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Forensic Law in Indonesia Challenges Legal Framework and the Role of Forensic Medicine in Criminal Investigations

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ABSTRACT

Forensic law represents a specialized branch of legal science concerned with the integration of medical expertise into the criminal justice system, particularly in the investigation and resolution of serious crimes such as homicide, physical assault, and sexual violence. The involvement of forensic physicians is pivotal in providing objective scientific assessments related to the cause and time of death, as well as injury analysis, through external examinations and autopsies. In the Indonesian legal framework, the application of forensic medicine is governed by several key legislations, including the Criminal Procedure Code (KUHAP) and the Medical Practice Act. Forensic physicians are often summoned as expert witnesses in court, tasked with delivering scientifically grounded testimonies that aid in the judicial process. However, the implementation of forensic law in Indonesia still faces several challenges. Among these are the limited understanding of forensic procedures among law enforcement personnel and the inadequate number of forensic medical specialists across the country. These gaps can hinder the efficiency and accuracy of criminal investigations. Recent research emphasizes the value of expert forensic involvement in litigation, noting its contribution to more timely case resolution and a greater assurance of justice. Accordingly, there is an urgent need to strengthen formal education in forensic medicine, establish standardized training modules, and develop well-equipped forensic laboratories. These efforts are essential to elevate the scientific credibility and operational capacity of forensic services within Indonesia's legal system.

1. Introduction

Forensic law is a branch of forensic law *Interdisciplinary* between medical science and law which play an important role in law enforcement, especially in proving criminal and civil cases. In practice, forensic medicine is at the forefront of uncovering the truth of an incident through scientific analysis of the human body, both living and dead. Practices such as visum et repertum, autopsy, identification of the body, and determination of the cause and time of death are forms of real contribution from forensic medicine to the legal process (Gusti & Widiantari, 2022)

In the context of Indonesian law, *existence* Forensic law has been regulated in several laws and regulations. One of the main legal bases is the Criminal Procedure Code (KUHAP) which regulates the procedures for investigation and proof in criminal proceedings. On the other hand, the presence of Law No. 17 of 2023 concerning Health replacing Law No. 36 of 2009 brings major changes, including strengthening legal protection for medical personnel and providing a more comprehensive legal framework for forensic medical practice in Indonesia (Permenkes, 2023)

However, the practice in the field still shows that there are quite complex challenges. One of the issues that often arises is the rejection of autopsies by the victim's family, which is often based on cultural, religious, or ignorant reasons of the importance of autopsies in legal proceedings. This is where the ethical and legal dilemma arises for forensic doctors: on the one hand, he has an obligation to assist in the legal process according to the provisions of the Criminal Code, but on the other hand, he must also consider aspects of medical ethics and patient/family rights protected by the Health Law.

Another problem is the lack of synchronization between existing laws and regulations. The Criminal Code, which has been drafted since 1981, has not undergone significant updates to keep pace with the times, including in dealing with new legal issues such as digital forensics, electronic medical records, and the involvement of doctors in mass disaster investigations. Meanwhile, the newly passed Law No. 17 of 2023, although it has a strong vision of reform, still needs implementing regulations such as Government Regulations (PP) so that it can be implemented effectively.

The above problem underscores the need for a deep understanding of the relationship between law and forensic practice in Indonesia. An academic study is needed to explain how forensic law is positioned in the national legal system, as well as how the role of forensic doctors is legally guaranteed in carrying out their professional duties.

2. Methodology

This research is a normative legal research with a descriptive-analytical approach. Normative legal research was chosen because the focus of the study is directed at the analysis of laws and regulations, doctrines, and scientific literature relevant to the practice of forensic medicine in Indonesia.

Research Approach

a. Statute Approach: Examining the provisions of the Criminal Code, the Criminal Code, and Law Number 17 of 2023 concerning Health as the legal basis for forensic practice.

b. Conceptual Approach: Analyzes the concept of forensic law, the role of forensic doctors, and professional ethics.

c. Case Approach: Reviewing forensic cases to understand the application of norms in the field.

Data Types and Sources

This study uses secondary data, consisting of:

a. Primary legal material: Laws and regulations and legal provisions related to the practice of forensic medicine.

b. Secondary legal materials: Books, scientific journals, academic articles, and research reports.

c. Tertiary legal materials: Legal dictionaries, encyclopedias, and credible internet sources.

Data Collection Techniques

Data was obtained through literature studies by tracing legal sources and academic literature from libraries, journal databases, and official government websites.

Data Analysis Techniques

The analysis was carried out qualitatively by examining the relationship between legal norms and the practice of forensic medicine, comparing theory with practice, and drawing conclusions based on the results of literature analysis

3. Result and Discussion

Definition of Forensic Law

Forensic law or in Latin known as *Ius Forensic* is a branch of science that combines legal aspects with scientific methods for the purpose of investigation and judicial processes. Etymologically, the term is derived from the word "ius" which means law or legal system, "lex" which also means law but refers more to written law, and "forensis", which comes from the word forum in ancient Roman culture—a place where public debate and court took place which was then interpreted as everything related to the court.(La Cava et al., 2022)

Thus, *Ius Forensic* describes the application of legal principles in the context of the courts through a scientific approach, as seen in forensic medicine (*Medicine Forensis*), forensic toxicology, and various other branches of forensic science. The main goal is to support the law enforcement process objectively based on scientific evidence. In its application, Forensic Law covers various fields such as *toxicology* forensics, forensic pathology, *Dentistry* forensics, to DNA analysis and digital forensics. The central role of Forensic Law is as a tool of proof in criminal and civil courts. With the development of the times, the term *Forensic Science* has become more widely known and used internationally as a general term to refer to the application of scientific methods in the realm of law.(Adolph, 2016)

In addition, the justice approach *Restorative* (*restorative justice*) is also beginning to be integrated as part of the penal system, making room for more humane and recovery-oriented settlements. This formulation is part of the national priority in the 2025 National Legislation Program (Prolegnas), and has been completed with an Academic Manuscript and Problem Inventory List (DIM) submitted to the House of Representatives of the Republic of Indonesia by the government through the Ministry of Law and Human Rights. (Adolph, 2016)

Basis of Forensic Law in Indonesia:

Based on the practice of forensic medicine in Indonesia, there are several legal bases that govern the implementation and obligations of health workers, especially doctors, in handling cases related to criminal acts.

Several laws and regulations completely regulate the implementation of medical measures in the forensic context, both in terms of criminal procedure law and from health regulations. One of the main legal foundations in the practice of forensic medicine in Indonesia is the Criminal Procedure Code (KUHAP). In the Criminal Code, there are several relevant articles, including:

1. Article 133 states that if there is a suspicion of an unnatural death, investigators are obliged to ask for the assistance of medical personnel, especially doctors, to examine the body. This examination aims to find out the cause of death through an autopsy or external examination.
2. Article 134 states that the results of the examination must be stated in the form of a *visum et repertum minutes*, which are prepared by the doctor and have a position as evidence in the criminal justice process.

In addition to the Criminal Code, another legal basis is contained in Law Number 17 of 2023 concerning Health, which provides a legal framework for medical personnel in carrying out medical practices, including forensic medicine. In the law, there are several articles that are indirectly related to forensic practices, namely:

1. Article 273: Declares that health workers, including doctors, receive legal protection as long as medical actions are carried out in accordance with applicable professional standards, service standards, and operational procedures.
2. Article 310: Regulates the mechanism for resolving medical service disputes through restorative channels, such as mediation or arbitration, before entering into formal legal proceedings.
3. Article 311: Affirms that forensic services, including visum, autopsy, and handling of victims in disasters or emergency conditions, are part of the health services that must be provided
4. Article 408: Provides legal protection for medical personnel when facing KLB, outbreaks, or security disturbances while on duty
5. Article 185: Affirms the responsibility of health service facilities for medical practices carried out by medical personnel under their authority.
6. As for Articles 98 to 101: Regulates occupational health aspects, which become relevant if death occurs due to work accidents or exposure to hazardous materials in the work environment.

It should be noted that the articles in the Criminal Code have so far referred to Law Number 8 of 1981, which is currently in the process of being thoroughly revised. The revision of the Criminal Procedure Code was drafted to adapt to the needs of the times, uphold the principles *of due process of law*, and strengthen the protection of "Human Rights" (HAM). The new draft of the Criminal Procedure Code is planned to come into effect on January 1, 2026, so it is important for the medical and legal community to begin to understand the implications of these changes on forensic medicine practices in the future. Along with the enactment of the Criminal Code that has been passed previously. The drafting of the Criminal Procedure Bill includes several *substantial changes*, including; expanding protection for suspects, defendants, and victims; strengthening the pretrial mechanism, arrangements related to crown witnesses, and the implementation of technology-based information systems to support a more transparent and accountable legal process.

Scope and Role of Forensic Law

Forensic law has an important role in the investigation of criminal acts, especially in cases of violence, unnatural death, sexual offenses, and identification of disaster victims. Forensic doctors play a role in determining the cause of death, time of death, type of injury, and estimating the tools used by the perpetrator. In addition, forensic doctors also provide information as expert witnesses in court based on the results of scientific examinations.

A. External Examination and Autopsy

External examination (*visum et repertum*) and autopsy are the main procedures in identifying the cause of death, both reasonable and suspicious. The findings of this examination are very important as evidence in the investigation of criminal cases.

In addition, External inspection (*Visa and Repertum*) is a critical stage in a forensic autopsy. During this examination, the non-invasive officer records body characteristics such as position, external wounds, trauma death, or proof of identity. This is often the basis for deciding whether a full autopsy is necessary. The autopsy aims to determine the identity of the body, the cause of death, the mechanism, and the time of death and to collect additional evidence (organs, body fluids, tissues) to support the criminal investigation. Its role in the eyes of the law is very strategic because the results *Visa and Repertum* considered as valid evidence according to the Criminal Procedure Code. (Tampubolon & M, n.d.)

B. Documentation and Interpretation of Wounds

Forensic doctors are in charge of interpreting identities; (gender, age, etc.) and the cause of the injuries suffered by the victim. This helps determine if the injury was the result of violence, accident, or other causes.(Suryadi & Kulsum, 2020)

C. Forensic Laboratory Analysis

DNA analysis, toxicology, and serology are part of a forensic laboratory that can support scientific evidence in legal cases. The role of the laboratory is very important in strengthening the results of medical examinations objectively.

Serological examinations are used for the detection of biological fluids such as blood and semen before DNA analysis is performed. For example, DNA profiling, which is the gold standard for individual identification, and according to comparative studies, emphasizes that DNA analysis is now considered more reliable than conventional serology methods.(Abebe et al., 2024)

D. Role as an Expert Witness in Court

In the criminal justice system, forensic doctors act as expert witnesses to scientifically explain the results of the examination to judges and prosecutors. This testimony greatly determines the direction of evidence in the trial. (5)

Ethics and Informed Consent in Forensic Actions

Although forensic actions are often carried out in a legal context, the principles of medical ethics must still be upheld. Forensic doctors are obliged to maintain the confidentiality of medical information, be professional, and not take sides with any party. Ethical principles such as *Non-maleficence* (harmless), *beneficence* (do good), *justice* (justice), and *Autonomy* (respect for individual rights) remains valid in forensic practice.(Suryadi & Kulsum, 2020)

Informed consent or approval of medical actions is a patient's right that is legally and ethically regulated, including in the context of forensic medicine. In Indonesian law, the principle of informed consent is regulated in the Criminal Procedure Law (KUHAP) and Law Number 17 of 2023 concerning Health. This law replaces Law Number 29 of 2004 concerning Medical Practice, namely Article 45, which states that any medical action can only be carried out after the patient gives voluntary consent, after receiving a complete explanation, and provides the latest legal basis regarding the governance of medical practices, including forensic practices. In the context of forensic procedures such as autopsy, the role of forensic doctors is also regulated in the legal corridor to ensure patient protection and the professionalism of medical personnel. (Maela & Sidi, 2023)

In addition, the 2023 Health Law regulates the registration and licensing system for practice in a more centralized manner, which also affects the legality mechanism of forensic doctors in carrying out their duties. The application of informed consent has specificities, especially in the act of autopsy. There are two types of autopsies that need to be distinguished from a legal perspective: (Maela & Sidi, 2023)

1. Clinic Autopsy

A clinical autopsy is performed for medical purposes, such as finding out the cause of death in cases of undiagnosed diseases. In this case, the doctor is required to obtain informed consent from the patient's family or legal guardian before taking action. Without such consent, an autopsy cannot be carried out because it is contrary to the right to the body protected by law and medical ethics. (Maela & Sidi, 2023)

2. Forensic Autopsy (Judicial Autopsy)

Forensic autopsy is carried out on the order of the investigator in the criminal investigation process, as stipulated in Articles 133 and 134 of the Criminal Procedure Code, which states that in the event of an

alleged criminal act, the investigator can ask for the help of a doctor to carry out the *Visa and Repertum*. In this context, no consent from the family is required, as the action is carried out as part of a legal obligation in the criminal justice process. (Maela & Sidi, 2023)

So the short conclusion is that the clinical autopsy must have the approval of the patient's family or legal guardian before the action is carried out. However, for forensic autopsies to be carried out at the request of the investigator, this action can be carried out without the family's consent, as it is a legal obligation in the investigation process. However, as a forensic doctor, he still communicates well with the victim's family, by providing an explanation of the purpose of the action, the legal basis, and the process to be carried out. This is important to maintain transparency, professional ethics, and build public trust in the legal process.

3. Ethical Aspects

Principles of medical ethics such as *Autonomy* (respect for individual rights), non-*Maleficent* (not harmful), and *justice* (justice) must still be upheld. Forensic doctors have a responsibility to act professionally, objectively, and impartially, both towards the victim, the family, and law enforcement officials. (Maela & Sidi, 2023)

4. Legal and Ethical Conflicts

In some cases, there is a conflict between the legal interest (the investigation process) and the family's right to refuse an autopsy. Legally, an autopsy *Judicial* It can still be implemented despite family rejection, but humanist approaches and ethical dialogue remain part of good forensic practice. (Maela & Sidi, 2023)

Challenges in Legal Practice in Indonesia

1. Lack of understanding of law enforcement officials

Many law enforcement officials in Indonesia still have a limited understanding of forensic procedures and the use of medical examination results as legal evidence, resulting in delayed evidence mobilization and lengthening the investigation process. (Lubis & Sembiring, 2024)

2. Limited Number of Forensic Specialists

The number of forensic doctors and forensic pathologists in Indonesia is still very limited and uneven, so that in many areas, especially remote areas, the examination of corpses is often delayed due to a lack of experts, which then slows down the legal process and reduces the quality of forensic evidence.(Lubis & Sembiring, 2024)

3. Limitations of Laboratory Facilities

The lack of complete and state-of-the-art forensic laboratory facilities, especially for DNA analysis and toxicology, is one of the main obstacles in obtaining fast and accurate examination results in complex cases, thus hindering the efficiency of the investigation process. (Lubis & Sembiring, 2024)

Aspects of Forensic Law

Related Laws	Provisions and Sanctions of the Law
A. Protection of Forensic Medical Personnel	Article 50 of Law No. 17 of 2023 concerning Health: Health workers who carry out their duties based on their science and competence cannot be criminally or civilly punished, if the implementation of these duties is in accordance with professional standards, service standards, and standard operating procedures.

B. Forensic Examination and Investigation	Any examination of the victim's body or body must be carried out by a medical expert (forensic doctor) and stated in the form of *visum et repertum*. The failure to carry out *the visum* can hinder the judicial process and can be ensnared with Article 221 of the Criminal Code: namely obstructing investigations, with a maximum penalty of 9 months in prison or a maximum fine of Rp4,500,000.
C. Refusal or Forgery of Visum by Doctors	Rejection of article 216 of the Criminal Code: Whoever deliberately disobeys an order or request made according to the law by an official whose duty it is to supervise something, or by an official based on his duty, as well as who is authorized to investigate or examine a criminal act; Likewise, whoever deliberately prevents, obstructs or thwarts actions to carry out the provisions is threatened with imprisonment for a maximum of four months and two weeks or a maximum fine of nine thousand rupiah. Falsification of visum by doctors Article 267 of the Criminal Code: A health worker who deliberately provides false information in writing (for example in a visum) can be sentenced to a maximum of 4 years in prison. If used in the judiciary, the threat of punishment increases to 7 years in prison.
D. Insult or Violence against Forensic Personnel on Duty	Articles 211 and 212 of the Criminal Code: A person who fights against an expert who is carrying out state duties (including forensic personnel) can be sentenced to imprisonment for a maximum of 1 year and 4 months, and if accompanied by violence, can be sentenced to a maximum of 4 years and 6 months.
E. Obstruction of Forensic Process	Articles 409-410: Obstructing or manipulating forensic tasks Imprisonment of a maximum of 3 years or a maximum fine of IDR 300 million
F. Expert Testimony at the Trial	Article 186 of the Criminal Code: Expert testimony given under oath becomes valid evidence. If false information is given, experts can be charged with Article 242 of the Criminal Code with a maximum prison sentence of 7 years. Article 187 of the Criminal Code: Stating that what is meant by letter evidence includes:

	"A certificate from an expert that is contained in the form of a report lawfully made under oath."

4. Conclusion

Forensic law is a field that combines medical science and law to support the investigative and judicial process, especially in criminal cases. Forensic doctors play an important role through visum, autopsy, and expert testimony to determine the cause and time of death, as well as the identification of the victim. In Indonesia, this practice is regulated in the Criminal Procedure Code and Law No. 17 of 2023 concerning Health. Although crucial, the implementation of forensic law still faces obstacles such as limited experts, laboratory facilities, and understanding of law enforcement officials. Strengthening of regulations, education, and forensic facilities is needed to increase effectiveness and fairness in the legal system.

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