

Team Psychological Safety on Patient Safety Events and Error Reporting among Nurses in a Level II Government Hospital

Sweet Cerlyn L. Espenoza., RN and Joan P. Bacarisas, DM, MAN, RN

Graduate School of Allied Health Sciences, University of the Visayas

DOI: <https://doi.org/10.51584/IJRIAS.2026.11010090>

Received: 23 January 2026; Accepted: 28 January 2026; Published: 11 February 2026

ABSTRACT

This study assessed the relationship between team psychological safety and patient safety event and error reporting among nurses in a tertiary hospital during the last quarter of 2025. A descriptive–correlational design was employed, using complete enumeration that yielded responses from 437 nurses. The study utilized an adapted version of Edmondson’s Psychological Safety Scale (1999) and selected dimensions of the Hospital Survey on Patient Safety Culture. Data were analyzed using descriptive statistics, chi-square tests, Cramer’s V, and Pearson r to determine relationships among demographic profile, psychological safety, and incident reporting. Results showed a moderate level of team psychological safety and a high overall level of patient safety event reporting, with lower scores observed in near-miss reporting and non-punitive response to error. Significant relationships were found between demographic variables and both psychological safety and reporting behaviors. Team psychological safety demonstrated significant positive correlations with frequency of events reported, non-punitive response to error, communication openness, and overall reporting levels. These findings support Edmondson’s Theory of Psychological Safety and align with Reason’s Swiss Cheese Model, highlighting the role of supportive team environments in strengthening patient safety. A Psychological Safety and Incident Reporting Enhancement Plan is proposed to address identified gaps and strengthen the hospital’s safety culture.

Keywords: Psychological Safety; Incident Reporting; Patient Safety Events; Nurses; Descriptive–Correlational Design

INTRODUCTION

In a hospital setting where every second counts and each decision can determine a patient’s life or death, the role of nurses extends far beyond bedside care. Nurses are expected to uphold safety standards, report incidents, communicate openly, and contribute to a culture of transparency especially when adverse events or medical errors occur. This study focuses on two essential variables that influence these responsibilities: psychological safety and patient safety event and error reporting. Psychological safety refers to the belief that team members feel safe to take interpersonal risks, such as speaking up about mistakes, asking questions, or reporting issues without fear of punishment or embarrassment. In clinical settings, this means that nurses are confident they can report incidents or concerns without being judged or blamed. When nurses feel psychologically safe, they are more likely to participate in open communication and share critical information that can help prevent harm and improve systems, while a lack of psychological safety often leads to silence, fear, and missed opportunities for improvement (Kim et al., 2021; Lee et al., 2023).

Patient safety events and error reporting involve the formal process of identifying, documenting, and communicating incidents that have caused, or could potentially cause, harm to patients. These events include medication errors, near misses, procedural lapses, equipment failures, and communication breakdowns. Reporting is intended to identify system-level weaknesses and prevent the recurrence of similar incidents rather than to punish healthcare workers. Nurses play a critical role in this process, as they are often the first to recognize safety threats during patient care. However, underreporting remains a significant concern due to fear of blame, lack of managerial support, and unclear reporting procedures (Wang et al., 2021; Choi et al., 2020). Studies by Kim et al. (2021) and Lee et al. (2023) further support that nurses who feel psychologically safe are

more likely to report safety events and engage in safety-related communication.

Despite growing international evidence, there remains limited local research examining the relationship between psychological safety and patient safety event reporting among nurses in the Philippine context, particularly in government hospitals. Most existing studies focus on private institutions or on other healthcare professionals, leaving bedside nurses underrepresented. Although the hospital has an established Quality Assurance/Patient Safety and Risk Management Office tasked with monitoring patient safety and promoting reporting systems, challenges such as underreporting of errors, fear of punitive consequences, and limited psychological safety among nurses persist. Actual observations in government hospitals reveal that nurses often hesitate to report errors due to fear of sanctions, judgment, or administrative consequences, reflecting deeper issues in workplace culture where reporting behavior is influenced more by fear than by a desire to improve care.

The researcher, a nurse with over seven years of experience in a tertiary government hospital, brings direct involvement in quality assurance activities and patient safety event management to this study. This research aims to assess the level of psychological safety and the frequency of patient safety event reporting among nurses in a tertiary hospital. Anchored in Sustainable Development Goal 3 (Good Health and Well-being) and Sustainable Development Goal 8 (Decent Work and Economic Growth), the study seeks to contribute to safer healthcare systems and healthier work environments by providing evidence that can guide nursing leadership and hospital administrators in strengthening patient safety culture and reducing avoidable harm.

Research Questions

This study aimed to assess the interrelationship among demographic profile, team psychological safety and patient safety events and error reporting among nurses in a level III government hospital in Surigao City for the year 2025.

Specifically, it sought to answer the following question:

1. What was the demographic profile of the nurses in terms of:
 - 1.1 age;
 - 1.2 sex;
 - 1.3 position;
 - 1.4 department/Unit assigned;
 - 1.5 years of experience as a CRH nurse; and
 - 1.6 training on patient safety incident reporting?
2. What was the level of team psychological safety as perceived by nurses?
3. What was the level of patient safety events and error reporting among nurses in terms of:
 - 3.1 frequency of events reported;
 - 3.2 non-punitive response to error; and
 - 3.3 communication openness and feedback?
4. Was there a significant relationship between:
 - 4.1 demographic profile and team psychological safety;
 - 4.2 demographic profile and patient safety events and error reporting;

4.3 psychological safety and patient safety events and error reporting?

5. What Psychological Safety and Incident Reporting Enhancement Plan could be proposed based on the findings of the study?

Statement of Null Hypothesis

H₀₁: There was no significant relationship between demographic profile and team psychological safety among nurses.

H₀₂: There was no significant relationship between demographic profile and patient safety events and error reporting among nurse.

H₀₃: There was no significant relationship between psychological safety and patient safety events and reporting among nurses.

REVIEW OF RELATED LITERATURE AND STUDIES

Team Psychological Safety. Psychological safety is often described as the collective belief within a team that it is safe to speak up whether to point out an error, ask a question, or raise a concern without worrying about judgment or retribution (Edmondson, 1999). In recent years, this concept has been widely recognized as a group-level phenomenon, reflecting team culture more than individual confidence (LaPlante et al., 2025). Across healthcare, psychological safety has proven essential in encouraging staff to report safety issues and work collaboratively on improvement. A cross-sectional study of nurses and nurse managers found that when leaders were inclusive and created supportive environments, psychological safety flourished and this, in turn, drove a willingness to report errors. Psychological safety acted as a bridge between both safety climate and leadership inclusiveness and actual error reporting behaviors (Munn et al., 2023).

The latest reviews also reinforce that psychological safety is intertwined with patient safety outcomes, especially when linked to objective measures like reported errors or adverse incidents. A 2025 narrative synthesis reported that higher psychological safety scores corresponded with better safety outcomes, such as fewer ventilator-associated events and more reports of medical errors, noting that a high report rate may reflect a transparent and learning-focused culture rather than poorer safety performance (Montgomery et al., 2025). Other research identified inclusive and transformational leadership, a workplace climate grounded in trust and open communication, and a non-hierarchical culture as key precursors of psychological safety in frontline healthcare settings (Ip et al., 2025). When psychological safety is embedded, it promotes psychological support, healthier dialogue, innovation, and resilience, enabling staff to speak up and contribute to improvements in patient care (Kingston et al., 2024).

Patient Safety Events and Error Reporting. Patient safety event reporting is now widely recognized as a core component of modern safety management in hospitals. It is a structured process where healthcare professionals record and communicate incidents, near misses, or errors that have caused or could potentially cause harm to patients. These reports play a critical role in strengthening safety systems because they allow risks to be identified early, underlying causes to be analyzed, and preventive strategies to be implemented before harm recurs (AHRQ, 2019; Al Sabei et al., 2022). In recent years, health systems have increasingly moved toward viewing reporting as a proactive driver of improvement rather than a reactive administrative step. Current evidence shows that the most effective systems are those where leadership not only collects reports but also acts on them promptly. Without visible follow-up such as feedback to staff, system redesign, or targeted training reporting loses credibility and participation drops (Alsaleh et al., 2023; Al Sabei et al., 2022). Despite advances, underreporting remains a global challenge. Contemporary studies confirm that voluntary reporting systems capture only a fraction of safety events, with barriers including fear of blame, lack of time, confusion about what to report, and doubts about whether reporting leads to real change (Alsaleh et al., 2023; Liu et al., 2020).

Organizational culture is still the key determinant of whether reporting thrives. Hospitals that cultivate a non-punitive environment one where the focus is on learning rather than assigning fault see higher reporting rates

and richer detail in the reports submitted (Alsaleh et al., 2023; Liu et al., 2020). This links closely with the concept of psychological safety, where staff trust that speaking up about errors will not result in humiliation or retribution. In such environments, higher report volumes often signal openness and transparency, not necessarily declining safety (Kim et al., 2021). Technology has also played a pivotal role in improving reporting processes. The adoption of electronic incident reporting systems (EIRS) and shared taxonomies has reduced the burden of logging events, sometimes allowing for anonymous submissions, and improved the comparability of data across facilities (Panesar et al., 2018; Lee et al., 2023). These innovations, combined with leadership engagement and ongoing feedback, help position reporting as an integral part of continuous quality improvement rather than an isolated compliance task. For nurses often the first to detect safety threats clear reporting procedures, supportive leadership, and a psychologically safe work climate remain the most important enablers of consistent and accurate reporting. The current literature underscores that when these foundations are strong, patient safety event reporting becomes a powerful mechanism for learning, system change, and prevention of harm.

Factors influencing nurses' task load. Beyond workload, job-related stress remains a growing global concern. Nearly 90% of workers in multiple sectors including healthcare reported work-related stress in 2016. Depression and anxiety cause a productivity loss equivalent to US\$ 1 trillion annually. Organizational Role Stress (ORS), introduced by Pareek (1983), conceptualizes stress arising from one's role within the organization. This includes role ambiguity, role overload, and resource inadequacy, among others. These role-based stressors, distinct from general stress, negatively impact job satisfaction, emotional resilience, and organizational commitment, and are linked to higher turnover intentions and long-term health issues (Lal Dewangan et al., 2024). Quality of Work Life (QWL) is another important construct that encompasses job satisfaction, work-life balance, safety, growth opportunities, and workplace culture. It offers a broader perspective than satisfaction alone, aiming to improve employee well-being. Enhancing QWL has been shown to reduce stress, improve productivity, and lower attrition rates, while supporting psychological well-being and long-term performance (Lal Dewangan & Goswami et al., 2024).

Frequency on Events Reported. The frequency of event reporting describes how often healthcare workers document incidents, near misses, or errors within a defined period, reflecting not only the habits of individual reporters but also the maturity of an organization's safety culture and the usability of its reporting systems. Contemporary studies show that in many hospitals, the number of reports filed still falls far short of the number of safety events that actually occur, underscoring that underreporting remains a persistent global challenge (Alsaleh et al., 2023; Al Sabei et al., 2022). Importantly, high report counts may indicate a strong culture of openness and psychological safety, while low counts can mask underlying safety issues, particularly in punitive environments (Kim et al., 2021).

Non-Punitive Response to Error. A non-punitive response to error is foundational to a patient safety culture that prioritizes learning over blame, as emphasized by the Just Culture framework, which focuses on systems and context rather than individual fault (WTW, 2024). Empirical evidence shows that weak non-punitive responses are associated with underreporting and emotional distress among healthcare workers, with studies documenting low scores in public hospitals and highlighting the "second victim" phenomenon when staff are blamed rather than supported (Alsaleh et al., 2025; Jeong, 2025). Leadership practices that promote shared accountability, supportive error handling, and open communication foster trust, reduce fear, and enable incident reporting to function as a tool for continuous improvement rather than punishment (ECRI & Just Culture Company, 2025; Murray, 2023).

Communication openness and feedback. Communication openness and feedback are essential pillars of a strong patient safety culture, as openness allows healthcare workers to speak up about errors and risks without fear, while feedback ensures that reported concerns lead to visible action and improvement. Evidence shows that open communication and constructive feedback increase healthcare professionals' willingness to report incidents, participate in safety initiatives, and view safety as a shared responsibility rather than an individual burden (Chen et al., 2021; Aljabari et al., 2022; Anwer et al., 2023). When leaders actively model openness, act on staff input, and close the feedback loop, communication becomes a continuous exchange that strengthens trust, learning, and patient safety outcomes (Huang et al., 2020)

Demographic Profile on Team Psychological safety. Psychological safety the confidence to speak up, raise

concerns, and acknowledge mistakes without fear of embarrassment or punishment is deeply influenced by both organizational culture and individual demographic factors. While leadership and team climate remain the strongest predictors, research consistently shows that personal characteristics such as age, sex, position, work unit, years of experience, and prior training in patient safety can subtly shape how staff perceive and experience psychological safety. Age often emerges as a complex factor, as younger nurses may report higher openness to speak up due to modern nursing education, while less experienced staff may hesitate to challenge authority and older staff may be more reserved due to cultural norms or fear of reputational damage (Adair et al., 2022; Lee et al., 2021). Sex differences are usually subtle but can still influence perceptions of psychological safety, particularly in acute care environments, although these differences diminish in units led by inclusive leaders (Alquwez et al., 2023). Position, department, and years of experience further shape psychological safety, with senior staff generally reporting higher confidence, high-acuity units presenting both teamwork and pressure-related barriers, and experience supporting autonomy unless routine becomes entrenched (Adair et al., 2022; Tasbihi et al., 2025; Alquwez et al., 2023). Training on patient safety or incident reporting serves as a major equalizer, as structured training paired with supportive leadership reinforces that speaking up is valued and protected, demonstrating that demographic influences on psychological safety are neither fixed nor insurmountable (Adair et al., 2022; Lee et al., 2021).

Demographic Profile on Patient safety event reporting. Recent research indicates that demographic characteristics may influence how healthcare professionals engage in patient safety event reporting, although the strength of these relationships varies depending on organizational culture, leadership, and reporting systems. Age, sex, position, department or unit assignment, years of experience, and training have all shown varying correlations with reporting behavior, with position, unit assignment, and training demonstrating more consistent associations, while age, sex, and years of experience are often mediated by professional confidence, workload, and workplace culture (Dalky et al., 2024; Alquwez et al., 2023; Sorra et al., 2022; Tasbihi et al., 2025). Training in patient safety or incident reporting shows one of the strongest correlations, as structured and repeated training increases both the frequency and quality of reports and reduces fear of negative consequences (Dalky et al., 2024; Sorra et al., 2022). Overall, these findings reinforce that improving reporting rates depends less on changing demographic characteristics and more on ensuring that all staff work in environments where reporting is supported, valued, and acted upon.

Psychological safety on patient safety event reporting. Psychological safety has emerged as one of the strongest predictors of whether healthcare workers will actively participate in patient safety event reporting, as it determines how safe they feel to speak up without fear of retaliation or embarrassment. Recent evidence shows that nurses in units with higher psychological safety scores report more near misses and adverse events, even when incidents may reflect negatively on performance, because reporting is viewed as contributing to systemic learning rather than blame (Lee et al., 2023; Newman et al., 2020). Psychological safety fosters honest communication and reduces hierarchical barriers, allowing staff to process incidents constructively and provide richer reports that support root cause analysis and corrective action (Frazier et al., 2017). Importantly, higher reporting frequency in psychologically safe environments reflects transparency and organizational health rather than poorer patient safety outcomes (Kim et al., 2021).

RESEARCH METHODOLOGY

Design. The study utilized a quantitative approach utilizing the descriptive-correlational research design. In this study, a descriptive-correlational design was used to present the demographic profile of nurses and their levels of team psychological safety and patient safety event reporting, as well as to examine the relationship between team psychological safety and patient safety event reporting.

Environment. This study was conducted in Surigao City.

Respondents. The respondents of this study were all 437 registered nurses currently employed in the hospital.

Sampling Design. This study used a complete enumeration.

Inclusion Criteria and Exclusion Criteria. The study included were all registered nurses employed at a level

II government hospital in Surigao City, regardless of age, sex, marital status, religious affiliation, educational background, or employment classification, including both regular and job order nurses who held a valid and current professional nursing license. To ensure adequate exposure to hospital systems and patient safety practices, only nurses who had been employed for at least six months and were actively involved in direct patient care within their respective units were included, with participation requiring voluntary informed consent. Nurses who had already submitted a resignation or retirement notice were excluded, as their responses might reflect bias or disengagement from organizational practices. Additionally, individuals in purely administrative positions, such as nurse supervisors, head nurses, or the chief nurse, were not included because their roles did not involve direct patient care.

Instrument. This study used a three-part questionnaire. The first part of the instrument was a self-constructed questionnaire used to determine the demographic profile of the respondents. It covered age, sex, marital status, highest educational attainment, position, department or unit assigned, years of experience as a nurse, and training received on patient safety or incident reporting. These variables provided baseline data to describe the background of the nurses and served as reference points for correlating psychological safety and patient safety event reporting. The second part employed the Edmondson Team Psychological Safety Scale (Edmondson, 1999), a standardized seven-item instrument widely used to assess psychological safety within teams. All seven items were adopted and rated on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), measuring nurses' perceptions of speaking up, admitting mistakes, asking questions, and expressing concerns without fear of negative consequences. Scores ranged from 7 to 35, with 7–16 indicating low, 17–25 moderate, and 26–35 high levels of team psychological safety, where higher scores reflected a supportive and open work environment. The third part of the instrument was adapted from the Hospital Survey on Patient Safety Culture (HSOPS 2.0) developed by the Agency for Healthcare Research and Quality, utilizing selected domains relevant to patient safety event and error reporting. These domains included Frequency of Events Reported, Non-Punitive Response to Error, and Communication Openness and Feedback, all rated using five-point Likert scales with interpretation based on established legends. Higher mean scores reflected frequent reporting, open communication, and a non-punitive reporting climate, while lower scores indicated underreporting, fear of blame, and limited feedback mechanisms.

Data Gathering Procedures. Before data collection began, the researcher submitted the study title for approval and was assigned a research adviser. Approval letters were secured and addressed from the Dean of Allied Health Sciences, Chief Academic Officer, and the Chief of Hospital. A design hearing was conducted to assess the technical and ethical soundness of the study. Approval from the Ethics Committee or Institutional Review Board (IRB) was obtained prior to data collection. After obtaining all necessary permissions, the researcher distributed the survey questionnaires to the respondents. The objectives of the study were explained, and respondents were assured of voluntary participation and confidentiality. Respondents self-evaluated to complete the questionnaire, and all questionnaires were checked for completeness; incomplete forms were returned for completion. After data collection, data were collated and analyzed using appropriate statistical methods. Data analysis addressed the research questions and objectives. Results were interpreted and presented in tables with corresponding implications and supporting literature. Finally, all answered questionnaires and identifying data were shredded to ensure confidentiality.

Statistical Treatment of Data. The statistical data were analyzed. The frequency distribution and simple percentage were used to present the personal characteristics of the nurse-respondents, including age, sex, marital status, highest educational attainment, years of service, and employment status. The mean score and standard deviation were applied to determine the levels of team psychological safety and patient safety event reporting, where the mean reflected the general tendency of responses and the standard deviation indicated variability. Then, Chi-Square and Cramer's V were used to examine significant associations between nurses' personal characteristics and team psychological safety and patient safety event reporting, with Cramer's V determining the strength of significant relationships. And the Pearson r was employed to determine the direction and strength of the correlation between psychological safety and patient safety event reporting.

Ethical Considerations. Ethical considerations are an essential component of any research study. The study was submitted for ethical approval prior to data gathering.

Presentation, Analysis, And Interpretation of Data

Table 1 Demographic Profile of Nurses

Profile	<i>f</i>	%
Age		
18 to 25 years old (young adult)	133	30.40
26 to 44 years old (adult)	294	67.30
45 years old and above	10	2.30
Sex		
Male	141	32.30
Female	296	67.70
Position		
Staff Nurse	261	59.70
Charge Nurse	176	40.30
Highest Educational Attainment		
Bachelor's Degree	195	96.50
Master's Degree	7	3.50
Area of Assignment		
Adult	35	8.00
Emergency	42	9.60
EREID	15	3.40
Family Medicine Ward	13	3.00
Medical Ward 3B	30	6.90
Medical Ward 4A	58	13.30
Medical Ward 4B	31	7.10
Medical Ward 5A	34	7.80
Medical Ward 5B	32	7.30
NICU	21	4.80
OB Ward	33	7.60

Pedia Respi	17	3.90
Pedia Ward	26	5.90
PICU	27	6.20
Surgery Ward	23	5.30
Years of Experience as a Nurse in the hospital		
Below 1 year	111	25.40
1 to 3 years	210	48.10
4 to 6 years	64	14.60
7 to 9 years	28	6.40
10 years or more	24	5.50
Training on patient safety incident reporting		
No	312	71.40
Yes	125	28.60

Note. $n=437$.

As shown in Table 1, the nurses in this study were mostly in the younger and middle-adult age groups and predominantly female, reflecting global workforce trends where the majority of practicing nurses fall between their mid-20s and mid-40s and where nursing remains a feminized profession (Smiley et al., 2023; Kharazmi et al., 2023; Masibo et al., 2024). Most respondents held staff nurse roles, had completed a bachelor’s degree, and were assigned across medical, surgical, pediatric, emergency, and critical care units, a distribution consistent with hospital staffing structures and safety culture studies that emphasize the central role of bedside nurses in patient care and safety activities (Granel et al., 2020; Granel et al., 2022; Schnell et al., 2024). Additionally, most nurses had only a few years of work experience and only a minority reported receiving training on patient safety incident reporting, mirroring literature that highlights early-career dominance in hospital staffing and persistent gaps in structured training on incident-reporting systems (Smiley et al., 2023; Oweidat et al., 2023; Elmi et al., 2025; Smit & Peddle, 2025).

Table 2 Team Psychological Safety of Nurses

Level of Team Psychological Safety	Average Score	<i>f</i>	%
Low	14.5	2	0.46
Moderate	22.22	361	82.61
High	26.93	74	16.93
Overall	22.98	Moderate	

Note. $n=437$.

Legend: A score of 7 to 16 is low, 17 to 25 is moderate, and 26 to 35 is high.

The results indicate that nurses generally experience a moderate level of team psychological safety, suggesting that while trust and cooperation are present, they are not strong enough to consistently eliminate fear of negative reactions, particularly in situations involving authority, disagreement, or sensitive issues. Similar findings have been reported internationally, where moderate psychological safety is often attributed to hierarchical relationships, workload demands, and cultural expectations that encourage harmony but limit open disagreement (Sato et al., 2025; Cho et al., 2023). These results are reflected in actual workplace situations, where nurses feel comfortable communicating with peers but become cautious with supervisors, engage more in task-based teamwork than interpersonal dialogue, and practice selective openness influenced by cultural values such as *hiya*, *pakikisama*, and *paggalang*. From a nursing management perspective, the predominance of moderate psychological safety highlights the need for more consistent supportive leadership, strengthened communication norms, and clearer assurances that speaking up is safe and valued to promote full participation, organizational learning, and improved team functioning.

Table 3 Level of Patient Safety Events and Mirror Reporting among Nurses

Dimensions	Mean score	SD	Interpretation
Frequency of Events Reported			
1. Mistakes caught and corrected before reaching the patient are reported.	3.51	1.102	Most of the time
2. Near misses (events that could have harmed the patient but did not) are reported.	3.28	0.964	Sometimes
3. Events that did not cause harm but could have are reported.	3.54	0.968	Most of the time
4. Adverse events that caused harm are reported.	3.95	1.138	Most of the time
Factor mean	3.57	0.829	High
Non-punitive Response to Error			
1. Staff feel that their mistakes are held against them. (R)	2.68	0.818	Neutral
2. When an event is reported, it feels like the person is being blamed, not the problem. (R)	2.66	0.929	Neutral
3. Staff worry that reporting mistakes will be used against them. (R)	2.51	0.950	Disagree
4. This unit encourages learning from mistakes rather than punishing individuals.	4.13	0.720	Agree
Factor mean	3.00	0.574	Moderate
Communication Openness and Feedback			
1. Staff are encouraged to speak up if they see something that may negatively affect patient care.	4.12	0.737	Agree
2. Staff feel free to question decisions or actions of those with more authority.	3.60	0.957	Agree
3. Feedback is given to staff about changes made based on event reports.	4.02	0.825	Agree

4. Staff who report errors receive acknowledgment or follow-up.	3.51	1.044	Agree
Factor mean	3.81	0.623	High
Grand mean	3.65	0.407	High

Note. $n=437$.

Legend: A score of 1.00 to 1.80 is very low (never, strongly disagree), 1.81 to 2.60 is low (rarely, disagree), 2.61 to 3.40 is moderate (sometimes, neutral), 3.41 to 4.20 is high (most of the time, agree), and 4.21 to 5.00 is very high (always, strongly agree).

The findings in Table 3 indicate that the hospital has established a generally strong culture of patient safety event and error reporting, as reflected by the high grand mean of 3.65, suggesting that nurses recognize reporting as part of their professional responsibility and actively participate in patient safety activities. However, the moderate reporting of near misses and the moderate score in non-punitive response to error indicate that nurses may still hesitate to report incidents perceived as minor or personally sensitive due to conditional feelings of safety and fear of blame. In contrast, the high score in communication openness and feedback reflects a solid foundation for teamwork, collaborative practice, and transparency, supporting effective coordination and shared accountability for patient safety. From a nursing management and organizational perspective, these findings highlight the need to sustain strong communication practices while strengthening consistent non-punitive leadership behaviors, continuous education, and learning-oriented feedback mechanisms to further enhance reporting completeness and patient safety culture.

Table 4 Relationship between demographic profile and personal team psychological safety

Independent Variables	chi value	<i>p</i> value	Cramer's V value	Decision	Interpretation
Age	88.933	.000	.319	Reject Ho	Significant
Sex	57.666	.000	.363	Reject Ho	Significant
Position	70.590	.000	.402	Reject Ho	Significant
Department	2.873E2	.000	.217	Reject Ho	Significant
Years of Service as a Nurse in the hospital	2.308E2	.000	.363	Reject Ho	Significant
Training on patient safety incident reporting	87.430	.000	.447	Reject Ho	Significant

Legend: Significant if *p* value is $< .05$. Dependent variable: Team Psychological Safety. Cramer's V values: A value of >0.25 is very strong, >0.15 is strong, >0.10 is moderate, >0.05 is weak, and >0 is no association.

Table 4 results show that all demographic variables have a significant and positive relationship with team psychological safety among nurses, indicating that perceptions of psychological safety increase as age, position, years of service, and training on patient safety incident reporting strengthen. Older, more experienced nurses and those in higher positions report greater confidence in speaking up and reporting concerns, as increased familiarity with workplace norms, authority, and reporting systems reduces fear of negative consequences. Training on patient safety incident reporting demonstrates the strongest association, as education clarifies reporting purposes, normalizes open communication, and reinforces trust that reports are used for learning rather than blame. From a nursing management perspective, these findings emphasize the need to support younger and less experienced nurses through mentoring, consistent leadership behaviors, and targeted training to foster psychological safety early and promote sustained reporting and patient safety engagement

Table 5 Relationship between Demographic Profile and Level of Patient Safety Events and Error Reporting

Independent Variables	chi value	p value	Cramer's V value	Decision	Interpretation
Frequency of Errors Reported					
Age	1.357E2	.000	.394	Reject Ho	Significant
Sex	1.580E2	.000	.601	Reject Ho	Significant
Position	1.111E2	.000	.504	Reject Ho	Significant
Department	2.145E2	.009	.202	Reject Ho	Significant
Years of Service as a Nurse in the hospital	2.851E2	.000	.404	Reject Ho	Significant
Training on patient safety incident reporting	1.054E2	.000	.491	Reject Ho	Significant
Non-punitive Response to Error					
Age	97.890	.000	.335	Reject Ho	Significant
Sex	96.127	.000	.469	Reject Ho	Significant
Position	56.509	.000	.360	Reject Ho	Significant
Department	2.672E2	.000	.226	Reject Ho	Significant
Years of Service as a Nurse in the hospital	2.295E2	.000	.362	Reject Ho	Significant
Training on patient safety incident reporting	45.737	.000	.324	Reject Ho	Significant
Communication Openness and Feedback					
Age	51.066	.001	.242	Reject Ho	Significant
Sex	25.489	.013	.242	Reject Ho	Significant
Position	31.888	.001	.270	Reject Ho	Significant
Department	1.876E2	.143	--	Failed to reject Ho	Not significant
Years of Service as a Nurse in the hospital	1.035E2	.000	.243	Reject Ho	Significant
Training on patient safety incident reporting	16.817	.157	.196	Reject Ho	Significant
Overall					

Age	91.758	.000	.324	Reject Ho	Significant
Sex	1.097E2	.000	.501	Reject Ho	Significant
Position	68.470	.000	.396	Reject Ho	Significant
Department	3.835E2	.002	.250	Reject Ho	Significant
Years of Service as a Nurse in the hospital	2.160E2	.000	.352	Reject Ho	Significant
Training on patient safety incident reporting	60.817	.000	.373	Reject Ho	Significant

Legend: Significant if p value is $< .05$. Dependent variable: Level of Patient Safety Events and Error Reporting. Cramer's V values: A value of >0.25 is very strong, >0.15 is strong, >0.10 is moderate, >0.05 is weak, and >0 is no association.

Table 5 results show that the level of patient safety events and error reporting is significantly related to nurses' demographic and professional characteristics across almost all dimensions, including frequency of errors reported, non-punitive response to error, communication openness and feedback, and overall reporting levels. Strong and very strong associations indicate that as nurses gain age, years of service, higher position, and training on patient safety incident reporting, their engagement in reporting becomes more frequent, confident, and consistent, supported by increased familiarity with reporting systems, professional confidence, and accountability. Training on patient safety incident reporting shows one of the strongest positive relationships, enhancing nurses' understanding of just culture principles, improving perceptions of fairness, and encouraging open communication, feedback, and near-miss reporting. Differences observed across departments further suggest that unit practices, leadership style, and workflow structures influence how consistently nurses engage in reporting behaviors. From a nursing management perspective, these findings emphasize that sustained investment in training, mentoring, and supportive leadership is essential in strengthening reporting behaviors, fostering transparency, and reinforcing a culture where patient safety is viewed as a shared professional responsibility.

Table 6 Relationship between Team Psychological Safety and Level of Patient Safety Events and Error Reporting

Variables	r value	p value	Decision	Interpretation
Team Psychological Safety vs. vs. Frequency of Errors Reported	.192	.000	Reject Ho	Significant
Team Psychological Safety vs. Non-punitive Response to Error.	.296	.000	Reject Ho	Significant
Team Psychological Safety vs. Communication Openness and Feedback	.234	.000	Reject Ho	Significant
Team Psychological Safety vs. Level of Patient Safety Events and Error Reporting	.151	.002	Reject Ho	Significant

Legend: Significant if p value is $\leq .05$. Dependent Variable: Level of Patient Safety Events and Error Reporting. Pearson r interpretation: A value greater than $.5$ is strong (positive), between $.3$ and $.5$ is moderate (positive), between 0 and $.3$ is weak (positive), 0 is none, between 0 and $-.3$ is weak (negative), between $-.3$ and $-.5$ is moderate (negative), and less than $-.5$ is strong (negative).

Table 6 results show that team psychological safety has a positive and significant relationship with all dimensions of patient safety events and error reporting, although the strength of association is generally weak to approaching moderate. This indicates that as nurses feel safer, more accepted, and less threatened within their teams, they are more likely to report events, perceive error handling as fair and learning-oriented, and experience open communication and feedback, consistent with current literature (Cho et al., 2023; Lu et al., 2025; Montgomery et al., 2025). The strongest association is observed with non-punitive response to error, highlighting that psychological safety is closely linked to nurses' perceptions of fairness and leaders' reactions to mistakes, particularly whether errors are treated as learning opportunities rather than personal failures. Positive but smaller relationships with frequency of errors reported and communication openness suggest that while psychological safety encourages reporting and speaking up, actual documentation is also influenced by workload, time pressure, system usability, and reporting procedures (Yang & Liu, 2021; Oweidat et al., 2023). Observations in hospital settings reflect these findings, as nurses in psychologically safe teams openly discuss errors and near misses, whereas those in less safe environments limit disclosure or avoid formal reporting. From a nursing management perspective, these results affirm that strengthening team psychological safety through supportive leadership, non-defensive responses, and consistent feedback is essential for fostering a transparent, learning-oriented reporting culture and improving patient safety outcomes.

CONCLUSION AND RECOMMENDATIONS

Conclusion. The findings reveal that psychological safety and incident reporting are central components of a healthy patient safety culture, with nurses generally experiencing supportive team interactions and actively participating in patient safety event and error reporting, although significant differences exist across demographic and professional characteristics. A positive pattern emerged wherein nurses who are older, have longer years of service, hold higher positions, and have received training on patient safety incident reporting exhibit stronger psychological safety and more consistent reporting behaviors, confirming a significant relationship between psychological safety and reporting practices

Recommendations. Based on the findings, nursing practice should integrate the study results into daily care through the implementation of the Psychological Safety and Incident Reporting Enhancement Plan, active participation in safety huddles and debriefings, and dissemination of findings across nursing units to strengthen open communication and consistent reporting behaviors. For nursing policy, incident reporting and just culture policies should be reviewed and strengthened by the ANSAP Patient Safety Committee through the development of clear non-punitive, standardized reporting, feedback, psychological safety promotion, near-miss reporting, and patient safety education policies that emphasize learning and system improvement. In nursing education, the study findings may be incorporated into patient safety, leadership, and nursing management courses, supported by simulation activities on speaking up, near-miss identification, and just culture decision-making to prepare nurses to actively contribute to a strong safety culture.

Further studies to contribute to the growing evidence on psychological safety and patient safety reporting. The following research titles are recommended:

1. The lived experiences of nurses on psychological safety and incident reporting in the hospital setting
2. A mixed-method study on team psychological safety and patient safety event reporting among nurses
3. Validation of the relationship between psychological safety and incident reporting using a larger and more diverse group of respondents

Psychological Safety and Incident Reporting Enhancement Plan

Rationale

Psychological safety and effective incident reporting are essential in maintaining patient safety, promoting open communication, and strengthening a just culture within the healthcare environment. When nurses feel safe to speak up, clarify concerns, or report mistakes without fear of embarrassment or punishment, they contribute to

better teamwork, timely identification of risks, and improved patient outcomes. Incident reporting supports learning, prevents future harm, and helps the hospital understand patterns of errors. However, consistent reporting can only take place when nurses believe they will be treated fairly and supported. Based on the study, team psychological safety was moderate, non-punitive response was inconsistent, and near-miss reporting varied across demographic groups and departments. Training greatly influenced psychological safety and reporting practices. This enhancement plan was developed to strengthen psychological safety, harmonize reporting behaviors, and support a fair and learning-focused safety culture.

General Objectives

To strengthen team psychological safety and improve consistent, confident, and learning-oriented patient safety event reporting among nurses.

Specific Objectives

- a. Improve team psychological safety across all units.
- b. Enhance nurses’ confidence in reporting events and near misses.
- c. Strengthen non-punitive and learning-focused responses to errors.
- d. Improve communication openness and feedback related to safety events.
- e. Sustain and improve overall patient safety event reporting.

Areas of Concern	Specific Objectives	Activities	Persons Responsible	Resources Needed	Time Frame	Success Indicators
1. Moderate Team Psychological Safety	Improve team psychological safety among nurses	Hospital-initiated: <ul style="list-style-type: none"> • Conduct a seminar on Psychological Safety in Nursing Teams • Hold workshops on respectful communication and supportive feedback 	Staff Nurses Nurse Supervisors Chief Nurse Nursing Education & Training Office Hospital Administrators	Internet Laptops/computers Budget for seminars (₱10,000/activity) Psychological Safety Questionnaire	First Quarter 2026 onwards	Attendance certificates Minutes of meetings Leadership training reports Improved psychological safety scores
2. Selective Near-Miss Reporting & Moderate Non-Punitive Response	Enhance confidence and consistency in reporting errors and near misses	Personally-initiated: <ul style="list-style-type: none"> • Review hospital and DOH reporting policies. • Practice documenting near misses. Hospital-initiated: <ul style="list-style-type: none"> • Orientation on Just 	Staff Nurses Nurse Supervisors Quality Assurance Office Chief Nurse Patient Safety	DOH guidelines Incident report forms Printed posters Budget for training	Second Quarter 2026 onwards	Quick-guide posters posted Attendance certificates Increased near-miss reporting Improved non-punitive

		<p>Culture principles.</p> <ul style="list-style-type: none"> • Seminar and intervention plan on psychological safety and patient safety reporting. • Sharing of near-miss stories during endorsements. • Develop quick-guide posters (“What to Report”). 	Committee	Assessment tool		response scores
3. Departmental, Position, and Tenure Differences	Harmonize safety practices across departments	<p>Hospital-initiated:</p> <ul style="list-style-type: none"> • Conduct unit-based safety huddles. • Implement buddy system for new nurses. • Assign reporting mentors per unit. • Inter-departmental case reviews. • Leadership coaching for charge nurses. 	<p>Chief Nurse</p> <p>Nurse Supervisors</p> <p>Department Heads</p> <p>Nursing Education Office</p>	<p>Coaching modules</p> <p>Buddy system guidelines</p> <p>Training materials</p>	3rd Quarter 2026 onwards	<p>Minutes of huddles</p> <p>Buddy assignments</p> <p>Coaching attendance</p> <p>Reduced variation in scores</p>
4. Variable Communication Openness and Feedback	Enhance open communication and strengthen feedback loops	<p>Hospital-initiated:</p> <ul style="list-style-type: none"> • Training on constructive feedback and conflict-free communication. • Standardize acknowledgment of reported events. • Create a “Safety Bulletin” for lessons learned. • Install anonymous feedback boxes. • Include communication openness in daily endorsements. 	<p>Staff Nurses</p> <p>Nurse Supervisors</p> <p>Chief Nurse</p> <p>Quality Assurance Team</p>	<p>Templates for feedback</p> <p>Bulletin materials</p> <p>Suggestion boxes</p>	2nd Quarter 2026 onwards	<p>Published safety bulletins</p> <p>Feedback acknowledgment slips</p> <p>Improved communication openness scores</p>

5. Sustaining High Overall Reporting Levels	Sustain and improve overall reporting of patient safety events	<p>Hospital-initiated:</p> <ul style="list-style-type: none"> • Regular patient safety audits. • Recognition program for exemplary reporting. • Integrate reporting into annual competencies. • Continue training on patient safety reporting. • Reassess reporting levels after 6 months. 	<p>Chief Nurse Nurse Supervisors HR Office Quality Assurance Office</p>	<p>Audit tools Certificates of recognition Competency evaluation forms Assessment tool</p>	2nd Quarter 2026 onwards	<p>Audit reports Recognition records Competency evaluation results Sustained or improved reporting scores</p>
---	--	---	---	--	--------------------------	---

REFERENCES

1. Abdelaliam, S. M. F., Alsenany, S., & Elkhateeb, R. A. (2022). Factors affecting patient safety culture from nurses' perspectives. *Healthcare*, 10(10), 1889. doi:10.3390/healthcare10101889
2. Adair, K. C., Quow, K., Frankel, A., Mosca, P. J., Profit, J., Sullivan, P., & Sexton, J. B. (2022). The improvement readiness scale: Development of a readiness measure for quality improvement in healthcare. *BMJ Quality & Safety*, 31(5), 379–386. <https://doi.org/10.1136/bmjqs-2020-012773>
3. Agency for Healthcare Research and Quality. (2019). Patient safety primer: Incident reporting. <https://psnet.ahrq.gov/primer/incident-reporting>
4. Al Sabei, S., Al-Riyami, M., Al-Maqbali, M., Al-Yaqoubi, F., Al-Sinawi, H., & Alshehri, H. (2022). Barriers and facilitators of incident reporting among nurses in Oman: A cross-sectional study. *Journal of Nursing Management*, 30(4), 1078–1086. <https://doi.org/10.1111/jonm.13587>
5. Aljabari, S., Khatib, R., & Anwer, H. (2022). Communication openness and patient safety culture: A cross-sectional study. *BMC Health Services Research*, 22, Article 341. <https://doi.org/10.1186/s12913-022-07761-3>
6. Alquwez, N., Cruz, J. P., Al Otaibi, R. S., Al Thobaity, A., & Almazan, J. (2023). Influence of nurse characteristics and work environment on patient safety culture: A cross-sectional study. *Journal of Nursing Scholarship*, 55(2), 324–333. <https://doi.org/10.1111/jnu.12854>
7. Alsaleh, F. M., Abahussain, E. A., Altabbaei, A., & Abahussain, A. (2023). Factors influencing patient safety incident reporting: A cross-sectional study in Kuwait. *BMJ Open*, 13(1), e065740. <https://doi.org/10.1136/bmjopen-2022-065740>
8. Alshammari, A. S., Aldhuwayhi, T. Z., Alibrahim, N. O., et al. (2024). Assessment of patient safety culture among nurses working at tertiary care hospitals in Aljouf region, Saudi Arabia. *Cureus*, 16(4), e58429. doi:10.7759/cureus.58429
9. Anwer, H., Aljabari, S., & Khatib, R. (2023). Feedback mechanisms and patient safety reporting behavior among nurses. *International Journal for Quality in Health Care*, 35(1), mzad004. <https://doi.org/10.1093/intqhc/mzad004>
10. Arafat Abdeltwab, R., et al. (2025). The relation between psychosocial safety climate and work engagement among staff nurses. *Egyptian Journal of Health Care*.
11. Chen, I. C., Li, H. H., & Su, S. F. (2021). The relationship between work environment and patient safety culture among nurses in Taiwan. *Journal of Nursing Management*, 29(3), 537–545. <https://doi.org/10.1111/jonm.13169>
12. Cho, H., Steege, L. M., & Arsenault Knudsen, É. N. (2023). Psychological safety, communication openness, nurse job outcomes, and patient safety in hospital nurses. *Research in Nursing & Health*, 46(4), 445–453. doi:10.1002/nur.22327

13. Dalky, H. F., Al-Delaimy, W. K., & Al Momani, M. (2024). The impact of demographic characteristics on patient safety culture perceptions among nurses. *Nursing Open*, 11(1), 77–86. <https://doi.org/10.1002/nop2.1794>
14. Dong, S., Wu, J., & Li, X. (2024). Influence of work experience on nurses' safety attitudes: A cross-sectional study. *Journal of Nursing Management*. doi:10.1111/jonm.13922
15. ECRI & The Just Culture Company. (2025). *Just culture: Balancing accountability and learning in patient safety*. ECRI Institute.
16. Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383. <https://doi.org/10.2307/2666999>
17. Elmi, A. H., et al. (2025). Awareness of reporting practices and barriers to incident reporting among nurses in Mogadishu, Somalia. *BMC Nursing*, 24, Article 37xxx. doi:10.1186/s12912-025-03799-y
18. Frazier, M. L., Fainshmidt, S., Klinger, R. L., Pezeshkan, A., & Vranceva, V. (2017). Psychological safety: A meta-analytic review and extension. *Personnel Psychology*, 70(1), 113–165. <https://doi.org/10.1111/peps.12183>
19. Granel, N., et al. (2022). Patient safety culture and workload among hospital nurses: A cross-sectional analysis. *Journal of Nursing Management*, 30(5), 1320–1329. doi:10.1111/jonm.13553
20. Hawsawi, A. O., & Alhajri, S. T. (2025). Psychological safety in nursing: A narrative review of leadership, burnout, and cultural barriers to patient safety. *Journal of Nursing and Patient Safety and Policy*. doi:10.4103/JNSPP.JNSPP_17_25
21. Hirvikallio, J., Haaranen, A., & Hult, M. (2024). Psychological safety, social support, and commitment among nurse managers. *Nordic Journal of Nursing Research*, 44(1). doi:10.1177/20571585241238844
22. Hu, H., Wang, C., Lan, Y., & Wu, X. (2022). Nurses' turnover intention, hope and career identity: The mediating role of job satisfaction. *BMC Nursing*, 21, 43. doi:10.1186/s12912-022-00821-5
23. Huang, C. H., Wu, H. H., & Lee, Y. C. (2020). The perceptions of patient safety culture among nurses in Taiwan. *International Journal of Environmental Research and Public Health*, 17(7), 2379. <https://doi.org/10.3390/ijerph17072379>
24. Ip, W. Y., Lee, D. T. F., & Chan, S. W. C. (2025). Precursors of psychological safety in healthcare teams: A scoping review. *Journal of Nursing Management*, 33(2), 150–165. <https://doi.org/10.1111/jonm.13837>
25. Ito, A., Sato, K., Yumoto, Y., Sasaki, M., & Ogata, Y. (2022). A concept analysis of psychological safety: Further understanding for application to health care. *Nursing Open*, 9(1), 467–489. doi:10.1002/nop2.1086
26. Jaaffar, T., et al. (2023). Leadership, psychological safety, intrinsic motivation, and nurses' voice behavior. *Belitung Nursing Journal*, 9(3), 255–270. doi:10.33546/bnj.2556
27. Jeong, Y. (2025). The impact of just culture on nurses' second victim experience and psychological well-being. *Journal of Patient Safety*. Advance online publication. <https://doi.org/10.1097/PTS.0000000000001169>
28. Kharazmi, E., Bordbar, N., & Bordbar, S. (2023). Distribution of the nursing workforce in the world using the Gini coefficient. *BMC Nursing*, 22, 151. doi:10.1186/s12912-023-01313-w
29. Kim, E. M., Lee, Y. J., & Park, J. S. (2021). Psychological safety and its impact on the reporting of patient safety events: A cross-sectional study among nurses. *International Journal for Quality in Health Care*, 33(2), mzaa050. <https://doi.org/10.1093/intqhc/mzaa050>
30. Kingston, M. J., Evans, S. M., & Smith, B. J. (2024). Psychological safety in healthcare: Implications for team learning and performance. *BMJ Leader*, 8(1), 14–20. <https://doi.org/10.1136/leader-2022-000666>
31. Kyung, M., Kim, H., & Kim, J.-H. (2025). Factors associated with nursing students' satisfaction with simulation-based assessments: Interaction between psychological safety and gender. *BMC Medical Education*, 25, 7648. doi:10.1186/s12909-025-07648-z
32. Kyung, M., Kim, H., & Kim, J.-H. (2025). Psychological safety and gender differences in communication. *BMC Medical Education*, 25, 7648. doi:10.1186/s12909-025-07648-z
33. LaPlante, K., Ginsburg, L. R., & Lingard, L. (2025). Team psychological safety in healthcare: A conceptual review. *Academic Medicine*, 100(1), 18–27. <https://doi.org/10.1097/ACM.0000000000004961>
34. Lee, H., Kim, M., & Son, Y. J. (2023). Psychological safety and error reporting among nurses in hospital settings: The mediating role of communication openness. *BMC Nursing*, 22(1), 45.

- <https://doi.org/10.1186/s12912-023-01132-1>
35. Lee, S., Lee, J., & Kim, Y. (2023). Relationship between psychological safety and incident reporting among nurses. *Journal of Patient Safety*. Advance online publication. <https://doi.org/10.1097/PTS.0000000000001071>
 36. Liu, C., Liu, W., Wang, Y., & Zhang, Z. (2020). Factors influencing incident reporting in nursing: A systematic review. *Journal of Nursing Care Quality*, 35(2), E7–E13. <https://doi.org/10.1097/NCQ.0000000000000416>
 37. Lu, M., Xia, R., Wang, R., & Zou, X. (2025). Network analysis of the relationships between voice behavior and team psychological safety climate among Chinese nurses. *BMC Nursing*, 24, 794. doi:10.1186/s12912-025-03388-z
 38. Lu, M., Xia, R., Wang, R., & Zou, X. (2025). Relationships between voice behavior and team psychological safety climate. *BMC Nursing*, 24, 794. doi:10.1186/s12912-025-03388-z
 39. Martínez, M. A., Navarro, C., & García, L. (2022). Enhancing patient safety event reporting through feedback and system redesign: A Spanish teaching hospital's experience. *BMJ Open Quality*, 11(1), e001602. <https://doi.org/10.1136/bmjopen-2021-001602>
 40. Masibo, R. M., Kibusi, S. M., & Masika, G. M. (2024). Nurses, non-nurse healthcare providers, and clients' perspectives, encounters, and choices of nursing gender in Tanzania: A qualitative descriptive study. *BMC Nursing*, 23, 353. doi:10.1186/s12912-024-02027-3
 41. Masibo, R. M., Kibusi, S. M., & Masika, G. M. (2024). Perspectives on nursing gender roles in Tanzania: A qualitative descriptive study. *BMC Nursing*, 23, 353. doi:10.1186/s12912-024-02027-3
 42. Maulana, I., & Setiawan, I. M. B. (2025). Enhancing nursing documentation through incident reporting and safety training: A systematic review. *Journal of Pubnursing Sciences*, 3(1), 42–50. doi:10.69606/jps.v3i01.217
 43. Montgomery, A., Chalili, V., Lainidi, O., Mouratidis, C., Maliousis, I., Paitaridou, K., et al. (2025). Psychological safety and patient safety: A systematic and narrative review. *PLOS One*, 20(4), e0322215. doi:10.1371/journal.pone.0322215
 44. Montgomery, A., Panagioti, M., & Maben, J. (2025). Psychological safety and patient safety outcomes: A narrative synthesis. *International Journal for Quality in Health Care*, 37(2), mzad016. <https://doi.org/10.1093/intqhc/mzad016>
 45. Munn, J., Bannon, S., & Everett, T. (2023). Leadership inclusiveness and psychological safety: Impact on error reporting in nursing. *Journal of Nursing Management*, 31(5), 1002–1011. <https://doi.org/10.1111/jonm.13721>
 46. Murray, C. (2023). Perceptions of punitive culture in nursing homes: Implications for error reporting. *Journal of Patient Safety*, 19(4), 298–304. <https://doi.org/10.1097/PTS.0000000000001034>
 47. Newman, A., Donohue, R., & Eva, N. (2017). Psychological safety: A systematic review of the literature. *Human Resource Management Review*, 27(3), 521–535. <https://doi.org/10.1016/j.hrmr.2017.01.001>
 48. O'Donovan, R., van Dun, D., & McAuliffe, E. (2020). Measuring psychological safety in healthcare teams: Developing an observational measure to complement survey methods. *BMC Medical Research Methodology*, 20, 203. doi:10.1186/s12874-020-01066-z
 49. O'Donovan, R., van Dun, D., & McAuliffe, E. (2021). Healthcare professionals' experiences of psychological safety in healthcare teams: A scoping review. *Journal of Patient Safety*, 17(7), e595–e602. doi:10.1097/PTS.0000000000000849
 50. Oweidat, I., Al-Mugheed, K., Alsenany, S. A., Abdelaliem, S. M. F., & Alzoubi, M. M. (2023). Awareness of reporting practices and barriers to incident reporting among nurses. *BMC Nursing*, 22, 191. doi:10.1186/s12912-023-01376-9
 51. Panesar, S. S., deSilva, D., Carson-Stevens, A., Cresswell, K. M., Salvilla, S. A., Slight, S. P., Javad, S., Shafi, S., Netuveli, G., Larizgoitia, I., Donaldson, L. J., Bates, D. W., & Sheikh, A. (2018). How safe is primary care? A systematic review. *BMJ Quality & Safety*, 25(7), 544–553. <https://doi.org/10.1136/bmjqs-2015-004178>
 52. Reason, J. (2000). Human error: Models and management. *BMJ*, 320(7237), 768–770. <https://doi.org/10.1136/bmj.320.7237.768>
 53. Roh, Y. S., Lim, E. J., & Kim, H. (2022). Gender differences in simulation learning and psychological safety. *Nurse Education Today*, 109, 105261. doi:10.1016/j.nedt.2021.105261
 54. Sadeghi, R., Naderi, Z., & Yusefi, A. R. (2025). How patient safety culture influences nurses'

- responsibility: A structural equation modeling study. *BMC Nursing*, 24, 1414. doi:10.1186/s12912-025-04072-y
55. Sadeghi, R., Naderi, Z., & Yusefi, A. R. (2025). Patient safety culture and nurses' responsibility. *BMC Nursing*, 24, 1414. doi:10.1186/s12912-025-04072-y
56. Sato, T., Kakuda, K., Sekiguchi, E., & Ishiseki, M. (2025). Psychological safety and burnout in nurses: A scoping review. *Cureus*, 17(9), e92411. doi:10.7759/cureus.92411
57. Schnell, A., Steiner, L. M., Bonetti, L., Levati, S., & Desmedt, M. (2024). A bachelor's degree for entering the nursing profession: A scoping review for supporting informed health care policies. *International Journal of Nursing Studies Advances*, 6, 100171. doi:10.1016/j.ijnasa.2023.100171
58. Smiley, R. A., et al. (2023). The 2022 National Nursing Workforce Survey. *Journal of Nursing Regulation*, 14(Suppl 2), S1–S90. doi:10.1016/S2155-8256(23)00047-9
59. Smiley, R. A., Ruttinger, C., Oliveira, C. M., Hudson, L. R., Allgeyer, R. L., Reneau, K. A., ... Alexander, M. (2021). The 2020 National Nursing Workforce Survey. *Journal of Nursing Regulation*, 12(1 Suppl), S1–S96. doi:10.1016/S2155-8256(21)00027-2
60. Smit, C., & Peddle, M. (2025). Experiences and perceptions of registered nurses in acute care regarding incident reporting: A scoping review. *Healthcare*, 13(11), 1250. doi:10.3390/healthcare13111250
61. Sorra, J., Famolaro, T., Yount, N., & Smith, S. A. (2022). Hospital survey on patient safety culture: User's guide (Version 2.0). Agency for Healthcare Research and Quality. <https://www.ahrq.gov/sops/surveys/hospital/index.html>
62. Tasbihi, M., Thomas, E. J., Etchegaray, J. M., & Singh, H. (2025). Differences in patient safety culture across hospital units: A cross-sectional study. *BMJ Quality & Safety*, 34(1), 56–64. <https://doi.org/10.1136/bmjqs-2022-015064>
63. Wang, X., Liu, K., You, L. M., Xiang, J., Hu, H. G., & Zhang, L. F. (2021). Barriers to reporting adverse events in hospitals: A systematic review. *Journal of Patient Safety*, 17(8), e1465–e1475. <https://doi.org/10.1097/PTS.0000000000000785>
64. Wawersik, D. M., Boutin, E. R., Gore, T., et al. (2023). Individual characteristics that promote or prevent psychological safety and error reporting in healthcare: A systematic review. *Journal of Healthcare Leadership*, 15, 59–70. doi:10.2147/JHL.S369242
65. WTW. (2024). Just culture in healthcare: Moving from blame to learning. WTW Insights. <https://www.wtwco.com>
66. Yang, Y., & Liu, H. (2021). The effect of patient safety culture on nurses' near-miss reporting intention. *Journal of Research in Nursing*, 26(1–2), 6–16. doi:10.1177/1744987120979344
67. Yilmaz, A., Yildiz Keskin, A., & Sönmez, B. (2025). Nurses' perceptions of patient safety culture and voice behaviors. *Journal of Evaluation in Clinical Practice*, 31(3), e70046. doi:10.1111/jep.70046