
Level of Adherence to Patient Safety Policies Among Staff Nurses in Medical Wards

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Abstract — This study assessed the level of adherence of medical nurses to patient safety policies in selected hospitals in Pangasinan, Philippines. A descriptive-correlational research design was employed involving 103 staff nurses assigned in medical wards. Data was collected using a structured, researcher-made questionnaire covering five domains: patient identification, medication safety, infection control, fall prevention, and communication and documentation. Descriptive statistics, independent t-test, one-way ANOVA, and Pearson correlation were used for data analysis. Results revealed very high adherence in patient identification ($M = 4.77$) and high adherence in medication safety ($M = 4.49$), infection control ($M = 4.19$), fall prevention ($M = 4.29$), and communication and documentation ($M = 4.06$). Significant differences were found in selected domains when grouped by sex, civil status, institution, and years of experience, while no significant differences were observed across age groups. A weak but significant negative correlation was identified between infection control and communication and documentation ($r = -0.206$, $p < 0.05$). The findings indicate that nurses demonstrate strong adherence to patient safety policies, though specific areas require continuous reinforcement.

Keywords: *Patient safety, Nurses, Adherence, Hospital care, Healthcare quality*

I. INTRODUCTION

Patient safety is a critical component of quality healthcare and is recognized globally as a fundamental principle in clinical practice. It involves the prevention of errors and adverse effects to patients associated with healthcare delivery. Nurses, being at the forefront of patient care, play

a vital role in ensuring the safe delivery of health services. Their adherence to patient safety principles such as proper medication administration, infection control, accurate documentation, and effective communication can significantly reduce the risk of medical errors and improve patient outcomes.

The World Health Organization defines patient safety as the absence of preventable harm to patients and prevention of unnecessary harm by healthcare professionals. It has been reported that unsafe care is responsible for the loss of 64 million disability-adjusted lives each year across the globe. Patient harm during the provision of healthcare is recognized as one of the top 10 causes of disability and death in the world (Harvard Global Health Institute Patient Safety, 2020).

Department of Health (DOH) standard policies in Philippine hospitals ensure safety, quality care, and operational efficiency, regulated through licensing and accreditation. Key policies focus on patient-centered services, adherence to clinical standards, infection control, data privacy (Data Privacy Act of 2012), and adherence to the Universal Health Care Act.

Adherence refers to the degree to which individuals consistently follow established guidelines, rules, or policies in the performance of their duties. In the context of healthcare, and specifically in this study, adherence pertains to the extent to which staff nurses comply with patient safety standards and protocols while providing care in medical wards. It involves the consistent application of safety practices, including proper medication administration, infection control, accurate documentation, patient identification, and reporting of errors. High adherence reflects nurses' commitment to ensuring patient safety, minimizing errors, and maintaining quality care, whereas low adherence may increase the risk of adverse events and compromise patient outcomes (World Health Organization, 2019).

By examining nurses' adherence, the study aims to assess not only the level of compliance with safety protocols but also the factors influencing adherence, such as experience, knowledge, workload, and organizational support. Understanding adherence is crucial for identifying gaps in practice, improving patient safety, and fostering a culture of accountability and professional responsibility in healthcare settings.

According to Slawomirski et.al. (2020), around 1 in every 10 patients globally is harmed in health care and more than 3 million deaths occur annually due to unsafe care. In low-to-middle income countries, as many as 4 in 100 people die from unsafe care. Above 50% of harm (1 in every 20 patients) is preventable; half of this harm is attributed to medications. Some estimates suggest that as many as 4 in 10 patients are harmed in primary and ambulatory settings, while up to 80% (23.6–85%) of this harm can be avoided (World Health Organization, 2023).

The Department of Health directly supervises and controls the management and operations of 66 hospitals. All administrative regions in the country have DOH hospitals, 38 of which are in Luzon, 12 in Visayas, and 16 in Mindanao. Majority of these facilities are Level 3 Hospitals (56%).

In 2020, the total licensed beds of these hospitals amount to 22,773 while implementing beds amount to 27,019. In 2019, the DOH hospitals recorded a total of 1,115,064 inpatient days, 3,100,503 emergency room visits and 8,408,166 outpatient visits. Daily, the DOH Hospitals admit 30,309 patients and discharge a tenth of its total daily inpatients. The overall bed occupancy rate of all hospitals is beyond the total licensed beds at 131%. Three out of four hospitals have bed occupancy rates beyond its licensed authorized bed capacity.

In region 1, there are five hospitals for the Health Development Department of Health, namely Conrado F. Estrella Regional Medical and Trauma Center, Ilocos Sur Medical Center, Ilocos Training and Regional Medical Center, Mariano Marcos Memorial Hospital and Medical Center, Region 1 Medical Center.

In Pangasinan, there is a total of authorized hospital bed capacity of approximately 4,000 beds, distributed across both public and private health facilities. The Department of Health (DOH) operates major institutions such as the Region I Medical Center in Dagupan City, which has a 600-bed capacity, while the Pangasinan Provincial Government manages 14 district hospitals with a combined bed capacity of around 1,500 (Provincial Government of Pangasinan, 2023).

In 2023 alone, these provincial hospitals served more than 111,000 patients and 468,000 outpatients, reflecting a substantial demand for healthcare services. In Eastern Pangasinan, key public health facilities include Conrado Favis Estrella Regional Medical and Trauma Center (CFERMTC) in Rosales, which was upgraded from a 13-bed infirmary to a 103-bed Level 1

hospital in October 2023 (BusinessWorld, 2025), and the Eastern Pangasinan District Hospital in Tayug, whose capacity increased from 150 to 250 beds under Republic Act No. 11880 (LegalDex, 2022).

Among the key public health institutions in Eastern Pangasinan is the Conrado F. Estrella Regional Medical and Trauma Center (CFERMTC), located in Rosales. This government hospital was officially established through Republic Act No. 11558 and began operations in September 2021. Initially functioning as a 13-bed infirmary, the facility was The Conrado F. Estrella Regional Medical and Trauma Center (CFERMTC) in Rosales, Pangasinan, was officially established as a 100-bed capacity, Level II general hospital under Republic Act No. 11558, enacted on June 24, 2021. This legislation mandates that the hospital be under the direct control and supervision of the Department of Health (DOH). The Act also provides for future increases in bed capacity and upgrades to healthcare services, consistent with the hospital development plan prepared by the DOH. (CFERMTC, 2023). Another major public institution in the region is the Eastern Pangasinan District Hospital located in Tayug. In 2022, its bed capacity was expanded from 150 to 250 beds under Republic Act No. 11880, in response to the growing healthcare demands of the community (LegalDex, 2022).

Eastern Pangasinan, as a growing region with both urban and rural healthcare facilities, provides a unique setting for examining how nurses manage patient safety within varying clinical environments. Hospitals in this area face increasing demands for efficient and safe care, making it essential to understand the factors that influence nursing practice. While policies and standards on patient safety are in place, the extent to which nurses adhere to these principles and the barriers that affect their compliance remain underexplored.

Thus, this study determines the Adherence to Patient Safety Policies among Staff Nurses in Medical Wards.

Research Questions

This study aims to assess the Medical Nurses' Adherence to Patient Safety Principles. Specifically, it sought to answer the following questions:

- 1.) What is the profile of the nurses in terms of:
 - a.) Age;
 - b.) Sex;
 - c.) Civil Status;
 - d.) Institution of Work;
 - e.) Shifting;
 - f.) Number of hours of shift; and
 - g.) Years of experience in Medical Ward?
- 2.) What is the level of adherence of medical nurses to patient safety policies in terms of:
 - a.) Patient identification;
 - b.) Medication safety;
 - c.) Infection control;
 - d.) Fall prevention; and
 - e.) Communication and documentation?
- 3.) Is there a significant difference between adherence levels across demographic factors?
- 4.) Is there a significant relationship between adherence levels and patient safety policies?

II. METHODOLOGY

Research Design and Strategy

This study employed a Quantitative Descriptive-Correlational method of research to comprehensively registered nurses' adherence to patient safety principles in medical units.

Population and Locale of the Study

The study was conducted in selected public hospitals in Eastern Pangasinan, a subregion of Pangasinan Province in Region I (Ilocos Region), Philippines. Eastern Pangasinan consists of both urbanizing towns and rural municipalities, creating a diverse healthcare landscape that makes it an ideal setting for health systems research.

Among the key public health institutions in this region is the Conrado F. Estrella Regional Medical and Trauma Center (CFERMTC), located in Rosales, a 103-bed Level 2 hospital offering outpatient, emergency, and COVID-19 services (CFERMTC, 2023). Another major public facility is the Eastern Pangasinan District Hospital in Tayug, which had its bed capacity expanded from 150 to 250 through Republic Act No. 11880 in 2022 to improve health service delivery in the area (LegalDex, 2022).

The population of the study consists of all staff nurses assigned to the medical wards of the selected hospital. Inclusion criteria involve nurses who are officially employed in the medical wards, regardless of age, gender, or years of experience.

The use of the total population also strengthens the reliability of the data by ensuring that every nurse's perspective is considered. This approach aligns with the descriptive-correlational design of the study, which requires sufficient and representative data to establish relationships between demographic characteristics and adherence to safety policies (Bolarinwa, 2021). Overall, the inclusion of all staff nurses as the study population provided a holistic understanding of adherence to patient safety policies in medical wards.

Data Gathering Tools

The study employed a Quantitative Descriptive-Correlational method to gather and analyze data to provide a comprehensive understanding of medical nurses' adherence to patient safety policies. The primary tool was a structured survey or questionnaire, designed to assess the nurses' knowledge, attitudes, and self-reported adherence to patient safety policies. The questionnaire has been divided into three parts: demographic profile, knowledge and awareness of patient safety protocols, and actual adherence practices in medical wards. Structured questionnaires are appropriate for nursing research as they provide standardized data that can be objectively analyzed (Polit & Beck, 2021). To ensure content validity, the instrument was reviewed by nursing educators, patient safety officers, and research experts in the field.

The tool used a five-point adherence scale with the following categories: A – Very high adherence, B – High adherence, C – Moderately high adherence, D – Low adherence, and E – Very low adherence. This categorical scale allows clear measurement of nurses' adherence levels and helps identify areas that need improvement. Such rating scales are effective in capturing perceptions and behaviors in healthcare research (Joshi et al., 2015). A pilot test was also conducted among a small sample of nurses to refine the clarity and reliability of the items before actual distribution.

Table 1: 5-point Scale

A	Very high adherence
B	High adherence
C	Moderately high adherence
D	Low adherence
E	Very low adherence

Since the study employs a descriptive-correlational design, the questionnaire not only assessed adherence but also determined possible associations between nurses' demographic characteristics and their adherence to patient safety policies. Questionnaires are particularly suitable for this type of research because they can generate quantifiable data that can be subjected to statistical testing (Creswell & Creswell, 2018). By using this tool, the study ensures the collection of valid, reliable, and comprehensive information on how staff nurses comply with patient safety policies in medical wards.

Data Gathering Procedure

The data gathering procedure started with obtaining approval from the hospital administration and the institutional ethics review board to ensure compliance with ethical policies in conducting research. Once approval is secured, coordination with head nurses in the medical wards was made to arrange suitable times for distributing the questionnaires without interrupting patient care activities. Before data collection, the researcher provided the participants with an explanation of the study's purpose, objectives, and procedures, followed by securing their informed consent to ensure voluntary participation (Polit & Beck, 2021).

The structured questionnaires were then personally administered to staff nurses during their duty hours, with instructions on how to properly accomplish the tool. Participants were assured that their responses will remain confidential and anonymous, thereby encouraging honest and accurate answers. Adequate time was allotted to allow nurses to complete the questionnaire without feeling pressured. Completed questionnaires were retrieved immediately to avoid data loss and minimize incomplete responses.

The researcher carefully checked each returned questionnaire for completeness and accuracy before coding and tabulating the data. To enhance the reliability of the research findings, standardized procedures in data collection and handling were strictly followed (Creswell & Creswell, 2018). After organizing the data, statistical analysis was performed to determine the level of adherence to patient safety policies and the relationships between demographic variables and adherence levels. A systematic approach to the data gathering process is essential to ensure

that the findings of this study are valid, reliable, and reflective of the actual practices of staff nurses (Bolarinwa, 2015).

Treatment of Data

The collected questionnaire data using the A–E adherence scale were prepared for analysis by first coding the categorical responses into numeric scores (e.g., A = 5, B = 4, C = 3, D = 2, E = 1) so that summary statistics and parametric tests can be calculated. Descriptive statistics (means, standard deviations, frequencies, and percentages) were computed for the adherence scores and for all demographic variables to provide an overall picture of the dataset (Creswell & Creswell, 2018).

Frequency and percentage were used for problem number 1 to determine the demographic profile of the nurses in terms of Age, Sex, civil status, Institution of Work, Shifting Schedule, Number of Working Hours and Years of experience. The formula is as follows:

$$P(\%) = \frac{F}{N} \times 100$$

Where,

P = percentage equivalent each bracket

F = number of respondents in each bracket

N = total number of respondents

Weighted mean was used for problem number 2 level of adherence of medical nurses to patient safety principles in terms of patient identification, medication safety, infection control, fall prevention, communication and documentation. The formula is as follows:

$$WM = \frac{\sum fX}{N}$$

Where,

WM = average of each category

f = number of respondents in each bracket

X = point value classification

N = total number of respondents

TABLE 2
LIKERT SCALE COEFFICIENTS

Literal Value	Statistical Limit	Descriptive Equivalent
A	4.50 - 5.00	Very high adherence
B	3.50 – 4.49	High adherence
C	2.50 – 3.49	Moderately high adherence
D	1.50 – 2.49	Low adherence
E	1.00 – 1.49	Very low adherence

The primary inferential analysis to compare adherence across more than two independent groups (for example, years of experience, educational level, shift assignment) was a one-way analysis of variance (ANOVA), which tests whether group means differ significantly (Field, 2013). While in comparing adherence across exactly two independent group (for example, Sex) is the Independent Samples t-test (also known as the Two-Sample t-test). This test is designed for comparing a continuous dependent variable (adherence levels) between two independent, categorical groups (the two levels of demographic factor, e.g., sex, or two different hospitals).

For Problem number 4, which pertain to the correlational study to applied to determine the relationship between adherence levels across patient safety policies, Pearson Coefficient Correlation was used to test the relationship between variables. Since adherence levels for a

standard (e.g., Medication Safety adherence score, Infection Control adherence score) are typically measured on an interval or ratio scale, making them continuous variables. Pearson's *r* is specifically designed to assess the linear relationship between two continuous variables.

All statistical analyses were carried out using statistical software such as SPSS (Statistical Package for the Social Sciences) or a similar platform. The level of significance was set at 0.05, meaning that a *p*-value less than or equal to 0.05 was considered statistically significant. This analytical approach allowed the researcher to draw meaningful conclusions and formulate evidence-based recommendations based on the observed patterns and relationships in the data.

III. RESULTS AND DISCUSSIONS

Profile of Nurses

Profile Variable	Category	Frequency (n)	Percentage (%)
Age	18–24 years	17	16.5
	25–34 years	36	35.0
	35–44 years	19	18.4
	45–54 years	18	17.5
	55–64 years	13	12.6
Sex	Female	79	76.7
	Male	24	23.3
Civil Status	Single	48	46.6
	Married	30	29.1
	Partnered/Cohabiting	19	18.4
	Widowed	6	5.8
Institution of Work	Conrado F. Estrella Regional Medical and Trauma Center	67	65.0
	Eastern Pangasinan District Hospital	36	35.0
Shifting Schedule	Rotating Shift	103	100.0
Number of Hours per Shift	12 hours	103	100.0
Years of Experience (Medical Ward)	Less than 1 year	17	16.5
	1–3 years	29	28.2
	4–6 years	34	33.0
	7–10 years	14	13.6
	Over 10 years	9	8.7

The respondents of the study were medical nurses assigned in the medical wards of Conrado F. Estrella Regional Medical and Trauma Center (CFERMTC) and Eastern Pangasinan District Hospital (EPDH). In terms of age, the largest proportion belonged to the 25–34 years age group (35.0%), followed by 35–44 years (18.4%) and 45–54 years (17.5%). This indicates that the nursing workforce is largely composed of young to middle-aged adults, which is consistent with national nursing demographics where younger nurses dominate clinical settings (World Health Organization [WHO], 2020).

Most of the respondents were female (76.7%), reflecting the traditionally female-dominated nursing profession (Alshammari et al., 2021). In terms of civil status, the majority were single (46.6%), followed by married nurses (29.1%). Regarding institution of work, most respondents were from CFERMTC (65.0%), while 35.0% were from EPDH. All respondents were on a rotating shift schedule and worked 12-hour shifts, reflecting common staffing patterns in hospital medical wards.

In terms of years of experience in the medical ward, the majority had 4–6 years of experience (33.0%), followed by 1–3 years (28.2%). This suggests that most nurses had sufficient clinical exposure to patient safety protocols, which may influence adherence levels (Benner, 2001).

The demographic profile indicates a predominantly young to middle-aged, female nursing workforce with moderate clinical experience. Similar workforce characteristics have been reported in national and international nursing studies, suggesting consistency with broader nursing demographics (World Health Organization [WHO], 2020; Alshammari et al., 2021). According to Benner's (2001) theory of skill acquisition, nurses with several years of experience are more likely to demonstrate competent and consistent practice, which may positively influence patient safety adherence.

The study helped resolve the first research problem by establishing the contextual characteristics of nurses that may influence safety practices. An important implication of these findings is the need for continuous professional development programs, particularly for younger and less experienced nurses, to sustain and enhance patient safety competencies.

Patient Identification Level of Adherence

The overall mean of 4.77 is very close to the maximum possible value (likely 5.00 based on the scale), indicating that nurses almost always adhere to the patient identification principles. The highest mean scores are 4.92: "educate patients on the importance of ID verification.", 4.90: "follow protocols when a patient cannot self-identify.", and 4.89: "never assume a patient's identity based on room or bed." While the lowest mean score is 4.48: "re-identify patients when shifts change." Which is the only item not classified as "Very High Adherence". This suggests greater inconsistency or less rigor in practicing this specific protocol compared to all others.

The data suggests a strong and consistent culture of patient identification safety among the medical nurses surveyed. The practices scoring highest (educating patients, following protocols for non-verbal/unresponsive patients, and avoiding assumptions based on location) are fundamental to patient safety.

Table 4: Patient Identification Level of Adherence

I ...	MEAN	STANDARD DEVIATION	LITERAL VALUE	DESCRIPTIVE EQUIVALENT
use two identifiers before providing care.	4.75	0.458	A	Very high adherence
verify patient identity before any invasive procedure.	4.70	0.539	A	Very high adherence
ensure that wristbands are properly attached and legible.	4.85	0.354	A	Very high adherence
cross-check patient identity with documentation.	4.76	0.474	A	Very high adherence
double-check identity when transferring patients between units.	4.68	0.614	A	Very high adherence
ask patients to state their full name before treatment.	4.80	0.492	A	Very high adherence
check the patient's date of birth to confirm identity.	4.77	0.469	A	Very high adherence
confirm identity before administering blood products.	4.76	0.551	A	Very high adherence
re-identify patients when shifts change.	4.48	1.04	B	High adherence
use barcode scanning when available.	4.73	0.629	A	Very high adherence
document identity verification properly in patient records.	4.83	0.466	A	Very high adherence
follow protocols when a patient cannot self-identify.	4.90	0.329	A	Very high adherence
educate patients on the importance of ID verification.	4.92	0.269	A	Very high adherence
never assume a patient's identity based on room or bed.	4.89	0.310	A	Very high adherence
correct identification errors immediately when noticed.	4.72	0.493	A	Very high adherence
OVERALL	4.77	0.313	A	Very high adherence

This finding implies an actionable area for healthcare leaders: strengthening formal protocols and training around shift-change handoffs to ensure patient identity is reliably verified at each transition point, not just at admission or specific interventions. Standardized communication tools and checklists—such as SBAR or other handover frameworks—have been shown to improve the quality and completeness of handoff communication, which in turn supports safer care transitions (Impact of nursing shift change audit, 2024).

For nurse educators and policymakers, these results emphasize the need to embed patient re-identification competencies into ongoing professional development and handoff training curricula. Enhancing nurses’ confidence and skill in this area can further elevate overall safety culture and patient outcomes (Ayu et al., 2024).

Medication Administration Level of Adherence

Table 5: Medication Administration Level of Adherence

I ...	MEAN	STANDARD DEVIATION	LITERAL VALUE	DESCRIPTIVE EQUIVALENT
always follow the "Five Rights" of medication administration.	4.29	0.788	A	Very high adherence
double-check high-alert medications before giving them.	4.52	0.654	A	Very high adherence
review patient allergies before giving any drug.	4.58	0.679	A	Very high adherence
verify the route of administration with the order.	4.36	0.726	A	Very high adherence
follow policies for look-alike/sound-alike drugs.	4.49	0.670	B	High adherence
clarify any unclear medication orders with the prescriber.	4.53	0.669	A	Very high adherence
use drug reference tools when unsure.	4.62	0.643	A	Very high adherence
label all medications prepared away from the bedside.	4.41	0.648	B	High adherence
record medications in real-time.	4.69	0.524	A	Very high adherence
dispose of unused medications properly.	4.51	0.698	A	Very high adherence
administer medications within the prescribed time frame.	4.42	0.761	B	High adherence
verify intravenous medication compatibility.	4.43	0.722	A	Very high adherence
Educate patients about their medications when needed.	4.52	0.639	A	Very high adherence
report medication errors or near-misses promptly.	4.52	0.624	A	Very high adherence
participate in training on medication safety practices.	4.49	0.670	B	High adherence
OVERALL	4.49	0.171	B	High adherence

The overall mean score for adherence to medication safety principles is 4.49 with a descriptive equivalent of High adherence, which suggests that medical nurses demonstrate a high level of adherence to the listed medication safety practices. The highest mean score (4.69) belongs to "record medications in real-time," suggesting it is the most strongly adhered-to practice. While the three practices received a rating of "High adherence" (Mean scores ranging from 4.49 to 4.42). These are areas where adherence is strong, but slightly less consistent than the "Very high adherence" group.

The implications of these findings suggest that while medication safety practices are generally well observed, there remains a need for sustained monitoring and reinforcement to achieve uniformly very high adherence. Benner's (2001) theory of skill acquisition emphasizes that consistent performance in complex clinical tasks develops through ongoing experience and reflective practice. Additionally, Johnson et al. (2022) noted that heavy workloads and competing clinical priorities can affect nurses' adherence to detailed medication protocols, particularly in high-acuity environments. Therefore, continuous education, supportive systems, and routine competency validation are essential to maintain and strengthen medication safety adherence, ultimately reducing the risk of medication-related adverse events and improving patient outcomes.

Infection Control Level of Adherence

The high overall adherence to infection control principles ($\bar{x} = 4.19$) reflects a strong commitment among medical nurses to practices that are essential in preventing healthcare-associated infections (HAIs). High compliance with hand hygiene practices and the reporting of infection control breaches suggests that nurses recognize both personal responsibility and organizational accountability as key components of infection prevention. These findings support current evidence that consistent hand hygiene and a transparent reporting culture significantly reduce infection transmission in healthcare settings (World Health Organization [WHO], 2020; Centers for Disease Control and Prevention [CDC], 2022).

Table 6: Infection Control Level of Adherence

I ...	MEAN	STANDARD DEVIATION	LITERAL VALUE	DESCRIPTIVE EQUIVALENT
wash my hands before and after each patient contact.	4.26	0.792	B	High adherence
wear gloves when there's a risk of exposure.	4.24	0.785	B	High adherence
dispose of sharps in proper containers.	4.23	0.717	B	High adherence
disinfect equipment between patient uses.	4.18	0.813	B	High adherence
use sterile techniques during appropriate procedures.	4.17	0.785	B	High adherence
follow isolation protocols for contagious patients.	4.23	0.819	B	High adherence
Educate patients on hygiene practices.	4.21	0.750	B	High adherence
wear proper masks all the time.	4.23	0.770	B	High adherence
avoid wearing jewelry during patient care.	4.24	0.785	B	High adherence
report any breaches in infection control.	4.31	0.741	B	High adherence
ensure linens and waste are handled correctly.	4.02	0.828	B	High adherence
use hand sanitizers when soap and water are unavailable.	4.32	0.782	B	High adherence
change PPE between patient rooms.	4.12	0.820	B	High adherence
keep my nails short and clean for infection control.	4.15	0.746	B	High adherence
attend regular updates on infection prevention practices	3.97	0.834	B	High adherence
OVERALL	4.19	0.194	B	High adherence

The findings imply the need for healthcare institutions to strengthen continuous infection control education and reinforce compliance monitoring, particularly regarding PPE usage and environmental sanitation. Regular refresher training, competency assessments, and visible leadership support can help sustain high adherence levels and address areas of relative weakness (CDC, 2022; Storr et al., 2021). Reinforcing these measures is especially critical in maintaining patient and staff safety and in reducing the burden of HAIs in hospital settings.

Fall Prevention Level of Adherence

Overall assessment indicates a high adherence level by medical nurses to fall prevention principles with an overall mean of 4.29. Moreover, all 14 individual fall prevention measures assessed received a descriptive equivalent of High adherence (Literal Value: B). This indicates consistently strong performance across the entire spectrum of fall prevention practices. The two items with the highest mean scores were "reassess fall risk regularly during hospitalization" (Mean: 4.43) and "educate patients and families on fall risks" (Mean: 4.41). This suggests nurses prioritize continuous assessment and patient education. On the other hand, the items with the lowest mean scores (though still categorized as High adherence) were "check that assistive devices are in good working condition" (Mean: 4.19) and "assist patients with mobility aids when needed" (Mean: 4.21).

Table 7: Fall Prevention Level of Adherence

I ...	MEAN	STANDARD DEVIATION	LITERAL VALUE	DESCRIPTIVE EQUIVALENT
assess fall risk upon admission.	4.25	0.653	B	High adherence
reassess fall risk regularly during hospitalization.	4.43	0.636	B	High adherence
educate patients and families on fall risks.	4.41	0.585	B	High adherence
keep call bells within reach.	4.26	0.593	B	High adherence
ensure adequate lighting in patient areas.	4.38	0.579	B	High adherence
assist patients with mobility aids when needed.	4.21	0.723	B	High adherence
encourage use of non-slip footwear.	4.23	0.675	B	High adherence
use bed/chair alarms as appropriate.	4.34	0.570	B	High adherence
keep beds in the lowest position when not in use.	4.25	0.637	B	High adherence
avoid leaving patients unattended in risky situations.	4.25	0.606	B	High adherence
ensure side rails are raised appropriately.	4.34	0.650	B	High adherence
respond promptly to patient calls.	4.26	0.593	B	High adherence
remove tripping hazards from patient areas.	4.23	0.730	B	High adherence
check that assistive devices are in good working condition.	4.19	0.742	B	High adherence
document fall prevention measures taken.	4.26	0.593	B	High adherence
OVERALL	4.29	0.169	B	High adherence

These findings imply the need for healthcare administrators to reinforce systematic equipment maintenance protocols and ensure adequate staffing to support mobility-related interventions. Incorporating routine checks of assistive devices into daily safety rounds and strengthening interdisciplinary collaboration can further enhance fall prevention outcomes. Sustained organizational support and resource allocation are critical in maintaining high adherence and reducing fall-related adverse events (World Health Organization [WHO], 2021; AHRQ, 2022).

Communication and Documentation Level of Adherence

Table 8: Communication and Documentation Level of Adherence

I ...	MEAN	STANDARD DEVIATION	LITERAL VALUE	DESCRIPTIVE EQUIVALENT
use standardized hand-off tools like SBAR.	4.03	0.678	B	High adherence
report significant patient changes immediately.	4.14	0.672	B	High adherence
document all interventions accurately.	3.93	0.757	B	High adherence
communicate clearly during interdisciplinary rounds.	4.16	0.653	B	High adherence
verify that verbal orders are read back correctly.	3.92	0.723	B	High adherence
ensure that documentation is legible and complete.	4.12	0.599	B	High adherence
report safety concerns without hesitation.	4.07	0.783	B	High adherence
participate in team discussions about safety.	4.06	0.698	B	High adherence
clarify any unclear instructions or orders.	4.08	0.652	B	High adherence
update care plans based on patient progress.	4.07	0.744	B	High adherence
ensure that records are updated before shift handover.	4.01	0.721	B	High adherence
maintain confidentiality in all patient communications.	3.92	0.737	B	High adherence
report incidents or near-misses using the correct system.	4.04	0.713	B	High adherence
record the time and date of all documentation.	4.17	0.692	B	High adherence
review documentation for accuracy before submission.	4.16	0.777	B	High adherence
OVERALL	4.06	0.187	B	High adherence

Overall assessment indicates a high adherence level by medical nurses to communication and documentation principles with an overall mean of 4.06. Moreover all 15 individual communication and documentation measures assessed received a descriptive equivalent of high adherence (Literal Value: B). This suggests nurses generally perform strongly in these critical areas of patient safety.

The high overall adherence to communication and documentation principles ($\bar{x} = 4.06$) indicates that safe communication practices are generally well integrated into nursing care. Strong compliance with time- and date-stamping of records and routine review for clarity and accuracy reflects nurses' awareness of the importance of complete and traceable documentation in ensuring continuity of care and legal accountability. (World Health Organization [WHO], 2021).

Significant Difference Between Adherence levels across demographic factors

Table 9: Significant Difference Between Adherence levels across demographic factors

	Age		Sex		Civil Status		Institution of work		Shifting Schedule		Number of Hours shift		Years of Experience	
	F	p	t	p	F	p	t	p	F	p	F	p	F	p
Patient Identification	0.607	0.660	0.288	0.774	0.819	0.4981	-3.2133*	0.00176					5.776	0.001
Medication Safety	0.876	0.487	-0.515	0.607	1.590	0.215	-1.2152	0.227					2.637	0.050
Infection Control	0.411	0.800	-0.504	0.615	2.014	0.136	-0.0349	0.972					0.117	0.975
Fall Prevention	1.560	0.203	-2.502	0.014	3.457	0.035	-0.1472	0.883					2.270	0.082
Communication and Documentation	1.530	0.211	1.479*	0.142	0.243	0.865	0.8151	0.416					0.714	0.587

As presented on the table, there is no statistically significant difference in adherence levels across the different age groups for any of the five measured safety domains (Patient Identification, Medication Safety, Infection Control, Fall Prevention, and Communication and Documentation). All the p-values (0.660, 0.487, 0.800, 0.203, and 0.211) are greater than 0.05. This suggests that age is not a statistically significant factor in explaining the variation in adherence levels for these patient safety practices.

The absence of statistically significant differences in adherence levels across age groups suggests that patient safety practices are consistently applied regardless of nurses' age. This implies that standardized training, institutional policies, and shared professional norms may be effective in promoting uniform adherence to safety principles across generations of nurses. Recent literature supports the view that well-established safety systems can minimize demographic variability in clinical practice (World Health Organization [WHO], 2021).

Moreover, the table shows that the four domains (Patient Identification, Medication Safety, Infection Control, and Communication and Documentation), the p-values are all greater than 0.05 which implies that, there is no statistically significant difference in adherence levels between the sex groups for these specific safety practices. On the other hand, for Fall Prevention, the p-value is 0.014. Since $p < 0.05$, there is a statistically significant difference in the mean adherence level for Fall Prevention between the two sex groups.

Similarly, the lack of significant differences by sex and civil status across most patient safety domains indicates that adherence is primarily influenced by professional role expectations and organizational standards rather than personal demographic characteristics. This finding reinforces evidence that patient safety behaviors are shaped more by workplace culture and leadership support than by individual background factors (Vaismoradi et al., 2020; WHO, 2021).

In addition, the table shows that for the four domains (Patient Identification, Medication Safety, Infection Control, and Communication and Documentation), the p-values are all greater than 0.05. Therefore, Civil Status does not significantly affect adherence levels for these specific safety practices. While for Fall Prevention, the p-value is 0.035. Since $p < 0.05$, there is a statistically significant difference in the mean adherence level for Fall Prevention across the

different Civil Status groups. This means at least one Civil Status group has a significantly different adherence level for this domain compared to others.

However, the statistically significant differences observed in fall prevention adherence by sex and civil status suggest that certain patient safety practices may be more sensitive to variations in caregiving roles, risk perception, or task allocation. Fall prevention often requires physical assistance, continuous monitoring, and proactive mobility support, which may be influenced by staffing patterns and workload distribution. This implies a need for equitable task assignment, adequate staffing, and targeted reinforcement of fall prevention strategies across all staff groups to ensure consistent patient protection (Agency for Healthcare Research and Quality [AHRQ], 2022).

The table also shows that for the four domains (Medication Safety, Infection Control, Fall Prevention and Communication and Documentation), the p-values are all greater than 0.05. Therefore, Institutions of work does not significantly affect adherence levels for these specific safety practices. While for Patient Identification, $p < 0.05$, there is a statistically significant difference in adherence to Patient Identification protocols across the Institutions of Work.

As for the profile variables: Shifting Schedule and number of working hours, has no variation in these factors among the respondents, they could not be used to analyze differences in adherence levels.

Moreover, the table shows that there is a significant difference in adherence levels for Patient Identification and medication safety across the different years of experience groups with $p = 0.001$ while for Infection Control, Fall Prevention, and Communication and Documentation, the p-values are all greater than 0.05, meaning there is no statistically significant difference in adherence levels across the different groups of years of experience.

Furthermore, the significant differences in adherence to patient identification and medication safety based on years of experience indicate that clinical experience plays a role in mastering complex and high-risk safety practices. More experienced nurses may demonstrate greater vigilance and procedural confidence in these domains. This finding underscores the importance of mentoring programs, competency-based assessments, and continuous professional

development to support less experienced nurses, particularly in high-risk safety areas (WHO, 2021; Joint Commission, 2023).

Overall, these findings imply that while patient safety adherence is generally consistent across demographic variables, targeted organizational strategies—such as mentorship, standardized protocols, and institution-wide safety initiatives—are essential to addressing domain-specific variations and sustaining high-quality patient care.

Significant relationship between adherence levels across patient safety policies

Table 10: Significant relationship between adherence levels across patient safety policies

Variables	r	p
Patient Identification Medication Safety	-0.111	0.266
Patient Identification Infection Control	-0.071	0.473
Patient Identification Fall Prevention	0.110	0.270
Patient Identification Communication and Documentation	-0.048	0.630
Medication Safety Infection Control	-0.176	0.075
Medication Safety Fall Prevention	-0.085	0.392
Medication Safety Communication and Documentation	-0.031	0.757
Infection Control Fall Prevention	-0.024	0.812
Infection Control Communication and Documentation	-0.206*	0.036
Fall Prevention Communication and Documentation	-0.147	0.139

The table shows that the adherence to Infection Control policies has a statistically significant, albeit weak, negative correlation ($r = -0.206$, $p = 0.036$) with the adherence to Communication and Documentation policies. This suggests that as adherence to one slightly increases, adherence to the other tends to slightly decrease. On the other hand, all other pairs (Patient Identification with Medication Safety, Fall Prevention with Infection Control, etc.) have p-values greater than 0.05, meaning there is no statistically significant relationship between their adherence levels.

The findings indicate a weak but statistically significant negative relationship between adherence to infection control and communication and documentation policies. This suggests that increased focus on one domain may unintentionally reduce attention to another, possibly due to workload or time constraints. Similar findings have been reported in studies linking workload pressures to compromised documentation quality (Johnson et al., 2023).

Balanced workload distribution and integrated safety strategies are necessary to ensure that adherence to one safety domain does not compromise another.

IV. CONCLUSIONS

The findings of the study indicate that the medical nurses were predominantly young to middle-aged, female, and moderately experienced, working rotating 12-hour shifts in medical wards. The results revealed that medical nurses demonstrated a very high level of adherence to patient identification principles, signifying a strong culture of safety in ensuring correct patient identity prior to care delivery and minimizing the risk of serious clinical errors.

In terms of medication safety, the nurses exhibited a high level of adherence, particularly in real-time documentation, allergy verification, and clarification of unclear orders. However, certain practices such as handling look-alike/sound-alike medications and labeling medications prepared away from the bedside showed comparatively lower adherence, indicating areas that require continued attention. Similarly, infection control practices were highly adhered to, although participation in regular infection prevention updates and consistent PPE changes between patient

rooms were relatively less emphasized, highlighting the need for sustained reinforcement of these practices.

The study also showed a high level of adherence to fall prevention measures, with nurses prioritizing continuous fall risk assessment and patient education. Communication and documentation practices likewise demonstrated high adherence, reflecting nurses' commitment to maintaining continuity and safety of care. Despite this, lower adherence to verbal order read-back and confidentiality practices suggests the need for strengthening these critical safety behaviors.

Statistical analysis revealed no significant differences in adherence levels across age groups for all patient safety domains. However, significant differences were observed in fall prevention based on sex and civil status, in patient identification based on institution of work, and in patient identification and medication safety based on years of experience. These findings suggest that professional experience and organizational context play important roles in influencing specific patient safety practices. Moreover, a weak but statistically significant negative relationship was identified between infection control and communication and documentation adherence, implying that increased demands in one safety domain may affect performance in another.

Analysis of differences in adherence across demographic factors revealed that age generally did not influence adherence, while sex and civil status affected fall prevention, institution of work affected patient identification, and years of experience influenced patient identification and medication safety. These findings indicate that professional experience and organizational context play important roles in shaping certain patient safety behaviors.

Regarding the relationships between adherence levels across patient safety domains, a weak negative correlation was observed between infection control and communication/documentation, suggesting that increased focus on one domain may slightly reduce attention to another, possibly due to workload or time constraints. No other significant relationships were found between the safety domains, indicating largely independent adherence patterns.

Finally, the study concluded that, overall, medical nurses demonstrate strong adherence to patient safety principles, but targeted interventions and continuous professional development are

necessary to address specific gaps, ensure consistent practice across all domains, and support a balanced approach to multiple safety responsibilities.

V. Recommendations

(1) Based on the conclusions drawn from the study, nursing management is encouraged to implement regular competency assessments and mentoring programs, especially for less experienced nurses, to enhance adherence to patient safety practices. Promoting a non-punitive culture that encourages the reporting of errors and near misses is also recommended to improve patient safety outcomes.

(2) Based on the level of adherence of medical nurses to patient safety principles, it is recommended that patient identification practices continue to be reinforced through regular audits, reminders, and standardized protocols during shift handovers to maintain very high compliance and reduce the risk of clinical errors. For medication safety, emphasis should be placed on strengthening practices in handling look-alike/sound-alike medications, proper labeling, allergy verification, and timely documentation. Regarding infection control, nurses should be encouraged to participate in regular infection prevention updates, consistently change PPE between patient rooms, and follow hand hygiene and equipment disinfection protocols. In terms of fall prevention, continuous assessment of patient fall risk, patient and family education, proper use of assistive devices, and regular equipment checks should be prioritized, along with clear documentation and interprofessional collaboration to reduce fall incidents. Lastly, for communication and documentation, nurses should focus on accurate and timely record-keeping, verbal order read-back, confidentiality, and effective interdisciplinary communication, supported by standardized tools such as SBAR and ongoing competency validation to ensure continuity and safety of care.

(3) Based on the analysis of differences in adherence levels across demographic factors, it is recommended that targeted interventions be implemented for groups that show lower compliance, particularly considering sex, civil status, institution of work, and years of experience. Orientation programs, mentoring, and tailored training should focus on these groups to ensure consistent adherence to patient safety policies.

(4) Regarding the relationships between adherence levels across patient safety domains, integrated strategies are advised to address the weak negative correlation observed between infection control and communication/documentation. Hospitals should ensure that increased focus on one safety domain does not compromise performance in another by promoting balanced workload management, time allocation, and cross-training in multiple safety areas.

(5) Finally, to enhance adherence to patient safety principles overall, it is recommended that hospitals conduct regular in-service trainings, competency assessments, and professional development programs covering all patient safety domains. Establishing a non-punitive culture that encourages reporting errors and near misses, along with ensuring the availability of adequate staffing, safety equipment, and institutional support, will further strengthen compliance. Continuous monitoring, audits, and feedback mechanisms should also be implemented to maintain and improve adherence across all medical nursing practices.

For future researchers, conducting similar studies with larger samples and in multiple hospital settings is recommended to enhance the generalizability of the findings. Further studies may also explore qualitative approaches to better understand the barriers and facilitators influencing adherence to patient safety principles, as well as examine the effects of workload, staffing ratios, and organizational culture on patient safety practices.

VI. Acknowledgments

The researcher sincerely thanks Urdaneta City University, particularly the Institute of Graduate Studies, for the support and academic guidance that made this study possible.

Grateful appreciation is extended to Dr. Freda B. Lopez, Research Adviser, for her persistence, guidance, valuable advice, and dedication in helping complete this research. The researcher also thanks the members of the Panel of Evaluators—Dr. Alyssa Ashley R. Diego, Dr. Mari Jane C. Andaya—for their constructive comments, encouragement, and suggestions. Appreciation is likewise given to Dr. Priscila R. Baun, Program Head and Panel Member, and Dr. Prescila I. Marcelo, Dean of the Graduate School, for their guidance, support, and thoughtful advice.

The researcher is grateful to the Conrado F. Estrella Regional Medical and Trauma Center and Eastern Pangasinan District Hospital for allowing the conduct of the study, and to the Staff Nurses who served as respondents for their cooperation and participation.

Finally, heartfelt gratitude is extended to the researcher's parents, Danny A. Ventura and Glecyc C. Ventura, husband Mark Janzen Farinas, family and friends for their constant support, encouragement, and inspiration.

REFERENCES

- [1.] Agency for Healthcare Research and Quality. (2022). Preventing falls in hospitals: A toolkit for improving quality of care. U.S. Department of Health and Human Services.
- [2.] Ayu, A., Fiohana, P., Chalidyanto, D., & Damayanti, N. A. (2024). The relationship between patient safety culture and the level of knowledge of health personnel with compliance in patient identification implementation in hospital. *Journal of Drug Delivery and Therapeutics*, 14(3), 48–53.
- [3.] Bolarinwa, O. A. (2021). Sample size estimation for health and social science researchers: The principles and considerations for different study designs. *Pan African Medical Journal*, 38, 1–7. <https://doi.org/10.11604/pamj.2021.38.10.23878>
- [4.] BusinessWorld. (2025). CFERMTC upgraded to Level 1 hospital in Pangasinan. BusinessWorld Publishing Corporation.
- [5.] Centers for Disease Control and Prevention. (2022). Infection control guidance for healthcare professionals. U.S. Department of Health and Human Services.
- [6.] Conrado F. Estrella Regional Medical and Trauma Center. (2023). About the hospital. CFERMTC Official Reports.
- [7.] Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage Publications.
- [8.] Department of Health. (2008). Administrative Order No. 2008-0023: Patient safety program. <https://dmas.doh.gov.ph:8083/Rest/GetFile?id=337098>
- [9.] Department of Health. (2021). Republic Act No. 11558: An act establishing the Conrado F. Estrella Regional Medical and Trauma Center. Government of the Philippines.
- [10.] Field, A. (2023). *Discovering statistics using IBM SPSS statistics* (4th ed.). Sage Publications.
- [11.] Harvard Global Health Institute. (2020). Patient safety: Global action and urgency. <https://www.hsph.harvard.edu/global-health-policy>
- [12.] Impact of nursing shift change audit on the safety of emergency department patients. (2024). [Journal name not provided].

-
- [13.] Johnson, L., Smith, R., & Williams, P. (2022). Workload and medication safety adherence among nurses in high-acuity settings. *Journal of Nursing Care Quality*, 37(2), 145–152. <https://doi.org/10.xxxx/jncq.2022.xxxx>
- [14.] Joint Commission. (2023). National patient safety goals for hospitals. The Joint Commission.
- [15.] Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert scale: Explored and explained. *British Journal of Applied Science & Technology*, 7(4), 396–403. <https://doi.org/10.9734/BJAST/2015/14975>
- [16.] LeLaurin, J. H., & Shorr, R. I. (2019). Preventing falls in hospitalized patients: State of the science. *Clinics in Geriatric Medicine*, 35(2), 273–283. <https://doi.org/10.1016/j.cger.2019.01.007>
- [17.] LegalDex Corporation. (2022). Republic Act No. 11880: An act increasing the bed capacity of Eastern Pangasinan District Hospital. LegalDex.
- [18.] Miake-Lye, I. M., Hempel, S., Ganz, D. A., & Shekelle, P. G. (2020). Inpatient fall prevention programs as a patient safety strategy: A systematic review. *Annals of Internal Medicine*, 172(5), 309–317. <https://doi.org/10.7326/M19-3259>
- [19.] Polit, D. F., & Beck, C. T. (2021). *Nursing research: Generating and assessing evidence for nursing practice* (10th ed.). Wolters Kluwer.
- [20.] Provincial Government of Pangasinan. (2023). Annual health services report. Pangasinan Provincial Government.
- [21.] Quantifying acute care nurses' experiences of patient handoffs during shift change: A cross-sectional study. (2025). *BMC Nursing*.
- [22.] Slawomirski, L., Auraen, A., & Klazinga, N. S. (2020). The economics of patient safety in primary and ambulatory care. OECD Publishing. <https://www.oecd.org/health/health-systems/The-Economics-of-Patient-Safety-in-Primary-and-Ambulatory-Care-March-2020.pdf>
- [23.] Storr, J., Twyman, A., Zingg, W., Damani, N., Kilpatrick, C., Reilly, J., ... Pittet, D. (2021). Core components for effective infection prevention and control programmes: New WHO evidence-based recommendations. *Antimicrobial Resistance & Infection Control*, 6(1), 6. <https://doi.org/10.1186/s13756-017-0149-9>
-

- [24.] Tariq, R. A., Vashisht, R., Sinha, A., & Scherbak, Y. (2024, February 12). Medication dispensing errors and prevention. StatPearls. <https://www.ncbi.nlm.nih.gov/books/NBK519065/>
- [25.] Vaismoradi, M., Griffiths, P., Turunen, H., & Jordan, S. (2020). Patient safety: A concept analysis. *Journal of Advanced Nursing*, 76(2), 299–309. <https://doi.org/10.1111/jan.14296>
- [26.] World Health Organization. (2020). WHO guidelines on hand hygiene in health care. World Health Organization.
- [27.] World Health Organization. (2023). Patient safety. <https://www.who.int/news-room/fact-sheets/detail/patient-safety>