Kusuma, R. Y. et al. (2026)
Jurnal Keperawatan Soedirman – Vol 21, No 2 page 79-86
http://jos.unsoed.ac.id/index.php/jks/index

ORIGINAL ARTICLE

IMPLEMENTATION OF FORENSIC NURSING IN EMERGENCY DEPARTMENTS: AN EXPLORATORY QUALITATIVE STUDY

Rahmah Yanita Kusuma[1], Ariani Arista Putri Pertiwi[3], Christantie Effendy[2], Syahirul Alim[3], Sri Setiyarini[3]*

1. Alumna Master of Nursing, Faculty of Medicine Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia
2. Department of Medical Surgical Nursing, Faculty of Medicine Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia
3. Department of Basic and Emergency Nursing, Faculty of Medicine Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

Article Information
Received: 6 September 2025
Revised: 18 February 2026
Accepted: 28 June 2026

***Corresponding Author**
Sri Setiyarini
sri_setiyarini@ugm.ac.id

DOI
10.20884/1.jks.2026.21.2.17256

ABSTRACT

Forensic nursing is a new field that has yet to be widely recognized in Indonesia. Despite the high crime rate and the large number of forensic case patients who come to the emergency department (ED), there are still no specific regulations governing such cases. This study aims to explore the application of forensic nursing in EDs in Yogyakarta. A qualitative exploratory study was conducted. The researchers conducted in-depth semi-structured interviews in the EDs of government and private hospitals in Yogyakarta Province, Indonesia. The participants were 12 ED nurses who handled forensic cases. Triangulation was conducted through interviews with two ED head nurses and three security staff, as well as a review of medical records. The data analysis comprised identifying meaning units, conducting initial and refined coding, grouping them into categories, and generating themes using the forensic nursing paradigm approach. This study identified the following themes: (1) forensic nursing cases, (2) nursing roles and responsibilities in forensic cases, (3) the significance of crime evidence, (4) forensic nursing implementation support, and (5) challenges and needs in implementing forensic nursing. This study found that forensic nursing has been implemented in Eds in Yogyakarta. However, it has not been effectively executed.

Keywords: *Emergency department, forensic nursing; practical nursing; qualitative research*

ISSN : 1907-6637 **e-ISSN : 2579-9320**

BACKGROUND

The fourth leading cause of death worldwide is criminal acts (Filmalter, Heyns, & Ferreira, 2018). In Indonesia, criminal offenses remain a predominant legal concern (Wirmando, W., Astari, A. M., Yuliatun, L., Hariyanti, 2021). Among all provinces in Indonesia, Yogyakarta ranks 18th in terms of the highest number of criminal cases (Badan Pusat Statistik, 2022). In 2022, Yogyakarta recorded 8,853 criminal cases, an increase from the previous year (Kepolisian Republik Indonesia, as cited in Badan Perencanaan Pembangunan Daerah, 2022).

A consequence of the rising number of criminal cases is greater healthcare demands (Filmalter et al., 2018). Patients involved in criminal incidents or forensic cases often seek emergency care at emergency departments (EDs) for post-incident treatment. The negative impacts experienced by patients involved in forensic cases require nurses to provide care that integrates nursing science and forensic knowledge to support their patients' legal processes (Han & Lee, 2022).

Forensic nursing is a relatively new field in nursing practice. Over the past few decades, this specialty has rapidly developed by combining forensic principles with clinical nursing knowledge (Donaldson, 2022; Machado, Batista de

Araújo, & Figueiredo, 2020). It is designed to meet the healthcare and legal needs of patients as victims, suspects, or perpetrators in forensic cases (Berishaj, Boyland, Reinink, & Lynch, 2020). In the ED, forensic nursing plays a crucial role in identifying and assessing forensic cases, as well as communicating with patients' families about the care provided (Lynch & Stevens, as cited in Özden, Özveren, & Yılmaz, 2019). ED nurses are frequently the first healthcare professionals to encounter forensic patients. They are responsible for delivering forensic nursing care and contributing crucial information to legal proceedings concerning their patients (Özden et al., 2019).

A lack of forensic nursing services in the ED can cause various adverse outcomes, including suboptimal identification of forensic victims, unmet medical and legal needs, ineffective legal interventions, poor collaboration between nurses and law enforcement or other healthcare professionals, and the loss of evidence due to the absence of operational standards and insufficient forensic nursing knowledge and skills among nurses (Donaldson, 2020; Machado et al., 2020).

The rising number of forensic cases in the ED highlights the importance of structured forensic nursing services. Insufficient care can have serious consequences, underscoring the need to examine how forensic nursing is implemented in emergency settings. Therefore, this study aims to explore the application of forensic nursing in EDs in Yogyakarta.

METHOD

Study design

This study employed an exploratory qualitative design with a descriptive approach. This study was conducted in two hospitals: a Government General Hospital (a referral hospital) with a medical forensics department, and a Private General Hospital in central Yogyakarta city that caters to various forensic cases.

Participants

The participants were selected using the purposive sampling technique based on their experience and willingness to participate. The inclusion criteria were nurses currently working in the EDs of government or private hospitals, with a minimum of 5 years of ED work experience, and experience providing forensic nursing care. ED nurses who chose not to participate were excluded.

The sample size was determined based on thematic saturation. The researchers conducted the interviews with ED nurses sequentially and analyzed the data concurrently. Data saturation was achieved after the twelfth interview with ED nurses, as subsequent interviews did not yield additional analytical insights.

The triangulation involved additional informants, namely two ED head nurses and three hospital security officers. Security personnel were also involved due to their role in storing forensic evidence, and head nurses were consulted for their insights into policy and procedural aspects of forensic case handling. All head nurses and security personnel have at least 5 years of experience in EDs and in handling forensic cases. All participants completed the study, with no reported dropouts or refusals during the study period.

Instrument

The research instrument was the researcher, assisted by an interview guide. The primary researcher is a female student pursuing her master's degree in emergency nursing at Universitas Gadjah Mada. The primary researcher has completed a qualitative research short course and had no prior relationship or interaction with the participants before the study.

Data collection

Data were collected from November to December 2023. The researcher conducted face-to-face semi-structured in-depth interviews in the ED office. The interviews were audio-recorded, each lasting between 23 min and 1 h.

A reflexive stance was maintained by acknowledging the researcher's background, which may have influenced data interpretation. Reflexivity was practiced through ongoing self-reflection during interviews and repeated reviews of transcripts during analysis to ensure that the interpretations remained grounded in participants' perspectives. The same researcher conducted all interviews, and no external enumerators or research assistants were involved, thereby ensuring consistency in data collection while allowing the close monitoring of potential researcher bias through reflexive practices.

The interview guide comprised questions exploring the types of forensic cases handled by nurses, the procedures and workflows involved in forensic case management, existing policies, perceived challenges and barriers, and nurses' needs and suggestions for enhancing forensic nursing practice. Triangulation was conducted in the following ways to ensure data validity: (1) through source triangulation, involving interviews with ED head nurses and security staff from both hospitals; and (2) through document triangulation, which involved reviewing the physical format of patient records of forensic cases.

Data analysis

Data analysis was performed using line-by-line coding, a method commonly used in qualitative exploratory research involving multiple case types. The analysis involved identifying meaning units, conducting initial and refined coding, grouping them into categories, and generating themes.

The researcher determined the themes and categories using a deductive approach, guided by the forensic nursing paradigm proposed by Sharma & Joseph (2022), which conceptualizes forensic nursing as the integration of clinical care with legal and forensic responsibilities. Key domains of the paradigm include the identification and management of forensic cases, preservation and documentation of forensic evidence, collaboration with legal and law enforcement systems, and ethical, patient-centered care within medico-legal contexts. By using this framework deductively, the researcher organized and interpreted the data through mapping emerging categories and themes onto these core domains.

The researcher manually analyzed the data and no qualitative software was used. Coding consistency was maintained through repeated reading of transcripts, iterative comparisons of codes across interviews, and revisiting earlier coding decisions as the analysis progressed to ensure consistent interpretation.

Trustworthiness

The researcher used source and document triangulation to ensure credibility. Transferability was addressed by providing a detailed account of the research setting, participant

selection, and analysis process. Dependability was established through an audit trail involving the research supervisors and two expert reviewers experienced in qualitative and emergency nursing. Confirmability was preserved by obtaining agreement on the findings with two additional researchers.

Ethical consideration

This study received ethical approval from the Medical and Health Research Ethics Committee, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada (approval number: KE/FK/1644/EC/202), and from the Research Ethics Committee of PKU Muhammadiyah Hospital, Yogyakarta (approval number: 2290/PI.24.2/X/2023). Before participating in the interviews, all participants provided their written informed consent.

RESULT

Demographic Data

A total of 12 ED nurses participated in this study, comprising seven females (58.3%) and five males (41.7%) (Table 1). The participants' ages ranged from 33 to 50 years, with an average of 43.9 years. They had an average of 21 years of work experience in the ED, and most had an associate's degree (58.3%). As many as 50% work at the Government General Hospital (GGH), and the remaining 50% work at the Private General Hospital (PGH). In addition to the 12 ED nurse participants, triangulation was conducted with two ED head nurses and three hospital security officers who had experience handling forensic cases.

All participants had prior experience handling forensic cases in the ED, as indicated by their involvement in assessment, documentation, and evidence-related activities. However, the number and specific types of forensic cases managed by each participant were not systematically recorded.

Table 1. Participants characteristics

No	Participant Code	Age	Background Education	Sex	Hospital Status	Length of Work at ER
1	P1	38	Diploma	F	Private general hospital (PGH)	13 years
2	P2	33	Diploma	F	Private general hospital (PGH)	9 years
3	P3	49	Diploma	F	Private general hospital (PGH)	25 years
4	P4	50	Diploma	F	Private general hospital (PGH)	27 years
5	P5	48	Diploma	M	Private general hospital (PGH)	30 years
6	P6	38	Diploma	F	Private general hospital (PGH)	14 years
7	P7	39	Bachelor	F	Government general hospital (GGH)	17 years
8	P8	50	Bachelor	M	Government general hospital (GGH)	28 years
9	P9	42	Bachelor	M	Government general hospital (GGH)	19 years
10	P10	44	Diploma	M	Government general hospital (GGH)	22 years
11	P11	42	Bachelor	M	Government general hospital (GGH)	19 years
12	P12	54	Master	F	Government general hospital (GGH)	30 years

Notes: P=Participant; F=Female; M=Male

Themes and Categories

This study obtained 2,685 initial codes, which the researcher reduced to 286 codes and classified these codes into 13 categories and 5 themes (Table 2, Figure 1).

Table 2. Category and Theme

Category	Theme
a. Types of forensic cases b. Patient's psychological conditions	1. Forensic Nursing Cases
c. The role of nurses d. Nursing care in emergencies e. Forensic nursing interventions	2. The Role and Responsibilities of Nurses in Forensic Cases
f. Types of evidence g. Evidence management h. Involvement of nurses in the legal process	3. The Importance of Crime Evidence
i. Standard operational procedures j. Facilities k. Interprofessional collaboration	4. Forensic Nursing Implementation Support
l. Internal and external problems of nurses m. The need for nurses to improve knowledge and skills	5. Problems and Needs for The Implementation of Forensic Nursing

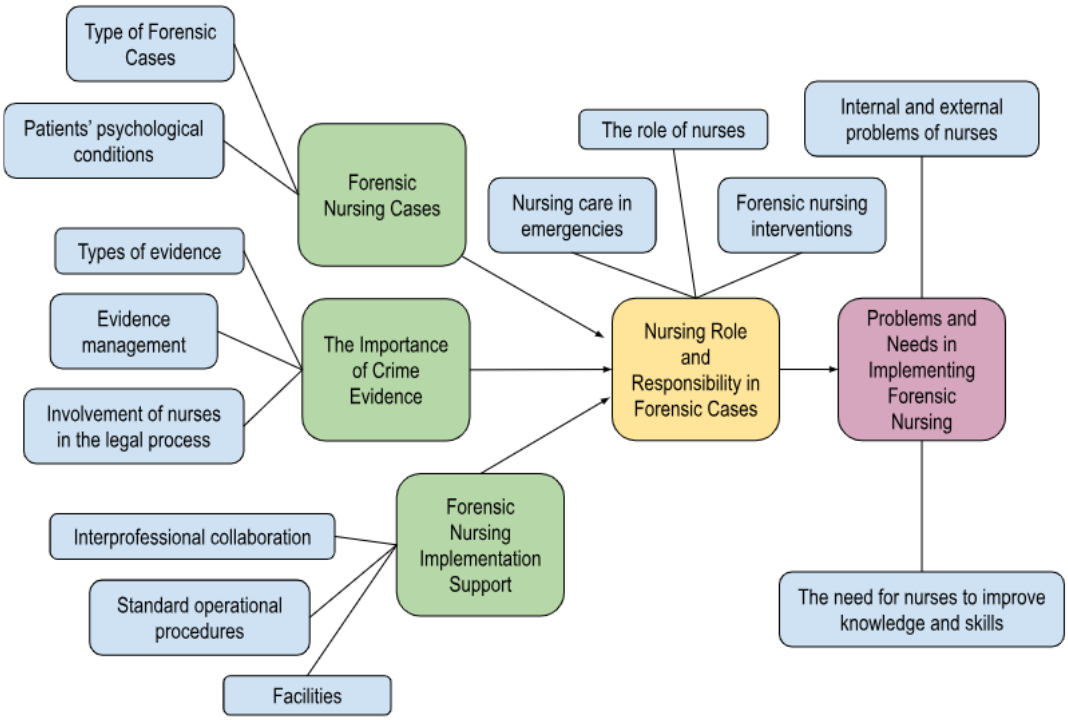

Figure 1. Coding Tree

Theme 1: Forensic nursing cases

a. Types of forensic cases

The results revealed that the ED has received a wide range of forensic cases, including rape and sexual assault, physical violence, child abuse, domestic violence, gang violence (locally known as klithih), homicide, suicide, and suicide risk.

> *"There are usually cases of sexual assault, rape, physical violence… domestic violence within families...and accidents frequently occur owing to klithih." (P1)*
> *"...suicide cases are also common..." (P8)*

b. Patients' psychological conditions

The findings reflected the patients' psychological states, typically manifesting as emotions or compulsive behaviors, including fear, anxiety, sadness, stress, emotional instability, silence, denial, and withdrawal.

> *"...they felt anxious, afraid, and ashamed..." (P12)*
> *"...somewhere between fear, sadness, and something else—it was unclear..." (P4)*

Theme 2: Nursing roles and responsibilities in forensic cases

a. Role of nurses

The ER nurse's role in forensic nursing includes serving as a facilitator, educator, companion, court witness, and caregiver to patients. Nurses are also responsible for providing care to address patient emergencies and assist with forensic nursing interventions, including supporting examinations.

> *"...we educate patients..." (P10)*
> *"…we accompany patients to undergo physical examinations…" (P7)*

b. Nursing care in emergencies

Nurses provide critical care to forensic patients to save their lives and stabilize their condition.

> *"...[We check] their airway, their consciousness...We initially treat all patients the same…" (P3)*
> *Triangulated data from the head nurse at the GGH also emphasized the significance of nurses' emergency care.*
> *"...patients who arrive at the ED are initially assessed based on their severity…then, we identify their chief complaints and perform lifesaving…".*

c. Forensic nursing interventions

Nurses perform various interventions for forensic patients, including assessing complaints, documenting chronologies, collecting specimens, and collaborating with doctors, security staff, other units, and evidence management teams.

> *"...[we would] record the location of the wounds, noting the bruises and their placement, identifying their cause or related factors... assessing how deep the wounds are, how wide they are..." (P5)*

Theme 3: Significance of crime evidence

a. Types of evidence

There are several forms of evidence, including objects (e.g., clothing and personal belongings) and reports from physical examinations. It may also include items noted on a patient's body, including fingerprints, sperm, and signs of physical trauma (e.g., a torn hymen).

> *"...(the hymen) is damaged or not..." (P5)*
> *"...sperm can be evidence" (P8)*

b. Evidence management

Nurses implement evidence management in collaboration with other professionals, including doctors, forensic medicine specialists, security personnel, and the police. Evidence management is performed before, during, and after providing care.

Not all physical evidence is kept. Unused evidence is discarded with an official report or handed over to the family.

"...unused physical evidence can be kept by the patient or taken by their family..." (P2)

While providing care, nurses also collect data, including writing the chronology, screening for evidence on the patient's body, drawing the results of the assessment, and asking about the patient's experience, such as whether they are still wearing the same clothes from the incident and whether the vagina has been cleaned (in rape cases). Doctors also collect sperm, photograph evidence on the patient's body (head-to-toe photos), and check for DNA. Then, the nurse and doctor discuss the evidence. The same result was obtained from triangulation with ED head nurses.

"Yes, it was photographed (evidence)... and measured using a ruler..." (P9)
"It was drawn on the medical record… how wide the wound was, how deep." (P5)

Nurses and security guards are involved in evidence management in both hospitals. In the GGH, after the evidence is stored, it will be handed over to the medical forensics department. Meanwhile, in the PGH, after the security guard stores the evidence, it will be handed over directly to the police when needed.

"...the evidence is wrapped in plastic and labeled, then stored in a locker for a certain period, and recorded by a security personnel..." (P8)
"...when needed, we will coordinate with the medical forensics department..." (P11)
"...later, the police will come to the emergency room to look for evidence themselves..." (P1)

Data from the triangulation shows that nurses often coordinate with security staff in evidence handling, particularly in the documentation and storage of patients' belongings, as described by one security officer:

"…When nurses contact us about patients' belongings, we go to the ED, document the items in the inventory log together with the ED staff, and then transfer valuables such as wallets or bags to the security post for safekeeping." (Security staff)

c. Involvement of nurses in the legal process

When a case is brought to court, nurses also play a role in the legal process. If the police request witnesses from the hospital, the hospital will conduct an audit of the medical personnel who treated the patient. Nurses appointed by the hospital as court witnesses will be accompanied by the hospital's legal department.

"…nurses are typically asked to be a witness in court…" (P3)

Theme 4: Forensic nursing implementation support

a. Standard Operating Procedures (SOPs)

Both hospitals had no SOPs for forensic nursing. However, they had general SOPs for specific cases, including domestic violence.

"...there is no SOP specifically for forensic nursing. However, there is an SOP for domestic violence" (P11)
Data from the triangulation also showed a similar result:
"...we use the usual trauma SOP... there is no specific [SOP for forensic nursing]" (ED head nurse)

b. Facilities

The main facilities for handling forensic cases are in government hospitals that have complete forensic case examination tools. Thus, all examinations can be performed in the ED without referring them to other polyclinics. The Women and Child Protection Unit (UPPA) and the Integrated Crisis Center (UPKT) are other units that facilitate the implementation of forensic nursing. There are also consultation room facilities and isolation rooms or special rooms available.

"... We have the UPPA, like a child and women protection unit..." (P2)
"… there is a UPKT polyclinic, the Integrated Crisis Service Unit..." (P9)
"... the psychiatry room, we have a ward... specifically for patients that need it... there is a separate isolation room…" (P11)

c. Interprofessional Collaboration

When caring for patients involved in forensic cases, nurses also collaborate with other professionals and community organizations that protect women and children. Such collaboration efforts include consultations, surgeries, medication administration, and overall patient management.

"...consulted to the polyclinic…obstetrics and gynecology, psychiatry, surgery, and pediatrics too..." (P7)

Theme 5: Challenges and needs in implementing forensic nursing

a. Internal and external challenges nurses face

Nurses encounter internal and external challenges in implementing forensic nursing in the ED. Internal challenges include a lack of knowledge, difficulties in identifying and managing evidence, limited human resources, the absence of training in forensic nursing, and a lack of information sharing with physicians regarding forensic cases.

"We have limited human resources..." (P6)
"We never received [forensic nursing training].." (P1)

The external challenges nurses face when caring for forensic patients include inadequate facilities, a lack of forensic nursing policies, prolonged care processes, and the potential for patients or their families to provide false information. There were also no clinical guidelines for nursing care in forensic cases at either of the studied hospitals. The high volume and diversity of forensic cases in the ED further complicate matters, leading to delays in nurses' service delivery. Moreover, nurses frequently encounter incomplete patient data or patients who provide false information. Thus, a cautious and thorough approach is required during the anamnesis process to ensure that the information collected is accurate and reliable.

"...there is no special guideline for handling forensic patients...there is no special tool for forensics here either." (P1)
"...sometimes, patients provide false data." (P10)
"...the cases vary...sometimes, it raises criticism that the handling takes a long time." (P11)

b. The need for nurses to improve their knowledge and skills

Forensic nursing is a relatively new concept for ED nurses in both hospitals. The participants have identified methods to enhance their forensic nursing knowledge and skills, including training workshops, dissemination of information, SOPs, workshops on the legal aspects of forensic nursing,

and knowledge sharing. Training and dissemination efforts are required for forensic nursing, communication, patient anamnesis in forensic cases, and reporting systems.

> *"…nurses require training so that they can perform anamnesis properly." (P12)*
> *"There should be a (forensic nursing SOP) if there is a (forensic nursing applied in the ED) then we can provide better care for the patients…" (P6)*

DISCUSSION

This qualitative study explores the implementation of forensic nursing in Eds in Yogyakarta. The data revealed five related themes: forensic nursing cases, nursing roles and responsibilities in forensic cases, the significance of forensic evidence, support for forensic nursing implementation, and challenges and needs in implementing forensic nursing.

This study's results indicate that rape and sexual assault, physical violence, child abuse, domestic violence, gang violence (klithih), homicide, and suicide or suicide risk represent the most frequent forensic cases in the ED. This phenomenon was also reported in the study of Sharma & Joseph (2022), which noted cases of trauma, sexual violence, domestic violence, and drug abuse as forensic cases that frequently occur and are encountered by forensic nurses in the ED. The similarity between these two studies may be because both studies were conducted in developing countries with high crime rates.

This study showed that nurses play a crucial role in managing forensic cases while providing emergency care in the ED. They assess complaints, perform physical examinations, document chronologies, collect specimens, and collaborate with doctors, security staff, other units, and evidence management teams. These results align with some of the findings reported by Lynch (cited in Çelik, Çelik, Hastaoğlu, & Mollaoğlu, 2024), indicating that conducting anamnesis and performing physical examinations are the duties of an ED nurse when handling patients in forensic cases.

During assessment, nurses collect information by identifying the violence that the patient has and is currently experiencing. As an initial approach, nurses would interview patients, observe their movements, identify signs of trauma, and note the language and behavioral responses patients exhibit when discussing their experience (Bracewell, 2018; Chandramani et al., 2020; Wolf et al., 2019). Additionally, this study's findings align with the Emergency Nurses Association's (ENA) report, which asserts that ED nurses are responsible for collecting evidence that may be used in court (Bush, 2018; Dougherty, 2010).

Forensic evidence regarding patients, including their identification and proper management, is crucial in legal investigations. In this study, physical objects, medical records, and biological samples collected from the patient were identified as the most common forms of forensic evidence. Fingerprints, semen residue in the vaginal area, and hymenal tears were also frequently encountered evidence in ED forensic cases. These findings align with Sharma & Joseph (2022), who noted that forensic evidence comprises biological samples, objects (e.g., clothing), and documentation in written, diagrammatic, or photographic forms.

During patient care, nurses typically perform independent tasks, including recording patient histories, documenting findings, conducting screenings, sketching assessments, and participating in team discussions. However, according to the participants, photographic documentation was primarily performed by forensic physicians in hospitals with established forensic departments, as this aligns with their professional authority. Meanwhile, the nurses would assist and accompany the forensic physicians during the process.

In contrast, in hospitals without a forensic department, the forensic photography was performed by nurses. This variation in practice appears to be influenced by institutional norms and the absence of hospital-specific standard operating procedures authorizing nurses to conduct forensic photography independently. However, Sharma & Joseph (2022) suggested that forensic nurses should handle all aspects of documentation, including written, diagrammatic, and photographic records, reflecting a more active role for nurses.

Furthermore, this study found that the evidence management process in the studied hospitals involves separating clean and contaminated evidence, packaging the items, transferring them to security personnel, and documenting the findings in medical records. Moreover, nurses assist with forensic reports, transfer evidence to relevant departments, and oversee its destruction with official documentation. However, the responsibility for storing and labeling evidence is delegated to security personnel. Conversely, Sharma & Joseph (2022) emphasized that forensic nurses should carefully separate, label, and store evidence in sealed containers, envelopes, or boxes.

This study's findings suggest that nurses can inadvertently mismanage evidence due to limited knowledge, such as handing unused physical evidence to patients or their families. This practice contradicts best practices, which hold that evidence, regardless of form, is critical in forensic studies and is the nurse's responsibility. Johnson (in Sharma & Joseph, 2022) also reported that nurses should securely store evidence according to its type rather than return it to patients or their families. In India, evidence management is more structured and guided by established procedures.

Therefore, these findings indicate that although the emergency department nurses are actively involved in forensic assessment and initial evidence handling, the division of forensic responsibilities among multiple professionals has important implications for evidence continuity and integrity. However, this division of responsibilities may increase the risk of inconsistent documentation and unintentional mishandling of evidence, particularly in the absence of standardized forensic nursing protocols and regulatory support.

Additionally, from an ethical perspective, fragmented responsibility may increase the risk of unintentional mishandling of evidence, potentially compromising justice for patients involved in forensic cases. Nevertheless, the identified risk was based on participant narratives rather than on a confirmed practice. Thus, further research is needed to examine whether the return of physical evidence occurs in practice and to explore its frequency, underlying causes, and legal consequences.

The decision to report forensic cases to law enforcement rests with the patient and their family. Families need a physician-issued report and are often accompanied by an ED nurse when reporting the case. Nurses may also be called as witnesses in court. In contrast, Berishaj et al. (2020) argued that forensic nurses should not only assist patients but also

educate them about legal processes, provide legal support, help obtain protective orders, and offer counseling and emotional support. In the United States, where forensic nursing is well established, nurses and forensic physicians share responsibility for patient care.

Another disparity lies in legal reporting authority. In Indonesia, nurses are not authorized to report suspected forensic cases, as this decision is left to patients and their families. However, in other countries, such as Portugal, medical staff are mandated to immediately report suspected cases on based on clinical assessments (Machado et al., 2020). According to Çelik et al. (2024), official regulations in Turkey require ED nurses to assist forensic patients in reporting their cases to the authorities. This difference is attributed to the Indonesian government's lack of official regulation regarding the duties of ED nurses in assisting with the patient reporting process.

In this study, both hospitals lack formal forensic nursing-specific SOPs, relying instead on general patient care guidelines. Only cases of sexual violence or domestic abuse have dedicated SOPs. This finding contrasts with that of Berishaj et al. (2020), who advocated establishing professional guidelines or policies for all forensic cases. In the US, SOPs for forensic nurses are well developed and routinely applied, whereas in Indonesia forensic nursing remains largely unknown among nurses.

Facility-specific disparities were also noted, with government hospitals providing more complete services and having more extensive infrastructure than private hospitals. The lack of facilities in private hospitals reflects limited awareness and development of forensic nursing. In contrast, countries such as India have well-established government support for forensic nursing, including comprehensive hospital infrastructure (Sharma & Joseph, 2022).

Next, nurses in the ED collaborate with general practitioners, specialists, forensic physicians, security personnel, and other units (e.g., the UPPA). These collaborations align with international forensic nursing standards, underscoring the importance of interdisciplinary collaboration (Berishaj et al., 2020). Additionally, as forensic patients frequently require legal proceedings, collaboration among healthcare professionals, police, and judicial authorities is essential.

The key challenges in implementing forensic nursing include limited knowledge and experience among nurses, insufficient training, difficulty identifying and managing evidence, inadequate staffing, and limited information sharing among clinicians. Nurses who are unfamiliar with forensic nursing may also delay their patients from receiving proper care and evidence handling (Çelik et al., 2024). This lack of preparation may cause legal injustice due to poor evidence documentation (Berishaj et al., 2020). Therefore, the ENA highlights the importance of ongoing education to help nurses effectively collect evidence and reduce patient trauma (Bush, 2018).

Moreover, patients frequently offer false or misleading information, complicating accurate assessment and appropriate care. This finding aligns with Machado et al. (2020), who reported that patient-provided misinformation can obstruct forensic care.

Therefore, nurses in both hospitals recommend conducting training and awareness programs, developing clear SOPs, integrating forensic nursing into the legal system, and fostering interdisciplinary knowledge sharing to address these challenges. Training is crucial for preparing ED nurses to professionally care for a diverse range of forensic cases (Machado et al., 2020). Continuous education also supports the practical evaluation of forensic cases and the identification of victims and perpetrators (Çelik et al., 2024). Untrained nurses may feel unprepared and provide generic care, failing to address the forensic-specific needs of their patients (Donaldson, 2020, 2022).

In this study, nurses emphasized the significance of clear SOPs for guiding forensic patient management. Protocol implementation enhances the effectiveness and accuracy of forensic nursing (Çelik et al., 2024; Machado et al., 2020). Additionally, hospital policies play a critical role in supporting nurses to make timely and informed decisions (Donaldson, 2020).

This study's limitation is that it focused on only two hospitals, which may not fully represent the entire population. In addition, future studies should document case volume and case types to better contextualize participants' forensic expertise. Additionally, the absence of patient and law enforcement perspectives in this study may limit a more comprehensive understanding of the forensic process, particularly regarding patient experiences and intersectoral coordination with legal authorities. Future studies should incorporate these perspectives to provide a more holistic view of forensic nursing practice in emergency settings.

CONCLUSION AND RECOMMENDATION

The lack of proper implementation of forensic nursing in two Eds in Yogyakarta is attributed to the absence of regulations for forensic nursing cases in Indonesia. Nurses in both hospitals encountered several challenges, including limited knowledge and inadequate equipment. These gaps may negatively affect patient safety and the integrity of forensic evidence by increasing the risk of incomplete documentation, improper handling of evidence, and ethical or legal vulnerabilities. Thus, hospitals should provide structured forensic nursing training and develop clear SOPs covering patient care, evidence management, and interprofessional coordination to strengthen forensic nursing practice. At the professional level, the Indonesian National Nurses Association (PPNI) is encouraged to support the development of forensic nursing competencies through standard-setting and collaboration with educational institutions and healthcare providers. At the national level, regulatory frameworks and policies are needed to formally recognize and standardize forensic nursing practice across emergency care settings.

REFERENCES

Badan Perencanaan Pembangunan Daerah. (2022). Data Tindak Pidana (Criminal Act Data). Retrieved from https://bappeda.jogjaprov.go.id/dataku/datadasar/index/547-data-tindak-pidana

Badan Pusat Statistik. (2022). Statistik Kriminal 2022 (Crime Statistics 2022). Badan Pusat Statistik. Jakarta. Retrieved from https://www.bps.go.id/id/publication/2022/11/30/4022d3351bf3a05aa6198065/statistik-kriminal-2022.html

Berishaj, K., Boyland, C. M., Reinink, K., & Lynch, V. (2020). Forensic Nurse Hospitalist: The Comprehensive Role of the Forensic Nurse in a Hospital Setting. *Journal of Emergency Nursing, 46*(3), 286–293. https://doi.org/10.1016/j.jen.2020.03.002

Bracewell, T. E. (2018). Multidisciplinary Team Involvement and Prosecutorial Decisions in Child Sexual Abuse Cases. *Child and Adolescent Social Work Journal, 35*(6), 567–576. https://doi.org/10.1007/s10560-018-0557-1

Bush, K. (2018). Forensic Evidence Collection in the Emergency Care Setting. *Journal of Emergency Nursing, 44*(3), 286–289. https://doi.org/10.1016/j.jen.2018.03.010

Çelik, P., Çelik, Ş., Hastaoğlu, F., & Mollaoğlu, M. (2024). Multicenter evaluation to determine the deficiencies of emergency nurses in forensic case management. *International Emergency Nursing, 74*, 101440. https://doi.org/10.1016/j.ienj.2024.101440

Chandramani, A., Dussault, N., Parameswaran, R., Rodriguez, J., Novack, J., Ahn, J., … Carter, K. (2020). A Needs Assessment and Educational Intervention Addressing the Care of Sexual Assault Patients in the Emergency Department. *Journal of Forensic Nursing, 16*(2), 73–82. https://doi.org/10.1097/JFN.0000000000000290

Donaldson, A. E. (2020). New Zealand emergency nurses knowledge about forensic science and its application to practice. *International Emergency Nursing, 53*, 100854. https://doi.org/10.1016/j.ienj.2020.100854

Donaldson, A. E. (2022). Forensic professional's thoughts on New Zealand emergency nurse's forensic science knowledge and practice. *International Emergency Nursing, 62*, 101151. https://doi.org/10.1016/j.ienj.2022.101151

Dougherty, C. M. (2010). Evidence Collection in the Emergency Department. *In Forensic Nursing Science*. Elsevier.

Filmalter, C. J., Heyns, T., & Ferreira, R. (2018). Forensic patients in the emergency department: Who are they and how should we care for them? *International Emergency Nursing, 40*, 33–36. https://doi.org/10.1016/j.ienj.2017.09.007

Han, M., & Lee, N.-J. (2022). Forensic nursing in South Korea: Assessing emergency nurses' awareness, experience, and education needs. *International Emergency Nursing, 65*, 101217. https://doi.org/10.1016/j.ienj.2022.101217

Machado, B. P., Batista de Araújo, I. M., & Figueiredo, M. do C. B. (2020). Forensic nursing practice - What do the students know anyway? *Forensic Science International: Synergy, 2*, 138–143. https://doi.org/10.1016/j.fsisyn.2020.04.003

Özden, D., Özveren, H., & Yılmaz, İ. (2019). The impact of forensic nursing course on students' knowledge level on forensic evidence. *Journal of Forensic and Legal Medicine, 66*, 86–90. https://doi.org/10.1016/j.jflm.2019.06.012

Sharma, S., & Joseph, J. (2022). The paradigm of forensic nursing for nursing aspirants in India: Promises, caveats & future directions. *Journal of Forensic and Legal Medicine, 86*, 102321. https://doi.org/10.1016/j.jflm.2022.102321

Wirmando, W., Astari, A. M., Yuliatun, L., & Hariyanti, T. (2021). Perlukah kita merawat seorang pelaku kriminal? (Should We Care for a Criminal Offender?). *Insan Cendekia Mandiri*.

Wolf, L. A., Delao, A. M., Malsch, A. J., Moon, M. D., Perry, A., & Zavotsky, K. E. (2019). Emergency Nurses' Perception of Geriatric Readiness in the ED Setting: A Mixed-Methods Study. *Journal of Emergency Nursing, 45*(4), 374–385. https://doi.org/10.1016/j.jen.2019.02.004