Patient Safety Culture In Saudi Hospitals: A Review Of Nursing Perspectives

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ABSTRACT

Background: Saudi Arabia is advancing in the field of healthcare at a rapid pace and patient safety culture is the integral part of the same. Patient safety culture (PSC) coincides with strategic aims of Saudi Vision 2030, which advances healthcare reform agenda in the nation. This review study will provide information for national policy-makers, hospital directors, and educators for potential strategies to develop interventions that would advance nursing leadership in safety, and to align hospital practices with national policy related to safety and also advances in global practices.

Study Objectives: The main objective of the study is to review existing studies on patient safety culture in Saudi hospitals from the nursing perspective. The study will also focus on the identification of key themes, barriers, and facilitators influencing PSC.

Materials and Methods: Study is a narrative based review study and uses exploratory research design where the data is gathered from various sources on the basis of pre decided criteria of inclusion and exclusion. PRISMA is used to segregate and screen the collected studies. The results are presented in the form of results and discussion, in a frame of chronology for better understanding.

Results: Nurses have recognized that safety practices are vital, in spite of hurdles such as lack of support from hospital management, inadequate nurse-patient ratios, and worries about punitive action. Other barriers include cultural differences, ineffective communication, and inconsistent training.

INTRODUCTION AND BACKGROUND

Patient safety, which pertains to the avoidance and reduction of patient harm and adverse events as they relate to the delivery of healthcare, is a major aspect of overall quality in healthcare. [1], [2] Universal health coverage, particularly in fluid economies, necessitates strong systems for reducing error. In the Kingdom of Saudi Arabia (KSA), advancing patient safety culture (PSC) coincides with strategic aims of Saudi Vision 2030, which advances healthcare reform agenda in the nation. Saudi Vision 2030's introduction of an agenda for national transformation will promote excellence and world-class quality in the delivery of health care services. In order to achieve such safety, an organization must regard pervasive culture of safety as a clinical imperative and as the primary approach to the national initiatives. [3]

A true culture of safety embodies a shared view of values, beliefs, and behaviors to safety. It accepts that although errors are individually based behaviors, they frequently emerge, more importantly, as a result of system deficits. Therefore, a developed safety culture is always focused on the persistent evaluation, and remediation of system errors which create errors. [4] The nursing workforce occupies a unique position at the intersection of system processes and direct patient care, and nursing represents the largest group of clinicians in any hospital setting. Registered Nurses (RNs) serve as an essential, front-line area of involvement, and their own perceptions and experiences underscore the operational safety environment directly. Thus, evaluating the PSC, from the nursing perspective can provide a valid assessment of the safety culture in Saudi hospitals. [5]

This comprehensive review synthesis will address only the extant literature that is situated in the Saudi Arabian context. The reviewed studies rely on standardized and internationally recognized instruments, particularly the Hospital Survey on Patient Safety Culture (HSOPSC), in either version 1.0 or version 2.0. [6] The methodological coherence allows comparisons of the studies in governmental (e.g., Ministry of Health, military, academic) and private hospitals, within various regions of the Kingdom. The goal is to move beyond descriptive findings to confirm system-level barriers and develop actionable and evidence-based strategies from nursing's perceptions.

Overall perception of Safety

When the preliminary baseline evaluations were completed, it indicated that while the notion of safety was recognized as important, nurses' overall perceptions need considerable improvement. Studies conducted on baselines perceptions of patient safety culture vary, but studies have generally returned either low, if not sub-optimal, positive response rates. In one study conducted at King Fahad Medical City (KFMC), for example, 52% of the nurses positively perceived patient safety culture. [6], [7] This teeters on moderately positive perception but still lies in an area that would qualify as needing improvement according to the AHRQ criterion. Similarly, other literature points to an overall positive perception of safety in the neighborhood of 59.9%. [8] Overall perception scores would suggest organizations and/or hospitals in Saudi Arabia have not matured patient safety culture from a reactive culture (primarily complying) to a proactive or "just" culture. [9] When nurses have an overall positive experience/satisfaction with their clinical units (as indicated with subsequent high scoring domains) that simultaneously counterbalances the other structurally low scores (as in non-punitive response), this may reveal a disparity between the general positive perception of safety and the actual deeply embedded components of concern within the structure. [10], [13] This suggests that broad cultural initiatives alone are insufficient; improvement efforts must be highly focused on specific, high-leverage domains where the structural deficits are most pronounced.

Some Major Issues

When staffing is insufficient to effectively deliver care in a punitive setting, the environment is one of high workload and stress, and low trust, which is a clinical risk. Rushed work happens due to a lack of staff, and not because a nurse is rushing. Rushed work, coupled with fatigue, and/or time pressure increases the risk of human error. [11], [15] When human errors do occur because of fatigue and time pressure in a punitive culture environment, a nurse does not report the error. It becomes more about

avoiding punishment by the facility. So, simply fixing the staffing situation, will not necessarily improve reporting, and thus improve learning in a culture of blame; staff will still find ways to cover up errors, where errors did still occur, because the culture did not improve, but the staffing situation did. The association between workload, fatigue, and unwillingness to report indicates the operational challenges within Saudi hospitals. [14], [12] The hospital's potential staff weaknesses are expanded with inadequacies in resources and equipment. Of the more frequently reported factors, poor communication factors have been an issue within systems of care with blame culture and poor leadership behaviors noted here. [15] The issue of inadequate communication is well-known in various environments, including patient and provider communication, department communication within hospitals, and to the most detrimental degree, handoffs and transitions of care. The topic of Hand-offs and Transitions remains a well-knows area of opportunity for performance improvement.

Accreditation of Healthcare Institutions (CBAHI), challenges persist in the implementation of safety, particularly at the nursing level. The purpose of this review study is to review and synthesize what is known in the literature on Patient Safety Culture in Saudi hospitals with an emphasis on the nursing perspective. [16] Through study of reported empirical research findings, themes will be reviewed, and contextual barriers that shape Patient Safety Culture (PSC) will be assessed. This review study will convey how nurses perceive, are involved in, and impacted by PSC. This review study will provide information for national policy-makers, hospital directors, and educators for potential strategies to develop interventions that would advance nursing leadership in safety, and to align hospital practices with national policy related to safety and also advances in global practices.

Research Gap

Based on studies screened and evaluated, some of the major research gaps were identified, as mentioned below:

Saudi Arabia are cross-sectional studies, that is they only collect a snapshot of nurses perceptions; that is there is little longitudinal research investigating how safety culture develops or changes over time or through policy changes or training.

Most PSC studies have been conducted in tertiary, or urban hospitals. There is little evidence to support the study of safety culture in primary care centers, rural hospitals or provinces in Saudi Arabia, that are receiving increased emphasis for health care, to be included in the overall decentralization of health care strategy.

In Saudi hospitals there is a multicultural nursing workforce, however, very few studies explore the cultural norms of an interprofessional workforce related to their impact on PSC. This creates limitations around developing culturally sensitive safety interventions.

OBJECTIVE

The main objective of the study is to review existing studies on patient safety culture in Saudi hospitals from the nursing perspective. The study will also focus on the identification of key themes, barriers, and facilitators influencing PSC.

RESEARCH METHODOLOGY

Research Design

As the topic says, this is a review study of nursing perspective on patient safety culture, hence the researcher has follows the exploratory research design. In such a study, many of the previous studies related to present topic of study are collected and based on the pre decided criteria of inclusion & exclusion a final data is prepared. From that database most relevant studies are considered for the past development, current scenario and future scope. Research will presents the narrative review of such studies. This present study takes the reference from many studies conducted in patient safety culture in hospitals, medical colleges, clinical setups and other related medical facilities of Saudi Arabia, time line of the study is 10 years i.e. 2014 to 2024.

Population: The population of the study was the total number of studies based on perspective of nurses related to patient safety culture in Saudi Arabia. Studies based on current practices of PSC in

Saudi Arabia and MEA region will be included, then what at the major challenges and respective future prospects will also be evaluated. This study takes into account, about 64 studies that are related to point in question and present the assessment of the same in a chronological manner.

Inclusion and Exclusion criteria

Inclusion

- National or global studies focused on Saudi Arabia.

- Studies based on the origin, development and future prospects of patient safety culture only will be included.

- Mostly review articles, reports from government and private agencies and white papers.

- Studies published or presented in English or Arabic will be included.

- Studies published between 2014 to 2024 will be included

Exclusion

- Studies not related to Saudi Arabia or MEA will be excluded

- Studies not directly related to patient safety culture of nursing perspective will be excluded.

- Any type of editorials, general opinions, non-peer reviewed articles will be excluded.

- Studies in other languages (without translation) will be excluded.

- Studies published before 2014 will be excluded.

Sources of Data and Keywords

Researcher has touched a number of sources for the collection of data. Some of the relevant sources are mentioned here:

- PubMed

- Cochrane Library

- ClinicalTrials.gov

- EMBASE

- Saudi Medical Journal

- King Saud University Repository

Keywords for the study were decided in advance and only those studies were touched that have the following keywords using boolean operators (AND, OR):

"Patient Safety Culture", "Nursing Perspectives", "Saudi Arabia", "Healthcare Quality", "Hospital Safety", "Error Reporting", "Safety Leadership", "Multicultural Workforce", "Non-punitive Environment", "Nursing Empowerment".
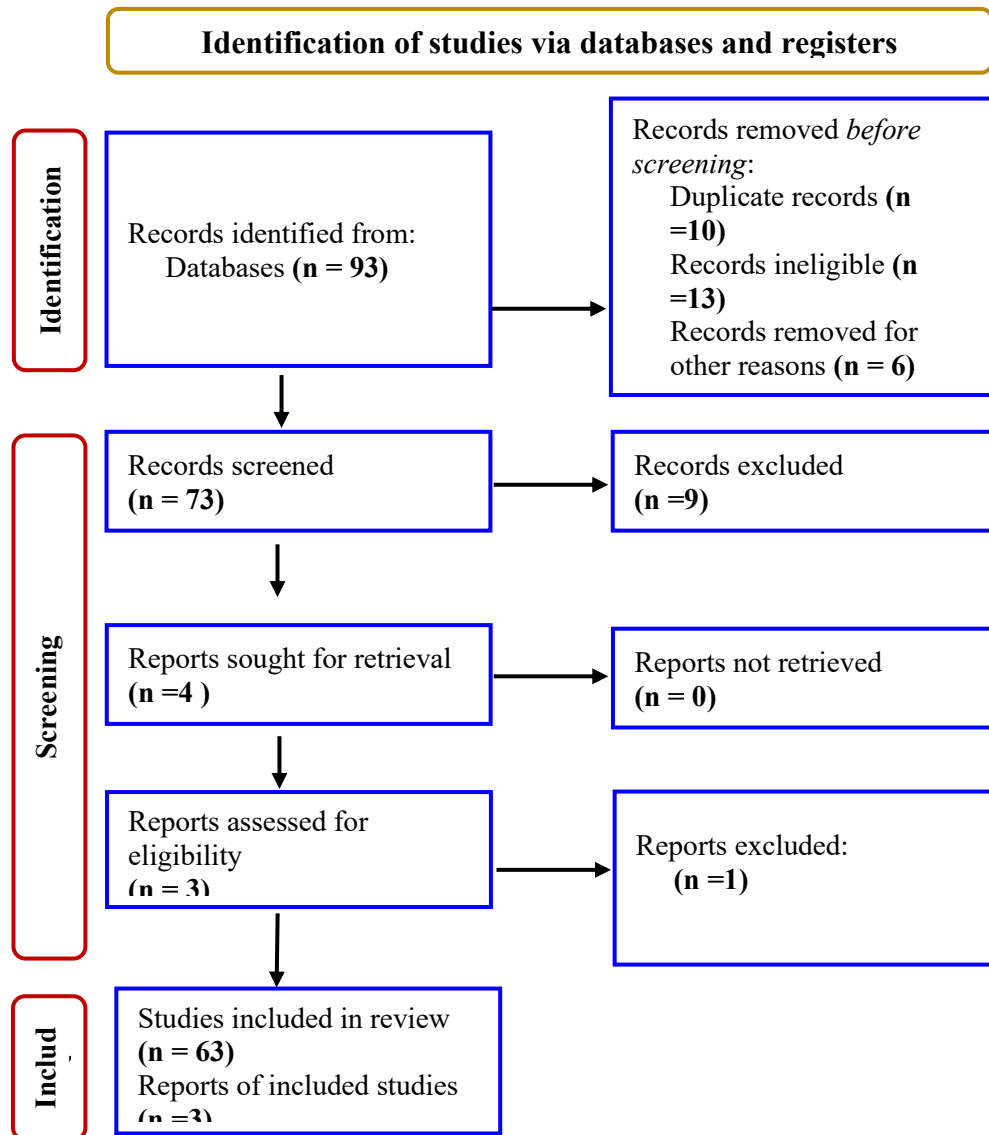
Information Extraction

Researcher had prepared a format for recording the relevant information, main heading include, design of study and location, demographics of the respondents and number, specific measures of outcome, like practices related to PSC in the recent past and in the current scenario, in international or Saudi Arabia perspective, then the future aspects and scope of development.

RESULT

A total of 93 research studies and 4 reports were identified, all of them were based on the practices of patient safety culture, current development in the field of PSC and future prospects of PSC in Saudi Arabia. From the total 93 studies, 10 were removed because of duplication of records, references and location and 13 studies were marked as ineligible, on the basis of relevance to the topic at hand and 7 for some other unavoidable conditions. Further 73 records were saved for screening, then in the

screening process 09 records were further removed on the basis of exclusion criteria stated above. Total studies finalized for review were 64. Then 4 reports were also included in the study and one of them was excluded.

Identification of studies via databases and registers

Identification

Records identified from:
Databases **(n = 93)**

Records removed *before screening*:
Duplicate records **(n =10)**
Records ineligible **(n =13)**
Records removed for other reasons **(n = 6)**

Screening

Records screened
(n = 73)

Records excluded
(n =9)

Reports sought for retrieval
(n =4)

Reports not retrieved
(n = 0)

Reports assessed for eligibility
(n =3)

Reports excluded:
(n =1)

Includ

Studies included in review
(n = 63)
Reports of included studies
(n =3)

Source: Page MJ, et al. BMJ 2021;372:n71. doi: 10.1136/bmj.n71
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In a 2024 study conducted in hospitals located in Jazan, nurses indicated a 60% satisfactory rating of Patient Safety Culture (PSC), suggesting a moderate level of awareness and engagement in terms of safety at that specific hospital. **[16]** Teamwork within units of care was identified as the highest rated domain (77.8%) while staffing (46.17%) and nonpunitive response to errors, which included discipline or punishment for reporting errors (39.75%), received the lowest rating from nurses. In another study conducted in Hail City, statistically significant impacts on total scoring for PSC were obtained based on nurses' nationality, length of work experience, and position of employment (p-values of .015, .046, and .027 respectively). **[17]** In general nurses with more years of experience and those in leadership positions rated PSC levels to be higher, for example, in domains of handoffs and transitions, and teamwork across units of care. **[18]** The literature on PSC is linked to finding adverse events. Overall nurses reported lower trust in leadership, lack of staffing resources and fear of punitive discipline for reporting errors. **[19]** These barriers will hinder the development of a strong safety culture and will require focused intervention. Overall nurses reported lower trust in leadership,

lack of staffing resources and fear of punitive discipline for reporting errors. These barriers will hinder the development of a strong safety culture and will require focused intervention.

DISCUSSION

While the notion of patient safety culture (PSC) has grown in popularity around the world, implementing PSC programs in hospitals in Saudi Arabia can still be challenging and in flux. This review discusses the subtle views of the nurses who are central to clinical care, identifying both organizational strengths and opportunities for improvement in the culture of safety. [20], [21]

One of the most consistently cited findings from empirical studies is that nurses' perceptions of PSC operate at a moderate level. While domains like teamwork in units and infection control are generally rated positively, domains like adequate staffing, nonpunitive responses to errors, and intra- and interdepartmental communications are all weak. [16], [22] This suggests that while the mechanisms may exist for ensuring safety, the cultural and organizational supports for the safety culture are still developing. Nurses continue to report fear of being blamed for unsafe practices, and also lack a sense of psychological safety to report incidents, which undermine transparency and learning, both of which are important to PSC. [23], [24]

Leadership involvement is another key indicator of PSC. Hospitals that have visible champions of safety, shared governance, and nurse-directed safety committees will tend to score higher on PSC measures. More specifically, the effect of using a predominately expatriate nursing work-face typically means that some nurses experience the influence of an additional language barrier when working with patients, teams and, within higher-level nursing practice, in privileges and empowered interactions between patients and staff. [3], [7], [25] The obvious issues of communication, developing rapport and the very presence of nursing when engaging the patient family member/caregiver is often additional barrier to effective communication. Further, transferring care to other professional (hand-off) in emergency situations and engaging nurses in reporting adverse events has barely had the body of research that has considered the additional layering of cultural competence training and or multilingual assistant in Saudi Arabia - urgent areas of future research and policy changes will promote proactive and reactive patient safety measures in hospitals. [23], 24

Education and training are also very important for promoting PSC. While some tertiary hospitals have implemented simulation-based safety training and root cause analysis workshops, these are not widely accessible around the Kingdom. The lack of PSC incorporation into nursing undergraduate degree programs does not position new graduates to enter complex safety related environments. [11] Continuing professional development (CPD) programs, with a focus on safety leadership, ethical decision making, and systems thinking would significantly increase nurses' confidence to influence PSC. The review demonstrates that there are currently no culturally appropriate standardized tools available to measure PSC in Saudi Arabia. [15], [26] Most studies have used available internationally available tools, such as the AHRQ Hospital Survey which do not take into account local nuances such as religion, hierarchy, and regulatory context. [25] Developing and validating Saudi specific tools would make measuring, bench marking, and relevant interventions viable. The evidence of the association between PSC and clinical outcomes is becoming more apparent, with several studies already demonstrating a link between strong PSC, and reduced adverse events.- for example, pressure ulcers, falls, and medication errors. This fortifies the justification of supporting an industry improvement agenda; developing PSC should not only be seen as a compliance measure, but more strategically, it is also about improving patient outcomes and reducing health care costs. [11], [19]

In summary, although the state of Saudi Arabia is taking positive strides to promote patient safety through national organizations (Saudi Patient Safety Center, SPSC) and new accreditation standards through CBAHI, nursing has identified gaps in achieving these remarkable initiatives. To fulfill these items, an all-encompassing approach is needed, which involves supporting nurses as safety leaders, building cultures of inclusiveness and absent of blame, supporting adapting PSC tools to the local situation, and embedding safety education at all levels of nursing practice. As the Kingdom continues to implement health care transformation as part of Vision 2030, nurses must be strategic collaborators, not just patients' caregivers, in safety governance as their voices, experiences, and leadership of

patient safety nursing is vital to sustaining a learning health care system with a focus on patient safety to the highest of its priorities. **[22], [23]**

CONCLUSION

In light of the data presented, this paper suggests that while the issue of patient safety culture is being examined in Saudi hospitals, there are still large gaps, especially in nursing practice. Nurses have recognized that safety practices are vital, in spite of hurdles such as lack of support from hospital management, inadequate nurse-patient ratios, and worries about punitive action. Other barriers include cultural differences, ineffective communication, and inconsistent training. Efforts to enhance patient safety culture should concentrate on education of nurses as safety leaders in their hospitals, facilitating a forum for nurses to have open communication with hospital leadership, and concluding with safety initiatives that are adaptable to the Saudi environment. In order to advance the implementation of the Kingdom of Saudi Arabia's Vision 2030, nursing safety programs will be vital to the realization of resilient healthcare systems that provide high-quality care.

Scope for Future Studies

Most studies that have been conducted or are currently being conducted use international tools such as AHRQ surveys, which may not fully represent the sociocultural, linguistic, and organizational context of Saudi hospitals. Future research should focus on synthesis, design and validation of PSC tools that present the context in Saudi hospitals, reflect Islamic ethical frameworks, hierarchical norms and multilingual workforce. Longitudinal research that demonstrates the movement of PSC over time, e.g. would there be and what change may have happened in response to policy, accreditation or training could be conducted. Experiments could evaluate to what impact a nurse led safety program, simulation based education, or a digital reporting system. They would contribute to evidence based practice guidelines.

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