SAFETY CULTURE AND SAFETY ATTITUDES OF NURSES EMPLOYED IN SALUBRIS MEDICAL CENTER

Karter U. Castañeda[1], Jhezarie Anne M. Cariño[2], Maryrose P. Cariño[3], Vivien Julianne C. Labasan[4], Xandrix Vhan S. Soriano[5], Elery Michelle C. Quiben RN, MSN[6]

ABSTRACT

Patient safety culture and attitudes among healthcare professionals play a crucial role in determining the overall quality and safety of care delivered in hospitals. Despite increasing efforts to enhance safety in Philippine healthcare, little is known about the relationship between institutional safety culture and individual safety attitudes among nurses in provincial medical centers. This study utilized a descriptive correlational quantitative research design to assess the perceptions of 49 registered nurses at Salubris Medical Center in Nueva Vizcaya regarding safety culture and safety attitudes, and to examine the correlation between the two. Using validated survey tools—the Hospital Survey on Patient Safety Culture (AHRQ-HSOPS 2.0) and the Safety Attitudes Questionnaire (SAQ)—data were collected and analyzed using descriptive statistics and Pearson's correlation. The results revealed that while nurses generally held positive perceptions of safety culture and safety attitudes, specific dimensions such as staffing adequacy, stress recognition, and management support were areas for improvement. A statistically significant moderate positive correlation ($r = 0.583$, $p < 0.01$) was found between safety culture and safety attitudes, suggesting that improvements in one may influence the other. Hospital leadership should prioritize strategic interventions such as leadership engagement, structured training, and non-punitive reporting systems to enhance both institutional safety culture and individual safety attitudes among nursing staff.

Keywords: Hospital leadership, nurse perception, safety culture, safety attitudes, patient safety

INTRODUCTION

Patient safety remains a vital concern in healthcare institutions due to the potential for errors that may result in serious harm or death. A critical approach to addressing this concern involves promoting a strong culture of safety and positive safety attitudes among healthcare staff, particularly nurses. Nurses, due to their direct and continuous involvement with patients, play a key role in preventing adverse events and maintaining high-quality care. Previous studies have demonstrated that knowledge gaps and communication issues, a lack of management support, and staffing issues are major barriers to ensuring patient safety. Inadequate safety culture and poor safety attitudes can compromise nurses' performance and negatively affect patient outcomes. According to the Agency for Healthcare Research and Quality (AHRQ, 2021), nurses are essential actors in advocating for and maintaining patient safety through consistent, evidence-based practices.

Healthcare systems today face the dual challenge of ensuring both quality and safety in an increasingly complex environment. From hospital-acquired infections to medication errors and adverse events, the risks are varied and significant. Safety culture and attitudes form the underlying framework that can mitigate these risks. Safety culture is defined as the product of individual and group values, attitudes, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization's health and safety management.

Research indicates that developing a robust safety culture begins with effective leadership and is sustained by collaborative practices across departments. The study by Burisaw

et al. (2020) concluded that fewer than half of the nurses in their survey demonstrated adequate knowledge of safety practices, underscoring a critical need for education and systems improvement. Bras et al. (2023) emphasized that dimensions such as feedback about error, communication openness, and staffing levels directly relate to perceptions of safety culture. Similarly, attitudes such as teamwork climate, stress recognition, and job satisfaction, as measured by the Safety Attitudes Questionnaire, reveal how individual nurses experience and respond to their organizational environment.

Given this context, the current study seeks to explore registered nurses' perceptions of safety culture and safety attitudes at Salubris Medical Center. It also aims to examine the relationship between these perceptions to determine if efforts to improve one may benefit the other. The findings of this research will be valuable to hospital administrators, nursing managers, and policy-makers interested in enhancing patient safety.

To guide this investigation, the study aimed to describe the safety culture and safety attitudes of nurses employed at Salubris Medical Center during the second semester of the academic year 2024–2025. Specifically, it sought to answer the following research questions: (1) What are the perceptions of the nurses employed in Salubris regarding safety culture and safety attitudes? (2) Is there a significant relationship between the safety culture and safety attitudes of nurses employed in Salubris? (3) What recommendations can be suggested to improve the safety culture and safety attitudes of nurses in Salubris Medical Center based on the gathered data? In line with these objectives, the study tested the following null hypothesis. There is no significant relationship between nurses' safety culture and safety attitudes at Salubris Medical Center.

METHODOLOGY

This study employed a descriptive, correlational quantitative research design to examine safety culture and safety attitudes among nurses employed at Salubris Medical Center (SMC) and to investigate the relationship between these two variables. A descriptive design was used to systematically observe and describe existing perceptions without manipulating variables, while a correlational design aimed to identify the statistical association between safety culture and safety attitudes. The study was conducted at Salubris Medical Center, a level II hospital with a 100-bed capacity, located along the National Highway in Barangay Roxas, Solano, Nueva Vizcaya. SMC was selected due to its relevance as a local healthcare provider actively working toward international safety standards and employing a full-time nursing staff. The sample included all 49 registered nurses employed at SMC for at least 6 months, in line with the Agency for Healthcare Research and Quality–Hospital Survey on Patient Safety Culture (AHRQ-HSOPS) guidelines, which recommend this period for familiarity with the institutional environment. Nurses from all wards and special units were eligible, while those with less than six months of employment were excluded. Total population sampling was used to ensure complete representation. Ethical approval was obtained from the University Research Ethics Office before the commencement of the study. An official request to conduct the study was submitted to the Chief of Hospital through the Nursing Director, and clearance from the Human Resources Department was secured to access the roster of eligible participants. Informed consent was obtained from all respondents, and they were assured of voluntary participation, anonymity, and confidentiality of their responses, with the option to withdraw at any point without penalty.

Regarding instrumentation, data were collected using a self-administered survey comprising two validated tools: the Hospital Survey on Patient Safety Culture (HSOPSC) 2.0, developed by AHRQ, and the Safety Attitudes Questionnaire (SAQ), developed by Sexton et al. (2006). The HSOPSC measured ten domains, including teamwork, communication about error, handoffs and information exchange, hospital management support, staffing, and response to

error, using a modified 4-point Likert scale. Similarly, the SAQ measured six safety attitude domains, such as teamwork climate, safety climate, job satisfaction, and stress recognition, also on a modified 4-point scale. Both tools demonstrated strong internal consistency in prior studies, with Cronbach's alpha values ranging from 0.70 to 0.93. In the current study, the questionnaire underwent expert validation by three clinical instructors—two of whom hold Master of Science in Nursing degrees—yielding a validity score of 3.76 out of 4. Negatively worded items in both instruments were reverse-scored to reduce response bias and ensure data accuracy.

Data collection occurred after securing ethical approval and institutional permissions. Surveys were distributed during low patient-volume periods to minimize workflow disruption. Completed surveys were collected in sealed envelopes and stored securely. The data analysis began with a review for completeness and accuracy. Missing values and outliers were assessed and handled appropriately to meet statistical assumptions. Descriptive statistics, including frequencies, means, and standard deviations, were used to summarize respondent characteristics and to interpret the overall levels of safety culture and safety attitudes. To interpret the Likert scale results, a scoring guide was applied: 1.00–1.49 (Strongly Disagree), 1.50–2.49 (Disagree), 2.50–3.49 (Agree), and 3.50–4.00 (Strongly Agree). For negatively worded items, reverse scoring was applied to align interpretation with positively worded items. To determine the relationship between safety culture and safety attitudes, Pearson's correlation coefficient was calculated. Correlation strength was interpreted using the following ranges: ±0.01–0.19 (very low), ±0.20–0.39 (low), ±0.40–0.59 (moderate), ±0.60–0.79 (high), and ±0.80–0.99 (very high). A positive correlation indicates a direct relationship between the two variables, helping assess whether improvements in one can predict improvements in the other. No study results are reported in this section to maintain its methodological integrity.

RESULTS AND DISCUSSION

Section 1. Perceptions of the Nurses Employed in Salubris Medical Center (SMC) on Safety Culture and Safety Attitudes

Safety Culture

Table 1

Means, Standard Deviations, and Qualitative Description of the Perceptions of Nurses Employed in Salubris Medical Center in Terms of Safety Culture

	Mean	Standard Deviation (s)	Qualitative Description
1. In this unit, we work together as an effective team.	3.59	0.50	Strongly Agree
2. In this unit, we have enough staff to handle the workload.	2.61	0.57	Agree
3. Staff in this unit work longer hours than is best for patient care.	1.90	0.55	Agree
4. This unit regularly reviews work processes to determine if changes are needed to improve patient safety.	3.37	0.53	Agree
5. This unit relies too much on temporary, float, or PRN staff.	3.08	0.67	Disagree
6. In this unit, staff feel like their mistakes are held against them.	2.86	0.68	Disagree
7. When an event is reported in this unit, it feels like the person is being written up, not the problem.	2.82	0.67	Disagree
8. During busy times, staff in this unit help each	3.47	0.54	Agree

other.			
9. There is a problem with disrespectful behavior by those working in this unit.	2.88	0.73	Disagree
10. When staff make errors, this unit focuses on learning rather than blaming individuals.	3.14	0.61	Agree
11. The work pace in this unit is so rushed that it negatively affects patient safety.	3.14	0.61	Disagree
12. In this unit, changes to improve patient safety are evaluated to see how well they worked.	3.39	0.53	Agree
13. In this unit, there is a lack of support for staff involved in patient safety errors	3.04	0.68	Disagree
14. This unit lets the same patient safety problems keep happening.	3.06	0.77	Disagree
15. My supervisor, manager, or clinical leader seriously considers staff suggestions for improving patient safety.	3.24	0.52	Agree
16. My supervisor, manager, or clinical leader wants us to work faster during busy times, even if it means taking shortcuts.	2.90	0.68	Disagree
17. My supervisor, manager, or clinical leader takes action to address patient safety concerns that are brought to their attention.	3.22	0.62	Agree
18. We are informed about errors that happen in this unit.	3.76	0.48	Always
19. When errors happen in this unit, we discuss ways to prevent them from happening again.	3.88	0.33	Always
20. In this unit, we are informed about changes that are made based on event reports.	3.73	0.53	Always
21. In this unit, staff speak up if they see something that may negatively affect patient care.	3.65	0.52	Always
22. When staff in this unit see someone with more authority doing something unsafe for patients, they speak up.	3.41	0.61	Sometimes
23. When staff in this unit speak up, those with more authority are open to their patient safety concerns.	3.31	0.58	Sometimes
24. In this unit, staff are afraid to ask questions when something does not seem right.	3.10	0.82	Rarely
25. When a mistake is caught and corrected before reaching the patient, how often is this reported?	3.33	0.75	Sometimes
26. When a mistake reaches the patient and could have harmed the patient, but did not, how often is this reported?	3.41	0.79	Sometimes
28. The actions of hospital management show that patient safety is a top priority.	3.69	0.47	Strongly Agree
29. Hospital management provides adequate resources to improve patient safety.	3.57	0.61	Strongly Agree
30. Hospital management seems interested in patient safety only after an adverse event happens.	2.76	0.69	Disagree
31. When transferring patients from one unit to another, important information is often left out.	3.22	0.69	Disagree
32. During shift changes, important patient care information is often left out.	3.16	0.75	Disagree
33. During shift changes, there is adequate time to exchange all key patient care information.	3.29	0.58	Agree
34. How would you rate your unit/work area on	3.53	0.50	Excellent

patient safety?			
Safety Culture Mean	3.23	0.28	Agree
27. In the past 12 months, how many patient safety events have you reported?	1.33	1.49	1 to 2 safety events reported

Legend: 1.00-1.49 (Strongly Disagree, Never, Poor), 1.50-2.49 (Disagree, Rarely, Fair), 2.50-3.49 (Agree, Sometimes, Good), 3.50-4.00 (Strongly Agree, Always, Excellent)
Legend (negatively worded items: 3, 5, 6, 7, 9, 11, 13, 14, 16, 24, 30, 31, and 32): 1.00-1.49 (Strongly Agree, Always, Excellent), 1.50-2.49 (Agree, Sometimes, Good), 2.50-3.49 (Disagree, Rarely, Fair), 3.50-4.00 (Strongly Disagree, Never, Poor)

The results revealed a generally positive perception, as reflected in the overall mean score of 3.23 (SD = 0.28). The highest items indicate that transparent communication about errors and an institutional emphasis on learning from mistakes are strong features of the hospital's safety culture. This aligns with the findings of Oweidat et al. (2023), which emphasized the importance of incident reporting for promoting patient safety. However, they noted variability in reporting practices based on demographic and work-related factors.

Contrasting studies, such as those by Namadi et al. (2024) and Mansour et al. (2020), reveal that many nurses experience fear or discomfort when reporting errors, especially those made by colleagues. Barriers to reporting include fear of interpersonal conflict, legal repercussions, and social isolation. These negative experiences can suppress open communication and hinder the establishment of a transparent safety culture. However, this study's results suggest that such barriers may be less prominent at Salubris Medical Center, where discussions about errors appear routine and constructive.

The significance of psychological safety and team dynamics in fostering error reporting was also highlighted. Munn et al. (2023) emphasized that error reporting improves when team members feel safe to voice concerns without fear of blame. This psychological safety fosters an environment where errors become opportunities for learning rather than causes for punishment. Moreover, effective communication and nurse-patient interactions have been identified as vital to improving safety perceptions, as suggested by Chance et al. (2024), particularly through mechanisms such as patient checklists during surgical procedures.

Despite the generally positive outlook, the study also identified areas of concern. The lowest-rated items were *"Staff in this unit work longer hours than is best for patient care"* (mean = 1.90), *"We have enough staff to handle the workload"* (mean = 2.61), and *"Hospital management seems interested in patient safety only after an adverse event happens"* (mean = 2.76). These responses suggest that workload, staffing, and reactive rather than proactive leadership approaches are perceived as weaknesses in the hospital's safety culture.

This finding is supported by Lee and Dahinten (2020), who noted that inadequate staffing diminishes nurses' capacity to engage in safety practices. Similarly, Fagerstrom et al. (2018) found a direct correlation between nurse shortages and higher patient incident rates. Conversely, Bae and Fabry (2014) argue that strong leadership and institutional support can mitigate the adverse effects of long hours, enabling safety culture to remain intact even under staffing strain. Cho et al. (2015) added that while staffing is critical, the broader work environment and organizational culture significantly influence safety outcomes.

In conclusion, the safety culture at Salubris Medical Center is perceived positively, especially in areas concerning communication and learning from errors. However, issues such as staffing shortages and reactive leadership responses pose challenges that require organizational attention. To further strengthen safety culture, the hospital should focus on staffing adequacy, proactive leadership, and continuous training to empower nurses and improve patient safety outcomes.

Safety Attitudes

Table 2

Means, Standard Deviations, and Qualitative Description of the Perceptions of Nurses Employed in Salubris Medical Center in Terms of Safety Attitudes

	Mean	Standard Deviation (s)	Qualitative Description
1. Nurse input is well-received in this clinical area.	3.61	0.49	Strongly Agree
2. In this clinical area, it is difficult to speak up if I perceive a problem with patient care.	2.92	0.86	Disagree
3. Disagreements in this clinical area are resolved appropriately (i.e., not who is right, but what is best for the patient).	3.59	0.50	Strongly Agree
4. I have the support I need from other personnel to care for patients.	3.49	0.62	Agree
5. It is easy for personnel here to ask questions when there is something that they do not understand.	3.49	0.65	Agree
6. The physicians and nurses here work together as a well- coordinated team.	3.73	0.45	Strongly Agree
7. I would feel safe being treated here as a patient.	3.65	0.48	Strongly Agree
8. Medical errors are handled appropriately in this clinical area	3.76	0.43	Strongly Agree
9. I know the proper channels to direct questions regarding patient safety in this clinical area.	3.61	0.49	Strongly Agree
10. I receive appropriate feedback about my performance.	3.49	0.71	Agree
11. In this clinical area, it is difficult to discuss errors.	3.14	0.87	Disagree
12. I am encouraged by my colleagues to report any patient safety concerns I may have.	3.53	0.54	Strongly Agree
13. The culture in this clinical area makes it easy to learn from the errors of others.	3.33	0.66	Agree
14. My suggestions about safety would be acted upon if I expressed them to management.	3.35	0.60	Agree
15. I like my job.	3.51	0.62	Strongly Agree
16. Working here is like being part of a large family.	3.49	0.62	Agree
17. This is a good place to work.	3.53	0.50	Strongly Agree
18. I am proud to work in this clinical area	3.65	0.48	Strongly Agree
19. Morale in this clinical area is high.	3.57	0.50	Strongly Agree
20. When my workload becomes excessive, my performance is impaired.	2.16	0.90	Disagree
21. I am less effective at work when fatigued.	2.53	0.92	Agree
22. I am more likely to make errors in tense or hostile situations.	2.08	0.73	Disagree
23. Fatigue impairs my performance during emergencies (e.g., emergency resuscitation, seizure).	2.18	0.86	Disagree
24.1 Management supports my daily efforts. (Unit Mgt)	3.10	0.59	Agree
24.2 Management supports my daily efforts. (Hosp Mgt)	3.12	0.63	Agree
25.1 Management doesn't knowingly compromise pt safety. (Unit Mgt)	2.12	0.78	Disagree

25.2 Management doesn't knowingly compromise pt safety. (Hosp Mgt)	2.10	0.80	Disagree
26.1 Management is doing a good job. (Unit Mgt)	3.39	0.61	Agree
26.2 Management is doing a good job. (Hosp Mgt)	3.31	0.55	Agree
27. 1Problem personnel are dealt with constructively by our: (Unit Mgt)	3.12	0.73	Agree
27.2 Problem personnel are dealt with constructively by our: (Hosp Mgt)	3.02	0.59	Agree
28.1 I get adequate, timely info about events that might affect my work, from: (Unit Mgt)	3.10	0.68	Agree
28.2 I get adequate, timely info about events that might affect my work, from: (Hosp Mgt)	3.04	0.68	Agree
29. The levels of staffing in this clinical area are sufficient to handle the number of patients.	2.71	0.71	Agree
30. This hospital does a good job of training new personnel.	3.12	0.70	Agree
31. All the necessary information for diagnostic and therapeutic decisions is routinely available to me.	3.02	0.56	Agree
32. Trainees in my discipline are adequately supervised.	3.16	0.59	Agree
33. I experience good collaboration with nurses in this clinical area.	3.55	0.50	Strongly Agree
34. I experience good collaboration with staff physicians in this clinical area.	3.59	0.50	Strongly Agree
35. I experience good collaboration with pharmacists in this clinical area.	3.33	0.59	Agree
36. Communication breakdowns that lead to delays in the delivery of care are common.	2.53	0.82	Disagree
Safety Attitudes Mean	3.17	0.26	Agree

Legend: 1.00-1.49 (Strongly Disagree), 1.50-2.49 (Disagree), 2.50-3.49 (Agree), 3.50-4.00 (Strongly Agree) (negatively worded items: 2, 11, and 36): 1.00-1.49 (Strongly Agree), 1.50-2.49 (Agree), 2.50-3.49 (Disagree), 3.50-4.00 (Strongly Disagree)

The results revealed an overall positive perception, with a computed mean score of 3.17 (SD = 0.26). This suggests that, on average, respondents agreed with the safety-attitude statements in their clinical environment. The high-scoring items indicate that nurses view their workplace as a safe, collaborative, and professionally satisfying environment.

The findings align with the literature, which emphasizes the critical role of leadership and organizational culture in fostering patient safety. Yilmaz and Sonmez (2024) highlight the importance of integrating safety education into nursing training and sustaining it through ongoing workplace-based programs. They argue that nurse educators and managers must collaborate to create systems that proactively prevent errors and cultivate non-punitive responses to mistakes. This aligns with the observed positive safety attitudes in the current study, reinforcing the need for continued investment in education, leadership development, and regulatory compliance.

The high rating for teamwork between nurses and physicians affirms the importance of coordination in healthcare delivery. As Moloro et al. (2025) suggest, deeper research is needed to identify specific factors—such as leadership styles, workload, or cultural dynamics—that may influence collaboration. While teamwork is currently strong, sustaining and improving it will require continuous effort and understanding of the underlying dynamics.

Organizational pride also emerged as a notable factor influencing safety attitudes. According to Badran and Mohamed (2024), nurses who feel proud of their workplace report higher job satisfaction and stronger commitment to organizational goals. Similar to the current findings, their study indicated that building a positive corporate culture, offering professional development opportunities, and recognizing staff achievements significantly boost staff morale and safety commitment. Enhancing organizational pride could thus be a viable strategy for improving overall safety attitudes and nurse retention.

Despite the generally positive results, some critical concerns were also noted. Item 22, *"I am more likely to make errors in tense or hostile situations"*, received the lowest mean score (2.08). Though a low score might suggest confidence or resilience, it may also indicate underrecognition of how stress impacts performance. High-pressure clinical environments often correlate with increased medical errors, a point reinforced by Reganata and Saputra (2022), who found a negative correlation between workload and nurse performance during the COVID-19 pandemic. This highlights the need for stress management interventions and better emotional support systems within the workplace.

Further issues relate to staff perceptions of management. Low scores were recorded for Items 25.2 and 25.1, which question whether hospital and unit management knowingly compromise patient safety. Mean scores of 2.10 and 2.12, respectively, suggest significant skepticism about leadership's commitment to safety. This aligns with findings from Malinowska-Lipień et al. (2021), who observed that poor evaluations of management often stem from a lack of visible engagement and communication with frontline staff. When leaders are perceived as distant or uninvolved, trust erodes, thereby undermining safety culture.

In conclusion, while safety attitudes at Salubris Medical Center are generally positive—especially regarding teamwork, error response, and workplace pride—important concerns persist. These include perceived stress-related vulnerabilities and limited trust in management's commitment to safety. Addressing these gaps will require stronger leadership visibility, structured emotional support, and continuous evaluation of organizational culture to maintain and improve nurse safety attitudes.

Section 2. Relationship Between Safety Culture and Safety Attitudes of Nurses Employed in Salubris Medical Center

Table 3

Significant Relationship Between Safety Culture and Safety Attitudes

AHRQ-HSOPS v 2.0 and SAQ	Pearson Correlation	.583**
	Sig. (2-tailed)	.000
	N	49

Legend: ±0.80-±0.99 (Very High Correlation), ±0.60-±0.79 (High Correlation), ±0.40-±0.59 (Moderate Correlation), ±0.20-±0.39 (Low Correlation), ±0.01-±0.19 (Very Low Correlation)

The Pearson correlation analysis revealed a moderate positive correlation ($r = 0.583$, $p = 0.000$) between safety attitudes and safety culture among nurses at Salubris Medical Center, indicating a statistically significant relationship. This suggests that nurses with more favorable safety attitudes tend to perceive their workplace safety culture more positively. While causality cannot be confirmed, the results highlight how individual perceptions of safety-related behaviors may influence overall views of organizational safety practices.

This finding is supported by Kusumuwati et al. (2019), who also found a positive relationship between patient safety culture and nurses' willingness to report incidents—emphasizing that a strong safety culture encourages transparency and continual improvement. Likewise, Zabin et al. (2023) found that job-related stressors such as fatigue, burnout, and heavy workloads negatively affect safety culture, suggesting that improving safety attitudes could help counteract these stressors.

Overall, the results suggest that enhancing safety attitudes through leadership involvement, stress management, and improved communication may positively impact the broader safety culture. Future research should investigate specific strategies to strengthen both areas, especially in high-pressure clinical environments.

Section 3. Recommendations Suggested to Improve the Safety Culture and Safety Attitudes of Salubris Medical Center Based on the Gathered Data

The study at Salubris Medical Center revealed generally positive perceptions among staff nurses regarding both safety culture (mean = 3.23) and safety attitudes (mean = 3.11). However, the findings also highlighted specific areas needing improvement. A statistically significant moderate positive correlation (r = 0.583) between safety culture and safety attitudes suggests that enhancing one domain may lead to improvements in the other. Based on these insights, several targeted recommendations have been proposed to strengthen both aspects of patient safety within the institution.

To enhance safety culture, the foremost recommendation is to implement a non-punitive error-reporting system. Encouraging staff to report mistakes without fear of disciplinary action is essential to building a transparent, learning-oriented environment. This was echoed by a participant (Respondent 15), who suggested adopting such a system to ensure that concerns are raised promptly. This aligns with the study's quantitative findings, particularly the high scores for items like *"discussing ways to prevent errors"* (mean = 3.88) and *"being informed about changes based on event reports"* (mean = 3.73), indicating that communication around errors is already a strong point but still requires institutional reinforcement.

Improving safety attitudes requires attention to staff's emotional and psychological well-being. One of the lowest-rated items was *"I am more likely to make errors in tense or hostile situations"* (mean = 2.08), reflecting a vulnerability under stress. This points to the necessity of stress management and conflict resolution training. The study by Choi and Ahn (2021) supports the effectiveness of such interventions, particularly those based on situated learning theory, in enhancing problem-solving and interpersonal skills. Implementing similar workshops for staff could increase resilience and decrease error rates during high-pressure scenarios.

The development of a supportive and respectful work environment was another recurring theme in both the survey results and open-ended feedback. Respondents emphasized the need for professionalism, compassion, and camaraderie. Suggestions like adopting the "golden rules of Salubris" (Respondent 10) and creating "a friendly and healthy working environment" (Respondent 14) reflect the importance of team dynamics in promoting positive safety attitudes. Establishing peer support systems and reinforcing values of mutual respect can further enhance psychological safety among staff.

Finally, visible leadership engagement is essential for reinforcing both safety culture and attitudes. Nurses emphasized the role of supervisory behavior in influencing staff performance (Respondent 5). This reinforces the need for leadership development programs focused on safety-oriented behaviors, communication, and accountability. As supported by recent literature (e.g., Alshammari et al., 2024; Zabin et al., 2023), leadership visibility and commitment are

strong predictors of patient safety outcomes. In conclusion, integrating system-level interventions (e.g., non-punitive reporting), personal development strategies (e.g., training, stress management), and leadership initiatives provides a comprehensive roadmap to strengthen safety culture and safety attitudes at Salubris Medical Center.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study concludes that nurses at Salubris Medical Center generally perceive both safety culture and safety attitudes positively, particularly in areas of communication, collaboration, and learning from errors. The moderate positive correlation between the two variables highlights that improvements in safety attitudes may support improvements in safety culture, and vice versa. Despite these strengths, notable gaps remain—particularly in staffing adequacy, stress recognition, and perceived managerial support—requiring targeted organizational attention. These findings imply that sustained efforts to promote open communication, emotional resilience, and proactive leadership are crucial in strengthening patient safety systems. For nursing practice and hospital administration, this means prioritizing non-punitive error reporting, staff development, and leadership visibility. Integrating these strategies into institutional policies may help foster a consistently safe environment for both patients and healthcare providers.

This study has several limitations that may affect the interpretation and generalizability of its findings. First, it was conducted exclusively among 49 registered nurses at Salubris Medical Center, excluding other healthcare professionals such as physicians, midwives, allied health workers, and administrative staff. Second, the study did not incorporate patient perspectives. Since patients are direct recipients of care, their views are critical in evaluating the effectiveness of safety practices and the overall safety climate within a healthcare institution. Third, the use of self-reported survey tools introduces the risk of bias, including social desirability and recall bias. Respondents may have answered in ways they believed were expected or may have inaccurately recalled past experiences, which could affect the reliability of the data. Lastly, the study was conducted in a single healthcare institution, meaning its findings reflect the unique organizational context of Salubris Medical Center at the time of data collection. Therefore, caution should be exercised when generalizing the results to other hospitals or healthcare settings.

Recommendations

For Salubris Medical Center, strengthening safety culture and attitudes may be supported through several initiatives. First, implementing structured, continuous safety training is encouraged, particularly in areas such as communication, workload management, and stress recognition—domains identified as less positively perceived in the study. These training opportunities should be embedded in existing professional development structures to ensure accessibility and relevance. Second, a regular staffing evaluation process could help align nurse-to-patient ratios with current demands, thereby reducing fatigue and improving clinical focus. Leadership teams may also consider enhancing visibility and engagement through scheduled safety walk rounds and feedback sessions, which may help reinforce trust and support, particularly in units where perceptions of leadership are lower.

To improve daily practice, forming unit-level safety communication committees may help nurses engage more directly with safety goals and incident data. These committees could serve as platforms for feedback and shared decision-making. Furthermore, establishing a

mentorship program between senior and junior staff could enhance knowledge transfer, support safe behaviors, and build a culture of peer accountability. Complementing these initiatives, a secure, anonymous feedback mechanism can help staff express safety-related concerns without fear, enabling management to identify and address systemic barriers. Promoting a non-punitive incident reporting system may also help normalize open discussions of mistakes as learning opportunities, reinforcing a just culture. Lastly, resilience-building and mental health resources—such as stress management workshops or accessible wellness spaces—can provide staff with tools to better manage work-related pressures, particularly in high-stress units like the emergency room.

For future researchers, several directions are suggested. First, expanding the sample to include physicians, allied health professionals, and other non-nursing staff could offer a more complete view of the institution's safety culture. Second, researchers may explore how demographic and professional variables—such as age, training, and clinical experience—influence safety perceptions. This could inform more tailored interventions. Third, comparative and mixed-methods studies across different hospital settings and ownership types (e.g., public vs. private) could uncover contextual factors that affect safety dynamics. Finally, incorporating patient and family perspectives would add valuable insight into how institutional safety practices align with actual care experiences and expectations. These recommendations are grounded in the data gathered through this study and aim to support practical improvements in both policy and practice. They are not intended as prescriptive mandates but rather as informed suggestions that can be adapted and refined based on further evaluation and stakeholder input.

REFERENCES

Badran, F. M., & Mohamed, E. H. (2024). Organizational pride and job satisfaction among staff nurses. *Research Square*. https://doi.org/10.21203/rs.3.rs-4391456/v1

Bae, S., & Fabry, D. (2014). Assessing the relationships between nurse work hours/overtime and nurse and patient outcomes: A systematic literature review. *Nursing Outlook, 62*(2), 138–156. https://doi.org/10.1016/j.outlook.2013.10.009

Chance, E. A., Florence, D., & Abdoul, I. S. (2024). The effectiveness of checklists and error reporting systems in enhancing patient safety and reducing medical errors in hospital settings: A narrative review. *International Journal of Nursing Sciences*. https://doi.org/10.1016/j.ijnss.2024.06.003

Choi, H., & Ahn, S. H. (2021). Effects of a conflict resolution training program on nursing students: A quasi-experimental study based on situated learning theory. *Nurse Education Today, 103*, 104951. https://doi.org/10.1016/j.nedt.2021.104951

Cho, E., Chin, D. L., Kim, S., & Hong, O. (2015). The relationships of nurse staffing level and work environment with patient adverse events. *Journal of Nursing Scholarship, 48*(1), 74–82. https://doi.org/10.1111/jnu.12183

Deilkås, E. T., & Hofoss, D. (2008). Psychometric properties of the Norwegian version of the Safety Attitudes Questionnaire (SAQ), generic version (short form 2006). *BMC Health Services Research, 8*(1), 191. https://doi.org/10.1186/1472-6963-8-191

Lee, S. E., & Dahinten, V. S. (2020). The enabling, enacting, and elaborating factors of safety culture associated with patient safety: A multilevel analysis. *Journal of Nursing Scholarship, 52*(5), 544–552. https://doi.org/10.1111/jnu.12585

Mansour, R., Ammar, K., Al-Tabba, A., Arawi, T., Mansour, A., & Al-Hussaini, M. (2020). Disclosure of medical errors: Physicians' knowledge, attitudes, and practices (KAP) in an oncology center. *BMC Medical Ethics, 21*(1). https://doi.org/10.1186/s12910-020-00513-2

Moloro, A. H., Sabo, K. G., Lahole, B. K., Wengoro, B. F., & Mare, K. U. (2025). Prevalence of

interprofessional collaboration towards patient care and associated factors among nurses and physicians in Ethiopia, 2024: A systematic review and meta-analysis. *BMC Nursing, 24*(1). https://doi.org/10.1186/s12912-025-02847-x

Munn, L. T., Lynn, M. R., Knafl, G. J., Willis, T. S., & Jones, C. B. (2023). A study of error reporting by nurses: The significant impact of nursing team dynamics. *Journal of Research in Nursing, 28*(5), 354–364. https://doi.org/10.1177/17449871231194180

Namadi, F., Alilu, L., & Habibzadeh, H. (2024). Nurses' experiences of reporting the medical errors of their colleagues: A qualitative study. *BMC Nursing, 23*(1). https://doi.org/10.1186/s12912-024-02092-8

Reganata, G. P., & Saputra, I. G. N. M. Y. (2022). Workload and performance of nurses during the COVID-19 pandemic: A meta-analysis study. *Jurnal Varian, 5*(2), 107–114.

Yılmaz, A., & Sönmez, B. (2024). Nurses' perspectives and experiences on medical errors: A qualitative study. *Journal of Evaluation in Clinical Practice, 30*(6), 1153–1164. https://doi.org/10.1111/jep.14125

Zabin, L. M., Zaitoun, R. S. A., Sweity, E. M., & De Tantillo, L. (2023). The relationship between job stress and patient safety culture among nurses: A systematic review. *BMC Nursing, 22*(1). https://doi.org/10.1186/s12912-023-01198-9