



## The Effectiveness of Forensic Medicine in the Investigation of Murder and Harassment at the Cirebon City Police

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### ABSTRACT

The importance of forensic medicine in supporting the criminal investigation process, especially in cases of murder and harassment. In some cases, conventional evidence is not enough to reveal the facts that occurred, so a scientific approach is needed through the analysis of biological, medical, and toxicological evidence, the use of forensic medicine often faces various challenges in its application, such as objections from the victim regarding autopsy. For this reason, it is necessary to know the extent of the effectiveness of forensic medicine in handling the crime of murder and harassment, as well as the challenges faced by investigators in the case at the Cirebon City Police. This type of research is normative juridical, examining theories, concepts, legal principles, and laws and regulations. Data collection techniques include interviews and document studies. The results of the study show that forensic medicine is very effective in helping to solve murder cases at the Cirebon City Police. However, in the case of verbal harassment, it is still difficult to prove because there is no trace of the perpetrator on the victim's body, so in this case, the doctor can only make a medical certificate regarding the victim's psychological state.

## **INTRODUCTION**

### ***Background of the Problem***

The crimes of murder and harassment are two forms of crime that seriously threaten the security and comfort of the community. These two types of crimes often have a profound psychological impact on the victim and their families, as well as create a sense of insecurity in the environment where they live. In the context of law enforcement, the disclosure and handling of crimes, murder, and harassment requires a careful and comprehensive approach.

Forensic medicine is a branch of science that focuses on applying medical principles and techniques in the legal context. Along with the development of technology and investigative methods, forensic medicine science increasingly has a significant role in helping law enforcement officials find valid evidence in court. For example, DNA analysis, toxicology examinations, and the identification of injuries and causes of death have helped many criminal cases be solved more quickly and accurately.

For example, in the murder case that occurred in Cirebon in 2023, forensic examination of DNA found at the crime scene (TKP) succeeded in identifying the main perpetrator in less than two weeks. The analysis of the injuries on the victim's body also provided strong evidence related to the modus operandi of the crime committed. This case demonstrates the importance of the role of forensic medicine in supporting the investigative and judicial process.

However, there are still various challenges in the application of forensic medicine in Indonesia, especially at the Police level. Regulatory obstacles, objections from victims, and the difficulty of opening up sexual harassment are the main factors that hinder the optimization of forensic medicine in the investigation process

Therefore, forensic doctors' expertise is needed in the process of examination at the scene, interrogation, and reconstruction. However, the involvement of forensic doctors in the investigation of murder and harassment cases at the Cirebon City Police is still not optimal, so the investigation cannot be carried out optimally.

Looking at the background that has been explained, this topic deserves to be researched and outlined in a scientific paper entitled "The Effectiveness of Forensic Medical Science in the Investigation of Murder and Harassment in the Cirebon City Police."

### ***Problem Formulation***

1. How effective is forensic medicine in handling murder and harassment crimes at the Cirebon City Police?
2. What do Cirebon City Police investigators face the challenges in investigating the crime of murder and harassment in using forensic medicine?

### ***Purpose and Usefulness of Research***

#### ***Research Objectives***

- a. To find out the effectiveness of forensic medicine in handling murder and harassment crimes at the Cirebon City Police.

- b. To find out what challenges are faced by Cirebon City Police investigators in conducting investigations into the crime of murder and harassment in using forensic medicine.

#### *Research Uses*

- a. This research is expected to expand the author's insights, in particular, as well as readers in general, regarding the extent of the effectiveness of forensic medicine in the criminal investigation process at the Cirebon City Police.
- b. As a contribution to the development of legal science in general and to law enforcement agencies, especially the police, in carrying out one of their duties, namely the investigation function.
- c. This research is expected to contribute to and motivate fellow students to continue research related to the effectiveness of forensic medicine in the investigation of crimes at the Cirebon City Police.

## **LITERATURE REVIEW**

### *Legal Effectiveness Theory*

According to Soerjono Soekanto, legal effectiveness is defined as a law that can achieve its goals. Public behavior that turns into legitimate behavior is a good indicator of effective legislation. According to Soerjono Soekanto, the following elements affect law enforcement: legal factors, law enforcement facility aspects, and facility factors, as well as cultural and community factors.

### *Proof Theory*

According to Simons, this theory of proof, which is based on the law positively (*positivof wettelijk*), aims to eliminate the judge's subjective judgment and impose harsh norms of evidence. This means that the imposition of a criminal offence against a person is not solely the authority of the judge, but is under the authority of the law based on the principle that a defendant can only be convicted if the indictment submitted can be proven by legal means and valid evidence according to the law. This system is known as formal proof theory (*formele bewijsteorie*).

## **METHODOLOGY**

### *Types of Research*

This study is included in the normative research category because the author's focus in this study is on analyzing the applicable legal regulations, legal principles, and their application in the context of investigating the crime of murder and harassment.

With a normative juridical approach, the author can evaluate the extent to which forensic medicine is applied in accordance with the orders of laws and regulations. In addition, this approach can assist the author in understanding how legal norms support or hinder the effectiveness of forensic medicine in proving murder and abuse cases. This research aims to be able to provide

recommendations for improving regulations or better legal practices in the investigation of murder and harassment crimes in the Cirebon City Resort Police.

### ***Research Location***

The Cirebon City Resort Police Office became the place of research. The author chose this location because the Cirebon City Police have the authority to carry out their duties in the Cirebon City area and because the Cirebon City Police also have archives, records, and other information necessary for the study of the effectiveness of forensic medicine in the investigation of murder and harassment cases at the Cirebon City Police.

### ***Population and Sample***

#### *Population*

Population is all parties related to the problems studied in this study. Those included in the population of this study are:

- a. Member of the Cirebon City Resort Police Investigator;
- b. Forensic Doctor, Faculty of Medicine, Swadaya University Gunung Jati Cirebon.

#### *Sample*

The sample was selected by the authors using the purposive sampling method, which assigns a number of samples that represent the current population. The administrative section of the general criminal investigation determines the sample category, which consists of people who are considered competent in the field relevant to the study.

### ***Data Source***

#### *Primary Data*

A compilation of laws and regulations related to the issue under investigation produces primary legal material. The primary legal materials of the law include: Law No. 1 of 2023, the Criminal Code, and the TPKS Law on the Crime of Non-Physical Sexual Harassment.

#### *Secondary Data*

Secondary legal documents provide more explanations than primary legal documents. In this study, secondary legal documents were used in the form of legal opinions obtained from books, scientific papers, legal magazines, legal articles and other sources that support this research.

#### *Data Collection Techniques*

In studies that use normative research methods, secondary data used in research that utilizes normative research methodologies are collected through literature review, especially by collecting written materials referred to as "legal materials".

### ***Data Analysis***

This study uses a qualitative approach for data analysis. The legal norms covered in laws and regulations, court decisions, as well as norms that arise and persist in society are all included in the qualitative normative juridical study. To understand the data collected as a whole, a qualitative analysis will be performed, which requires examining the messages sent by respondents either orally, in writing, or through the actual behavior being examined. Based on this discussion, conclusions will be made deductively, that is, from general concepts to more focused conclusions.

## **RESULTS AND DISCUSSION**

### ***The Effectiveness of Forensic Medicine in Handling Murder and Harassment Crimes at the Cirebon City Police Station the Role of Forensic Medicine***

Criminal procedural law aims to reveal the material truth in a criminal case, which is inseparable from the evidentiary process. Evidence in criminal cases, Article 184 of the Criminal Code states that valid evidence, including the defendant's statement, expert testimony, witness statements, letters, and clues, Meanwhile, Article 183 of the Criminal Code explains that a judge cannot impose a criminal sentence on a defendant unless there are at least two valid evidence.

The judge's confidence in imposing a criminal verdict is based on the results of the examination of evidence submitted during the trial. The same is true for situations involving damage to the human body, where the law requires help from another field that is medical science to determine when the injury occurred and whether it was caused by a crime.

According to the guidelines outlined in Article 179 paragraph (1) of the Criminal Code, one way to obtain evidence in a criminal case is to ask for help from a doctor to be a witness who can provide written testimony in the form of visum et repertum or directly testify as an expert witness during the trial.

In addition, forensic medicine also determines the causal relationship between actions and their impacts, both in the form of injuries to the body and death of a person. Based on the results of the examination by a forensic doctor, it can be determined whether a person's injury or death was caused by a criminal act or not.

Based on data from the Indonesian National Police (Polri), the use of forensic medicine in criminal investigations shows an increase in effectiveness in resolving cases a study conducted in several police stations shows that forensic evidence can increase the case resolution rate by up to 85% in cases of murder and severe violence (Source: National Police Annual Report, 2024).

In conclusion, forensic doctors play an important role in helping investigators uncover criminal acts involving the human body or soul, so that they can clearly reveal the incident.

### ***The Effectiveness of the Forensic Medical Science Implementation Process***

Forensic doctors in the field of Human Resources (HR) have special knowledge in analyzing biological evidence. such as wounds, body tissues, and toxicology which are very important in solving criminal cases, especially in cases

of murder and harassment. The competence and forensic doctor determine the accuracy of the results of the examination, which is often the basis for court decisions.

In cases of murder and harassment at the Cirebon City Police, forensic doctors play an important role in the investigation process as makers of scientific evidence, namely in the form of *visum et repertum* and as expert witnesses who explain the results of the *visum et repertum* itself in the judicial process. *Visum et repertum* is considered to have a high level of credibility in the judiciary because it is made by medical experts who have professional competence in their fields, namely forensic doctors or authorized medical personnel.

In addition to forensic doctors' human resources, the facilities and facilities in forensic examinations also determine the effectiveness of the implementation process in resolving criminal cases, especially in cases of murder and harassment.

Based on the results of interviews obtained by the author from the forensic doctor of Waled Hospital, the facilities and facilities at Cirebon City Hospital, especially at Waled Hospital, have been fulfilled and quite adequate. The modern technology that helps the forensic examination process is *virtopsy* or virtual autopsy which only exists in Jakarta. This technology usually uses medical imaging techniques such as CT scan (*computer Tomography*) or MRI (*Magnetic Resonance Imaging*) to study the inside of the body without having to perform invasive procedures. *Virtopsy* becomes a very useful solution in cases where traditional autopsies are not allowed or prohibited for cultural or religious reasons. With this tool, forensic doctors can analyze the cause of death, examine injuries, or detect diseases in a faster and non-invasive way. However, the drawback of the tool is that the results of the tool are not accurate because the tool cannot read cells in the human body. In addition, the cost of using *virtopsy* can be charged Rp.35,000,000.- in one use. This is not possible for all victims.

### ***Obstacles in the Investigation of Murder and Harassment at the Cirebon City Resort Police***

In the Cirebon City Resort Police in 2023-2025 there are 4 criminal cases of murder, and in 2023-2025 there are 3 criminal cases of harassment. The author selected 4 criminal cases that required the assistance of a forensic doctor, namely murder cases. Of the 4 criminal cases, they have been successfully solved with the help of forensic doctors.

Some of the factors that hinder the proof of murder and harassment cases at the Cirebon City Police are:

#### *Law Enforcement Officer*

Law enforcement in the criminal justice system aims primarily to handle every crime. This system consists of a series of processes involving various parties, namely the police as investigators, the prosecutor's office as the public prosecutor, the court as the adjudicating body, and the correctional institution as an institution for the rehabilitation of prisoners. All of these components work synergistically and support each other to achieve the common goal of preventing and overcoming crime.

The background of the crime of murder and harassment is often rooted in various complex factors, including emotional pressure, interpersonal conflicts, economic squeezes, and the deterioration of the nation's morals that lead to harassment and murder.

Police investigators and investigators are the vanguard in uncovering criminal cases of murder and harassment, must have adequate training and high qualifications and competence. Their task in handling murder and abuse cases involves a series of important steps to ensure justice. Investigators must collect evidence at the Crime Scene (Crime Scene), such as physical traces, witnesses, or CCTV footage, to understand the chronology of the incident, in addition, investigators are also responsible for conducting interviews with witnesses and victims with empathy and professionalism. In cases of harassment, investigators must maintain confidentiality and provide protection to victims so that they feel safe to speak. All of these steps are carried out with the aim of uncovering a fact, identifying the perpetrator, and ensuring that the legal process runs according to the rules. The expertise and integrity of investigators are crucial in handling sensitive cases like this.

A forensic doctor from Jakarta Hospital, Djaja Surya Atmadja, proposed that in cases that attract great attention, police involvement in the forensic process should be minimized and more involve civilian forensic doctors. Especially for cases with limited evidence, he argues that the public tends to trust civilian forensic doctors more because they are considered free from conflicts of interest, not about honesty or not. He also underlined that as part of a state institution, the police have a strong spirit of unity (soul korsa), so if there is a special order given to the police forensic doctor, it is difficult to refuse, especially if there is an emotional relationship between the victim and the forensic doctor's superior. This situation, according to him, can be an obstacle in the disclosure of murder cases.

It is possible that internal factors can be an obstacle in the investigation process at the Crime Scene (Crime Scene), such as the lack of experience of investigators. This shows that the investigator himself can be an obstacle in the course of the investigation. For example, investigators may lack understanding of crime scene handling procedures, have a low level of accuracy, or lack professionalism in carrying out their duties. As a result, the results that should have been obtained to uncover the case at the crime scene became less than optimal.

#### *Sexual Harassment Cases Are Difficult to Prove*

Cases of sexual harassment often face difficulties in proving the law due to complex social, cultural, and legal system factors. The lack of physical evidence, such as visum et repertum, is a major obstacle, especially in cases without witnesses or if the victim reports late. Based on the author's interview with the forensic doctor of Waled Hospital, visum et repertum often cannot be made for victims of sexual abuse for several reasons. One of them is the delay in reporting. If the victim reports after a long time, physical evidence such as injuries or biological traces may have been lost. In addition, many cases of sexual

harassment do not leave obvious physical marks, especially if the form of abuse is verbal or psychological.

Psychological trauma also affects the consistency of victims' testimonies, as seen from studies that show that many victims experience severe emotional distress. In addition, the majority of cases occur in closed environments, such as homes or vehicles, which makes it difficult to gather witnesses.

Social factors such as the stigma of people who still blame the victim also hinder case reporting. The patriarchal culture that considers women as "provocative" parties makes many victims afraid to reveal their experiences, as noted in the TPKS Law. On the other hand, weaknesses in legal formulation become a barrier to proof, for example in Article 184 of the Criminal Code which stipulates the need for at least two valid evidence, which has not fully accommodated digital or psychological evidence. The case in Yogyakarta (2024) is an example of how a rigid legal system is often inadequate in handling victim reports.

In addition, the lack of coordination between agencies such as the police, legal aid agencies, and counseling services hinders the handling of cases. The impact can be seen in the low reporting rate - only 12-15% of cases are reported according to National Police data (2024) - and the increase in social justice through the media as an alternative when the law is considered unresponsive.

#### *Objections from the victim's family*

One of the obstacles in proving a murder case is the emotional feelings of the victim's family that arise due to the loss of a loved one due to the perpetrator's actions. In accordance with Law Number 29 of 2004 which regulates Medical Practice, Article 45 paragraph (3), doctors are obliged to provide an explanation of the medical actions to be carried out. To help the investigation uncover a criminal case, the doctor must first explain and provide instructions to the victim's family with the investigator regarding the importance of the forensic autopsy procedure. This can be considered a violation of the applicable article if the doctor performs a forensic autopsy without the consent of the victim's family. Although technically, the forensic autopsy was carried out at the request of investigators related to the investigation of criminal acts.

Although no religion, including Islam, prohibits autopsies, investigators often face difficulties when the victim's family refuses them on religious grounds. although this has been affirmed by Fatwa Number 4 of 1955, the Decree of the Health and Sharia Advisory Council of the Ministry of Health of the Republic of Indonesia, which states as follows:

- a. Forensic autopsy is allowed (mubah) for the purpose of science, medical education, and the interest of justice in the community.
- b. These abilities are limited by the principle of emergency, carried out only to the extent of urgent needs to achieve the goal

If the family of the deceased raises an objection, then based on legal certainty according to the Law on Medical Practice, investigators are not allowed to force the examination process, and forensic doctors will not dare to conduct autopsies because of the applicable rules. Situations like this can be one of the obstacles in uncovering murder cases.

## CONCLUSION

Forensic doctors play an important role in the process of determining a murder case. Because they support law enforcement officials from the investigation stage to trial, especially in cases involving the human body or soul, in order to provide clarity on criminal events that occur. Forensic doctors contribute through two main aspects:

- a. Creation of Visum et Repertum
- b. As an Expert Witness

However, in the case of verbal harassment, it cannot be proven by visum et repertum because there is no trace of the perpetrator on the victim's body. Obstacles in the Investigation of Murder and Harassment at the Cirebon City Police in using the assistance of forensic doctors are: lack of integrity and professionalism of law enforcers, lack of forensic doctors in the jurisdiction of the Cirebon City Police, difficulty in proving cases of harassment, and objections from the victim's family in the autopsy examination process due to religious and cultural reasons.

## RECOMMENDATION

- a. Given that forensic doctors are essential to the process of establishing criminal cases involving the human body and soul, investigators entrusted with investigating criminal behavior must be more maximal in utilizing the assistance of forensic doctors, especially in cases of murder and abuse.
- b. Obstacles that cause the lack of support from forensic doctors in the investigation of murder and abuse cases can be overcome by improving coordination between investigators and forensic doctors and understanding more deeply the duties carried out by forensic doctors. In addition, the government's role in the equitable distribution of forensic doctors, especially in the jurisdiction of the Cirebon City Resort Police, is very important to facilitate and accelerate the investigation process.

## ADVANCED RESEARCH

Based on the obstacles encountered in the investigation of murder and harassment cases at the Cirebon City Police, further studies are suggested to explore the role and effectiveness of forensic doctors in law enforcement processes, especially in regions with limited forensic resources. Future research could focus on developing alternative forensic approaches or legal mechanisms to strengthen the investigation of harassment cases, particularly verbal harassment, which cannot be proven through physical evidence such as visum et repertum. It is also important to conduct deeper studies on the sociocultural and religious factors that influence families' acceptance of autopsy procedures, as well as on strategies to build public trust in forensic examinations. In addition, future research may analyze the training, distribution, and ethical standards of law enforcement officers and forensic doctors, to improve the integrity and professionalism needed in handling sensitive criminal cases. These studies are expected to contribute to improving the quality of criminal investigations and

enhancing cooperation between forensic experts and law enforcement authorities.

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