for mentorship programs that pair less experienced nurses with seasoned professionals, enabling the former to build confidence and develop their skills in communication and advocacy. Studies have shown that mentorship significantly enhances the integration of new nurses into clinical practice and improves their professional development (Suamchaiyaphum, Jones, & Markaki, 2024). Finally, addressing the declining perceptions of experienced nurses, particularly regarding event reporting, is vital for maintaining a robust safety culture. Organizations should explore targeted interventions to re-engage these staff members, such as professional development opportunities, leadership roles, or involvement in safety committees, which can reinvigorate their commitment to patient safety and improve job satisfaction (Staempfli & Lamarche, 2020).

Conclusion

This study indicates a generally positive perception of patient safety culture among nurses at King Saud Medical City, albeit with notable challenges that require attention. By addressing communication barriers, implementing supportive leadership practices, fostering a non-punitive reporting environment, and tailoring interventions to meet the needs of diverse nursing groups, the hospital can enhance its patient safety culture and ultimately improve patient outcomes. Ongoing efforts to promote transparency and accountability in patient care will be essential for fostering a culture that prioritizes safety and learning.

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