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Descriptive Analysis of the Incidence of Suicide by Hanging at *Bhayangkara Tk.* 1 *Pusdokkes Polri* Hospital: A Review of Data from the Last Five Years and an Islamic Perspective

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ABSTRACT

Background: Suicide is a major global public health concern, with its incidence continuing to rise each year. Hanging remains one of the most frequently used methods, including in Indonesia. Forensic examination is crucial for identifying victim characteristics, determining causes and mechanisms of death, supporting legal processes, and contributing to prevention strategies. Objective: The objective of this study is to obtain a comprehensive picture of the characteristics of victims, the instruments used, the cause and mechanism of death, case management efforts, and an Islamic perspective on suicide cases by hanging. Methods: This study used a descriptive method with a cross-sectional design and a qualitative approach. Data were collected retrospectively from medical records of suicide victims by hanging examined at the Forensic Medicine Department of *Bhayangkara* Hospital *Tk.* 1 *Pusdokkes Polri* from 2020 to 2024. The analyzed variables included age, sex, wound characteristics, instruments used, and causes and mechanisms of death. The majority of victims were male and belonged to the productive age group, with rope being the most commonly used ligature. Results: Although several cases lacked detailed information on the mechanism of death, available data indicated that asphyxia due to neck compression was the primary cause. These findings align with forensic theory, which states that death in hanging cases typically results from obstruction of air and blood flow caused by pressure on neck structures. Conclusion: Overall, suicide by hanging predominantly involves males of productive age, with asphyxia being the leading mechanism of death.

INTRODUCTION

On its official website, the National Institute of Mental Health defines suicide as death caused by self-harming behavior with the intent to die as a result of the behavior. Suicide attempts are fatal behaviors, self-inflicted, and potentially self-harming (National Institute of Mental Health, 2023). 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, with one suicide estimated to occur every 40 seconds. This makes suicide the fourth leading cause of death among adolescents and young adults aged 15 to 29 years, both males and females (Miyamori Daisuke et al., 2023). Indonesia ranks 159th for suicide cases worldwide. In 2019, suicide cases in Indonesia reached 6,544 at all ages, with 1,448 cases involving women and 5,096 cases involving men (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. Self-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).

The phenomenon of suicide, especially by hanging itself, is a serious public health problem and still occupies a high incidence rate in various countries, including Indonesia. In Islamic teachings, the act of suicide is strictly prohibited because it is considered to injure the trust of the soul given by Allah SWT, as affirmed in Q.S. An-Nisa verse 29. This prohibition shows that preserving the soul (*ḥifẓ an-nafs*) is part of the main purpose of Islamic sharia (*maqāṣid as-shari'ah*). Thus, suicide is seen not only as a medical and social problem, but also as a moral and spiritual one. Therefore, it is important to understand the dynamics of the case of self-hanging, especially based on data recorded at the *Bhayangkara Tk.1* Hospital of the National Police Health Center over the past five years.

The urgency of this research is underscored by the persistent and possibly underreported nature of suicide in Indonesia. The lack of comprehensive, institution-based data hinders the development of effective prevention strategies. Understanding the demographic characteristics of victims, the methods used, and the forensic findings can inform both public health interventions and clinical practice. Additionally, in a society where religion plays a central role, integrating an Islamic perspective on suicide is crucial for developing culturally sensitive and spiritually informed prevention and postvention approaches.

The novelty of this study lies in its integrated approach. It combines a detailed descriptive epidemiological and forensic analysis of suicide by hanging cases over a five-year period at a single institution, providing a longitudinal perspective often lacking in similar studies. Furthermore, it explicitly incorporates an Islamic theological perspective, examining the act of suicide through the lens of the Qur'an and the principles of *maqāṣid al-sharī'ah* (the higher objectives of Islamic law), specifically the principle of *ḥifẓ al-nafs* (*protection of life*). This dual perspective forensic and religious offers a more holistic understanding of the phenomenon within the Indonesian context.

Based on this background, this study formulates several main problems, namely the characteristics of the victims, the characteristics of the wounds, the most frequently used tools, the most common causes and mechanisms of death, as well as the handling efforts that have been carried out by the *Bhayangkara Tk.1* Hospital Pusdokkes Polri. This study also examines how Islam views suicide by hanging oneself. The research questions are designed to answer all of these aspects, from victim identification to evaluation of the effectiveness of handling suicide cases over the past five years at the hospital.

The objectives of this study include a general objective, namely to obtain a comprehensive picture of the characteristics of the victim, the tools used, the cause and mechanism of death, handling efforts, and an Islamic review of suicide cases by hanging. In particular, this research is useful for students as additional insights related to descriptive analysis of suicide incidence and Islamic perspectives; for YARSI University as a source of scientific data for the development of the medical education curriculum; and for researchers

as research experience and an in-depth understanding of the trend of suicide by hanging themselves at *Bhayangkara Tk.1* Hospital Pusdokkes Polri for the past five years.

METHOD

This study was a descriptive research with a cross-sectional design that was carried out at one point in time, with simultaneous data collection on suicide victims by the self-hanging method at the Forensic Medicine Installation of *Bhayangkara Tk.I* Hospital, Pusdokkes Polri. The research design uses a qualitative approach with a cross-sectional study through the analysis of medical records using instruments in the form of dummy tables. The population includes all suicide victims by hanging who were examined in the 2019–2024 period, with inclusion criteria including victims who underwent external and/or internal examinations and had complete medical records. Cases that should not be published are included in the exclusion criteria.

The type of data used was qualitative data from medical records, which includes information on age, gender, type of wound, tools used, cause of death, and mechanism of death. Data comes from secondary sources in the form of medical record files and other related documents. Data collection was carried out through the analysis of medical records of suicide victims by hanging themselves during the 2019–2024 period to identify victim characteristics and determine incidence trends. The data collection instrument is adjusted to a dummy table that contains the registration number, date of the examination, basic identity, examination results, tools used, cause of death, and mechanism of death.

Data analysis was carried out using descriptive analysis to describe victim characteristics, injury characteristics, incidence trends, and causes and mechanisms of death in suicide by hanging. The results of the study are presented in the form of narratives and tables to clarify the pattern of findings. The research flow is depicted in a separate diagram, while the research schedule is arranged starting from proposal preparation, implementation and data collection, data processing and analysis, to writing and publication which takes place throughout 2024 to 2025.

RESULT AND DISCUSSION

External Examination Results

1. Neck condition

Table 1. Results of the examination of the condition of the neck

Yes	Location of Neck Wounds	Description / Characteristics
1	Common (circular)	Compressive abrasions around the neck, resembling stab wounds, blackish-red/brownish in color, palpable like parchment paper
2	Front	Just at the front midline, ±2 cm above the hyacinth cartilage, ±1 cm wide
3	Right side	±7 cm from the front midline, ±6 cm below the right ear canal, ±1 cm wide, forming an angle of ±45° to the flat plane
4	Left side	±7 cm from the front midline, ±6 cm below the left ear canal, ±1 cm wide, forming an angle ±45° to the flat plane
5	Back	There is a knot injury, ±2 cm from the mid-back line and ±2 cm below the hairgrowth limit, size ±2 × 1 cm
6	Wound edges	Uneven, partially broken, rough/non-homogeneous wound surface
7	Color of the	Variations of red, black, and bluish

	wound

In Table 1, the characteristics of the wound on the neck appear circular resembling scars with reddish-black to brownish color and the consistency resembles parchment paper. The front wound is located in the front midline about 2 cm above the goiter cartilage with a width of 1 cm. The right-sided wound is about 7 cm from the front midline and 6 cm below the right ear hole with a width of 1 cm forming a 45° angle to the flat plane. The left-sided wound is located about 7 cm from the front midline and 6 cm below the left ear hole with a width of 1 cm forming an angle of 45°. The back wound showed a knot of 2 × 1 cm which was 2 cm from the midline of the back and 2 cm below the limit of hair growth. The edges of the wound appear uneven, partially broken, and the surface is rough. The color of the wound varies from red, blackish, to bluish.

2. Physical Condition

Table 2. Physical condition examination results

Yes	Body Parts	Description / Characteristics
1	Eyelid	Generally closed, some partially open (0.2–2 cm)
2	Clear membrane of the eye	Clear in most cases, cloudy in others
3	Eye Shadow	Round, variable diameter (0.3–0.6 cm), black color
4	Blindfold	Brown to dark brown
5	Eyeball membrane	Pale/white, some indicate dilation of blood vessels or bleeding patches
6	Eyelid membrane	Mostly pale, partially red, bleeding spots, edema, or signs of decay
7	Mouth	Some are closed, some are open (0.2–6 cm); Some secrete fluids (blood, foam, yellow fluid, maggots)
8	Tongue	Normal in some cases, but many are found stretched and/or bitten (±0.3–4 cm out of the mouth)
9	Nose	Generally there is no liquid; some discharge red, yellow, foam, or mixed food
10	Ear	Mostly no liquid; some discharge blood or clear fluid
11	Genitals	Some don't secrete anything, some secrete a thick, cloudy, clear, red, or blood-mixed liquid
12	Discharge hole (anus)	Some have no liquid; partially discharge stool (solid/soft/liquid, yellow–brown–black) or yellowish-diluted fluid

As shown in Table 2, the results of the physical condition examination show that the eyelids are generally partially closed, the clear membranes of the eyes are mostly clear and partly cloudy, and the round eyeballs are black with brown to dark brown eye curtains. The membranes of the eyeball appear pale, some with dilation of blood vessels or bleeding, while the membranes of the eyelids are mostly pale with some showing redness, edema, or signs of decay. The mouth appears closed or open with varying fluid output, and the tongue is often outstretched or bitten. The nose and ears are mostly free of fluid, while in the genitals and

anus, variations in the output are found in the form of fluid, blood, and feces with different colors and consistency.

3. Toxicology screening results

Table 3. Toxicology screening results

Toxicology Screening	n	%
NAPZA & Alcohol (-)	41	38,7
NAPZA (+) & Alcohol (-)	4	3,8
Alcohol (+)	2	1,9
Not listed	59	55,7

Based on Table 3, the results of toxicology examinations show that the majority of cases do not have data on examination results (55.7%). Cases with negative results for drugs and alcohol were 38.7%. Positive cases of non-alcoholic drugs were found at 3.8%, while cases with positive alcohol results were recorded at 1.9%.

Results of Deep Examination

1. Natural diseases

Table 4. Results of natural disease examination

Natural Diseases	n	%
Aterosclerosis	2	1,9
Splenomegals	1	0,9
None	6	5,7
Not done	97	91,5

In Table 4, out of a total of 106 cases, the number of cases that were examined in depth was 10 cases. The results of the examination showed that most cases were not examined for natural diseases (91.5%). Cases without natural disease findings were recorded at 5.7%. Atherosclerosis is found in 1.9% of cases, while splenomegaly is found in 0.9% of cases.

2. Findings on organs

Table 5. Results of examination of findings on organs

No	Organs/Parts	Key Findings Reported
1	Neck	• Circular, red-brownish, sometimes parchment-like abrasions• Blood infiltration of the connective tissue under the skin and neck muscles• Hyoid fracture with blood infiltration around it• Pressure wound on the goiter cartilage and surrounding area
2	Kerongkongan & Trakea	• Contains brownish/greenish mucus and foam• Visible dilation of blood vessels (congestion)
3	Heart	• Reddish-brown/purplish-red color• Bleeding spots on the back and front walls• Vascular congestion• Some cases have been found atherosclerosis (narrowing of the lumen ±80%, atherosclerosis degree II)
4	Paru-paru	• Enlarged, blackish-red/purple• Spongy consistency• On the outward pressure of the blood/mucus mixture• There are bleeding spots on the intervex barrier• Congestion and pulmonary edema
5	Spleen	• Enlarged, purple/blackish in color• Wrinkled/wrinkled surface• Dark red cross-section → congestion
6	Liver	• Reddish-brown/blackish-red in color• Smooth surface• Signs of congesticity• Sometimes bleeding spots on the surface
7	Stomach & Intestines	• Stomach filled with cloudy brownish fluid, pale mucosa with dilation of blood vessels• Intestine filled with yellow–blackish feces/fluid, pale mucosa• Signs of

		gastrointestinal congestion
8	Kidney	• Enlarged, reddish-brown/purple-colored in color• Clear surface and cross-section• Dilation of blood vessels (congestion)• Sometimes spotted
9	Bladder	• Contains little urine/cloudy fluid• Pale/reddish mucous membranes• Dilation of blood vessels
10	Brain	• Gray color• Dilation of blood vessels on the surface & cross-section• Some cases: bleeding under the membrane of the brain (subarachnoid/subdural hemorrhage)
11	Miscellaneous	• Reddish diluted fluid is found in the abdominal cavity (some cases)• Blood infiltration in the fat/muscle tissue of the chest or abdomen (non-specific)• Weight of organs differs between cases (lungs, kidneys, heart)

Analysis of Causes and Mechanisms of Death

1. Causes of Death

Table 6. Results of the examination of the cause of death

Causes of Death	n	%
Hang yourself	106	100

2. Tools used

Table 7. Results of inspection of the appliance used

Tools used	n	%
Cloth	4	3,8
Rope	34	32
Sarong	2	1,9
Not listed	66	62,3

Table 7 shows that the tools used in this case vary. A total of 34 cases (32%) used ropes, 4 cases (3.8%) used cloth, and 2 cases (1.9%) used sarongs. Meanwhile, in 66 cases (62.3%) the tools used were not listed or not listed in the records.

3. Mechanism of Death

Table 8. Results of the examination of the mechanism of death

Mechanism of Death	n	%
Asphyxia	9	8,5%
Not listed	97	91,5%

As seen in Table 8, the mechanism of death was largely not listed, i.e. in 97 cases (91.5%). Meanwhile, in 9 cases (8.5%), deaths occurred due to asphyxia.

Discussion

1. External Examination Results

The results showed that the wound on the neck was circular in shape resembling a snare, with a blackish-red to brownish color and a consistency resembling parchment paper (parchmentization). The front wound is about 2 cm above the thyroid cartilage, while the right and left sides are located 6 cm below the earlobe and form a 45° angle to the midline, respectively. The back shows a knot effect measuring 2 × 1 cm, with uneven wound edges, partial dismemberment, and rough surfaces. The color of the wound varies from red to bluish, signifying signs of vitality.

These findings are in line with international research reports, where the majority of ligature marks in hanging cases are found above the thyroid cartilage, with the oblique direction following the circumference of the neck and the wound being continuous. The direction of the wound can be horizontal if the suspension point is low, as the pull of the rope is almost perpendicular to the axis of the body (SK, 2021; Ghodake et al., 2023).

Hanging is a form of mechanical violence that is commonly used as a method of suicide, although it is not uncommon to find it in murder cases. There is a difference in the characteristics of the findings in the examination of hanging victims between suicide and murder cases. One of the main findings is ligature marks, which are formed by a combination of compression and abrasion on the neck and can provide information about the nature of the snare material and the type of bond used. Careful documentation of the snare pattern is important to estimate the hanging mechanism of the victim (Rakasiwi et al., 2021; Lehner et al., 2025).

The position of the node has an important role in the analysis of hanging cases. Several studies report diverse knot positions, but in general the nodes are most commonly found in the posterior/occiput or left side of the neck (Rakasiwi et al., 2021). The position of the node not only determines the direction of the impact, but also relates to the mechanism of death and autopsy findings. The knot is the point where the pressure of the entanglement object is greatest; the part of the snare that is diagonally and opposite of the node bears the maximum weight of the body, thus exerting the greatest stress on the neck structure at that location (Lehner et al., 2025).

The results of this study are in line with previous studies where the location of the snare is most often found above the thyroid cartilage, the direction of the oblique dominant wound, and the signs of parchmentization often appear in hanging victims (Lehner et al., 2025).

The results of the physical examination showed that the eyelids were generally partially closed with clear to cloudy conjunctivitis. The eyeballs are black with dark brown iris and pale looking sclera, some with bleeding. The membrane of the eyelids appears pale or reddish with signs of edema and the onset of decay. The mouth appears closed or open with varying fluid output, the tongue is often outstretched or bitten. The nose and ears do not show fluid discharge. In the genitals and anus, discharge in the form of fluid, blood, or feces with different colors and consistency is found.

These findings are in line with the research of BK et al. (2023) which reported that the most frequent external signs in self-hanging victims were dry saliva discharge at the corners of the mouth (71.25% of cases) and outstretched or bitten tongues in almost half of the autopsy cases of self-hanging. Research (Sahoo et al., 2016) also found salivary stains in 32–71% of cases, conjunctival hemorrhage, and protruding tongue due to snare pressure on the neck causing venous congestion and asphyxia.

Research by Crudele et al. (2024) states that petechial hemorrhage in the conjunctiva and eyelids arise due to increased pressure of the head veins and obstruction of blood flow in the neck area, becoming an important indicator in the diagnosis of death due to hanging. Similar results were also found by Rao (2022) who reported discoloration of the conjunctiva and sclera as a sign of the vitality of the snare wound, caused by the rupture of the superficial capillaries due to external pressure on the jugular vein. According to Marrone et al. (2023), outstretched tongues and bites on the edges of the tongue were found in more than half of

cases of hanging. This indicates reflexive spasms of the tongue muscles during the agonal phase before death.

Theoretically, physical signs such as conjunctival hemorrhage, outstretched tongue, and saliva discharge indicate a vital reaction or biological reaction that occurred while the victim was still alive. The mechanism of death in self-hanging is mechanical asphyxia caused by the pressure of the snare on the structure of the neck, especially the jugular vein and carotid artery, which inhibits blood flow to the brain. These obstructions cause hypoxia, venous congestion, and increased intracranial pressure that triggers the rupture of small blood vessels in the conjunctiva and facial tissues (Rao, 2022).

The results of the toxicology examination showed that most cases did not have data on the results of the examination (55.7%). Cases with negative results for drugs and alcohol were recorded at 38.7%. Positive cases of non-alcoholic drugs were found at 3.8%, while positive cases of alcohol were found at 1.9%.

These findings suggest that the majority of suicide victims were not under the influence of psychoactive substances or alcohol at the time of the incident. This is in line with the research of Ghodake et al. (2023) which reported that most suicide victims showed negative toxicological results for alcohol and illegal drugs, indicating that the action was carried out in a conscious state without external influence.

According to Sahoo et al. (2016), toxicology examinations play an important role in assessing the mental state and level of consciousness of the victim before death. Psychoactive substances such as alcohol, amphetamines, and depressant drugs can affect the emotional control centers in the brain, decrease impulse control, and increase the risk of spontaneous suicidal behavior. However, negative results such as those found in this study indicate more planned actions or the result of deep psychological distress, not due to the pharmacological effects of the substance.

The psychobiological theory of suicide explains that the decision to end life is influenced by the interaction between psychological, social, and neurobiological factors. An imbalance of neurotransmitters such as serotonin (5-HT) is associated with impulsivity and depression that can trigger suicidal acts even without substance use (Ponce-Regalado et al., 2025). Therefore, negative toxicology results do not rule out the possibility of psychiatric disorders as the main factor.

Forensically, the negative toxicology results also strengthen the interpretation that the death occurred by pure hanging, not murder by disguised strangulation. Saukko & Knight (2015) explained that in murder cases, the victim is often given sedatives or alcohol to paralyze before the act of violence is committed, so positive toxicological results are often found in these cases.

2. Results of Deep Examination

The results of the examination showed that most cases were not examined for natural diseases (76.4%), and 15.1% were not recorded. Cases without natural disease findings were recorded at 5.7%. Atherosclerosis is found in 1.9% of cases, while splenomegaly is found in 0.9% of cases. These findings suggest that most of the suicide victims do not have significant organic abnormalities or diseases. This condition is in line with the results of a study by Sahoo et al. (2016) which reported that the majority of suicide victims were individuals without a history of severe systemic disease. In the study, internal pathological findings such

as atherosclerosis or organ enlargement were found in only a small percentage of cases and were generally incidental, rather than a direct cause of death.

According to Chand (2019), in the case of self-hanging, the mechanism of death is mainly caused by asphyxia due to compression of the airway and blood vessels of the neck, not by organic abnormalities. Therefore, the presence of natural diseases such as atherosclerosis, hepatomegaly, or splenomegaly is often only a companion finding with no significant contribution to mortality.

Atherosclerosis found in a small percentage of cases can be interpreted as a degenerative disease common in the adult population, rather than a direct cause of death. This is reinforced by the findings of Ghodake et al. (2023) which suggest that vascular disorders such as atherosclerosis often appear as additional findings during autopsy, especially in elderly victims, but do not play a role in the mechanism of self-hanging.

Splenomegaly found in a small percentage of cases may be related to reactive conditions due to chronic or hemolytic infections, as described by (Saukko and Knight, 2015). However, in the context of forensic hanging, the findings do not affect the interpretation of the cause of death, since the process of death is determined more by mechanical factors in the neck than by pathological conditions of internal organs.

Examination of the organs showed typical changes due to mechanical asphyxia in cases of self-hanging. On the neck, a circular compressive abrasion was found that was reddish-brown with a stiff consistency resembling parchment, accompanied by blood infiltration in muscle tissue and sometimes hyoid bone fractures. The pressure of the rope on the neck causes abrasion and rupture of superficial blood vessels which results in blood diffusion as a sign of vitality (Chand, 2019). Hyoid bone fractures are more common in old age due to bone fragility (H. Waghmode and H. Waghmode, 2020). The esophagus and trachea show the presence of greenish mucus and foam with congestive blood vessels. This arises due to an increase in intrathoracic pressure during suffocation that causes the release of air-mixed mucus (Rao, 2022).

The heart appears congestive with purplish-red color and epicardial bleeding spots due to obstruction of venous circulation in systemic asphyxia (Saukko and Knight, 2015). The presence of mild atherosclerosis in some cases is incidental and is not directly related to the cause of death (Ghodake et al., 2023). The lungs are enlarged, blackish-red, and secrete a blood-mixed foam when pressed, indicating edema and congestion due to increased pulmonary venous pressure. According to Modi (2013), pulmonary edema is a typical finding in death by hanging. The liver, spleen, and kidneys show signs of congestion due to systemic hypoxia, according to Chand (2019) theory that obstruction of blood flow to the right heart causes visceral congestion. The gastrointestinal tract appears with pale mucosa and dilation of blood vessels, reflecting circulatory disorders due to the asphyxia process.

Thus, the organ findings indicate a mechanism of death due to mechanical asphyxia through compression of the neck that inhibits the flow of air and blood, causing tissue hypoxia, visceral congestion, as well as petechial hemorrhage. This is in line with the theory of Oscar & Yusuf (2024) which states that the typical signs of self-hanging are in the form of snares, organ congestion, pulmonary edema, and hyoid bone fractures. These results are consistent with the research of Sahoo et al. (2016) which reported that 92% of cases of self-hanging showed pulmonary congestion and 68% had edema, as well as Ghodake et al. (2023)

who found 83% of cases with snares above the thyroid cartilage and signs of vitality in the neck muscles. Pathak et al. (2022) also found dilation of cerebral blood vessels and subarachnoid hemorrhage in 24% of cases of self-hanging.

3. Causes and Mechanisms of Death

Based on the data, the tools used in the case of self-hanging show quite clear variations. Most cases (62.3%) did not list the type of tool used in the record. Of the identified cases, rope was the most frequently used tool, in 34 cases (32%), followed by cloth in 4 cases (3.8%), and sarongs in 2 cases (1.9%).

In theory, the choice of tools in the case of self-hanging is greatly influenced by the factors of availability, strength, and the ability of the material to withstand the weight of the body. According to Chand (2019), rope is the most commonly used tool because it is easy to obtain, has high durability, and is practical to use. This is reinforced by Saukko & Knight (2015) who stated that ropes or similar materials are more often used because they provide a strong and uniform entanglement effect on the neck, thus causing typical signs such as snare and blood infiltration in the neck tissue.

These results are also in line with previous research. Sahoo et al. (2016) reported that 85% of cases of self-hanging in India used rope as a snare device. Meanwhile, research by Ghodake et al. (2023) shows that 78% of cases in urban areas use ropes or electric cables as self-hangings, while textile materials such as fabrics and sarongs are more often found in cases in rural areas. These differences show that there are cultural variations and material accessibility at each event location.

Based on the data, the mechanism of death was mostly not listed in the report, namely in 97 cases (91.5%), while 9 cases (8.5%) were recorded as dying due to asphyxia. These results indicate that most autopsy reports have not listed a specific mechanical cause, although in cases of self-hanging, the mechanism of death is generally asphyxia due to compression of the neck.

Theoretically, death by hanging occurs due to obstruction of air and blood flow due to rope pressure on the neck structure, which leads to brain hypoxia, loss of consciousness, and cardiac arrest (Saukko and Knight, 2015; Chand, 2019). Pressure on the jugular vein and carotid artery inhibits blood circulation to and from the brain, while the closure of the trachea causes a lack of oxygen (Modi, 2013).

Previous research by Ghodake et al. (2023) also reported that almost all cases of self-hanging showed signs of mechanical asphyxia, such as snare injuries, visceral organ congestion, and pulmonary edema. This reinforces that asphyxia is the main mechanism of death in cases of self-hanging.

Research Limitations

This study has limitations in the completeness of autopsy report data, especially related to the tools used, the mechanism of death, and the results of natural disease examinations. The researcher did not conduct direct verification because the research is retrospective. Psychological and social data on victims are not available, so the analysis of causative factors is limited. Variations in recording between examiners also have the potential to cause differences in the description of findings. The research was conducted in one institution, so the results could not be generalized to a wider population.

CONCLUSION

Based on the results of a study on the incidence of suicide by hanging themselves at *Bhayangkara Tk. I* Hospital of the National Police Pusdokkes for the 2020–2024 period, it was found that the victims were dominated by men of productive age (25–44 years), Muslims, and working as employees, which illustrates greater social, economic, and psychological pressure on this group. The most commonly used tool is rope or similar materials that are easily accessible, showing elements of impulsivity and a desire to end life quickly, with forensic findings in the form of snares on the neck and signs of mechanical asphyxia. The cause of death was generally asphyxia due to pressure on the neck, which was reinforced by the findings of pulmonary congestion, cyanosis, and possible hyoid bone fractures that signaled rapid death due to lack of oxygen. Treatment at *Bhayangkara* Hospital has followed standard forensic procedures through identification, internal examination, and the making of visum, although there are still deficiencies in the completeness of documentation that can affect a more comprehensive analysis of risk factors. From the perspective of Islam, suicide is a great sin that is contrary to the principle of *ḥifẓ an-nafs* in *maqāṣid asy-syarī'ah*, as affirmed in Q.S. An-Nisa verse 29 that humans are forbidden to commit suicide and are obliged to maintain life as a form of obedience to Allah SWT.

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