

# ETHICAL NON-COMPLIANCE IN NURSING PRACTICE AS AN ORGANIZATIONAL RISK: A GOVERNANCE-ORIENTED ANALYSIS OF SUPERVISORY STRUCTURES

Tosi Rahmaddian\*

Baiturrahmah University, Indonesia

\*Correspondence: [tosi\\_rahmaddian@fkm.unbrah.ac.id](mailto:tosi_rahmaddian@fkm.unbrah.ac.id)

## ABSTRACT

### OBJECTIVE:

This study aims to analyse ethical non-compliance in nursing practice through a governance-oriented perspective, focusing on how supervisory structures and organizational arrangements shape ethical conduct within health service organizations.

### DESIGN:

A qualitative, document-based study employing an interpretive content analysis approach.

### SETTING:

The study was conducted in a tertiary hospital, examining formal supervisory, governance, and policy documents related to nursing practice.

### MAIN OUTCOME MEASURES:

Governance-related patterns associated with ethical non-compliance, including supervisory accountability, workload management, credentialing arrangements, and ethical oversight mechanisms.

### RESULTS:

Four interrelated themes were identified. Ethical non-compliance was normalized under sustained workload pressure and operational demands. Supervisory accountability was fragmented across organizational units, resulting in unclear ethical oversight. Gaps between formal credentialing requirements and actual task allocation weakened professional accountability. In addition, ethical standards were often symbolically emphasized but weakly enforced in routine supervisory practice. These governance conditions collectively contributed to the routinization of ethically problematic practices in everyday nursing work.

### CONCLUSIONS:

Ethical non-compliance in nursing practice is best understood as a governance-related phenomenon embedded within supervisory structures and organizational routines rather than as an individual moral failure. Addressing this issue requires strengthening supervisory accountability, integrating credentialing and clinical oversight, and embedding ethical evaluation within routine governance processes to prevent the normalization of ethical deviations in healthcare practice.

### KEYWORDS

ethical non-compliance; nursing practice; supervisory governance; ethical climate; health service governance

## INTRODUCTION

Ethical compliance represents a fundamental dimension of professional nursing practice and is closely associated with patient safety, dignity, and public trust in healthcare institutions. As the largest professional group within hospital systems, nurses engage in continuous ethical decision-making that shapes not only individual patient experiences but also organizational credibility and clinical outcomes [1]. International professional frameworks, such as the International Council of Nurses Code of Ethics, emphasize accountability, respect for patient autonomy, confidentiality, and professional responsibility as core ethical obligations in nursing practice [2].

Despite the widespread institutionalization of ethical codes and regulatory standards, ethical non-compliance remains a recurrent issue in hospital settings. Empirical studies have documented that ethical lapses often manifest in routine clinical activities, including inadequate communication, incomplete documentation, breaches of confidentiality, and non-adherence to professional regulations [3]. Such deviations have been linked to adverse patient outcomes, increased medico-legal risk, and erosion of trust in healthcare organizations [4].

Much of the existing literature has conceptualized ethical non-compliance primarily as an individual-level phenomenon, focusing on nurses' moral sensitivity, ethical awareness, and personal coping mechanisms. Research on moral distress and moral courage, for instance, has highlighted the psychological and emotional challenges faced by nurses when ethical values conflict with clinical realities [5,6]. While these perspectives offer important insights into individual experiences, they tend to underemphasize the organizational and governance contexts within which ethical behavior is enacted and sustained.

Increasingly, scholars have argued that ethical practice in healthcare is embedded within the broader ethical climate and governance structures of organizations. Ethical climate—defined as shared perceptions of ethically appropriate behavior and institutional support for ethical decision-making—has been shown to influence nurses' professional conduct, job satisfaction, and moral distress [7,8]. Leadership and supervision play a central role in shaping this climate, as supervisors translate institutional policies into everyday practice through monitoring, feedback, and role modeling [9]. In complex hospital environments, particularly tertiary care settings, ethical non-compliance often emerges not from deliberate misconduct but from systemic pressures. High patient acuity, staffing shortages, time constraints, and emotional fatigue can normalize deviations from ethical standards, gradually embedding them into routine clinical practice [10,11]. These conditions may weaken accountability mechanisms and blur professional boundaries, especially when supervisory oversight is inconsistent or fragmented.

Supervisory governance constitutes a critical yet underexplored mechanism in the maintenance of ethical nursing practice. Supervisors act as intermediaries between organizational policies and frontline care, shaping ethical expectations and reinforcing professional norms. Evidence suggests that weak supervisory structures and inconsistent enforcement of standards contribute to the normalization of ethical deviations, whereas structured and supportive supervision strengthens accountability and ethical compliance [12,13].

Quality improvement approaches, such as the Plan–Do–Study–Act (PDSA) cycle, have been widely applied to address clinical and organizational performance gaps, including communication failures and documentation quality. While such frameworks can support behavioral change, scholars caution that technical improvement tools alone are insufficient if they are not embedded within robust governance and ethical oversight structures [14,15]. Without attention to supervisory accountability and organizational context, improvement initiatives risk addressing symptoms rather than underlying ethical vulnerabilities.

In low- and middle-income country settings, challenges related to ethical governance may be further compounded by resource limitations, administrative fragmentation, and uneven supervisory capacity. Previous studies indicate that gaps in credentialing oversight, regulatory compliance, and monitoring systems can undermine ethical practice even when

formal policies are in place [16]. Nevertheless, empirical research examining ethical non-compliance through a governance-oriented qualitative lens remains limited, particularly in tertiary hospital contexts.

This study addresses this gap by examining ethical non-compliance in nursing practice as a supervisory governance phenomenon rather than as isolated individual failure. Using a qualitative descriptive approach based on document analysis, the study explores patterns of ethical non-compliance and the supervisory structures that shape these practices within a tertiary hospital setting. By foregrounding organizational context and governance dynamics, this research aims to contribute a nuanced and contextually grounded perspective to the international literature on nursing ethics and ethical governance.

## **MATERIALS AND METHODS**

---

### **STUDY DESIGN AND RESEARCH PARADIGM**

This study employed a qualitative research design grounded in an interpretivist paradigm to explore ethical non-compliance as an organizational phenomenon embedded within supervisory governance structures. A document-based qualitative approach was adopted to examine how ethical expectations, supervisory responsibilities, and accountability mechanisms are formally articulated and operationalized within hospital governance frameworks. This design was selected to capture institutional logics and governance practices that shape ethical conduct in nursing practice beyond individual perceptions or experiences.

### **STUDY SETTING**

The study was conducted in a tertiary referral hospital providing comprehensive inpatient and outpatient services, including high-acuity clinical units such as emergency care, intensive care, surgical wards, oncology, pediatrics, and obstetrics. Tertiary hospitals represent complex organizational environments where high patient turnover, regulatory demands, and hierarchical supervision structures may intensify ethical governance challenges [4,10]. To reduce unnecessary localization and enhance analytical relevance, the hospital is described at an organizational level rather than by name.

### **DATA SOURCES AND UNIT OF ANALYSIS**

The primary data sources consisted of formal supervisory and governance documents used within a tertiary hospital, including supervisory guidelines, standard operating procedures, internal policies, and ethical oversight documents relevant to nursing practice. These documents were selected because they represent authoritative organizational texts that structure supervisory practices and define ethical expectations within the institution.

The unit of analysis was the content of supervisory governance as reflected in these documents, with particular attention to how ethical responsibilities, reporting mechanisms, and supervisory roles were framed. Documents were included based on their relevance to nursing supervision, ethical oversight, and organizational accountability.

### **DATA COLLECTION PROCEDURES**

All eligible documents were retrieved through formal permission from hospital management and the nursing supervisory unit. Prior to analysis, documents were fully de-identified to remove personal identifiers of nurses, patients, and supervisors. Each document was assigned a unique code to facilitate organization and traceability during analysis. Data collection focused on capturing the breadth of ethical issues recorded through routine governance mechanisms rather than generating new observational or interview data.

### **DATA ANALYSIS**

Data were analyzed using a qualitative content analysis approach. Documents were read repeatedly to achieve familiarization, followed by systematic coding to identify patterns related to ethical expectations, supervisory practices, and governance mechanisms. Codes were then grouped into broader analytical categories that captured recurring governance-related themes associated with ethical non-compliance.

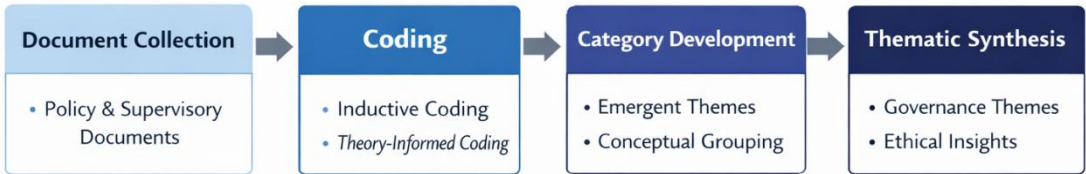
Coding was conducted using a hybrid approach that combined inductive and theory-informed strategies. Initial open coding was performed to identify recurrent patterns emerging directly from the documents, while sensitizing concepts from governance and ethical climate literature guided the interpretation of ethically relevant content. These initial codes were then compared, refined, and grouped into higher-order categories based on conceptual similarity.

Through an iterative process of abstraction and constant comparison, these categories were further synthesized into four overarching themes that represent governance-related dimensions of ethical non-compliance. This process ensured that themes were grounded in the data while also analytically aligned with the study's conceptual focus on supervisory governance.

The analytical process followed a structured sequence: document collection, data familiarization, open coding, category development, and thematic synthesis. This stepwise progression enhanced transparency and allowed traceability between raw document content and final thematic interpretations.

The analytical process was iterative, moving between the data and emerging interpretations to refine categories and ensure conceptual coherence. Throughout the analysis, attention was given to how supervisory structures and organizational routines may contribute to the normalization or regulation of ethically questionable practices within nursing work. Analytical decisions were documented in an audit trail to support transparency and dependability.

FIGURE 1. ANALYTICAL PROCESS OF DOCUMENT-BASED THEMATIC SYNTHESIS



TRUSTWORTHINESS

Several strategies were employed to enhance the trustworthiness of the study. Credibility was supported through prolonged engagement with the document corpus and iterative analytical review. Dependability was addressed by maintaining a transparent audit trail documenting analytical decisions and category development. Reflexivity was incorporated through ongoing critical reflection on the researchers' assumptions and interpretive positioning. Peer validation was conducted with supervisory personnel to verify the factual accuracy of document interpretation. This process was limited to confirming the contextual accuracy of organizational procedures and did not involve modification of analytical categories, themes, or interpretive conclusions. Supervisory personnel had no role in shaping the analytical framework or influencing the interpretation of findings.

ETHICAL CONSIDERATIONS

The study involved analysis of existing institutional documents and did not include direct interaction with human participants. All materials were anonymized prior to analysis, and no patient identifiers were accessed. Consistent with ethical guidelines for document-based qualitative research and quality governance evaluation, the study was classified as minimal risk [16]. Formal authorization to access and analyze documents was obtained from hospital management, and confidentiality was maintained throughout the research process.

RESULTS

The findings presented in this section are derived from analysis of formal supervisory and governance documents within the hospital setting. Analysis of supervisory and governance documents indicated that ethical non-compliance in nursing practice was not incidental or isolated. Instead, it appeared as a patterned phenomenon shaped by organizational conditions, supervisory arrangements, and routine clinical pressures. Four interrelated analytical themes were identified, reflecting how ethical standards were interpreted, enacted, and, at times, compromised in daily nursing practice.

TABLE 1. ANALYTICAL THEMES OF ETHICAL NON-COMPLIANCE IN NURSING PRACTICE

| Theme                                 | Core description                                                                                    | Illustrative focus                                                          |
|---------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Normalization of ethical deviations   | Ethical non-compliance becomes routine under sustained workload pressure and operational demands.   | Workload-driven prioritization, time constraints, task-oriented supervision |
| Fragmented supervisory accountability | Supervisory responsibilities are dispersed across units, resulting in unclear ethical oversight.    | Ambiguous reporting lines, inconsistent supervisory enforcement             |
| Credentialing and competency gaps     | Discrepancies between formal credentials and actual task assignments weaken ethical accountability. | Informal task delegation, limited competency verification                   |
| Symbolic professionalism              | Ethical standards are formally emphasized but weakly enforced in everyday practice.                 | Compliance-oriented documentation, symbolic audits                          |

### THEME 1: NORMALIZATION OF ETHICAL DEVIATIONS UNDER SUSTAINED WORKLOAD PRESSURE

Across multiple clinical units, supervisory records consistently documented ethical deviations occurring during periods of high workload and service intensity. Practices such as abbreviated patient explanations, delayed or incomplete documentation, and reduced interpersonal engagement were frequently noted. These deviations were often framed as practical adaptations to time constraints rather than as ethical concerns requiring corrective action.

Over time, repeated exposure to such conditions appeared to normalize these practices. Supervisory notes suggested that deviations were increasingly perceived as routine and unavoidable aspects of clinical work, particularly in high-acuity units. This normalization blurred the distinction between acceptable situational adjustment and ethical compromise, allowing deviations to persist without sustained reflection or intervention. Supervisory records indicated that patient communication was frequently abbreviated during high workload periods (Supervisory Report SR-03), suggesting that reduced interaction was implicitly tolerated as an operational adjustment rather than addressed as an ethical concern.

### THEME 2: FRAGMENTED SUPERVISORY ACCOUNTABILITY

A second theme concerned variation in supervisory oversight and accountability mechanisms across clinical units. Documents revealed inconsistencies in the frequency, depth, and follow-up of ethical supervision. In some units, supervisors conducted regular monitoring and provided immediate feedback, while in others, supervision was sporadic and largely reactive.

This fragmentation resulted in uneven expectations regarding ethical compliance. Nurses working in different units received divergent signals about the importance of ethical standards, depending on supervisory practices. Where follow-up was inconsistent, ethical deviations were less likely to be addressed systematically, weakening accountability and reinforcing selective compliance. Documents highlighted that follow-up actions on ethical issues were inconsistent, with some units lacking documented feedback mechanisms (Audit Record AR-02), indicating variability in supervisory enforcement.

### THEME 3: ADMINISTRATIVE–CLINICAL DISCONNECTION IN CREDENTIALING AND LEGAL COMPLIANCE

Supervisory documentation frequently identified gaps in credentialing and legal compliance, including expired professional licenses and incomplete clinical authorization records. These issues were rarely associated with deliberate neglect. Instead, they reflected unclear responsibility and limited coordination between administrative systems and clinical supervision.

Credentialing compliance was often treated as an administrative requirement rather than an integral component of ethical nursing practice. Supervisors noted that nurses were frequently unaware of documentation lapses until audits or external reviews occurred. This administrative–clinical disconnection reduced the visibility of legal compliance within everyday supervisory processes and weakened its integration into ethical oversight. Administrative records noted instances of expired professional licenses that were only identified during periodic audits (HR Compliance Log HR-01), reflecting weak integration between administrative and clinical oversight.

THEME 4: SYMBOLIC PROFESSIONALISM AND SUPERFICIAL COMPLIANCE

The final theme highlighted a tendency toward symbolic expressions of professionalism. Supervisory notes frequently emphasized visible indicators such as uniform adherence, punctuality, and formal appearance. While these elements were consistently monitored, deeper ethical dimensions such as respectful communication, confidentiality, and patient-centered explanation received less systematic attention.

Corrective actions often focused on surface-level compliance, reinforcing observable behaviors without addressing underlying ethical reasoning or professional judgment. This emphasis on symbolic professionalism risked reducing ethical practice to a checklist of appearances rather than fostering reflective and substantive ethical engagement. Supervisory notes emphasized visible compliance indicators such as punctuality and uniform adherence (Policy Monitoring Record PM-04), while limited documentation addressed deeper ethical dimensions such as patient communication or confidentiality.

TABLE 2: MAPPING THEMES TO REPRESENTATIVE CODES AND DOCUMENT SOURCES

| Theme                                 | Representative Codes                       | Document Source         | Document Reference |
|---------------------------------------|--------------------------------------------|-------------------------|--------------------|
| Normalization of ethical deviations   | Workload pressure, delayed documentation   | Supervisory reports     | SR-03              |
| Fragmented supervisory accountability | Inconsistent monitoring, unclear roles     | SOP & audit reports     | AR-02              |
| Credentialing and competency gaps     | Expired licenses, incomplete authorization | HR & compliance records | HR-01              |
| Symbolic professionalism              | Appearance compliance, checklist audits    | Policy documents        | PM-04              |

SYNTHESIS OF FINDINGS

Taken together, these themes illustrate that ethical non-compliance in nursing practice was shaped primarily by organizational and supervisory dynamics rather than by individual moral failure. Sustained workload pressure normalized deviations, fragmented supervision weakened accountability, administrative gaps undermined legal compliance, and symbolic professionalism displaced deeper ethical reflection. The interaction of these factors created conditions in which ethical standards were unevenly enacted and inconsistently reinforced across clinical units.

DISCUSSION

This study advances understanding of ethical non-compliance in nursing practice by framing it as a governance-related phenomenon embedded within supervisory structures and organizational routines, rather than as isolated individual shortcomings. The findings, derived from formal supervisory and governance documents within a single tertiary hospital, demonstrate that ethical conduct is collectively shaped through everyday supervision, leadership signals, and institutional priorities. This reinforces the view that ethics is not solely an individual responsibility but an organizational outcome grounded in ethical climate and governance arrangements [7,9,12].

The normalization of ethical deviations under sustained workload pressure illustrates how organizational constraints recalibrate ethical boundaries. In high-acuity settings, time scarcity and competing demands appeared to legitimize abbreviated communication and delayed documentation as pragmatic responses. While previous studies have linked such patterns to moral distress and ethical accommodation [5,6,10], this study shows that normalization is reinforced through supervisory tolerance and inconsistent feedback, contributing to the routinization of ethical drift within governance processes.

Fragmented supervisory accountability emerged as a key structural vulnerability. Variability in monitoring and follow-up practices weakened the authority of ethical standards and produced uneven expectations regarding compliance. This aligns with evidence that ethical climate depends on leadership consistency and the visibility of ethical priorities in routine supervision [7,9,12]. Where supervisory structures lack clarity, ethical norms become negotiable, diminishing accountability and increasing selective compliance [4,17].

The administrative–clinical disconnection observed in credentialing and legal compliance underscores the importance of integrated governance systems. When oversight responsibilities are fragmented, compliance may be perceived as a bureaucratic requirement rather than an ethical obligation. Consistent with prior research [15,16,18], weak integration reduces the visibility of legal compliance within everyday supervisory practices.

The tension between symbolic professionalism and substantive ethical practice reflects broader organizational ethics concerns. Emphasis on visible indicators may create an appearance of professionalism while diverting attention from deeper ethical dimensions such as communication, autonomy, and confidentiality. Similar patterns have been reported in checklist-oriented oversight systems [3,8].

Ethical practice may also be shaped by cultural norms, interpersonal relationships, and hierarchical dynamics, although these were not examined in this study. Future research using observational or interview-based methods may provide a more comprehensive understanding.

This study has strengths in its document-based qualitative approach and governance-oriented lens, but is limited to formal documents within a single tertiary hospital. Informal practices and real-time interactions were not captured, and findings should be interpreted as context-specific.

From a governance perspective, strengthening ethical practice requires more than periodic ethics training. Practical interventions include structured supervisory audits, integrated credentialing dashboards, and routine ethical review checkpoints within performance monitoring systems [20]. These findings suggest that quality improvement approaches such as the Plan–Do–Study–Act (PDSA) cycle require strong integration with governance structures and supervisory accountability to effectively address ethical non-compliance.

Future research should examine how different governance models influence ethical practice across settings and how reforms affect the sustainability of ethical standards over time.

## CONCLUSION

Based on the analysis of formal governance and supervisory documents, this study demonstrates that ethical non-compliance in nursing practice is not merely an individual moral issue but a governance-related phenomenon embedded within supervisory structures and organizational routines. The findings show that sustained workload pressure, fragmented supervisory accountability, administrative–clinical disconnection in credentialing, and the emphasis on symbolic professionalism collectively contribute to the normalization of ethically problematic practices in everyday clinical work.

These results highlight that ethical practice in healthcare organizations is shaped by system-level conditions rather than solely by individual ethical awareness. Weak integration between supervisory, administrative, and regulatory functions

reduces the visibility and enforcement of ethical standards, allowing deviations to become routine and implicitly accepted within clinical environments.

From a governance perspective, addressing ethical non-compliance requires more than reinforcing professional codes or providing periodic ethics training. Practical interventions should include strengthening supervisory accountability through structured audit mechanisms, integrating credentialing and clinical oversight via digital governance systems, and embedding routine ethical evaluation within performance monitoring processes. These measures are essential to prevent the normalization of ethical deviations and to ensure that ethical standards are consistently enacted in daily nursing practice.

Overall, this study underscores the importance of governance-oriented approaches in sustaining ethical practice within complex healthcare systems. Strengthening supervisory structures and aligning organizational processes with ethical oversight are critical steps toward building a more accountable, transparent, and ethically resilient healthcare environment.

## CONFLICT OF INTEREST

The author declares that this research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## AI STATEMENT

AI-assisted tools were used solely for language editing and did not contribute to data analysis, interpretation, or the generation of findings.

## References

1. Aiken LH, Sloane DM, Bruyneel L, Van den Heede K, Griffiths P, Busse R, et al. Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study. *Lancet*. 2014;383(9931):1824–1830. [https://doi.org/10.1016/S0140-6736\(13\)62631-8](https://doi.org/10.1016/S0140-6736(13)62631-8)
2. International Council of Nurses. ICN Code of Ethics for Nurses. Geneva: ICN; 2021. [https://www.icn.ch/system/files/2021-10/ICN\\_Code-of-Ethics\\_EN\\_Web.pdf](https://www.icn.ch/system/files/2021-10/ICN_Code-of-Ethics_EN_Web.pdf)
3. Yu Q, Huang C, Yan J, et al. Ethical climate, moral resilience, and ethical competence of head nurses. *Nurs Ethics*. 2025;32(1):56-70. <https://doi.org/10.1177/09697330241230526>
4. Wei H, Sewell KA, Woody G, Rose MA. The state of the science of nurse work environments in the United States: a systematic review. *Int J Nurs Sci*. 2018;5(3):287–300. <https://doi.org/10.1016/j.ijnss.2018.04.010>
5. Shuai T, Xuan Y, Jiménez-Herrera MF, et al. Moral distress and compassion fatigue among nursing interns: a cross-sectional study on the mediating roles of moral resilience and professional identity. *BMC Nurs*. 2024;23:638. <https://doi.org/10.1186/s12912-024-02307-y>
6. Larkin ME, Beardslee B, Cagliero E, et al. Ethical challenges experienced by clinical research nurses: A qualitative study. *Nurs Ethics*. 2019;26(1):172-184. <https://doi.org/10.1177/0969733017693441>
7. Asgari S, Shafipour V, Taraghi Z, Yazdani-Charati J. Relationship between moral distress and ethical climate with job satisfaction in nurses. *Nurs Ethics*. 2019;26(2):346–356. <https://doi.org/10.1177/0969733017712083>
8. Okumoto A, Yoneyama S, Miyata C, Kinoshita A. Relationship between hospital ethical climate and continuing education in nursing ethics. *PLoS One*. 2022;17(7):e0269034. <https://doi.org/10.1371/journal.pone.0269034>
9. Bloemhof J, Knol J, Van Rijn M, Buurman BM. The implementation of a professional practice model to improve the nurse work environment in a Dutch hospital: A quasi-experimental study. *J Adv Nurs*. 2021;77(12):4919-4934. <https://doi.org/10.1111/jan.15052>
10. Labrague LJ, McEnroe-Petitte DM. Job stress and organizational commitment among nurses: a systematic review. *J Nurs Manag*. 2018;26(7):902–914. <https://doi.org/10.1111/jonm.12619>

11. Coremans R, Saerens A, De Lepeleire J, Denier Y. From moral distress to resilient ethical climate: A qualitative pilot study. *PLoS One*. 2024;19(8):e0306026. <https://doi.org/10.1371/journal.pone.0306026>
12. Aloustani S, Atashzadeh-Shoorideh F, Zagheri-Tafreshi M, Nasiri M, Barkhordari-Sharifabad M, Skerrett V. Association between ethical leadership and organizational citizenship behavior from nurses' perspective. *BMC Nurs*. 2020;19:15. <https://doi.org/10.1186/s12912-020-0408-1>
13. Kim H, Kim H, Oh Y. The impact of ethical climate, moral distress, and moral sensitivity on turnover intention among haemodialysis nurses. *BMC Nurs*. 2023;22:55. <https://doi.org/10.1186/s12912-023-01212-0>
14. Taylor MJ, McNicholas C, Nicolay C, Darzi A, Bell D, Reed JE. Systematic review of the application of the Plan–Do–Study–Act method to improve quality in healthcare. *BMJ Qual Saf*. 2014;23(4):290–298. <https://doi.org/10.1136/bmjqs-2013-001862>
15. Reed JE, Card AJ. The problem with Plan–Do–Study–Act cycles. *BMJ Qual Saf*. 2016;25(3):147–152. <https://doi.org/10.1136/bmjqs-2015-005076>
16. Giannetta N, Villa G, Pennestrì F, Sala R, Mordacci R, Manara DF. Ethical problems and moral distress in primary care: a scoping review. *Int J Environ Res Public Health*. 2021;18(14):7565. <https://doi.org/10.3390/ijerph18147565>
17. Rahmaddian T, Hanum NZ, Aisyiah IK, Adhyka N, Rusti S, Faaghna L. Assessing the impact of human and technological factors on hospital management information system utilization: a case study at Hospital X in Padang City, Indonesia. *Int J Stat Med Res*. 2025;14:28–37. <https://doi.org/10.6000/1929-6029.2025.14.03>
18. Adhyka N, Rahmaddian T, Yurizali B, Wulandani YP. A conceptual model of sustainable technology use: the role of confirmation and perceived usefulness in the Hospital X management information system in Padang. *Int J Stat Med Res*. 2025;14:76–85. <https://doi.org/10.6000/1929-6029.2025.14.08>
19. Couy J, Schneider JL, Rivelli JS, Petrik AF, Seibel E, D'Agostini B, Holtrop JS. Applying the Plan–Do–Study–Act (PDSA) approach to optimize performance of an evidence-based practice in primary care. *Implement Sci*. 2017;12:125. <https://doi.org/10.1186/s13012-017-0643-9>
20. Park SK, Jeong YW. Relationship between hospital ethical climate, critical thinking disposition, and nursing task performance. *BMC Nurs*. 2024;23:1–10. <https://doi.org/10.1186/s12912-024-02366-1>