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The Impact of Nurse Safety Culture on Patient Care Outcomes in Arab Healthcare Settings

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Abstract

Background: Patient safety culture (PSC) is an imperative component of quality healthcare. Understanding the composites of safety culture in Arab healthcare context where the cultural norms influence communication and safety practices is essential. This study looks at the perception of nurses on patient safety

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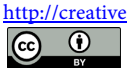

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culture and how this influences patient outcomes among Arab hospitals. **Methods:** We undertook an electronic search of CINAHL, PubMed and PsychoINFO databases and manual search of references of included studies for evidences. We included 13 studies on patient safety culture undertaken in four Arab countries. **Results:** The identified studies were conducted in Palestine (n = 6), Kuwait (n = 3), Saudi Arabia (n = 2) and Jordan (n = 2). The study design used in the included studies was predominantly cross-sectional quantitative design using either the *Hospital Survey on Patient Safety Culture* (*HSOPSC*) or *Safety Attitude Questionnaire*. Sample size was approximately 12,000 health care workers across multiple healthcare settings. On quality of the included studies, 7 studies were rated as high quality, 4 as moderate, and 2 as low as per the JBI checklist. **Main Findings:** Majorly, the included studies consistently showed a positive patient safety culture perception among nurses in Arab countries. Notably, teamwork and open communication were linked to better patient care outcomes. However, healthcare professionals also raised concerns about a punitive healthcare environment that discourages error reporting and inadequate staffing levels. This was consistent with international body of evidences on PSC identifying areas needing improvement. **Conclusion:** The findings of this review show that a holistic approach to strengthening patient safety culture is needed. Part of this effort is fostering a just culture that encourages error reporting and addressing staffing shortages.

Keywords

Primary Health, Patient Safety, Safety Culture, Safety Climate, Work Condition

1. Introduction

Patient safety culture comes out as an imperative when providing quality health care and measuring performance of healthcare systems globally. Patient safety culture incorporates the shared values, beliefs and norms about the paramount importance of patient safety within healthcare organizations, and reflects on how the healthcare providers, in this context the nurses, perceive and act upon safety priorities [1] [2]. The Institute of Medicine contends that patient safety is the cornerstone of an organization's intention to provide quality health services and establish a safety-oriented culture [3]. The World Health Organization (WHO) defines patient safety as reduction of risk of unnecessary harm to patient and staff to an acceptable minimum [4]. This makes an understanding of the dynamics of the construct safety culture part and parcel of our health institutions and the positive change in delivery of healthcare services. Evidence suggests there is substantial avoidable harm to patients in both developed and developing countries [4].

There is a strong correlation between a strong safety culture and reduction in medical errors, higher patient satisfaction and improved communication [5] [6]. In addition to protecting patients and reducing avoidable errors, prioritizing safety has the intrinsic value of promoting the wellbeing of nursing staff and en-

hancing the quality of care. The WHO Draft Guidelines for Adverse Event Reporting and Learning Systems, and Council Recommendation 2009/C 151/01 [7] champions the prevention of avoidable harm, promotes patient safety across many practice domains and guides countries in developing action plans. The initiative is a clarion call on health institutions to strengthen their policies, to be rooted in evidence-based safety practices and patient feedback and establish policies consistent with the global goals of patient safety.

Notably, healthcare systems are shifting from data-driven approaches to patient safety culture that were in the past based on number of errors, accidents, adverse events and near-misses to establishing and sustaining a culture of patient safety in enhancing patient outcomes [8]. It is possible that the prevailing culture of a group profoundly influences staff perception of safety behavior, communication and error reporting. Although studies show that hospitals with positive safety culture report lower adverse event rates and overall improved patient outcomes [9], evidences on the extent to which safety culture translates into improved patient outcomes relative to cultural context is scanty. Having different cultural believes and values that contradict established standards could also mean that patients continue to suffer avoidable harm and substandard care [10].

Arab culture is highly patriarchal and hierarchical, dynamics that pervades Arabian healthcare settings, communication among staff and patient and teamwork in those settings. Research from the Middle East countries points out challenges such as hierarchical physician-nurse relationship, limited error reporting and fear of blame as limiting an open safety culture [11] [12]. Additionally, workforce diversity, organizational structure and leadership style may also influence the implementation of and perception about safety culture [13].

Even in the face of surging content on workplace diversity and how work place policies impact patient care outcomes, evidence linking nurse safety culture directly to patient care outcome in Arab healthcare settings remain scanty, making it difficult to identify best practices that could enhance patient safety. Additionally, exploring pertinent cultural issues around healthcare environments provides an opportunity to seal any potential loopholes in view of patient safety culture across countries. Understanding the impact of nurse safety culture on patient health outcomes has implications for advancing nursing practice and policy in Arab cultural settings. An investigation into the perception of nurses about the safety culture in Arab countries is directly linked to patient outcomes such as infection rates, error rates and satisfaction and health care systems can leverage the identified points for improvement. Against this background, this study looks at the perception of nurses on safety culture and how it influences patient outcomes among Arab hospitals

2. Methods

2.1. Design

We utilized a systematic review design whose process was informed by the Pre-

ferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework [14]. The review question was formulated using the Population, Concept Context (PCC) framework for the following question; what is the perception of nurses on safety culture and how does it influence patient outcomes among Arab hospitals?

2.2. Search Strategy

We undertook a comprehensive database search between October, 2025 and November 2025 on PubMed, CINAHL and PsycINFO. The following search terms were developed (combined using the Boolean operators and MeSH terms.

("Nurse safety culture" OR "patient safety culture" OR safety culture) AND (patient outcomes or quality of care or health outcomes or patient satisfaction) AND ("Arab countries" OR "Middle East" OR "Gulf countries" OR "North Africa")

We also hand searched lists of references of included studies to locate additional sources. To maintain methodological rigor and get peer reviewed sources, the study excluded Grey literature such as reports and theses.

2.3. Inclusion and Exclusion Criteria

For this review, the population of study included registered nurses working in Arab healthcare settings. Studies which referred to healthcare workers were included if more than 60% of the participants identified as registered nurse. The included studies provided an assessment of nurse or hospital safety culture using suitable global instruments such as the Hospital Survey on Patient Safety Culture (HSOPSC), which was developed by the Agency for Healthcare Research and Quality (AHRQ) [1]. Also, studies were included if they reported on the association between safety culture and patient care outcomes such as adverse events, infection rates, patient satisfaction and other quality indicators [15] and were published in English language, conducted in Arab countries and in primary or tertiary care settings. We excluded studies that did not include nursing staff, were conducted in non-Arab countries, lacked clear outcome measures or were reviews, editorial or commentaries.

2.4. Study Selection

We imported the identified citations into Convidence citation management program for screening and reference management and duplicates were removed. Titles and abstracts of the citations were screened by two independent reviewers who followed the inclusion criteria. Full text screening was then conducted for eligible studies. Disagreements were sorted out via consensus building with a third reviewer. The PRISMA flow diagram shows the screening process.

2.5. Data Extraction

We collectively developed a standardized excel data charting form to extract study features from each study: author, year, location, aim, design, data collection tool

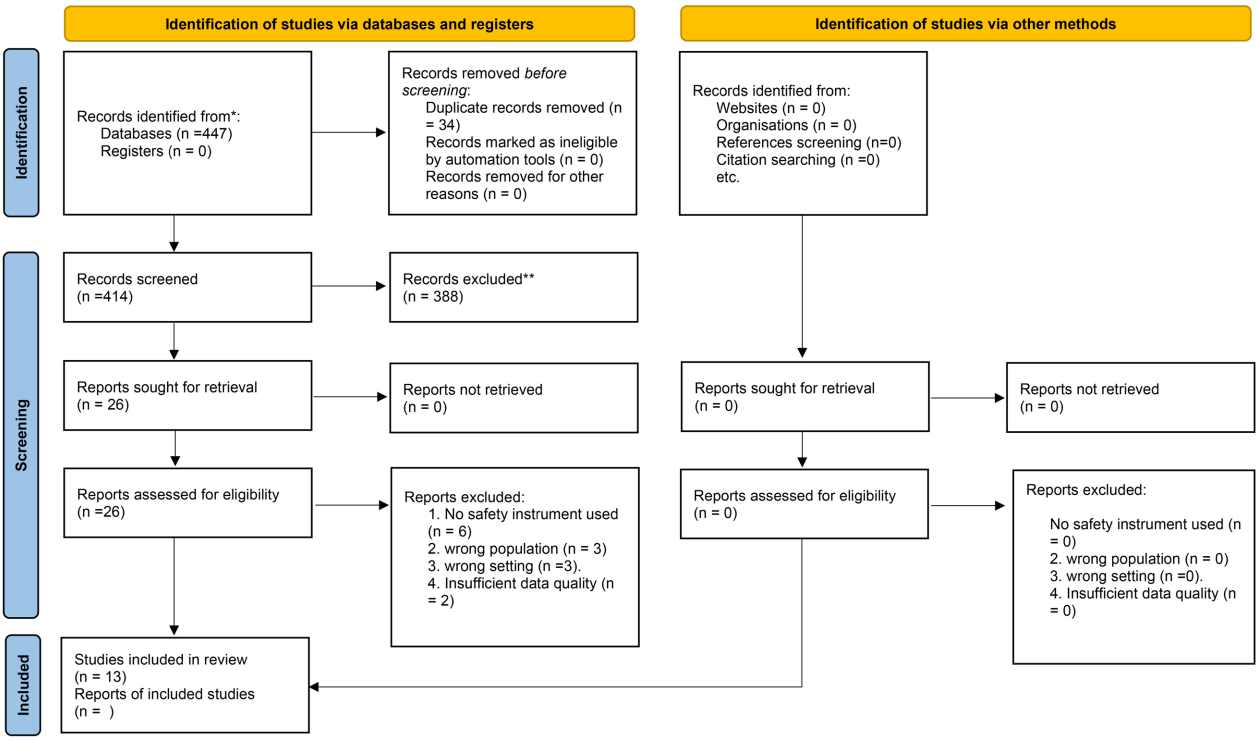
and important findings. Two reviewers independently collected data to ensure consistency.

2.6. Quality Appraisal

The assessment for methodological quality of the included studies was conducted using the Joanna Briggs Institute (JBI) critical appraisal checklists based on the study design [16]. Any disagreement pertaining to quality appraisal were resolved via consensus.

2.7. Data Synthesis

Because the included studies are heterogeneous in study design, this review uses a narrative synthesis. The identified constructs will be organized thematically under different domains of safety culture and their inferred association with patient care outcomes.



*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).
**If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: http://www.prisma-statement.org/

Figure 1. PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources.

3. Results

3.1. Study Selection

The database searches yielded 447 articles which were imported for screening, and 34 duplicates were removed. Two authors screened 413 titles and abstracts and identified 47 full-text peer-reviewed articles for review and in this phase we re-

trieved 26 references basing on eligibility criteria. Ultimately 13 articles met the inclusion criteria and were included in the synthesis. This is shown in the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) flow diagram (Figure 1).

3.2. Study Characteristics

The included studies were conducted across four Arab countries, including; Palestine: 6 studies [17]-[22], Kuwait: 3 studies [23]-[25] Saudi Arabia: 2 studies [26] [27] and Jordan: 2 studies [28] [29]. Publication years range from 2013 to 2025, and the study design was predominately cross-sectional quantitative design using the Hospital Survey on Patient Safety Culture (HSOPSC) and Safety Assessment Questionnaire. Sample size was approximately 12,000 health care workers across multiple healthcare settings. On quality of the included studies, 7 studies were rated as high quality, 4 as moderate, and 2 as low as per the JBI checklist.

3.3. Safety Culture Systematic RV Data Extraction (Table 1)

Table 1. Safety culture systematic RV data extraction.

Author/ year	Location and Setting	Participants	Primary Aim	Design	Data collection methods	Key Findings
Qoronfleh *et al.* 2023	Palestine, Gaza street	147 nurses	To: -investigate the different perceptions around patient safety culture 2) to identify the factors considered by nursing staff to be of utmost importance to developing and maintaining safety culture among nurses residing and working in Qatar.	the Arabic Safety Attitude Questionnaire (Short Form 2006)	(HSOPSC)	Few composites such as organizational learning and continuous improvement scored the highest rate (89% positive responses). It was followed by team work within a unit and management support for patient safety scoring 88% and 73%, respectively, while others such as non-punitive response to error scored only 28%. The above scoring was the composite with the least positive responses, thus, emphasizing the view that nurses often felt that their mistakes were held against them and recorded in their personnel file. The second least scoring composite was the adequate staffing/staffing challenges with a score of 35% which was followed by case handoffs and transitions of shifts reporting with a score of 41%。
Elsous *et al.* 2017	Gaza Street Palestine	193 nurses; Male nurses constituted more than half of the sample (54.4%), and more than half held a bachelor degree (63.2%), while 28% had a 3-year diploma.	to assess the perception of nurses about patient safety culture and to test whether it is significantly affected by the nurses' position, age, experience and working hours.	cross-sectional quantitative study	the Arabic Safety Attitude Questionnaire.	it measured job Satisfaction and this was the most highly perceived factor affecting patient safety, followed by Perception of Management. in this study, it was seen that Nurse Managers had more positive attitudes towards patients than frontline clinicians did. The more experience nurses had, the better their attitudes towards patient safety. Nurses with a positive attitude had better collaboration with healthcare professionals than those without a positive attitude.
Abdulla, *et al.* 2023	Qatar	6538 employees in HMC facilities.	to evaluate the PSC understanding among the Hamad Medical Corporation (HMC) staff. To identify a local (HMC) reference point for providing quality health care based on a culture of patient safety.	cross-sectional	The HSOPSC survey	The HSOPSC survey resulted in an overall positive response rate of 62.4%. The dimensions with the highest positive response score were "teamwork within the Unit" followed by "organizational learning/continuous improvement" and "management support for patient safety" with a mean percent positive response (PPR) of 83.1%, 82.0%, and 79.2%, respectively. Conversely, there are three dimensions with the lowest positive response score, including "communication openness," "staffing," and "nonpunitive response to errors," with a mean PPR of 46.6%, 40.1%, and 27.7%, respectively.

Continued

Alsalah *et al.* 2025	Kuwait six public general hospitals and 13 private hospitals among the five governorates of Kuwait	clinical staff 13,455 and 4692 in public and private hospitals, respectively	to assess and compare patient safety culture across public and private hospitals in Kuwait.	Quantitative: Cross sectional	(HSOPSC)	five composites were areas of strength: "Teamwork within Units" (87.2%), "Organizational Learning—Continuous Improvement" (87.5%), "Management Support for Patient Safety" (77.8%), "Feedback & Communication about Error" (75.8%) and "Teamwork across Units" (75.0%). "Staffing" and "Non-punitive response to errors" were strikingly low.
Alswat *et al.* 2017	a multi-site Medical City in Riyadh, Saudi Arabia	Registered Nurses	To reassess PSC in a large multi-site healthcare facility in Riyadh, Kingdom of Saudi Arabia to explore the association between PSC predictors and outcomes putting into considering hospital size and demographics.	Quantitative: Cross sectional	HSOPSC	The dimensions considered areas of strength were Teamwork within units (84.8%), Organizational Learning – Continuous Improvement (86.3%), Management support for patient safety (75.3%) and Feedback and Communication about error (71.8%) A major area of strength highlighted in the survey findings included the degree to which the hospital is engaging in actions to improve patient safety (94.8% positive). Areas requiring improvement related to staffing. In fact, respondents indicated that hospital employees work longer than what should be considered best for patient safety (11.2% positive response). As for the dimension on Non-Punitive Response to Error, 13.7% of staff were worried that their mistakes were being kept in their personnel file and 29.3% felt that they were being written up when reporting an event.
Abu-El-Noor, *et al.* 2019	governmental hospitals in the Gaza-Strip	a convenient sample of 424 nurses,	to assess attitudes of nurses working in governmental hospitals in the Gaza-Strip toward patient safety and to examine factors impacting their attitudes.	a cross-sectional, descriptive study	The Attitudes to Patient Safety Questionnaire III	Nurses working in governmental hospitals showed overall only slightly positive attitudes toward patient safety with a total score of 3.68 on a 5-point Likert scale, although only 41.9% reported receiving patient safety training previously. The most positive attitudes to patient safety were found in the domains of "working hours as a cause of error" and "team functioning" with scores of 3.94 and 3.93 respectively, whereas the most negative attitudes were found in "importance of patient safety in the curriculum" with a score of 2.92.
Bottcher *et al.* 2018	Four hospitals in the Gaza-Strip.	424 nurses	examined the attitudes of nurses to key patient safety concepts.	Quantitative: Cross sectional	the Attitudes to Patient Safety Questionnaire	Nurses and doctors held moderately positive attitudes towards patient safety with five out of nine domain scores > 3.5 of 5. Doctors showed slightly more positive attitudes than nurses, despite a smaller proportion of doctors having received patient safety training with 37.5% compared with 41.9% of nurses. Both professions displayed their most positive patient safety attitudes in the same domains ("team functioning" and "working hours as a cause for error"), as well as their two most negative attitudes ("importance of patient safety in the curriculum" and "professional incompetence as a cause of error"), demonstrating significant deficits in understanding medical errors.
AlMaani *et al.* 2021	primary health-care centers in Al-Ahsa	nurses and other staff	to explore the safety culture attitude toward patient safety to improve the quality and patient safety in primary health-care centers.	A cross-sectional survey	Arabic translated safety attitude questionnaire	This study showed that the attitude of medical staff in primary health-care centers is positive toward patient safety culture where the average of job satisfaction score in the current study was higher at 80% and the overall score for safety climate was 68%.
Al-Surimi *et al.* (2022)	Middle East	nurses and other staff	to identify the relationship between patient safety culture/job satisfaction and intention to leave among healthcare workers.	cross sectional survey design.	HSOPSC	(38%) said the hospital is not a good place to work. The overall composite scores were highest for "teamwork within hospital units (81.4)", and "organizational learning (79.4)", while lowest for "communication openness (37)", staffing (26.5)", and "non-punitive response to error (22.1)".
Alsahi *et al.* 2024	Saudi Arabia		To examine the perception of patient safety culture among healthcare professionals in Saudi Arabia and its impact on their attitudes toward incident reporting, considering variables such as level of care, ownership, and professional background.	Quantitative: Cross sectional	Arabic version of (HSOPSC)	

Continued

Khatar *et al.* 2014	Jordanian hospitals	658 nurses participated	to assess patient safety culture in Jordanian hospitals from nurses' perspective.	A quantitative, descriptive-comparative, cross-sectional design	Arabic version (HSOPSC)	The study results revealed that the composite frequencies ranged between 21 and 78.8%. The highest composite frequency of patient safety related to unit-level dimension was 79%, reflecting nurses' positive perception of team work within the unit, while the lowest composite frequency (21%) means that only 21% of the nurse's responses reflected positive opinion about the non-punitive response to errors. For hospital-level dimensions of patient safety, the highest composite frequency was related to nurses' positive opinion of the management support for patients' safety (53.5%). For the outcome variables, the highest composite frequency related to the frequency of reporting events (69.2%From the nurses' perspective, the major areas needing improvement (percentage of items positive response < 50%) with respect to unit-level dimension are related to the staff's belief that their mistakes are held against them (14.9%), and nurses worried that mistakes made are kept in their personal file (15%). Staff working longer hours than is best for patients' care (24%) is another area necessitating improvement, with respect to unit level. Regarding hospital-level dimensions, almost all areas regarding patient safety required improvement (item percentage < 50%). The three lowest item percentages are related to the exchange of information across hospital units (24.8%), staff's unwillingness to work with staff from other hospital units (27%) and hospital units' lack of coordination (32.8%). Areas of strength related to unit level of patient safety in the hospital (item's positive response > 75%) included people support in the unit (85.9%), the frequency of reporting errors (85.3%) and nurses' work to improve patients safety (83.3%).
Malek *et al.* 2022	two health sectors (government and private) in Jordan	emergency room nurses (N = 424)	The aim of this study is to assess the perceptions of patient safety culture among emergency room nurses in Jordan.	cross sectional	The questionnaire includes two sections: socio-demographic characteristics and The other section was the Survey on Patient Safety (SOPS) Hospital Survey version 1:0, which used to measure PSC	The total perceptions mean of PSC among emergency nurses were 70.6% (M = 3.87, SD = 0.64), a potential for improvement. Three areas in PSC were reported as strong, which involved teamwork within units (77.4%; M = 3.87, SD = 0.64), feedback and communication about error (76.6%; M = 3.83, SD = 0.65) and organisational learning-continuous improvement (75.4%; M = 3.77, SD = 0.63). The lowest scores were for areas of frequency of events reported (63.6%; M = 3.18, SD = 0.99) and handoffs and transitions (64.4%; M = 3.22, SD = 0.78).
Moussavi, *et al.* (2013).	Islamic Azad University hospitals in Tehran, Iran, in 2013.	Nurses and other staff	to assess the patient safety culture at Islamic Azad University hospitals in Tehran, Iran, in 2013.	cross sectional survey design	HSOPSC	teamwork within units with 48% and organizational learning-continuous improvement with 46% were the dimensions that had the most positive scores in the hospitals we studied in Iran. non-punitive response to error and staffing received positive ratings by only 12% and 22% of the respondents respectively, and they were identified as the weakest dimensions of patient safety culture in these hospitals. communication openness, with a 26% positive score in the hospitals we studied, had the largest percentage difference between the Iranian and U.S. hospitals, *i.e.*, a 35% of difference.

3.4. Main Findings

Majorly, the included studies consistently showed a positive patient safety culture perception. Teamwork and open communication were linked to better patient care outcomes. The studies consistently found that units had stronger teamwork that led to higher patient satisfaction as follows; 88% positive responses [17], a

score of 83.1% positive response [24] and 87.2% positive response [23]. Additionally, positive scores across studies were also on organizational Learning and Continuous Improvement: 89% [17] and 87.5% [23].

The studies also identified areas needing improvement. One such composite was consistent use of Non-Punitive Response to Error that was reported with low score across studies, e.g., 28% [17], 27.7% [24], and 12% [29]. This is particularly concerning especially with regard to handling of staff during reporting of errors. Further, a second area needing improvement was staffing challenges. This was a major challenge with scores of 35% [17] and 40.1% [24], reflecting the fact that inadequate staffing levels impacted patient safety outcomes.

It was also noted that participant's demographic also influence perception of safety culture. Nurses' positions, age, and experience significantly influenced their perception of patient safety culture. More experienced nurses were open-minded and carried a more positive attitudes towards patient safety [18]. Cultural differences was identified as a mediating factor that carried significant discrepancies in patient safety perceptions when comparing the Middle Eastern countries and Western countries [29].

Generally, our synthesis showed that having a positive patient safety culture was a predictor of improved patient outcomes, and that contextual factors such as cultural norms, leadership style and organizational structure influenced this relationship. It is seen that safety culture varied across working hours, nursing position, work experience and age. We noted that compared to frontline clinicians, nurse leaders had more positive attitudes towards patients safety and that this increased with nurses' experience as such nurses had better teamwork and collaboration skills when compared to those without a positive attitude [18]. This implies that healthcare institutions should be attentive to staffing levels and provision of incentives and maintain a collegial environment as part of strategic planning and institutional policies to ensure patient safety culture and boast effort that will ensure better patient outcomes in Arab countries.

4. Discussion

This study contributes to the growing evidence base on the relationship between patient safety culture and patient safety care outcomes in the context of Arabian culture. Our findings have shown notable improvement in a number of composites and a few weak areas that require improvement. Our review has established that evidence links nurse safety culture to improved patient care outcomes in Arab healthcare settings. This finding reflects global findings [9] [30] that show that when nurses perceive their work environment as open, collaborative, and supportive of safety, patient outcomes such as error reduction, satisfaction, and overall quality of care tremendously improve.

The finding that attitude towards patient safety culture has increased in Arabic countries and cultures shows the need to identify hindrances or drivers for safe patient care [31]. These patterns observed in Arab studies align with international

evidence emphasizing the importance of organizational culture in promoting patient safety [30]. Research from four Western countries similarly reports that leadership engagement, teamwork, and open communication are the strongest predictors of safety outcomes [32]-[34]. Notably, a systematic review confirmed that indeed staffing and non-punitive response to error were constructs needing improvement [34]. Staffing in international discourse reflects continuing shortage of nurses in Europe and Middle East countries. This implies that healthcare institutions and by extension nursing staff management teams need to pay attention to staffing levels and provision of incentives and maintaining a collegial environment as part of strategic planning and institutional policies to boast effort that will ensure better patient outcomes.

Cultural Context was an issue of concern given its role in communication about errors and facilitating a culture of blame and hindered reporting practices and overall safety performance. It is possible that the Arab countries present unique cultural perspective to care—such as reluctance to report errors and hierarchical power distance to report errors; which in the long run suppress safety voices among nurses [11]. Several important mechanisms by which identified weak constructs such as error reporting and communication are mediated include differing interpretation of health, cultural understanding of health and the conflict between Islamic values and standard treatments [35] [36]. This could be attributable to variations in belief and practices which by extension are influenced by ethnic, familial, personal and other factors [37]. Our review observed however that the culture of blame is also common among European countries since non-punitive response to error has not dislodged in European countries.

There are also other issues of concern where Alswat *et al.* identified staffing as hospital employees work longer than what should be considered best for patient safety and that vast majority of staff were worried that their mistakes were being kept in their personnel file and felt that they were being written up when reporting an event [27]. Such cultural norms that hinge on respect for authority and avoidance of conflict are said to limit nursing staff willingness to challenge unsafe practices or report incidents [13]. This challenge underscores the need for culturally sensitive interventions in Arab healthcare contexts that meticulously balance respect for hierarchy with psychological safety while augmenting empowerment.

Our finding showed considerable burden from use of punitive response to errors. Studies have shown that leadership support and non-punitive response to errors was linked to reduced medication error rates [5] [12]. In western countries errors facilitate a learning culture and predicted better safety outcomes. In these settings, institutions that promoted a "just culture" that is, had mechanisms for encouraging error reporting, boasted better safety outcomes and learning climates. To change the situation, studies have proposed capacity building initiatives that include to be effective strategies to enhance an open safety culture [5].

4.1. Implications for Nursing Practice and Policy

A prerequisite to strengthening nurse safety culture is the need to make it a stra-

tegic priority for healthcare organizations in Arab countries. Culture transformation is such a dynamic undertaking that evolves basing on past events, character of leadership, local context and mood of the staff. The healthcare organizations should install a safety culture policy that ensure honest disclosure of information and a sincere interest in rectifying identified issues while viewing this as part of learning and professional development opportunity. Doing away with blame culture while embracing acknowledging errors and installing a learning culture is dependable on individual and organizational accountability to safety culture.

4.2. Limitations

This review was limited to peer-reviewed English language publications as there were hardly any peer-reviewed Arabic publications. It is also possible that the prevailing organizational cultures such as level of staff motivation and size of organizations might limit generalizability of the findings of the included studies. The included studies used quantitative cross-sectional study design which limits causal inference. The inclusion of different data collection tools and variation in types of participants (inclusion of studies with 75% nurses) makes comparison between included studies impossible. One limitation of the systematic review studies introduces publication bias and studies with non-significant results are unlikely to be published.

Future research should use interventional and longitudinal designs to investigate the impact of safety culture affect patient outcomes over time. Also, studies can explore nurses lived experiences qualitatively to gain insight into cultural dynamics of Arab countries.

5. Conclusion

There is still room for improvement on patient safety care as a safeguard for patient care outcome in developed and developing countries. Arab healthcare settings should build resilient and safe nursing environments by investing in strengthening teamwork, efficient communication strategies, and leadership support. To establish a just culture where staff are free to communicate errors in a transparent and honest manner, the policymakers should pay attention to prioritizing culture responsive and evidence-based culture-driven interventions that enhance the culture of safety and quality care across the Arab region. Healthcare institution should also provide for continuous monitoring and evaluation of patient safety initiatives and interventions that are specifically designed to identify and rectify non-punitive response to error and work out on modalities and legislations that will ensure open communication among staff and honest and transparent reporting system.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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