

## Descriptive Analysis of the Incidence of Suicide Due to Sharp Injuries at the Bhayangkara Tk. 1 Puskorke Polri Hospital: A Review of Data From the Last Five Years and an Islamic Perspective

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### ABSTRACT

Suicide is one of the leading causes of death and remains a major global public health issue. Although suicide by sharp force is relatively uncommon, it has distinctive forensic characteristics and a high fatality rate. This study aims to describe the incidence and characteristics of suicide cases caused by sharp force injuries handled by *Bhayangkara Tk.1 Puskorke Polri Hospital* during the last five years and to analyze the phenomenon from an Islamic perspective. This was a descriptive *retrospective* study using secondary data obtained from medical records and forensic autopsy reports at *Bhayangkara Tk.1 Puskorke Polri Hospital* between 2020 and 2024. The analyzed variables included gender, age, religion, occupation, place of incident, type of weapon used, wound characteristics, cause of death, and mechanism of death. Data were presented in frequency distributions and analyzed descriptively. A total of five suicide cases by sharp force were recorded during the study period. All victims were male, with a mean age of 32.4 years, and most were Muslims. The majority were private employees or students. The most commonly used weapon was a knife, and the incidents predominantly occurred at home. Fatal wounds were mostly located on the neck, with clean-cut edges. Internal examination revealed injuries to vital organs such as the lungs, heart, and liver. The primary cause of death was sharp force injury to major blood vessels or vital organs, with the dominant mechanism being hypovolemic shock due to massive hemorrhage.

**KEYWORDS** Suicide; Sharp Force; Forensic Medicine.



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### INTRODUCTION

A suicide attempt is an act of self-harm with the intent to end life (Choi and Bae, 2020). Suicide is a serious public health issue, with far-reaching social, emotional, and economic impacts. Each year, it is estimated that more than 700,000 suicides occur worldwide, making it the fourth leading cause of death among adolescents and young adults aged 15 to 29, both men and women. In Indonesia, suicide cases reached 6,544 in all ages, with 1,448 cases involving women and 5,096 cases involving men in 2019 (WHO, 2021).

The types of suicide attempts vary according to the economic, social, and cultural aspects of the country. Individuals use methods that are low risk to very lethal depending on what they have and understand about suicide methods. Dependence, drug poisoning, pesticide poisoning, jumping from heights, drowning, self-immolation, suicide by electrocuting, cutting blood vessels, standing in front of trains, car collisions, and intentional starvation are some of the types of suicides (Bidaki et al., 2016)

Forced bruises that cause injuries on the surface of the body caused by sharp objects are called sharp violence. Sharp violence is usually carried out using sharp objects such as knives, axes, razors, and others. Then, these objects cause injury or even death (Abdussalam and Desasfuryanto, 2014). The analysis method from the 2016–2018 SRS data shows that suicide with sharp violence was 3% of the total number of suicides in 2016–2018 (Onie et al., 2024).

The phenomenon of suicide is a serious problem that not only impacts the medical and social aspects, but also has a deep spiritual dimension. From a psychological perspective, suicide is often associated with mental disorders such as depression, anxiety, or personality disorders, while in the Islamic view, it is seen as an unlawful act and is a grave sin because it violates the principle of preserving life (*hifz an-nafs*). Islam emphasizes that human life is a mandate from Allah SWT that must be maintained and should not be terminated by one's own will, as He says in QS. An-Nisa': (4) 29, "And do not kill yourselves; Indeed, Allah is Most Merciful to you." Based on the concept of *maqāṣid asy-shari'ah*, the purpose of Islamic law is not only to enforce the rules, but also to protect the soul, maintain psychological well-being, and prevent destructive acts such as suicide (Zarkasyi Mubhar, 2019; Ibrahim, 2019; Ahmad & Rahman, 2020; Mustaqim Roslan & Osman Zainuri, 2023).

The urgency of this research stems from multiple converging factors. First, suicide rates in Indonesia, particularly among young adults and men of productive age, demand urgent attention and evidence-based prevention strategies. Second, understanding the specific characteristics of suicide by sharp force can inform both prevention messaging about method-specific risks and improve forensic investigation standards. Third, the five-year data period (2020-2024) encompasses the COVID-19 pandemic period, which may have influenced mental health and suicide patterns, providing valuable insights into pandemic-era suicide characteristics. Fourth, the integration of Islamic perspectives addresses the religious and cultural context of Indonesia's predominantly Muslim population, enabling prevention messaging that resonates with community values. Fifth, identifying gaps in forensic documentation can lead to improved recording standards supporting both clinical care and medicolegal investigation.

Based on the presentation of the data above, the author feels the need to analyze data to find out the incidence of suicide due to sharp violence at Bhayangkara Tk.I Hospital Puskokkes Polri.

The formulation of the problem in this study focuses on efforts to find out the characteristics of the victim, the characteristics of the wounds, the commonly used tools, as well as the cause and mechanism of death in cases of suicide due to sharp violence at the Bhayangkara Tk.I Hospital of the National Police Puskokkes in the last five years, including assessing the handling efforts carried out by the hospital and the Islamic view of these actions. The research questions were prepared to explore in detail these aspects, ranging from the identity of the victim, the type of injuries and tools used, to the effectiveness of hospital handling and religious perspectives. The general purpose of the study is to obtain a comprehensive picture of the characteristics of cases of suicide with sharp violence, while specific objectives include the identification of victims and injuries, analysis of tools, causes and mechanisms of death, evaluation of hospital efforts, and the study of Islamic views. This research is expected to be beneficial for students in understanding descriptive analysis methods and Islamic reviews, for YARSI University as a source of scientific data for the development of medical curriculum, and for researchers as experience in conducting research and understanding suicide trends due to sharp violence at Bhayangkara Tk.I Hospital, Puskokkes Polri.

## METHOD

This study was a descriptive research using a cross-sectional design. Data were collected at a single point in time from suicide victims caused by sharp force at the Forensic Medicine Installation of Bhayangkara Tk.I Hospital, Puskokkes Polri.

The study population included all suicide victims due to sharp force at Bhayangkara Tk.I Hospital, Puskokkes Polri from 2020 to 2024.

Inclusion Criteria:

- 1) Suicide victims with sharp force who underwent external and/or internal examinations at Bhayangkara Tk.I Hospital, Puskokkes Polri during 2020–2024.
- 2) Victims with complete and accessible medical records.

Exclusion Criteria: Suicide cases with sharp force whose information was restricted from publication.

This study used qualitative data to examine the characteristics of victims, types of injuries, and the cause and mechanism of death in suicide cases due to sharp force. Data collected included age, gender, wound types, instruments used, and mechanism of death. All information was analyzed to identify trends in suicide incidence caused by sharp force. The primary data source was medical records documenting the medical procedures provided to victims.

Data were collected through analysis of medical records of suicide victims due to sharp force at Bhayangkara Tk.I Hospital, Puskokkes Polri from 2020 to 2024. A dummy table (Appendix 1) was used to organize data, including the victim's registration number, examination date, gender, age, examination results, instrument used, cause of death, and mechanism of death. Additional documents, such as investigation request letters, autopsy reports, and medical history records, were reviewed to ensure completeness.

Descriptive analysis was conducted to determine victim characteristics, injury patterns, trends, and causes and mechanisms of death in suicide cases due to sharp force. Results were presented in narratives and tables to illustrate patterns and characteristics of suicide incidences.

## RESULT AND DISCUSSION

### Characteristics of Victims

**Table 1.** Distribution of Suicide Victims due to Sharp Violence by Gender, Occupation, Education, Marital Status, Left/Kin, Psychiatric History, and Scene

Characteristics	n	%
<b>Gender</b>		
Man	5	100
Woman	0	0
<b>Religion</b>		
Islam	4	80
Buddhist	0	0
Hindu	0	0
Christian/Protestan	1	20
Catholic	0	0
Not Listed	0	0

<b>Work</b>		
Employee	1	20
Private Employees	2	40
Student/Student	2	40
Not Listed	0	0
<b>Education</b>		
Junior High School/Equivalent	0	0
High School/Equivalent	0	0
SI	0	0
Not Listed	5	100
<b>Marital Status</b>		
Not Listed	0	100
Kidal/Kinan		
Not Listed	5	100
<b>Psychiatric History/Self-Harm</b>		
Not Listed	5	100
<b>Scene</b>		
House	2	40
Apartments/Boarding Houses/Rentals	1	20
Not Listed	2	40

Based on the results of the research presented in Table 1, during the 2020-2024 period, there were 5 cases of suicide due to sharp violence at Bhayangkara Tk.1 Hospital of the National Police Health Center. All victims were male (100%). Based on religion, the majority of the victims were Muslims as many as 4 people (80%), while 1 person (20%) was Christian. Information about the dominant hand (left-handed or kinan) was not recorded in all cases (100%). Of all the victims, 20% were employees, 40% worked as private employees, and 40% were students.

All victims (100%) did not have information on their marital status recorded in the medical record data/examination results. All victims (100%) also had no information about their last level of education.

Based on the results of the study in Table 5, it is known that the most common suicide scene due to sharp violence occurred at home, namely 2 cases (40%), followed by 1 case of apartments/boarding houses/rented houses (20%), while the other 2 cases (40%) did not include information about the scene.

**Table 6.** Age, Weight, and Height

<b>Characteristics</b>	<b>n</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>
<b>Age</b>				
In years	5	18	55	32.40
<b>Weight</b>				
Kilogram	0	0	0	0
<b>Height</b>				
Centimetre	4	158	183	168.50

Meanwhile, based on the results of the research presented in Table 2, the age of the victims in this study has a minimum value of 18 years and a maximum of 55 years. The

average age of the victim was 32.4 years, which indicates that suicide due to sharp violence occurs most in productive age. The height of the victims in this study ranged from 158 cm to 183 cm with an average height of 168.50 cm, which was in the range of the average height of the adult population in Indonesia. Meanwhile, the victim's weight was not recorded in the data so it could not be analyzed further. A history of psychiatry or self-harm is also not stated in all cases (100%). The unavailability of this information may be due to limited recording in medical reports or lack of data from the sender of the body.

**Wound Characteristics**

1) External Examination Results

a. Physical Findings

**Table 3.** Physical Findings of External Examination

<b>General Physical Findings</b>	<b>n</b>	<b>%</b>
Open eyelids	5	100
Clear membrane of the eye	4	80
Cloudy eye membrane	1	20
Round eyes, black	5	100
Brown eye blinds	5	100
The membrane of the eyeball is white	5	100
Pale eyelid membrane	5	100
Symmetrical nose, stinging effect	2	40
Symmetrical nose, stinging effect	3	60
Symmetrical ears, hanging effect	3	60
Earlobes stick	1	20
Closed mouth	4	80
Open mouth	1	20
Tongue sticking out/biting	1	20
Discharge from the body cavity	2	40

The results of the external examination in Table 3 showed that all victims were found with open eyelids (100%), pale eyeball membranes (100%), brown eyelids (100%), and white eyeball membranes (100%). Most of the victims also had clear eye membranes (80%), while one case showed cloudy eye membranes (20%).

On the nasal examination, a symmetrical shape was found with a stinging impression in 60% of cases and stinging in 40% of cases. Findings on the ear showed that 60% of cases had a hanging, while the lobes were attached in 20% of cases.

Oral examination showed the majority of victims with their mouths closed (80%), while 20% of cases were open-mouthed. A sticky or bitten tongue was found in only one case (20%). In addition, in two cases, fluid was found to discharge from the body opening, namely in the form of bleeding from the mouth and nose in one case and clear fluid from the pubic hole in the other.

b. Wounds

**Table 4.** Fatal Injury Location

<b>Wound Characteristics</b>	<b>n</b>	<b>%</b>
<b>Location of Wounds</b>		
Given	1	20

Neck	2	40
Stomach	1	20
Other	1	20
<b>Types of Wounds</b>		
Flat edge open wound	5	100
Open wound uneven edges	0	0

Based on the results of descriptive analysis (Table 4), the location of fatal injuries was most often found on the neck as many as 2 cases (40%). Wounds on the chest and abdomen were found in 1 case (20%) each. In addition, there was 1 case (20%) that was categorized as "other", namely wounds in two locations at once (neck and wrist). This suggests that most cases involve vital areas (neck) either as a single location or together with other locations.

The type of fatal wound found in all cases was an open wound with a flat edge (100%). This indicates that the main underlying mechanism is stab wounds due to sharp violence.

**Table 5.** Number of Fatal Injuries

Number of Fatal Injuries	n	%
1	4	80
2	1	20

Based on the number of fatal injuries, most victims had only one fatal injury (80%), while 1 case (20%) was found with two fatal injuries (Table 5). These findings show that although most victims die from one fatal injury, there are also cases with more than one fatal injury.

In this study, the analysis was only focused on fatal injuries that were the cause of death. However, it should be noted that in most cases other non-fatal injuries such as abrasions and bruises are also found, which will be explained further in the discussion section.

c. Toksikologi

**Table 6.** Toxicological Examination Results

Toxicology Examination	n	%
Done (Drug & Alcohol negative)	4	80
Not done	1	20

Toxicological examinations were carried out in 4 cases (80%). All cases showed negative results on drug and alcohol tests. One case (20%) was not carried out toxicological examination (Table 6).

2) Results of Deep Examination

As many as three out of five cases of suicide due to sharp violence received an internal examination (autopsy), while the other two cases did not undergo the procedure.

a. Natural Diseases

**Table 7.** Results of Natural Disease Examination

Natural Diseases	n	%
Not done	2	40%
No Natural Diseases	2	40%
There are natural diseases	1	20%

Based on the results of the internal examination presented in Table 7, 1 case (20%) was found with the original disease in the form of atherosclerosis, 2 cases (40%) there was no original disease, and in 2 cases (40%) no internal examination was carried out.

b. Other findings

**Table 8.** Other Findings on Internal Examination

Organs/Parts	Key Findings	n
Neck & Throat	Cut wounds hit connective tissue, muscles, large blood vessels, ring cartilage, accompanied by extensive blood infiltration.	2
Lung	Bleeding, edema, fluid/blood in the chest cavity (+/- 400mL free blood + clot +/- 150g); right lung weight +/- 300g, left lung +/- 400g.	2
Heart	The pericardium contains a small amount of clear liquid; heart weight +/- 300g; no other structural abnormalities were found.	1
Liver	Translucent wounds affecting the liver organs; weight +/- 850 g; It is yellowish-brown in color, the surface is smooth and blunt.	1
Abdominal cavity	Free blood was found +/- 295 mL; The stomach contains food residues mixed with blood.	1
Brain & Skull	There is no blood diffusion in the skull bone; the brain appears swollen, dilation of blood vessels; Brain weight 1400 - 1600 g.	2
Wound Duct	The wound penetrates the skin of the → lower tissue → of the skin of the → muscle of the → ribs of the lungs → (length +/- 25cm, front-back direction).	2

In the internal examination, in addition to assessing the presence or absence of the original disease, various other findings related to the mechanism of death were also found (Table 8). Cut wounds on the neck affect muscle tissue, large blood vessels, and ring cartilage with extensive blood infiltration. In the chest cavity, free blood was found about 400 mL accompanied by a clot ±150 g, with a translucent wound hitting the right lung. The lungs show a chewy, blackish consistency with blood coming out when massaged.

The heart was found to contain a small amount of clear fluid with an organ weight of about 300 g without other abnormalities. The liver was found with a translucent wound weighing about 850 g, a slippery surface and yellowish-brown in color. The abdominal cavity contains ±295 mL of blood, the stomach contains food residues mixed with blood. The brain exhibits edema and dilation of blood vessels, with an average weight of 1400–1600 g (Table 12).

In the examination of the wound duct, variations in the wound end point were found. One case showed a limited cut wound to the neck that involved the cutting of the main return blood vessel of the left side of the neck. One case showed a stab wound through the ribs and stopped in the right lung. Another case penetrated deeper to the heart (Table 12).

## 1. Tools Used

**Table 9.** Tools Used

Tools Used	n	%
Knife	2	40
Not Listed	3	60

Based on the results of the analysis in Table 9, out of a total of 5 cases of suicide due to sharp violence, only two cases (40%) included information on the tool used, namely knives. As many as three other cases (60%) did not include information about the tools used in the forensic examination documents.

## 2. Causes of Death

**Table 10.** Causes of Death

Registration No.	Causes of Death
034/VII/2021/ML	Cut wound in the neck
058/IX/2023/ML	<i>Laceration of lung and liver as a result of assault by sharp object.</i>
0015/VI/2024/ML	Sharp violence in the abdomen that cuts the liver organs causing severe bleeding.
0059/V/2024/ML	Open wounds on the left side of the neck and wrist
264/VIII/2023/ML	Sharp harshness to the neck that cuts the main veins of the neck and throat shaft resulting in bleeding and breathing disorders.

Based on the results of forensic examinations of five cases of suicide with sharp violence carried out at Bhayangkara Tk.1 Hospital of the National Police Health Center during the 2020-2024 period (Table 10), all victims were declared dead due to massive bleeding. The mechanism of death found was mainly related to hypovolemic or hemorrhagic shock arising from various wound locations, such as the chest, neck, abdomen, and wrists.

## 3. Mechanism of Death

**Table 11.** Mechanism of Death

Registration No.	Mechanism of Death
034/VII/2021/ML	Not Included
058/IX/2023/ML	Direct cause: hemorrhagic shock as a result of <i>laceration of lung and liver as a result of assault by sharp object.</i>
0015/VI/2024/ML	Not Included
0059/V/2024/ML	Not Included
264/VIII/2023/ML	Direct cause: <i>Hypovolemic shock as a result of injury of unspecified blood vessel at neck level as a result of an open wound involving larynx and trachea as a result of intentional self harm by sharp object at cervical regio.</i>

Based on the autopsy results presented in Table 11, the mechanism of death was recorded in only two cases, while the other three cases were not included in detail in the report. In cases with registration number 058/IX/2023/ML, the mechanism of death is hemorrhagic shock due to laceration of the lungs and liver as a result of assault with a sharp object. Meanwhile, in the case with registration number 264/III/2023/ML, the mechanism of death was hypovolemic shock due to injury to blood vessels in the neck region accompanied

by open wounds involving the larynx and trachea, as a result of intentional self-harm with sharp objects.

### **1. Characteristics of Victims**

Based on the results of data analysis from 5 cases of suicide due to sharp violence at Bhayangkara Tk.1 Hospital of the National Police Health Center, all victims were male (100%). These findings are in line with several studies that state that cases of suicide with sharp violence are more often found in men. This is thought to be related to psychosocial factors, where men tend to seek less help when experiencing psychological problems, and are more influenced by gender norms that emphasize courage and assertiveness. This condition makes men prefer direct and deadly suicide methods, including the use of sharp objects. In addition, access to tools, the urge to hide vulnerability, as well as the use of alcohol or certain substances also contribute to the selection of suicide methods. (Berardelli, et al., 2022).

The age of the victims in this study has a minimum value of 18 years and a maximum of 55 years. The average age of the victim was 32.4 years, which indicates that suicide due to sharp violence occurs most in productive age. These findings are consistent with the study by Djajadisastra et al. (2025) which found that disturbed interpersonal needs (such as feelings of not being accepted or considered burdened) as well as stress and depression are more common in young adults and increase the risk of suicidal ideation. In addition, Mathieu et al. (2022) show that economic hardship and unemployment are significantly related to suicidal behavior in adults, reinforcing that psychosocial factors such as financial and job pressures can be triggers in productive age groups.

The height of the victims in this study ranged from 158 cm to 183 cm with an average height of 168.50 cm, which was in the range of the average height of the adult population in Indonesia. Although height is not a direct risk factor for suicide, this anthropometric data is still important to record in forensic examinations for the purpose of victim identification, especially if the victim is found without identity. Meanwhile, the victim's weight was not recorded in the data so it could not be analyzed further. In fact, this parameter can also help in estimating body mass index (BMI) which has the potential to provide additional information related to the nutritional status of the victim before death.

Psychiatric or self-harm history is not listed in all cases (100%). The unavailability of this information may be due to limited recording in medical reports or lack of data from the sender of the body. On the other hand, a history of mental disorders is one of the important risk factors for suicide. This finding is also in line with the Interpersonal-Psychological Theory of Suicide (IPTTS) discussed in the latest research in Indonesia (Djajadisastra, et al., 2025), that the risk of suicide can arise when individuals experience thwarted belongingness (feelings of isolation and loneliness) and perceived burdensomeness (feeling a burden to others). These two factors, especially when they occur together, increase the likelihood of suicidal thoughts.

Based on religion, the majority of the victims were Muslims as many as 4 people (80%), while 1 person (20%) was Christian. This distribution may reflect the proportion of the majority population in the region where the data were taken, given that Indonesia's population is predominantly Muslim. However, religious factors themselves are not the sole determinant of suicide risk, but can act as a protective factor or vice versa depending on the level of religious interest of a person. This is in line with the findings of research in Indonesia

that show that suicide is influenced not only by psychosocial factors such as financial crisis, alienation, loneliness, and loss of hope, but also by low religiosity, such as weak faith, non-adherence to religious teachings, or spiritual separation. The study confirms that religion and culture interact in shaping the meaning of suffering, social expectations, and the way individuals express suicidal thoughts. Thus, religion cannot be seen as a single factor, but is greatly influenced by the socio-cultural context and the level of involvement of individuals in their religious teachings (Djajadisatra et al., 2025).

Information about the dominant hand (left-handed or kinan) was not recorded in all cases (100%). This data can actually provide an overview of the position and direction of the wound, making it useful in forensic analysis. The absence of this data shows the need to improve recording standards in forensic examinations so that relevant information is not missed.

Of all the victims, 20% were employees, 40% worked as private employees, and 40% were students. This shows that victims come from diverse employment backgrounds, with the largest proportion being private employees and students/students. These findings may reflect work and academic pressure, which are factors for suicide risk. Studies show that vulnerability due to socioeconomic stressors, such as financial hardship and unemployment, is closely related to increased suicide rates through psychological mechanisms such as feelings of failure, trapping, and being burdened (Sinyor, et al., 2024). Similar mechanisms can also arise due to work stress and academic burden, thus strengthening the risk of suicide.

All victims (100%) did not have information on marital status and education level recorded in medical records or examination results. This information is actually important to see risk patterns based on social support and educational background. Research by Arafat et al. (2023) shows that marital status can be one of the predictors of suicide risk, where individuals who are not married or divorced tend to have a higher risk than those who are married. However, the influence of marital status on suicide is highly dependent on cultural norms, gender roles, and responsibilities borne in married life. In some contexts, marriage can be a protective factor due to social support, but on the other hand it can also increase the risk due to loss of individual independence, domestic role pressures, or economic burdens. This impact also varies between countries.

The most violent suicide scene was found at home (40%). This finding is in line with the results of research by Arafat et al. (2024) which show that the house is the most frequently used location because it provides a sense of security, privacy, and easy access to sharp tools, such as kitchen knives. In addition, Acts of suicide at home are also often related to the victim's desire to avoid the attention of others and end life in a place that is considered comfortable or familiar.

## **2. Tools Used**

Based on the results of the study, of the five cases of suicide due to sharp violence, only two cases (40%) listed the type of tool used, namely knives, while the other three cases (60%) were not accompanied by a description of the tool. This shows that knives are the most common tool used in suicide with a sharp mechanism. Most likely, the choice of knives is due to the factor of ease of access in the home environment as well as its ability to cause open wounds with flat edges that can cause fatal bleeding in a short time. These findings are in line

with research conducted by Nishimura (2017), who found that kitchen knives and other knives cause injuries in almost all cases of self-injury.

### **3. External Examination Results**

The results of the study showed that in all cases, the wound that caused death was mainly in the form of open wounds with flat edges with the most common location being the neck. This pattern is in accordance with the literature that states that the area is the most frequently chosen location in cases of suicide using sharp objects because it involves vital organs with a risk of massive bleeding (Marrone et al., 2024; Berg von Linde et al., 2024). In addition, non-fatal injuries such as abrasions and bruises were also found in some cases. This finding is important because it can indicate the presence of previous attempts or defensive wounds that need to be distinguished from the possibility of hesitation wounds (Berg von Linde et al., 2024).

However, there was one case with two fatal injuries, namely on the neck and wrist. This condition illustrates the possibility of the victim making repeated suicide attempts before finally suffering a fatal injury. A wound on the wrist in such cases can be considered a hesitation wound that develops into a fatal, whereas a wound on the neck causes direct damage to vital organs. These findings are consistent with the literature that states that in suicide with sharp violence a combination of experimental and fatal injuries is often found in more than one body location (Berg von Linde et al., 2024).

Toxicological examinations conducted in most cases produced negatives for alcohol and drugs. These findings suggest that suicidal acts in these samples were most likely not affected by psychoactive substances. Toxicology examinations in most cases produce negative results for alcohol and drugs. This suggests that suicide in this study sample was most likely not affected by psychoactive substances. These findings are in line with the literature that states that although alcohol use and substance use disorder (SUD) can increase the risk of suicide, the relationship between the two is complex and is influenced by a variety of other factors, including mental disorders, trauma, social isolation, and life stressors (Edalati et al., 2024). Thus, not all suicide cases are directly related to the use of psychoactive substances, as shown in this study.

### **4. Results of Deep Examination**

On internal examination, it was found that puncture and cut wounds due to sharp violence did not only hit superficial tissues, but also involved vital organs. Two cases showed injuries to the neck that hit muscles, large blood vessels, and ring cartilage, potentially causing severe bleeding and airway disturbances. Findings in the chest cavity in the form of bleeding of about 400 mL accompanied by a clot, as well as a penetrating wound in the right lung, indicate that the mechanism of death can occur due to massive bleeding or impaired respiratory function. In other cases, the wound penetrated further to the liver, with an organ weight of about 850 grams and a yellowish-brown surface, which also showed damage to vital organs due to sharp trauma.

In addition, examination of the wound duct showed variations in wound endpoints. Two cases were limited to the neck, one case stopped at the lungs, and one case penetrated deeper into the liver. These findings are in line with the literature that states that sharp trauma to the neck, chest, and abdominal areas has a high risk of causing premature death due to internal bleeding or damage to vital organs (Marrone et al., 2024; Misiak et al., 2016;

Linggom and Sihaloho, 2022). Thus, the results of this study show that the involvement of vital organs in sharp wounds greatly determines the mechanism and speed of the death process.

## **5. Causes and Mechanisms of Death**

Based on the results of the study, there were variations in the causes and mechanisms of death in cases of suicide due to sharp violence examined at Bhayangkara Tk.1 Hospital of the National Police Health Center. Of the five cases analyzed, three cases did not include the mechanism of death of the victim in detail and clearly in the autopsy report, while the other two cases provided more complete information.

The case with registration number 058/IX/2023/ML shows that the cause of death was a sharp injury to vital organs in the form of lungs and liver, which then caused a death mechanism in the form of hemorrhagic shock due to massive bleeding. This is in line with the literature that states that puncture or slash wounds in large parenchymal organs, such as the liver, have a very high potential for bleeding due to extensive vascularization (Marrone et al., 2024).

The case with registration number 264/VIII/2023/ML shows that the cause of death was a sharp wound to the neck region that hit the larynx, trachea, and large blood vessels that were not specified. This condition gives rise to a mechanism of death in the form of hypovolemic shock due to severe bleeding from a vascular injury. In the case of suicide, a wound on the neck is one of the wound patterns that is often found because the victim has direct access to self-harm in this area.

In the other three cases, the autopsy report did not explicitly list the mechanism of death. However, when viewed from the pattern of sharp wounds that hit vital areas, it is likely that the cause of death is still related to injuries caused by sharp objects with the dominant mechanism in the form of massive bleeding (hemorrhagic/hypovolemic shock).

In general, this discussion shows that the cause of death in the study case is injury due to sharp violence that hits vital organs and large blood vessels such as the lungs, neck, liver, heart, with the most common mechanism of death found to be hemorrhagic or hypovolemic shock due to massive bleeding. These findings are consistent with the findings of Misiak et al. (2016) who stated that the majority of deaths due to sharp wounds are caused by massive bleeding from wounds to large organs or blood vessels.

## **6. Research Limitations**

In this study, there was no adequate data on the medical efforts made by the hospital on the victim before he was declared dead. This shows that there are limitations in recording or reporting medical in cases of suicide with sharp violence.

Incomplete records can be an obstacle in the process of medical evaluation and forensic analysis, because information about resuscitation, hemodynamic stabilization, and other emergency interventions should be able to help understand the victim's clinical journey before death. In addition, detailed documentation is also important for research purposes, medical audits, as well as as part of legal evidence in cases of unnatural death. This emphasizes the need to improve the medical and forensic recording system, so that the available data is more comprehensive and can be used optimally in research and law enforcement.

## CONCLUSION

A five-year review of suicide cases due to sharp force at Bhayangkara Tk.1 Hospital, Puskokkes Polri found that victims were predominantly Muslim males of productive age, often private employees or students, with incidents occurring mainly at home using readily accessible knives. The most common fatal injuries were clean-cut wounds to the neck, causing hemorrhagic shock from damage to major blood vessels or vital organs, with internal examinations generally showing no other pathological conditions or toxic substances. Case management followed standard forensic procedures, though documentation of victims' personal and social histories was often incomplete, limiting comprehensive medical and forensic evaluation. From an Islamic perspective, the findings reinforce the principle of *ḥifẓ al-nafs* (safeguarding the soul), emphasizing that suicide is strictly forbidden. Future research should focus on improving data completeness and exploring psychosocial and environmental factors contributing to suicide by sharp force to inform targeted prevention strategies.

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