



ASSESSMENT ON THE ADHERENCE OF PATIENT SAFETY AND ITS BARRIERS TO IMPLEMENTATION: BASIS FOR RISK REDUCTION AND POLICY ENHANCEMENT

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ABSTRACT

This study aimed to assess adherence to patient safety and the barriers to its implementation in a government hospital in the 2nd District of Bohol from May to September 2025, focusing on their relationship to nurses' demographic profiles, perceived barriers, patient safety goals, and outcomes. Employing a quantitative, descriptive-correlational research design, the study surveyed nurses using a structured questionnaire that covered dimensions such as leadership and governance, patient and family engagement, learning systems, workforce safety, and incident management. The findings revealed that demographic factors such as age, sex, length of service, and area of assignment did not significantly influence patient safety outcomes. However, significant correlations were found between adherence to the Patient Safety Program and other key variables. A strong positive correlation was observed between program adherence and patient safety goals, whereas a moderate negative correlation was observed between adherence and patient safety outcomes, suggesting that structural and systemic factors may mediate the effectiveness of safety protocols. Additionally, perceived barriers showed a weak but significant negative correlation with both safety goals and outcomes. The study's findings align with Avedis Donabedian's Structure–Process–Outcome (SPO) framework and the 2024 Risk Management Framework for Healthcare Facilities by the QPSNHS, highlighting the importance of robust safety structures and processes in achieving positive patient outcomes. Recommendations include strengthening hospital leadership, enhancing staff training, and addressing systemic barriers to improve safety implementation and outcomes.

Keywords: *patient safety program, patient safety outcomes, perceived barriers, safety goals, nurse demographics, healthcare quality, risk management, Donabedian SPO model, GPSNHS framework, hospital safety implementation*

INTRODUCTION

Patient safety is a global health priority and a fundamental component of healthcare quality. The World Health Organization defines it as the prevention of errors and adverse effects associated with healthcare delivery (WHO, 2021). This is particularly critical in hospital settings, where system inefficiencies, miscommunication, and clinical errors can compromise patient outcomes. In developing countries such as the Philippines, government hospitals play a vital role in delivering healthcare services and must therefore prioritize effective patient safety initiatives.

Government hospitals in the Philippines are mandated to implement patient safety programs, including infection control, medication safety, surgical checklists, and incident reporting systems (Tamondong-Lachica et al., 2020). However, consistent implementation remains a challenge due to resource constraints, staffing shortages, inadequate training, and administrative limitations (Daou et al., 2021). Variability in compliance, weak reporting systems, and limited patient engagement further contribute to gaps in safety practices, resulting in uneven healthcare outcomes (Ramos & Calidgid, 2018; Kang et al., 2021).

Institutional data from Don Emilio Del Valle Memorial Hospital from 2022 to mid-2025 reflect both progress and ongoing challenges in patient safety. While improvements in infection control and reductions in medication errors suggest effective interventions, recurring issues in high-acuity areas and among vulnerable populations highlight the need for continuous monitoring and targeted strategies. These trends underscore the importance of context-specific assessments in strengthening patient safety programs.

This study addresses a critical gap in the literature by focusing on the implementation of patient safety measures in a district-level government hospital in the 2nd District of Bohol. While existing studies have largely examined tertiary institutions, research on the unique challenges faced by district hospitals remains limited. By assessing adherence to patient safety protocols and identifying implementation barriers, this study aims to provide evidence-based recommendations to support nurse administrators and policymakers in enhancing patient safety practices.

Research Questions

The study assessed the adherence to patient safety and the barriers to its implementation in a public hospital in the 2nd District of Bohol.

Specifically, it sought to answer these questions:

1. What is the extent of adherence to the patient safety program in terms of the following:
 - 1.1 Culture, Leadership, Governance;
 - 1.2 Patient & family engagement;
 - 1.3 Learning system; and
 - 1.4 Workforce safety?
2. What are barriers in implementing the patient safety program in terms of the following:
 - 2.1 Culture, Leadership, Governance;
 - 2.2 Patient & family engagement;
 - 2.3 Learning system; and
 - 2.4 Workforce safety?
3. What are the patient safety goals as perceived by the respondents?
4. What are the patient safety outcomes as perceived by the respondents?
5. Is there a significant degree of correlation between the following:
 - 5.1 extent of adherence of the patient safety program and perceived barriers in implementing the patient safety program;
 - 5.2 extent of adherence of the patient safety program and patient safety goals;
 - 5.3 extent of adherence of the patient safety program and patient safety outcomes;
 - 5.4 perceived barriers in implementing the patient safety program and patient safety goals;
 - 5.5 perceived barriers in implementing the patient safety program and patient safety outcomes; and
 - 5.6 patient safety goals and patient safety outcomes?

METHODOLOGY

This study employed a quantitative, descriptive-correlational design to examine the implementation of the Patient Safety Program in a government hospital in the 2nd District of Bohol. The design enabled the analysis of relationships between nurses' demographic characteristics and their perceptions of patient safety practices; however, it does not establish causality.

The study was conducted in a secondary-level public hospital with approximately 180–220 beds. The respondents consisted of 111 nurses selected through simple random sampling from a total population of 155. Inclusion criteria required at least one year of clinical experience and active involvement in patient safety practices. Nurses who did not meet these criteria were excluded.

Data were collected using a structured, researcher-adapted questionnaire based on institutional patient safety guidelines and related frameworks. The instrument comprised five sections: (1) respondent profile; (2) extent of adherence to patient safety programs; (3) barriers to implementation; (4) patient safety goals; and (5) patient safety outcomes. Items were rated using a four-point Likert scale. The instrument underwent pilot testing and demonstrated acceptable to excellent internal consistency, with Cronbach's alpha coefficients ranging from 0.78 to 0.95.

Data gathering followed standard ethical procedures, including institutional approval, informed consent, and assurance of confidentiality. Questionnaires were administered anonymously to ensure unbiased responses.

Data analysis used descriptive statistics, including frequency, percentage, mean, and standard deviation, to summarize respondent characteristics and key variables. Spearman's rank correlation coefficient (ρ) was employed to examine relationships between patient safety goals and outcomes, with statistical significance set at $p < 0.05$.

The study was limited to a single government hospital, which may affect the generalizability of findings. Additionally, reliance on self-reported data may introduce response bias.

RESULTS

Extent of Adherence to the Patient Safety Program as Perceived by the Respondents

Overall adherence to the Patient Safety Program was rated "Highly Adherent," with a composite mean of 3.60, reflecting strong integration of safety practices into daily hospital operations.

Table 1. Extent of Adherence to the Patient Safety Program as Perceived by the Respondents (n=111)

Domains	Composite Mean	Derived Value	Interpretation	Rank
Culture, Leadership and Governance	3.61	Extremely Observed	Highly adhered	3
Patient and Family Engagement	3.68	Extremely Observed	Highly adhered	1
Learning System	3.62	Extremely Observed	Highly adhered	2
Workforce Safety	3.49	Extremely Observed	Highly adhered	4
Composite Mean	3.60	Extremely Observed	Highly adhered	

Legend:

Scale	Derived Value	Interpretation
1.00 – 1.75	Not Observed (NO)	Not adhered at all
1.76 – 2.50	Slightly Observed (SO)	Slightly adhered
2.51 – 3.25	Moderately Observed (MO)	Moderately adhered
3.26 – 4.00	Extremely Observed (EO)	Highly adhered

Barriers in Implementing the Patient Safety Program as Perceived by the Respondents

Overall, barriers to implementing the Patient Safety Program were generally rated as slightly observed, with a composite mean of 1.89, indicating that challenges are mild and do not significantly hinder program success.

Table 2. Barriers in Implementing the Patient Safety Program as Perceived by the Respondents (n=111)

Domains	Composite Mean	Derived Value	Interpretation	Rank
Culture, Leadership and Governance	1.83	Slightly Observed	Slight barriers in program implementation	4
Patient and Family Engagement	1.91	Slightly Observed	Slight barriers in program implementation	2
Learning System	1.91	Slightly Observed	Slight barriers in program implementation	2
Workforce Safety	1.91	Slightly Observed	Slight barriers in program implementation	2
Composite Mean	1.89	Slightly Observed	Slight barriers in program implementation	

Legend:

Scale	Derived Value	Interpretation
1.00 – 1.75	Not Observed (NO)	No barriers at all
1.76 – 2.50	Slightly Observed (SO)	Slight barriers in program implementation
2.51 – 3.25	Moderately Observed (MO)	Moderate barriers in program implementation
3.26 – 4.00	Extremely Observed (EO)	High barriers in program implementation

Patient Safety Goals as Perceived by the Respondents

The figure below depicts the patient safety goals as perceived by the respondents. With a composite mean of 3.71, this variable is perceived as highly prevalent in the workplace.

Table 3. Patient Safety Goals as Perceived by the Respondents (n=111)

Statements	Mean	Qualitative Description	Interpretation	Rank
1. The hospital ensures accurate patient identification using at least two patient identifiers in all procedures.	3.78	Extremely Observed	Highly achieved in the workplace	3
2. Communication among healthcare providers is structured and clear to prevent errors (e.g., use of SBAR, Check-Back, and Read-Back techniques).	3.71	Extremely Observed	Highly achieved in the workplace	5
3. Proper medication management and high-alert medication protocols are strictly followed.	3.73	Extremely Observed	Highly achieved in the workplace	4
4. Compliance with infection prevention and control measures (e.g., hand hygiene, sterilization) is consistently practiced.	3.69	Extremely Observed	Highly achieved in the workplace	7
5. Surgical and invasive procedures adhere to the WHO Surgical Safety Checklist and "Time Out" protocols.	3.86	Extremely Observed	Highly achieved in the workplace	1
6. A structured fall prevention program is implemented, including patient risk assessments and preventive interventions.	3.84	Extremely Observed	Highly achieved in the workplace	2
7. Rapid response to critical test results ensures timely intervention for patient safety.	3.49	Extremely Observed	Highly achieved in the workplace	10
8. The hospital maintains an effective incident reporting system to address safety concerns and prevent future risks.	3.65	Extremely Observed	Highly achieved in the workplace	9
9. Safe handover practices are followed to ensure continuity of care across different shifts and departments.	3.69	Extremely Observed	Highly achieved in the workplace	7
10. Patients and families are actively engaged in safety measures, including informed consent and patient education.	3.69	Extremely Observed	Highly achieved in the workplace	7
Composite Mean	3.71	Extremely Observed	Highly achieved in the workplace	

Legend:

Scale	Derived Value	Interpretation
1.00 – 1.75	Not Observed (NO)	Not achieved at all
1.76 – 2.50	Slightly Observed (SO)	Slightly achieved in the workplace
2.51 – 3.25	Moderately Observed (MO)	Moderately achieved in the workplace
3.26 – 4.00	Extremely Observed (EO)	Highly achieved in the workplace

Patient Safety Outcomes as Perceived by the Respondents.

The overall composite mean of 3.65 indicates that patient safety outcomes are highly achieved and extremely observed, reflecting effective implementation of safety measures.

Table 4. Patient Safety Outcomes as Perceived by the Respondents (n=111)

Statements	Mean	Qualitative Description	Interpretation	Rank
1. The hospital has demonstrated a reduction in medication errors through effective verification and administration protocols.	3.57	Extremely Observed	Highly achieved in the workplace	8
2. The incidence of hospital-acquired infections (HAIs) has decreased due to strict infection control measures.	3.45	Extremely Observed	Highly achieved in the workplace	10
3. The occurrence of patient falls and adverse events has significantly declined as a result of safety interventions.	3.59	Extremely Observed	Highly achieved in the workplace	7
4. Timely communication of critical test results has improved patient care outcomes.	3.61	Extremely Observed	Highly achieved in the workplace	6
5. Staff actively participate in incident reporting and learning from errors, fostering a culture of safety.	3.49	Extremely Observed	Highly achieved in the workplace	9
6. Compliance with surgical safety procedures has resulted in fewer preventable surgical complications.	3.78	Extremely Observed	Highly achieved in the workplace	1.5
7. Patient satisfaction surveys indicate improved perceptions of hospital safety measures.	3.76	Extremely Observed	Highly achieved in the workplace	3.5
8. Interdisciplinary collaboration and teamwork have enhanced patient safety practices.	3.73	Extremely Observed	Highly achieved in the workplace	5
9. Workforce safety measures have contributed to a healthier, more secure work environment for healthcare staff.	3.76	Extremely Observed	Highly achieved in the workplace	3.5
10. Overall, the hospital has achieved better patient recovery rates and quality healthcare outcomes due to improved safety protocols.	3.78	Extremely Observed	Highly achieved in the workplace	1.5
Composite Mean	3.65	Extremely Observed	Highly achieved in the workplace	

Legend:

Scale	Derived Value	Interpretation
1.00 – 1.75	Not Observed (NO)	Not achieved at all
1.76 – 2.50	Slightly Observed (SO)	Slightly achieved in the workplace

2.51 – 3.25	Moderately Observed (MO)	Moderately achieved in the workplace
3.26 – 4.00	Extremely Observed (EO)	Highly achieved in the workplace

Significant Degree of Correlation Between the following Variables

The results presented below suggest several significant correlations between different variables related to patient safety programs, with varying degrees of strength. Each of these correlations sheds light on the relationships between the implementation of patient safety programs, perceived barriers, and patient safety outcomes.

Table 5. Significant Degree of Correlation Between the following Variables

Variables	r-value	Interpretation	p-value	Result	Decision
Extent of Adherence of the Patient Safety Program and Perceived Barriers in Implementing the Patient Safety Program	0.686	Moderate Correlation	0.000	Significant	Reject Ho
Extent of Adherence of the Patient Safety Program and Patient Safety Goals	0.709	Strong Correlation	0.000	Significant	Reject Ho
Extent of Adherence of the Patient Safety Program and Patient Safety Outcomes	-0.424	Moderate Correlation	0.000	Significant	Reject Ho
Perceived Barriers in Implementing the Patient Safety Program and Patient Safety Goals	-0.362	Weak Correlation	0.000	Significant	Reject Ho
Perceived Barriers in Implementing the Patient Safety Program and Patient Safety Outcomes	-0.383	Weak Correlation	0.000	Significant	Reject Ho
Patient Safety Goals and Patient Safety Outcomes	0.824	Strong Correlation	0.000	Significant	Reject Ho

DISCUSSION

Extent of Adherence to the Patient Safety Program as Perceived by the Respondents

Patient and Family Engagement ranked highest (mean = 3.68), highlighting effective patient education, transparent communication, and involvement in treatment decisions, which fosters collaboration and patient-centered safety. The Learning System was followed (mean = 3.62), indicating that regular training and incident-reporting mechanisms support continuous learning, though opportunities exist to improve feedback and the sharing of lessons learned.

Culture, Leadership, and Governance scored 3.61, indicating strong leadership commitment through policies, safety initiatives, and non-punitive approaches, with room to enhance transparency and encourage open reporting. Workforce Safety received the lowest rating (mean = 3.49), reflecting general adherence to PPE, infection control, and emergency preparedness, but highlighting concerns about staffing, burnout, and workplace violence prevention. Overall, the findings suggest that the hospital maintains a robust safety culture, with targeted areas for further improvement in staff support and the integration of learning.

Overall adherence to the Patient Safety Program is observed across all assessed domains, with particularly strong performance in Patient and Family Engagement and Learning System. However, attention to Workforce Safety, especially regarding staffing adequacy and workplace support, is crucial to ensure the hospital maintains not only a safe environment for patients but also a sustainable, well-supported workforce. Strengthening these areas will help create a more resilient patient safety culture that benefits both healthcare providers and patients alike.

The overall extent of adherence to the Patient Safety Program, as perceived by nurses, was rated as “Highly Adhered,” with a composite mean of 3.60, indicating that patient safety practices are well integrated into daily hospital operations and widely recognized by staff. Among the domains assessed, Patient and Family Engagement received the highest rating (mean = 3.68), highlighting the hospital’s success in involving patients and families in safety-related initiatives through education, transparent communication, and participation in treatment planning.

This finding aligns with literature showing that patient-centered engagement enhances safety outcomes and fosters collaboration (Rosen & Rivard, 2025; Dukhanin et al., 2023; Listiowati et al., 2023). The Learning System (mean = 3.62) reflects effective continuous education, training, and incident reporting, though feedback and lesson-sharing can be strengthened (Carmack et al., 2024; Kimura et al., 2023; Samani & Rattani, 2023). Culture, Leadership, and Governance (mean = 3.61) demonstrates a strong commitment to leadership and non-punitive practices, yet transparency and the encouragement of reporting remain areas for improvement (Al-Oweidat et al., 2023; Shi et al., 2025). Workforce Safety, though highly rated (mean = 3.49), shows relative weakness in staffing,

violence prevention, and mental health support, which are critical for staff well-being and patient safety (Hesgrove et al., 2024; Foglia et al., 2026; Murray et al., 2024; O'Brien et al., 2024).

Barriers in Implementing the Patient Safety Program as Perceived by the Respondents

Among the domains, Patient and Family Engagement, Learning System, and Workforce Safety each had a composite mean of 1.91. Barriers in these areas included limited patient involvement, fear of blame, access to updated protocols, high workloads, understaffing, and occasional PPE shortages. While present, these issues are not major obstacles and could be mitigated through improved engagement, feedback systems, training, and resource allocation.

Culture, Leadership, and Governance had the lowest perceived barriers (mean = 1.83), mainly related to communication and resource management, suggesting only minor improvements are needed to fully support patient safety initiatives. Overall, the findings indicate that the hospital faces relatively minor barriers, with targeted interventions likely to enhance program effectiveness.

The overall barriers to implementing the Patient Safety Program were perceived as relatively mild, with a composite mean of 1.89 indicating slightly observed barriers across the domains. While the challenges identified are not insignificant, they are manageable and do not pose substantial barriers to the success of the program. Addressing these barriers—such as improving communication, increasing staffing, enhancing patient and family involvement, and ensuring timely updates and feedback—can further strengthen the implementation of the Patient Safety Program and improve both staff and patient safety outcomes in the hospital.

With the findings, the overall barriers in implementing the Patient Safety Program are generally mild, aligning with previous research that suggests most hospitals face only slightly observed challenges in executing safety initiatives (Al-Oweidat et al., 2023; Carmack et al., 2024; Shi et al., 2025). Across the domains of Culture, Leadership and Governance, Patient and Family Engagement, Learning System, and Workforce Safety, barriers are typically related to communication gaps, resource limitations, fear of blame, and staffing constraints, but they rarely constitute major obstacles (Carmack et al., 2024; Kimura et al., 2023; Samani & Rattani, 2023). Specifically, Patient and Family Engagement challenges, such as limited involvement in decision-making and safety education, are consistent with global findings that highlight the need for structured education, formal reporting mechanisms, and culturally sensitive communication to empower patients and families in safety initiatives (Dukhanin et al., 2025; Tai et al., 2024). Learning System barriers, including the fear of reporting errors and limited access to updated protocols, align with the literature emphasizing the importance of a non-punitive culture, continuous training, and timely feedback to sustain learning and improvement (Carmack et al., 2024; Shi et al., 2025). Workforce Safety barriers, such as high workloads, understaffing, and limited PPE availability, are also frequently cited as challenges that can compromise both staff and patient safety, highlighting the need for

appropriate staffing, resource allocation, and occupational support systems (Rawas & Abou Hashish, 2023; Al-Oweidat et al., 2023). Finally, although fewer in number, Culture, Leadership, and Governance barriers involve minor issues in communication and resource management, aligning with studies that underscore the role of leadership in creating a supportive environment for patient safety (Shi et al., 2025; Kimura et al., 2023). Overall, these findings indicate that while the hospital encounters some barriers across all domains, they are generally minor and manageable, supporting perceptions of high adherence to patient safety practices and the program's overall effectiveness.

Patient Safety Goals as Perceived by the Respondents

Among patient safety goals, the highest-rated was surgical and invasive procedures, with adherence to the WHO Surgical Safety Checklist and "Time Out" protocols (mean = 3.86, Rank 1), reflecting strong commitment to minimizing surgical errors. Fall prevention ranked second (mean = 3.84), showing proactive risk assessment and interventions. Accurate patient identification scored 3.78, and structured communication among providers (e.g., SBAR) scored 3.71, highlighting efforts to prevent errors through clear communication.

Medication management (mean = 3.73), infection control (3.69), safe handover (3.69), and patient/family engagement (3.69) were also highly observed, indicating diligence in routine safety measures and continuity of care. The incident reporting system (3.65) reinforces learning from safety events.

Rapid response to critical test results had the lowest score (3.49) but still demonstrates timely intervention, suggesting some room for improvement. The rapid response to critical test results received the lowest rating (mean = 3.49), indicating it is a key area for closer examination despite being "Highly Achieved." This may reflect delays in communication, coordination, or workflow processes involved in relaying and acting on critical values. Timely response to such results often depends on multiple factors, including laboratory turnaround time, communication channels, staff availability, and protocol clarity, any of which can introduce delays. The implication is significant: even minor lapses in responding to critical results can compromise patient outcomes, particularly in urgent or life-threatening conditions. This finding suggests that the hospital should strengthen real-time communication systems, streamline escalation protocols, and ensure accountability for follow-through actions. Enhancing these processes can improve responsiveness, reduce risks, and ensure that critical information leads to immediate and appropriate clinical interventions. Overall, these results indicate the hospital maintains a strong, comprehensive approach to patient safety across multiple high-risk areas.

The Patient Safety Goals are largely highly achieved in the hospital, with most safety protocols being extremely observed by respondents. The hospital's commitment to patient safety is reflected in the high ratings across various domains, particularly in surgical safety, fall prevention, and accurate patient identification. While there is always room for further improvement, especially in areas like responding to critical test results, the overall results suggest a strong adherence to patient safety measures, ensuring a safe and effective environment for both patients and healthcare workers.

Patient Safety Goals (PSGs) are critical strategic objectives that guide hospitals in minimizing medical errors, improving the quality of care, and enhancing patient safety. Research indicates that hospitals with clearly defined and actively implemented PSGs demonstrate higher compliance with safety protocols and better patient outcomes (Al-Oweidat et al., 2023; Carmack et al., 2024; Shi et al., 2025). The high ratings observed in surgical and invasive procedures, such as adherence to the WHO Surgical Safety Checklist and “Time Out” protocols, reflect global evidence that structured surgical safety interventions significantly reduce perioperative complications and prevent errors (Kochis et al., 2024; Kimura, 2023). Similarly, programs for fall prevention, accurate patient identification using two identifiers, and structured communication techniques like SBAR, Check-Back, and Read-Back have been consistently shown to enhance patient safety by mitigating preventable adverse events (Tai et al., 2024; Samani & Rattani, 2023). High compliance with medication management and infection prevention protocols also aligns with current literature, which emphasizes that standardized procedures and strict adherence to guidelines reduce the incidence of medication errors and healthcare-associated infections (Rawas & Abou Hashish, 2023; Dukhanin et al., 2025). Moreover, effective incident-reporting systems and rapid responses to critical test results are identified in studies as essential mechanisms for fostering a learning-oriented safety culture, enabling healthcare organizations to analyze errors and implement corrective actions (Carmack et al., 2024; Kimura et al., 2023). These findings support the current results, where respondents perceive that the hospital has successfully achieved its patient safety goals, demonstrating a robust and proactive safety culture that encompasses procedural safety, infection control, communication, and patient engagement.

Patient Safety Outcomes as Perceived by the Respondents

The overall composite mean of 3.65 indicates that patient safety outcomes are highly achieved and extremely observed, reflecting effective implementation of safety measures. The highest-rated outcomes were compliance with surgical safety procedures and improved patient recovery rates (both with a mean of 3.78), indicating that adherence to protocols enhances surgical safety and overall recovery. Patient satisfaction and workforce safety both scored 3.76, indicating that patients perceive a safe environment and staff are protected from occupational hazards, reinforcing a strong safety culture. Other notable outcomes included interdisciplinary collaboration (mean = 3.73), timely communication of critical test results (3.61), and reduction in patient falls and adverse events (3.59), demonstrating effective teamwork, communication, and preventive interventions. Medication error reduction (3.57) and decreased hospital-acquired infections (3.45) were slightly lower but still highly observed, highlighting ongoing improvements in clinical safety.

Active staff participation in incident reporting (3.49) further supports a learning-oriented safety culture. The decrease in hospital-acquired infections (HAIs), ranked 10th (mean = 3.45), while still “Highly Achieved,” indicates a comparatively weaker outcome among patient safety indicators. This finding aligns with Table 7, which shows that patient and family education on infection prevention was highly rated (mean = 3.82). The contrast

suggests that although education efforts are strong, they may not fully translate into consistent practice or measurable outcomes in reducing HAIs. Factors such as compliance variability, environmental conditions, or resource limitations may affect the effectiveness of infection control measures.

The implication for the hospital is the need to bridge the gap between knowledge and practice by reinforcing compliance monitoring, strengthening infection control protocols, and ensuring that both staff and patients consistently adhere to preventive measures. Enhancing this alignment can further reduce HAIs and improve overall patient safety outcomes. Overall, these results indicate that the hospital has successfully improved patient and staff safety, care quality, and patient satisfaction, with targeted areas for further enhancement.

Patient safety outcomes are widely recognized as critical indicators of the effectiveness of healthcare interventions, encompassing measurable results such as reductions in adverse events, medication errors, hospital-acquired infections, and improvements in patient well-being and satisfaction (Al-Oweidat et al., 2023; Carmack et al., 2024; Dukhanin et al., 2025). Studies have consistently shown that hospitals with well-implemented patient safety programs demonstrate higher compliance with surgical safety protocols, including the WHO Surgical Safety Checklist and "Time Out" procedures, thereby significantly reducing perioperative complications and improving recovery rates (Kochis et al., 2024; Kimura et al., 2023). Similarly, effective communication strategies such as SBAR (Situation-Background-Assessment-Recommendation), Check-Back, and Read-Back have been identified as key determinants in reducing medical errors and enhancing patient satisfaction (Tai et al., 2024; Samani & Rattani, 2023). Workforce safety measures, including adherence to infection control protocols, availability of personal protective equipment, and emergency preparedness, have also been linked to improved staff well-being and reduced occupational hazards, thereby supporting safer patient care (Rawas & Abou Hashish, 2023; Shi et al., 2025). Moreover, incident reporting systems and a culture that encourages learning from errors are shown to enhance organizational learning and continuous improvement, which directly correlates with reductions in adverse events and hospital-acquired infections (Carmack et al., 2024; Kimura et al., 2023s).

These findings corroborate the current results, wherein respondents perceived that patient safety outcomes were highly achieved across multiple domains, reflecting the hospital's successful implementation of safety interventions, effective teamwork, and commitment to both patient and workforce safety.

Significant Degree of Correlation Between the following Variables

The findings demonstrate significant relationships among adherence to the patient safety program, perceived barriers, patient safety goals, and outcomes. A moderate positive correlation between adherence and perceived barriers ($r = 0.686$, $p < 0.001$) suggests that greater adherence is associated with greater awareness of implementation challenges. This indicates that while staff actively follow safety protocols, they also

become more cognizant of systemic limitations such as resource constraints and training gaps.

A strong positive correlation between adherence and patient safety goals ($r = 0.709$, $p < 0.001$) highlights the critical role of consistent implementation in achieving safety objectives. Similarly, the moderate negative correlation between adherence and patient safety outcomes ($r = -0.424$, $p < 0.001$) indicates that higher adherence is associated with improved outcomes, given that lower outcome scores reflect fewer adverse events.

In contrast, perceived barriers showed weak negative correlations with both patient safety goals ($r = -0.362$, $p < 0.001$) and outcomes ($r = -0.383$, $p < 0.001$), suggesting that while barriers have a measurable effect, they are not the primary determinants of safety performance. These results imply that other factors—such as leadership, organizational culture, and staff engagement—play a more substantial role in influencing outcomes.

Notably, a strong positive correlation between patient safety goals and outcomes ($r = 0.824$, $p < 0.001$) underscores the importance of clearly defined and systematically pursued safety objectives in improving patient care. This finding reinforces the value of goal-oriented safety strategies in healthcare settings.

These results are consistent with prior studies (e.g., Mahmoud et al., 2023; Zhou et al., 2021), which emphasize that although barriers such as limited resources and training exist, they do not solely determine patient safety outcomes. Instead, institutional support, effective leadership, and a strong safety culture are more influential in achieving optimal results.

Overall, the study highlights that while addressing barriers is necessary, greater emphasis should be placed on strengthening adherence to safety protocols, enhancing organizational support, and establishing clear patient safety goals to achieve improved outcomes.

Conclusions

The findings of the study indicate that adherence to the Patient Safety Program is highly evident across all domains, suggesting that patient safety practices are well integrated into the hospital's daily operations. Among the areas assessed, patient and family engagement and the learning system emerged as key strengths, reflecting effective communication, education, and continuous improvement mechanisms. However, workforce safety, while still highly adhered to, requires further attention, particularly in addressing staffing adequacy, workload management, and staff well-being.

Barriers to implementing the Patient Safety Program were generally perceived as minimal and manageable. Although challenges such as communication gaps, limited resources, and staffing constraints were identified, they do not significantly hinder the program's overall effectiveness. Addressing these concerns through targeted interventions may further enhance the implementation and sustainability of patient safety practices.

The study also revealed that patient safety goals are highly achieved, demonstrating strong compliance with established safety standards. The hospital showed particular strength in areas such as surgical safety, fall prevention, and accurate patient identification. Nonetheless, the relatively low rating for timely response to critical test results suggests a need for improved coordination and communication processes in urgent clinical situations.

Similarly, patient safety outcomes were found to be highly achieved, reflecting the effectiveness of current safety interventions. Improvements in surgical safety, patient recovery, satisfaction, and teamwork highlight the hospital's commitment to quality care. However, areas such as infection control and incident reporting indicate the need to strengthen the translation of knowledge into consistent practice.

Furthermore, the study established significant relationships among adherence to the patient safety program, perceived barriers, patient safety goals, and patient safety outcomes. Higher adherence was associated with better achievement of safety goals and improved outcomes, underscoring the importance of consistent implementation of safety protocols. While perceived barriers showed a statistically significant relationship with both goals and outcomes, their influence was relatively weak, suggesting that other factors, such as leadership, organizational culture, and staff engagement, play a more critical role in determining patient safety performance. The strong relationship between patient safety goals and outcomes further emphasizes the importance of clearly defined and systematically implemented safety objectives.

Overall, the study concludes that effective adherence to patient safety programs, supported by strong leadership and a clear focus on safety goals, is essential for improving patient safety outcomes. Although barriers exist, they are not the primary determinants of performance. Strengthening workforce support, enhancing communication systems, and fostering a culture of safety are crucial strategies for sustaining and further improving patient safety in hospital settings.

Recommendations

Based on the study's findings, it is recommended that hospital administrators and nurse leaders sustain and further strengthen adherence to the Patient Safety Program by reinforcing existing best practices, particularly in patient and family engagement and continuous learning systems. Efforts should be made to institutionalize regular feedback mechanisms, enhance knowledge-sharing platforms, and promote a culture of open communication to further improve safety practices.

Given that workforce safety received the lowest rating among the domains, hospital management is recommended to prioritize strategies to address staffing adequacy, workload distribution, and staff well-being. This may include hiring additional personnel, implementing fatigue management programs, providing mental health support, and strengthening policies on workplace safety and violence prevention. Ensuring a well-

supported workforce is essential for sustaining high-quality patient care and safety outcomes.

Although perceived barriers were minimal, targeted interventions are still necessary to address identified concerns, such as communication gaps, limited resources, and fear of reporting errors. It is recommended that hospitals strengthen non-punitive reporting systems, improve access to updated protocols, and ensure the availability of essential resources, including personal protective equipment. Enhancing transparency and accountability mechanisms can further encourage staff participation in safety initiatives.

To improve the achievement of patient safety goals, particularly in the area of timely response to critical test results, hospitals should streamline communication systems, establish clear escalation protocols, and leverage technology to facilitate real-time reporting and response. Strengthening coordination among healthcare providers can minimize delays and improve clinical decision-making in urgent situations.

Regarding patient safety outcomes, it is recommended that hospitals intensify efforts to bridge the gap between knowledge and practice, particularly in infection prevention and control. Continuous monitoring, regular audits, and reinforcement of compliance with safety protocols should be implemented to ensure consistent application of best practices. Encouraging active participation in incident reporting and fostering a learning-oriented environment can further enhance patient safety outcomes.

For policymakers and healthcare administrators, the findings highlight the importance of strengthening organizational support, leadership engagement, and safety culture as key drivers of patient safety. Policies that promote continuous professional development, adequate resource allocation, and system-wide safety standards should be prioritized.

Finally, future research is recommended to validate and expand the findings of this study. Subsequent studies may involve larger sample sizes, multiple hospital settings, or comparative analyses between public and private institutions to improve generalizability. Researchers may also consider using mixed-methods or qualitative approaches to gain deeper insights into the underlying factors influencing patient safety practices. Further investigation into workforce safety, incident-reporting behaviors, and the translation of safety knowledge into practice is also encouraged to better understand and address persistent gaps in patient-safety implementation.

Compliance with Ethical Standards

The researchers affirms that this study adhered to established ethical standards in conducting research involving human participants. Prior to data collection, ethical approval was obtained from the Holy Name University Research Ethics Board and the Don Emilio Del Valle Memorial Hospital Research Ethics Board. Informed consent was obtained from all respondents using a duly completed consent form that clearly explained the study's purpose, procedures, potential risks, and benefits. Participation was entirely

voluntary, and respondents were informed of their right to withdraw from the study at any time without penalty or consequence.

The anonymity and confidentiality of the respondents were strictly maintained throughout the research process. No personally identifiable information was collected, and all responses were coded and securely stored, with access limited to the researchers. The study complied with applicable data privacy regulations, ensuring that all collected data were used solely for academic and research purposes. The well-being of the participants was safeguarded at all times, with no procedures posing harm or risk to their physical, psychological, or professional status.

The researchers declare no conflict of interest in the conduct of this study. All sources were properly acknowledged, and plagiarism was strictly avoided. Furthermore, the interpretation and presentation of findings were conducted objectively, without bias or manipulation of results. The study's outcomes are reported truthfully and are intended solely to advance knowledge in patient safety.

The researchers also disclosed that artificial intelligence tools were used solely for language refinement and editing. All intellectual content, analysis, and interpretations remain the original work of the researchers, ensuring full accountability and transparency in the research process.

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