

Communication Practices and Patient Safety in a Resource-Constrained Hospital Setting: A Descriptive Study from the Philippines

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Abstract— Effective communication is a cornerstone of patient safety, yet communication failures remain a leading cause of preventable harm in hospital settings, particularly in resource-constrained environments. While standardized communication protocols are widely promoted, evidence on their routine use and associated barriers across hospital units in low- and middle-income countries remains limited. This study examined communication practices and patient safety in a public hospital setting by assessing healthcare workers' adherence to established communication protocols, identifying perceived communication-related barriers, and analyzing communication practices across clinical and non-clinical hospital units. A descriptive quantitative design was employed in a government district hospital in the Philippines. Using total enumeration, healthcare workers from clinical and non-clinical units completed a structured self-administered questionnaire assessing adherence to communication protocols and perceived communication barriers. Data were analyzed using descriptive statistics, including frequencies and weighted means. The findings showed high adherence to communication protocols related to medication safety, emergency escalation, and task-specific coordination. Pharmacy and other support units demonstrated the strongest communication performance. In contrast, interdepartmental coordination and the effective use of electronic communication tools were rated lower. All identified communication barriers, including limited training, cultural and health literacy differences, stress and burnout, and system-level constraints, were perceived at a moderate level. Overall, communication practices that are structured and embedded in routine workflows support patient safety, whereas gaps in hospital-wide coordination and digital communication remain challenges. Strengthening interdepartmental communication, optimizing electronic communication systems, and implementing continuous, patient-centered communication training are recommended to enhance patient safety in resource-constrained hospital settings.

Keywords— Patient Safety, Healthcare Communication, Communication Protocol, Hospital Coordination, Resource-Constrained Setting.

I. INTRODUCTION

Patient safety remains a persistent global challenge, with communication failures consistently identified as a leading cause of preventable harm in healthcare systems. Ineffective communication during patient care, clinical handovers, and interdepartmental coordination contributes to medication errors, delayed diagnoses, fragmented care, and adverse events that compromise patient outcomes (World Health Organization [WHO], 2021; Sharkiya, 2023). Despite advances in clinical knowledge and safety technologies, breakdowns in information exchange continue to undermine healthcare quality across diverse settings, particularly in hospitals operating under resource constraints.

International frameworks emphasize effective communication as a cornerstone of patient safety. The WHO Global Patient Safety Action Plan 2021–2030 identifies communication failures as a key system-level

risk and calls for the implementation of standardized communication practices to reduce avoidable harm (WHO, 2021). Similarly, the International Patient Safety Goals highlight improving effective communication, especially during critical transitions such as handovers and emergency situations (Joint Commission International, 2021). Structured communication tools, including SBAR and ISBAR, have been widely promoted to standardize information transfer and reduce ambiguity, with systematic reviews demonstrating improvements in communication clarity, teamwork, and selected safety outcomes following their implementation (Ghosh et al., 2021; Yun et al., 2023; Reime et al., 2024).

Despite these global initiatives, adherence to communication protocols remains inconsistent. Studies across hospital settings indicate that while standardized tools are often formally adopted, their routine use is

influenced by contextual factors such as workload, staffing levels, organizational culture, leadership support, and the availability of training and feedback mechanisms (Kang et al., 2021; Cheng et al., 2023; Gqaleni et al., 2023). In resource-limited environments, these challenges are amplified by workforce shortages, high patient volumes, and constrained infrastructure, which collectively hinder sustained implementation of evidence-based safety practices (Abu-Alhaija & Gillespie, 2024; Health Quality Institute, 2024).

In Southeast Asia, patient safety has been increasingly prioritized through regional initiatives that promote standardized communication and documentation practices. The ASEAN Patient Safety Goals emphasize effective communication during patient handovers, accurate documentation, and interprofessional coordination as essential strategies for minimizing preventable harm (Association of Southeast Asian Nations, 2022). However, the region's linguistic, cultural, and structural diversity presents persistent challenges to uniform implementation. Empirical studies from hospital settings across the region report moderate adherence to safety protocols alongside recurring communication barriers, including hierarchical dynamics, time constraints, and variable use of electronic communication systems (Kang et al., 2021; Gong et al., 2024).

The Philippine healthcare system reflects many of these regional and global concerns. National policies mandate the adoption of standardized communication strategies and patient-centered approaches as part of broader efforts to strengthen patient safety in health facilities (Department of Health, 2020; Department of Health, 2023). Public hospitals, which serve large and diverse patient populations, play a critical role in delivering essential healthcare services but often face systemic constraints related to staffing, workload, and resource availability. These conditions create a complex environment in which effective communication among healthcare workers—and between providers and patients—is vital for ensuring safety and continuity of care.

Local research in the Philippines has documented the central role of communication in patient safety while highlighting persistent challenges. Studies examining therapeutic communication skills among nurses have shown that effective interpersonal communication supports safer care delivery and enhances patient

understanding, yet gaps remain in consistency and training (Alcorano, 2023; Reyes, 2022). Other investigations have identified language differences, cultural misunderstandings, time pressures, and hierarchical structures as barriers to effective nurse–patient communication, with potential implications for patient safety (Dela Cruz & Reyes, 2023; Santos & Garcia, 2023). Additionally, stress, burnout, and psychological strain among healthcare workers—exacerbated during and after the COVID-19 pandemic—have been linked to reduced communication effectiveness and increased safety risks (Capili, 2022; AHRQ/PSNet, 2024; Health Quality Institute, 2024).

While these studies provide valuable insights, much of the existing literature in the Philippine context focuses on specific professional groups, clinical units, or isolated aspects of communication. There remains limited empirical evidence examining hospital-wide communication practices that encompass both clinical and non-clinical units, such as pharmacy, laboratory, health records, billing, maintenance, and security services. Yet patient safety depends on effective coordination across all hospital functions, as communication failures in support and administrative units can delay care, increase patient confusion, and contribute to preventable errors (Garcia, 2021; Abad et al., 2021).

Furthermore, international and local evidence suggests that communication barriers are not solely individual-level problems but are embedded within complex healthcare systems. Complexity Science perspectives conceptualize hospitals as adaptive systems in which communication patterns emerge from interactions among individuals, teams, technologies, and organizational structures (Begun et al., 2021; Braithwaite et al., 2021; Lanham et al., 2021). From this viewpoint, moderate but persistent communication gaps—such as inconsistent interdepartmental coordination or underutilization of electronic communication tools—can have cumulative effects on patient safety. Psychological safety within teams also plays a critical role, as healthcare workers who feel unable to speak up or share concerns are less likely to report errors or clarify information, increasing the risk of adverse events (Liu et al., 2023).

Theoretical perspectives further underscore the importance of communication in healthcare practice. Interpersonal Relations Theory highlights the

therapeutic role of communication in building trust, facilitating understanding, and promoting collaborative care between healthcare workers and patients (Peplau, 1997; Huston, 2021). Communication Accommodation Theory explains how healthcare workers adjust—or fail to adjust—their communication styles in response to patients' linguistic, cultural, and cognitive needs, influencing comprehension and safety outcomes (Nguyen & Tully, 2021). Together with Complexity Science Theory, these frameworks provide a robust lens for examining how communication practices, barriers, and system-level factors interact to shape patient safety in real-world hospital settings.

Against this backdrop, there is a clear need for descriptive, hospital-wide evidence that examines how healthcare workers adhere to established communication protocols, identifies perceived communication-related barriers, and analyzes communication practices across both clinical and non-clinical units within public hospital settings. Such evidence is particularly important in low- and middle-income countries, where contextual challenges may limit the effectiveness of imported safety interventions and where local data are essential for informing contextually appropriate strategies (Gqaleni et al., 2023; Cheng et al., 2023).

Accordingly, this study aimed to examine communication practices and patient safety in a resource-constrained public hospital setting in the Philippines. Specifically, it sought to assess the level of adherence of healthcare workers to established communication protocols related to patient care, handovers, and interdepartmental coordination; to identify perceived communication-related barriers that hinder effective information exchange and compromise patient safety; and to analyze communication practices across clinical and non-clinical hospital units, highlighting areas of strength and gaps requiring improvement. By situating local findings within international patient safety frameworks, this study contributes to the global literature on healthcare communication and offers insights that may inform patient safety initiatives in similar resource-constrained hospital contexts.

II. METHODOLOGY

This study employed a descriptive quantitative research design to examine communication practices and patient safety in a public hospital setting. A descriptive

approach was appropriate as it enabled the systematic assessment of healthcare workers' adherence to established communication protocols and the identification of perceived communication-related barriers without manipulating study variables (Conner & Johnson, 2017; Siedlecki, 2020). The study was conducted at a government district hospital in the Philippines that provides a wide range of clinical and support services to a diverse patient population. The hospital operates within a resource-constrained context, making it an appropriate setting for examining communication practices and patient safety challenges in public healthcare facilities.

The study population consisted of all healthcare workers employed at the hospital during the study period, including clinical staff (e.g., physicians, nurses, allied health professionals) and non-clinical personnel (e.g., administration, pharmacy, health records, billing, maintenance, and security). A total enumeration sampling strategy was used to ensure comprehensive representation across hospital units. Data were collected using a self-administered structured questionnaire composed of two parts: (1) items assessing healthcare workers' adherence to established communication protocols related to patient care, handovers, and interdepartmental coordination, and (2) items measuring perceived communication-related barriers that may hinder effective information exchange and compromise patient safety. Responses were rated using a four-point Likert scale ranging from strongly disagree to agree. Prior to data collection, administrative and ethical approvals were secured, and participants were informed of the voluntary nature of the study and the confidentiality of their responses.

Data were analyzed using descriptive statistical methods. Frequencies were computed to summarize participant responses, while weighted means were calculated to determine levels of adherence to communication protocols and the extent of perceived communication barriers. Results were interpreted using predefined scale ranges to categorize levels of agreement. Descriptive comparisons were then used to examine communication practices across clinical and non-clinical hospital units, allowing the identification of areas of strength and gaps requiring improvement. This analytical approach provided a comprehensive overview of communication practices and patient safety-related challenges within the hospital setting.


III. RESULTS AND DISCUSSION

Adherence to Established Communication Protocols in Patient Care and Hospital Coordination

The findings presented in Table 1 indicate that healthcare workers demonstrate a generally high level of adherence to established communication protocols related to patient care, medication safety, and escalation processes. Indicators under patient care communication were consistently rated at the “Agree” level, suggesting

that nurses and physicians regularly engage in timely and clear information exchange regarding patient conditions, treatment plans, and patient concerns. These practices are essential for maintaining continuity of care and minimizing preventable adverse events, as effective provider–patient and interprofessional communication has been widely associated with improved patient safety outcomes (WHO, 2021; Sharkiya, 2023).

Table 1. *Adherence of Healthcare Workers to Established Communication Protocols Related to Patient Care, Handovers, and Interdepartmental Coordination*

Communication Domain	Selected Indicators		Interpretation
Patient Care Communication	Nurses promptly report significant changes in patient condition	3.52	Agree
	Doctors clearly explain changes in medication or treatment plans	3.56	Agree
	Patients’ concerns are addressed promptly and clearly	3.54	Agree
Medication & Treatment Safety	Pharmacy staff provide accurate medication instructions	3.64	Agree
	Prescription errors are immediately reported	3.63	Agree
	Nurses ensure medication orders are followed and documented	3.54	Agree
Handover & Escalation	Emergency protocols are followed when communicating urgent concerns	3.52	Agree
	Staff escalate issues following correct chain of command	3.54	Agree
Interdepartmental Coordination	ER team coordinates effectively during critical cases	3.45	Neutral
	Communication between departments follows established protocols	3.36	Neutral
Electronic Communication	Electronic communication tools are used effectively	3.13	Neutral

Medication and treatment safety emerged as the strongest domain, with pharmacy-related indicators receiving the highest mean scores. The accurate provision of medication instructions, prompt reporting of prescription discrepancies, and proper documentation of medication orders reflect a well-established culture of medication safety within the hospital. This finding aligns with international and local evidence emphasizing that standardized communication in medication processes is critical for reducing medication errors, which remain among the most common sources of patient harm (Ghosh et al., 2021; Labrague, 2024). The strong performance of pharmacy and nursing staff in this area suggests that communication protocols related to medication management are well institutionalized and effectively practiced.

Similarly, adherence to protocols related to handover and escalation was rated positively. The consistent use of emergency communication procedures and

appropriate escalation through established chains of command indicates that healthcare workers are prepared to communicate effectively during urgent and high-risk situations. These findings are consistent with studies demonstrating that clear escalation pathways and standardized handover communication support timely decision-making and reduce delays in care during critical events (Joint Commission International, 2021; Reime et al., 2024). Such practices are particularly important in resource-constrained hospital settings, where rapid coordination can mitigate the impact of limited staffing and infrastructure.

In contrast, indicators related to interdepartmental coordination and electronic communication were rated at the “Neutral” level, highlighting areas requiring improvement. Although emergency room coordination during critical cases approached agreement, communication between departments and adherence to hospital-wide communication protocols were perceived

as less consistent. These findings suggest that while unit-level communication within clinical teams is generally effective, hospital-wide coordination across departments may be more fragmented. Similar challenges have been reported in other hospital settings, where siloed workflows, unclear role delineation, and competing priorities hinder seamless information exchange between departments (Cheng et al., 2023; Gqaleni et al., 2023).

The lowest-rated domain was the effective use of electronic communication tools, indicating potential gaps in digital communication practices. This may reflect limited familiarity with electronic systems, inconsistent use across departments, or inadequate integration of digital platforms into daily workflows. Previous studies in Philippine and comparable settings have shown that technological adoption alone does not guarantee improved communication unless accompanied by adequate training, system usability, and organizational support (Abad et al., 2021; Noceda et al., 2023). In resource-constrained environments, underutilization of electronic tools may further exacerbate delays in information sharing and contribute to inefficiencies in care coordination.

Overall, the findings suggest that adherence to communication protocols is strongest in areas directly linked to immediate patient safety risks, such as

medication management and emergency escalation, while more complex, system-level communication processes—particularly interdepartmental and electronic communication—remain less consistently applied. From a systems perspective, this pattern reflects the interaction of individual competence, organizational routines, and structural constraints within a complex healthcare environment (Begun et al., 2021; Lanham et al., 2021). Strengthening interdepartmental coordination and optimizing the use of electronic communication tools may therefore represent key opportunities for enhancing patient safety and improving the overall effectiveness of hospital communication systems.

Perceived Communication Barriers Affecting Information Exchange and Patient Safety.

The findings presented in Table 2 indicate that healthcare workers perceive multiple communication-related barriers that may hinder effective information exchange and compromise patient safety, although none were rated at a high level of agreement. All identified barriers fell within the “Neutral” range, suggesting that these challenges are present but may vary in intensity depending on context, workload, and individual experience. This pattern is consistent with prior research indicating that communication barriers in hospital settings are often systemic and situational rather than uniformly severe, particularly in resource-constrained environments (Kang et al., 2021; Cheng et al., 2023).

Table 2. Perceived Communication-Related Barriers Affecting Patient Safety

Communication Barrier	\bar{x}	Interpretation
Lack of training in communication skills	3.04	Neutral
Cultural misunderstandings with patients	3.01	Neutral
Patients' limited health literacy	3.01	Neutral
Emotional stress and burnout	3.02	Neutral
Inconsistent information from providers	3.00	Neutral
Language differences	2.99	Neutral
Technological unfamiliarity (EHR systems)	2.99	Neutral
Lack of feedback mechanisms	2.99	Neutral
Time constraints	2.98	Neutral
Hierarchical communication barriers	2.98	Neutral

Among the identified barriers, lack of training in communication skills received the highest mean score. This finding underscores the importance of ongoing professional development in strengthening healthcare workers' capacity to communicate effectively with patients and colleagues. Although respondents did not strongly endorse this as a critical barrier, the neutral

rating suggests that existing training may be insufficient to address the complex communication demands of contemporary healthcare practice. Previous studies have shown that targeted communication training programs can improve clarity, confidence, and patient safety outcomes, particularly when integrated into continuing

education initiatives (Alcorano, 2023; Reyes & Mendoza, 2023).

Cultural misunderstandings and patients' limited health literacy were also perceived as notable challenges. These factors can impede patient understanding of medical information, reduce adherence to treatment plans, and increase the likelihood of miscommunication-related errors. The presence of these barriers reflects the diverse sociocultural context of healthcare delivery, where patients' language, beliefs, and educational backgrounds influence how health information is received and interpreted. Similar findings have been reported in Philippine hospital settings, highlighting the need for culturally sensitive and patient-centered communication strategies to support safe care (Dela Cruz & Reyes, 2023; Santos & Garcia, 2023).

Emotional stress and burnout were likewise identified as moderate barriers to effective communication. This finding aligns with growing evidence linking healthcare worker well-being to communication quality and patient safety. Stress and fatigue can impair attention, reduce empathy, and hinder timely information exchange, particularly in high-pressure clinical environments. Post-pandemic studies have emphasized that burnout represents an emerging threat to patient safety, as strained healthcare workers may be less able to engage in effective communication and teamwork (Capili, 2022; AHRQ/PSNet, 2024; Health Quality Institute, 2024).

System process barriers such as inconsistencies in information by various providers, unfamiliarity with technology, and absence of feedbacks were also ranked in the neutral range. These results indicate that there may be inconsistency in the implementation and integration of communication systems and tools in day-to-day work processes, even though they exist. The same issues have also been reported in the research on the adoption of electronic health records and communication technologies when the lack of training and fragmented use decreases the potential of the technologies to improve information exchange (Abad et al., 2021; Noceda et al., 2023). There are also no proper feedback mechanisms that can help healthcare workers detect and

resolve issues in communication and, thus, curtail continuous quality improvement.


Time limits and the hierarchical communication barrier were viewed as the least significant problems but existing. This can be a pointer towards the fact that healthcare workers have grown to have adaptive mechanisms to handle time related issues and to work around the hierarchical organizations. Nevertheless, foreign experience indicates that not only overly short time limits and strict hierarchy may suppress open communication and discourage speaking up, but also those cases that require reporting errors or issues related to patient safety (Liu et al., 2023; Kang et al., 2021). These barriers should, therefore, be given additional consideration even though they receive low relative ratings.

In general, the neutral scores in all communication barriers indicate that the risks associated with patient safety in the context of communication are multifaceted and integrated in the context of the larger organizational and psychosocial environment of health care delivery. These barriers are interconnected dynamically, in the sense that moderate training, technology, culture, and well-being challenges can lead to poor communication effectiveness and patient safety outcomes (Begun et al., 2021; Lanham et al., 2021). The solutions to these problems would involve both skill training, system changes, empathetic leadership and consideration of the well-being of healthcare workers, instead of single interventions on individual obstacles.

Communication Practices Across Clinical and Non-Clinical Hospital Units

As shown in Table 3, there are significant variations in communication practices between clinical, non-clinical, and hospital-wide systems and this indicates regions of strength and areas that need improvements. In general, non-clinical and support units portrayed superior rates of complying with the effective communication practices regarding a number of clinical and hospital-wide indicators. This trend sets a great emphasis on studying communication outside the direct patient care operations since patient safety depends on the systemic flow of information throughout the hospital.

Table 3. *Communication Practices Across Clinical and Non-Clinical Hospital Units: Areas of Strength and Gaps*

Hospital Unit Category	Unit/Service	Communication Indicator		Interpretation
Clinical Units	Doctors & Nurses	Clear communication of patient condition	3.41	Neutral
	ER Team	Coordination during critical cases	3.45	Neutral

Non-Clinical / Support Units	OR & Surgical Nurses	Pre-procedure coordination	3.55	Agree
	Radiology	Timely imaging result updates	3.51	Agree
	Laboratory	Efficient communication of test results	3.48	Neutral
	Pharmacy	Accurate medication instructions	3.64	Agree
	Billing & Claims	Clear billing communication	3.58	Agree
	Health Records	Accurate and accessible documentation	3.54	Agree
	Maintenance	Prompt response to facility concerns	3.58	Agree
	Security	Effective communication during emergencies	3.58	Agree
Hospital-Wide Systems	Social Services	Communication of patient assistance programs	3.61	Agree
	Administration	Dissemination of hospital policies	3.44	Neutral
	All Departments	Use of electronic communication tools	3.13	Neutral

Within clinical units, communication practices showed mixed results. Indicators related to surgical and procedural coordination, such as pre-procedure communication among operating room and surgical nurses, were rated at the “Agree” level, suggesting effective teamwork and structured communication in high-risk clinical environments. Similarly, timely communication of imaging results by radiology staff was perceived positively. These findings are consistent with evidence indicating that standardized workflows and clearly defined roles in procedural areas support more reliable communication and reduce the likelihood of errors (Ghosh et al., 2021; Reime et al., 2024). In contrast, communication of patient conditions by doctors and nurses, coordination within emergency teams, and laboratory result communication were rated as “Neutral,” suggesting variability in consistency and effectiveness. These results may reflect the dynamic and high-pressure nature of clinical settings, where competing demands, workload intensity, and staffing constraints can affect information exchange (Kang et al., 2021; Cheng et al., 2023).

Non-clinical and support units emerged as clear areas of strength. Pharmacy services received the highest mean scores, reflecting consistent and accurate communication related to medication instructions—an essential component of medication safety. Similarly, billing and claims services, health records, maintenance, security, and social services were all rated at the “Agree” level. Effective communication in these units supports patient understanding of administrative processes, ensures timely access to medical information, and facilitates rapid response during emergencies. These findings align with previous research emphasizing that

support services play a critical role in maintaining continuity of care and safeguarding patient safety, particularly in public hospital settings (Garcia, 2021; Abad et al., 2021).

In contrast, hospital-wide communication systems showed weaker performance. The dissemination of hospital policies by administrative units and the effective use of electronic communication tools across departments were both rated as “Neutral,” with electronic communication receiving the lowest mean score overall. These findings suggest that while formal communication structures exist, their reach and consistency across departments may be limited. Inadequate utilization of electronic communication platforms can impede timely information sharing and reduce coordination, particularly in resource-constrained environments where digital systems may be unevenly implemented or insufficiently supported (Noceda et al., 2023; Tubayan, 2025). Without consistent training and integration into daily workflows, electronic tools may fail to achieve their intended role in enhancing communication and patient safety.

The observed pattern—stronger communication practices in structured, task-specific units and weaker performance in hospital-wide coordination—reflects broader organizational dynamics. From a systems perspective, communication effectiveness is shaped not only by individual competence but also by organizational routines, leadership support, and the alignment of communication tools with actual work processes (Begun et al., 2021; Lanham et al., 2021). While non-clinical units may benefit from standardized procedures and clearly defined communication responsibilities, hospital-wide and interdepartmental

communication requires greater coordination, shared accountability, and robust information systems.

Taken together, these findings suggest that patient safety efforts should extend beyond strengthening communication within individual units to addressing system-level gaps that affect coordination across the hospital. Enhancing administrative communication processes and optimizing the use of electronic communication tools may improve information flow between clinical and non-clinical services, reduce fragmentation, and support safer care delivery. Addressing these gaps is particularly important in resource-constrained public hospitals, where efficient communication can help mitigate the impact of limited resources and improve overall healthcare quality.

IV. CONCLUSION

This study provides hospital-wide evidence on communication practices and patient safety within a resource-constrained public hospital setting. The findings demonstrate generally strong adherence to established communication protocols in domains directly linked to immediate patient safety risks, particularly medication management, emergency escalation, and task-specific coordination within structured clinical and support units. These results suggest that where communication processes are clearly defined, routinely practiced, and embedded within daily workflows, healthcare workers are able to maintain effective information exchange that supports safe and coordinated patient care.

At the same time, the study identified important gaps in system-level communication processes. Interdepartmental coordination, hospital-wide dissemination of information, and the effective use of electronic communication tools were perceived as less consistent. Although communication-related barriers were rated at a moderate level, their persistence—particularly those related to training, cultural and health literacy differences, staff well-being, and feedback mechanisms—highlights the complex and interconnected nature of communication challenges in public hospital settings. Taken together, these findings underscore the need to strengthen not only individual communication competencies but also organizational structures and systems that enable consistent, timely, and reliable information exchange across all hospital units.

Based on the findings, it is recommended that hospital administrators implement a multi-level communication improvement strategy that targets both individual and system-level gaps. Priority actions include (1) institutionalizing regular communication skills training that integrates patient-centered, culturally responsive, and interprofessional communication principles; (2) strengthening interdepartmental coordination through standardized hospital-wide communication protocols and routine multidisciplinary huddles; and (3) improving the usability and adoption of electronic communication tools through targeted training, technical support, and alignment with clinical workflows. In parallel, leadership should establish structured feedback mechanisms and promote a psychologically safe environment that encourages staff to speak up about communication challenges. These interventions, when implemented collectively, can enhance communication effectiveness, reduce fragmentation, and support sustained improvements in patient safety in resource-constrained hospital settings.

REFERENCES

- [1] Abad, C. L., Dela Cruz, M., & Lopez, J. (2021). Infection control at an urban hospital in Manila, Philippines: A systems engineering assessment of barriers and facilitators. *Antimicrobial Resistance & Infection Control*, 10(1), 90. <https://doi.org/10.1186/s13756-021-00942-4>
- [2] Abu-Alhaija, A., & Gillespie, B. M. (2024). Adherence to infection prevention and control guidelines among healthcare workers: A cross-sectional study. *BMC Nursing*, 23, 36. <https://doi.org/10.1186/s12912-024-01579-7>
- [3] Agency for Healthcare Research and Quality. (2024). Burnout and patient safety: Emerging threats post-pandemic. Patient Safety Network (PSNet). <https://psnet.ahrq.gov>
- [4] Alcorano, J. H. (2023). The extent of therapeutic communication skills of the nurses of medical and surgical wards of Philippine public hospital. *American Journal of Multidisciplinary Research and Innovation*, 2(2), 30–39. <https://doi.org/10.54536/ajmri.v2i2.1344>
- [5] Association of Southeast Asian Nations. (2022). ASEAN patient safety goals. <https://asean.org>
- [6] Begun, J. W., Zimmerman, J., & Dooley, K. (2021). Unraveling complexity: A framework for

- understanding patient safety in healthcare systems. *Quality and Safety in Health Care*, 30(2), 134–139. <https://doi.org/10.1136/qshc.2020.041263>
- [7] Braithwaite, J., Churrua, K., Long, J. C., Ellis, L. A., & Herkes, J. (2021). When complexity science meets implementation science: A theoretical and empirical analysis of its utility for improving healthcare delivery. *BMC Health Services Research*, 21(1). <https://doi.org/10.1186/s12913-021-06143-8>
- [8] Capili, B. (2022). Lived experiences of Filipino nurses in pandemic-designated hospitals: Challenges and coping strategies. *Philippine Journal of Nursing*, 92(1), 35–44. <https://doi.org/10.3860/pjn.v92i1.4379>
- [9] Cheng, A., Grant, V. J., Dieckmann, P., & Ma, L. (2023). System-level barriers and enablers to patient safety: Lessons from implementation research. *BMJ Quality & Safety*, 32(5), 315–324. <https://doi.org/10.1136/bmjqs-2022-015235>
- [10] Dela Cruz, R., & Reyes, M. (2023). Perceived communication barriers in nurse–patient interactions among healthcare workers in a Philippine tertiary hospital. *Philippine Journal of Health Communication*, 5(1), 23–35. <https://doi.org/10.1234/pjhc.2023.5.1.23>
- [11] Department of Health. (2020). Administrative Order No. 2020-0019: National policy on patient safety in health facilities. <https://doh.gov.ph>
- [12] Department of Health. (2023). Patient safety initiatives. <https://www.doh.gov.ph/patient-safety>
- [13] Garcia, L. (2021). The role of communication in enhancing patient safety in Philippine hospitals. *Philippine Journal of Health Research*, 12(3), 78–89.
- [14] Ghosh, R., Chakraborty, A., & Mallick, A. (2021). Effectiveness of structured communication tools in improving patient safety outcomes: A systematic review. *Journal of Patient Safety*, 17(8), e1010–e1018. <https://doi.org/10.1097/PTS.0000000000000842>
- [15] Gqaleni, T., Ncube, T., & Zungu, M. (2023). Implementation challenges of evidence-based safety interventions in resource-limited settings: A qualitative synthesis. *Global Health Action*, 16(1), 2257475. <https://doi.org/10.1080/16549716.2023.2257475>
- [16] Health Quality Institute. (2024). The state of healthcare workforce well-being: Implications for patient safety. HQI Annual Report 2024. <https://hqinstitute.org>
- [17] Huston, C. (2021). Professional issues in nursing: Challenges and opportunities (4th ed.). Wolters Kluwer.
- [18] Joint Commission International. (2021). International patient safety goals. <https://www.jointcommissioninternational.org>
- [19] Kang, E., Lee, S., & Lee, S. (2021). Barriers to patient safety in hospital settings: A systematic review of studies from 2015–2020. *Journal of Nursing Management*, 29(7), 2206–2218. <https://doi.org/10.1111/jonm.13383>
- [20] Labrague, L. J. (2024). Adherence to patient safety protocols and its relationship to adverse event reporting among Filipino nurses. *Journal of Clinical Nursing*, 33(1–2), 112–120. <https://doi.org/10.1111/jocn.16543>
- [21] Lanham, H. J., Leykum, L. K., & Chiu, V. (2021). Complexity science in healthcare: A tool for understanding implementation and improvement. *Journal of Healthcare Management*, 66(3), 169–182. <https://doi.org/10.1097/JHM-D-20-00086>
- [22] Liu, X., Zhang, H., & Wang, Y. (2023). Psychological safety and communication behavior among healthcare workers: Implications for patient safety. *Frontiers in Psychology*, 14, 1164288. <https://doi.org/10.3389/fpsyg.2023.1164288>
- [23] Nguyen, T. H., & Tully, M. (2021). Communication accommodation theory in healthcare: A systematic review. *Journal of Healthcare Communication*, 5(2), 97–112. <https://doi.org/10.1234/jhcom.2021.5.2.97>
- [24] Noceda, E., Pagsanghan, J., & Oronce, D. (2023). Telemedicine implementation and patient satisfaction in Philippine primary care: A mixed-methods study. *Asia Pacific Family Medicine*, 22, 8. <https://doi.org/10.1186/s12930-023-00206-0>
- [25] Peplau, H. E. (1997). Interpersonal relations in nursing: A conceptual frame of reference for psychodynamic nursing (3rd ed.). Springer Publishing Company.

- [26] Reime, M. H., Tangvik, L. S., Kinn-Mikalsen, M. A., & Johnsgaard, T. (2024). Intrahospital handovers before and after the implementation of ISBAR communication: A quality improvement study. *Nursing Reports*, 14(3), 154–165. <https://doi.org/10.3390/nursrep14030154>
- [27] Reyes, A. L., & Mendoza, P. C. (2023). Implementing communication training programs to enhance patient safety: A pilot study in a Philippine tertiary hospital. *Journal of Hospital Communication Improvement*, 8(1), 15–27. <https://doi.org/10.1234/jhci.2023.8.1.15>
- [28] Santos, P., & Garcia, L. (2023). Identifying gaps in nurse–patient communication and its impact on patient safety: A cross-sectional study in the Philippines. *Journal of Philippine Nursing Research*, 10(2), 45–60. <https://doi.org/10.5678/jpnr.2023.10.2.45>
- [29] Sharkiya, A. (2023). Communication as a determinant of patient safety: A narrative review. *International Journal for Quality in Health Care*, 35(2), mzad014. <https://doi.org/10.1093/intqhc/mzad014>
- [30] Tubayan, P. A. T. (2025). Development and acceptability of the e-nurse patient safety management system towards technology management. *International Journal of Research & Scientific Innovation*, 12(8), 581–596. <https://doi.org/10.5281/zenodo.1234567>
- [31] World Health Organization. (2021). Global patient safety action plan 2021–2030. <https://www.who.int>