

Scientific Investigation as Part of Criminal Science in Murder Crime Investigations

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ABSTRACT

The murder case of a female pulmonologist in Nabire, Central Papua, in March 2023 was used as a research study because it was a special case. Because at that time, investigators had difficulty determining the suspect because of the lack of evidence at the beginning of the investigation. This study aims to obtain a description of the Scientific Investigation Technique in disclosing the crime of murder by using a qualitative approach, while the research method is the case study method. The research was conducted at the Nabire Police Criminal Investigation Unit to find out the steps of the Nabire Police Criminal Investigation Unit in using Scientific Investigation through DNA. This study shows that the Scientific investigation method used by the Barelang Police Criminal Investigation Unit has assisted in disclosing the crime of murder effectively with supporting and inhibiting factors.

INTRODUCTION

Crime Science Investigation (CSI) is an investigative approach method by prioritizing various scientific disciplines to uncover a case that occurred (Et, 2022). Using the CSI method, the suspect's confession is placed at the end of the evidence to be submitted to court because the CSI method focuses on an analysis involving various scientific disciplines to reveal a crime.

In this case, the use of Scientific investigation in assisting the disclosure of cases plays a vital role, for example, in the jurisdiction of the Nabire Police, namely the disclosure of the criminal act of murder of Dr Mawartih Susanty, Sp. P, a pulmonary specialist, was found to have died unnaturally at her official residence with one of the pieces of evidence using Scientific investigation, namely DNA testing, found all over the victim's body.

Based on preliminary data obtained from the Nabire Police Criminal Unit, from 2018 to 2023, there was a significant increase in murder cases being handled by the Nabire Police Criminal Investigation Unit in general. From these data, it shows the phenomenon that criminal acts of murder occur more often in the jurisdiction of the Nabire Police. One of them that stands out is the murder case of Dr Mawartih Susanty, Sp. P, a pulmonologist whose body was found at the victim's official residence; based on the autopsy results, the police forensic team examined, in detail, the condition of Doctor Mawartih's body. They also used gauze to wipe the victim's vital areas suspected of having contact with the perpetrator, such as the nipples of the breasts. The gauze was used to find evidence of the perpetrator's DNA on the victim's body. The gauze found fingerprints and saliva on the victim's nipples.

This problem is quite interesting for researchers to research because this problem is a social phenomenon with a very complex character with problems; crimes cannot be uncovered if there is a lack of witness testimony and other evidence, as stated in the Criminal Procedure Code. Disclosure of the criminal act of murder revealed by the Bareleng Police Criminal Investigation Unit is quite complex because, in the framework of gathering evidence, it is pretty tricky until the Forensic Doctor finds pubic hair on the victim's genitals, which is the bright spot in disclosing this crime of murder.

THEORETICAL REVIEW

Article 1 number 2 of Law Number 8 of 1981 (KUHAP) is defined as a series of investigative actions in terms of and according to the methods regulated in this law to seek and collect evidence with which evidence makes it clear about the criminal acts that occurred and the purpose find the suspect (Eleanora, 2019). The series of investigative concepts as an integral whole in the Criminal Procedure Code, which includes receiving reports or complaints, investigative activities, summoning and examining witnesses, including changing the suspect's detention status, searching, examining letters, confiscating, in certain circumstances, may request expert testimony, as well as make a resume of the results of the investigation and notify the public prosecutor of the investigation.

Scientific Investigation comes from the words scientific and investigation (Mill, 2023). Scientific itself is scientific, or scientifically (Norman G. Lederman,

2014). While the investigation is an effort to research, investigate, investigate, search, examine and collect data, information and other findings to find out/prove the truth or even the falsity of a fact which then presents conclusions based on a series of findings and sequence of events. In investigating criminal acts, the National Police are always required to uphold the presumption of innocence, respect human rights, base it on scientific evidence/scientific investigation, avoid using violence, not pursue confessions and should pay more attention to the psychological and empathetic side (Gunarto, 2022). In the process of scientific verification/scientific investigation, the role of science is vast in assisting the disclosure and process of investigating the crime. One that plays a role in forensic science, which is a science that uses multi-disciplines to apply natural sciences, chemistry, medicine, biology, psychology, and criminology to make light or prove whether there was a crime or violation by examining goods.

About the provisions contained in the Criminal Code, the crime of murder referred to refers to the following articles: Article 338 of the Criminal Code, which states that: "Whoever deliberately takes the life of another person shall be punished for murder with a maximum imprisonment of 15 years" Intentional loss of life another person by the Criminal Code is referred to as a murder (Popescu, 2014). To kill another person's life, an actor must do something or a series of actions that result in the death of another person, provided that the perpetrator's intention must be aimed at the consequences in the form of the death of another person. From the description above, it can be seen that the criminal act of murder is a material offence, which means that the new offence can be considered as having been completed by the perpetrator with the emergence of consequences that are prohibited or unwanted by law. Thus, it cannot be said that a criminal act of murder has occurred if the result in the form of the death of another person has not arisen.

Prof. Dr Harsja W. Bachtiar stated that Police Science, like most new branches of knowledge, was formed due to combining elements of knowledge originating from various branches of knowledge that had long been part of science, especially legal knowledge. Each new branch of knowledge tends to utilize knowledge from several branches of knowledge that have previously been recognized as separate branches of knowledge so that they can also be considered as an interdisciplinary branch of knowledge, often also called interdisciplinary knowledge. Field. Police science utilizes knowledge from several branches previously recognized as a branch of science itself, namely forensics. In the case of the murder of the suspect Wardiaman Zebua, DNA forensics was used.

The term forensics relates to law; in the Law Dictionary, it belongs to the courts of justice. The words indicate the application of a particular subject to the law. For example, Forensic medicine is a branch of science that employs medical technology to solve legal problems. In the case of the criminal act of murder with the suspect Wardiaman Zebua, in disclosing his case, one of them uses forensics, namely forensic DNA crime. DNA profiling is a new means of identification. This method was introduced by Jeffreys in 1985 as DNA Finger

Printing. This method is stated to be very reliable for identifying someone because no two humans have the same DNA sequence except for identical twins (derived from 1 egg). DNA (deoxyribonucleic acid) combines deoxy sugars, phosphate groups, and nitrogenous bases. There are four types of nitrogenous bases in DNA, namely guanine (G), thymine (T), cytosine (C) and adenine (A) (Purwanti, 2014).

Scientific proof in investigating criminal cases will be the most reliable evidence and even become the backbone of the criminal justice process, especially in disclosing cases or perpetrators in the investigation process (Widijowati, 2023). In the evidentiary system, according to forensic science or criminalistic science, it is known that there is triangular crime scene evidence, namely the link between the victim, evidence and the perpetrator (Andayono, 2011).

Locard's principle, namely "Every contact Leaves a Trace", states that any physical contact between two objects will cause a mark to be left on each of the objects in contact. In the case of criminal acts, this principle causes a connection or relationship between the three existing pieces of evidence so that, schematically, it will give birth to a concept that we know as the Evidence Triangle. The evidence triangle is a triangle that is formed as a result of a reciprocal relationship (interrelation) between the victim, the perpetrator and the tool (each of which is a corner of the triangle), which contact each other at the time of the crime. At the centre of the triangle is the TKP which also has interrelationships with the three pieces of evidence. The essence of the card exchange principle is to provide an overview of what investigators should do to search, collect, maintain and analyze evidence found at the crime scene (TKP) to assist the legal process in court (Gardner, 2001).

METHODOLOGY

The research approach carried out by researchers is qualitative with the research method, namely case studies (Pollalis, 2018). The reason for the researcher using a qualitative approach is because the form of the problem is casuistic in nature. It focuses more on studying the Criminal Act of Murder against Dr. Mawartih Susanty, Sp.P, a pulmonary specialist who used the scientific investigation to help uncover this crime. It aims to describe in depth the use of scientific investigation.

RESEARCH RESULT AND DISCUSSION

In the criminal case of murder against Dr. Mawartih Susanty, Sp.P, a pulmonologist who specializes in exposing cases, apart from obtaining information from witnesses, also uses scientific investigation techniques, namely an autopsy by the police forensic team to examine in detail the condition of Dr. Mawartih's body. They also used gauze to wipe the victim's vital areas suspected of having contact with the perpetrator, such as the nipples of the breasts. The gauze was used to find evidence of the perpetrator's DNA on the victim's body (Kumar, 2019). The gauze found fingerprints and saliva on the victim's nipples.

Based on the facts, indications were obtained that it was true that there had been an allegation of a crime that deliberately and planned to eliminate the lives of other people accompanied by weighting in the form of theft of the victim's valuables committed by the suspect KW on Thursday 09 March 2023 at around 19.00 WIT at his official residence which is located at Siriwini Village, Nabire City, Central Papua Province. After 19 days after the murder of a pulmonary specialist at the Nabire Regional General Hospital, Mawartih Susanti, it was finally revealed. The police arrested Key Wengge after matching the DNA or nucleotide acids found in the victim's body with several witnesses.

At first, the Head of Public Relations for the Papua Regional Police, Sr. Comr. Ignatius Benny Ady Prabowo stated that he could not confirm the cause of Marwatih's death even though he had examined the crime scene six times. The police also found no damage to property at the crime scene. However, there were bruises on the victim's neck, stomach, and face from the post-mortem examination results at the Nabire Hospital. Based on information from Marwatih's driver, the victim still performed his usual activities on March 8, 2023. Marwatih, known to have a closed demeanor, returned home at 20.30 WIT. Nabire Police investigators and the General Criminal Investigation Directorate of the Papua Regional Police examined 64 witnesses. They also collected 68 items of evidence in this case. To find a clear point on the cause of Mawartih's death, her body was flown to Makassar, South Sulawesi. Post-mortem and forensic examinations were conducted on Mawartih's body at Bhayangkara Hospital in Makassar.

Officers from the Medical and Health Division of the South Sulawesi Regional Police examined the details of the condition of Mawartih's body. They also used gauze to wipe the victim's vital areas suspected of contact with the perpetrator, such as nipples. The gauze was used to find evidence of the perpetrator's DNA on the victim's body. The gauze was sent to the National Police Pusdokkes laboratory in Cipinang, East Jakarta, on March 15, 2023. "We work with the National Police Pusdokkes to examine the DNA found on the victim's body. From the gauze, fingerprints were found on the victim's nipples," said the Head of Medicine and Health for the Papua Regional Police, Senior Commissioner Narayana. Narayana explained that the results of the DNA examination attached to Mawartih's body were compared with primary data for DNA examination from 19 witnesses, namely blood, hair, and fingernails. The selection of the 19 witnesses was based on investigations by investigators who suspected they were involved in the killing of Mawartih.

From the results of the DNA examination of 19 witnesses at the Pusdokkes Polri laboratory, it was finally found that the owner of the fingerprints was attached to the victim's nipples. The perpetrator was Key Wengge, a janitor at Nabire Hospital. The police also arrested Key at his house on Jalan Medan, Karang Mulia Village, Nabire Regency, Tuesday (28/3/2023) at 22.30 WIT. Key admitted that he killed Mawartih and took the victim's cell phone. The Head of the Papua Regional Police, Inspector General Mathius Fahiri, emphasized that Key would be charged with Article 340 of the Criminal Code concerning premeditated murder. The Papuan Police, together with the Nabire Police, will

try to uncover the motives and other actors involved in this case. KW's arrest is a manifestation of the successful use of the scientific investigation method using scientific methods which has repeatedly uncovered criminal cases that do not have sufficient evidence.

In the case of a crime of murder, in addition to obtaining information from witnesses, scientific investigation techniques are also used, namely DNA forensics. Examination of DNA profiles was carried out using standard DNA forensic methods for all samples to obtain scientific evidence regarding DNA STR markers. Examination and analysis of DNA samples determine the type of DNA for each sample being analyzed, where each individual has a different type of DNA except for identical twins.

The procedure carried out aims to prove an event by using organized science to convince the judicial process about the truth of an event. The search for the identity of the murder suspect, in this case, relies on and utilizes medical, scientific techniques, especially forensic DNA. The steps of the Criminal Investigation Unit in disclosing criminal acts began with conducting investigations and investigations. Scientific investigation technical steps are very helpful for investigators in uncovering criminal acts. These steps can be continued according to the needs of investigators, making it easier for investigators to disclose cases and be professional in carrying out their duties.

The factors strongly influence the process of disclosing the crime of murder using Scientific Investigation in disclosing the crime of murder. Supporting factors are forming a large team to uncover cases and implementing titles and panels, which are carried out daily so that the progress of cases from day to day can be monitored to what extent the progress is. The inhibiting factors were during the TKP processing, handling at the TKP, and during an inappropriate autopsy inadequate facilities, infrastructure, and IT.

The role of the Forensic Laboratory is very important in assisting investigators in investigations and investigations (Claude Roux, Frank Crispino, 2012). Especially in terms of criminal investigations and evidence. Because for several investigations and investigations for certain cases, one cannot rely solely on the police. The Forensic Laboratory also balanced this with the application of SCI (Scientific Crime Investigation) or scientific study of crime. The application of SCI greatly assists the police in uncovering a case based on TKP (Case Incident) processing. The examination sub-fields in the Forensic Laboratory have been adapted to the needs. The Scientific Crime Investigation method, or scientific investigation that uses science as a reference provides far more accurate, detailed, and fast data. This makes it easier for investigators to shed light on a case by processing the crime scene optimally and with minimal errors, as was often the case before using this method. Besides that, it also supports law enforcement in this country.

CONCLUSIONS AND RECOMMENDATIONS

The murder case of a female pulmonologist in Nabire, Central Papua, in March 2023 was used as a research study because it was an outstanding case. Because at that time, investigators had difficulty determining the suspect

because of the lack of evidence at the beginning of the investigation. The results of this study indicate that the Scientific investigation method used by the Criminal Investigation Unit of the Bareleng Police has assisted in disclosing the crime of murder effectively with supporting and inhibiting factors.

There is a need for a forensic DNA laboratory in the Legal Area of the Riau Islands Police to make it easier to use Scientific investigation because the Riau Archipelago Province does not have a Forensic Laboratory, so the investigation process becomes more effective and efficient. It is improving facilities and infrastructure lacking in supporting investigations and coordinating with the entire Criminal Justice System so that when dealing with cases related to scientific evidence and investigations, they understand how to apply the right article in the law enforcement framework. One form that can be done is to carry out Focus Group Discussions (FGD) related to knowledge and the use of Scientific investigation in a case.

ADVANCED RESEARCH

This research still has limitations so that further research is still needed on this topic.

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