

## The COVID-19 Pandemic Prolonged Hanging Triggered

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### Abstract

**Background:** Since the beginning of information from the World Health Organization (WHO) on December 31, 2019, it was stated that there were cases of cluster pneumonia (41 cases) with unclear etiology in Wuhan City, Hubei Province, China. What was later discovered was the corona virus, with the high level of human mobility from one country to another as one of the factors that caused this type of virus to spread and infect citizens all over the world, including on March 2, the President of the Republic of Indonesia, Joko Widodo announced two a resident of Depok, West Java, tested positive for COVID-19. It has been 7 months since the Covid-19 pandemic has rolled on and it is not yet known when it will end, causing impacts not only on the health crisis but also on the difficult economy on all levels of society, causing despair and ending his life by hanging himself. **Case report:** A case was reported where the victim was a man with the initials DA, 28 years old, the work of an employee of PT Serdang Hulu. The victim was taken to the Pirngadi Hospital Medan by the police together with Visum et Repertum's request and carried out an examination of the body and an operation of the corpse at that time. **Result:** On external examination, a blue cloth was found with one end wrapped around the victim's neck as much as one loop with a slip knot, where the knot is located on the back of the head right in the midline of the body. There were lesions on the neck in the shape of the letter V which were slanted, blackish brown in color, hard touch, the front was below the Adam's apple, the left side was under the left ear, on the right side it was below the right ear, the injury ended on the back of the head on the right and left. **Discussion:** Based on anamnesis of investigators who went to the crime scene, the victim was an employee who was laid off due to the impact of the Covid-19 pandemic so that he did not have a job and was in debt. The victim ended his life by hanging himself. **Conclusion:** The victim was a male corpse, known, body length 166 cm, straight black hair and easily pulled out. From the results of external and internal examinations it was concluded that the cause of death of the victim was suffocation due to obstruction of air to enter the respiratory tract due to hanging death.

**Keywords:** Covid-19 pandemic; Hanging

## 1. Preliminary

Since it was announced by the *World Health Organization* (WHO) on December 31, 2019, which stated that there were cluster cases of pneumonia (41 cases) with unclear etiology in Wuhan City, Hubei Province, China. During a hectic journey at the Spring Festival, in Wuhan, which is at the center of China's transplanted, hundreds of thousands of people fled the city and could potentially carry the virus with them. What was later discovered was the corona virus, with the high level of human mobility from one country to another as one of the factors that caused this type of virus to spread and infect citizens all over the world, including on March 2, the President of the Republic of Indonesia, Joko Widodo announced two a resident of Depok, West Java, tested positive for COVID-19. It has been 7 months since the Covid-19 pandemic has started and infected more than 110,000 Indonesians at this time while it is not known when it will end, this condition has resulted not only a health crisis but also a difficult economy on all levels of society, causing despair and ending his life by hanging self.

## 2. Hanging

Hanging death is one of the deaths which has always been popular for suicide, because it does not require complicated tools / materials. A piece of rope, cable wire, a roll of clothing, a long cloth and other materials around the victim is enough to hang himself.

## 3. Medicolegal Aspect

- Suicide (suicide)
- Homicide (murder)
- Accidental (accident)

## 4. Mechanism of Death

Although the cause of death by hanging is due to asphyxia, it is often accompanied by other causes, namely pressure on the blood vessels (arteries or veins) in the neck and a reflex of vagal inhibition. The most common is a mixture of asphyxia with blockage of the blood vessels.

Thus the cause of death can occur because:

1. Asphyxia due to obstruction of the airways.

The mechanism of asphyxia:

- a. When the rope is tied over the thyroid cartilage, the base of the tongue will be rejected upward and backward against the posterior pharynx, until the airway is closed and finally asphyxia occurs.
- b. When binding under the thyroid cartilage it directly compresses the larynx and gives more pronounced signs of asphyxia.
- c. General constriction of the network will result in complete closure or partial of the common carotid artery in the neck and this will cause anemia in the brain and pressure on the laryngeal nerve, causing shock [1-7].

2. Venous congestion (vein congestion)

As a result of wrapping the straps around the neck, there is complete compression of the jugular veins, causing blood clots in the brain to cause bleeding in the brain [1-7].

3. Cerebral ischemia, due to blockage of the carotid arteries and vertebral arteries. The compression of the carotid arteries in the neck will stop blood flow to the brain [1,3,4,6,7].
4. Vagal shock, because the pressure on the carotid sinuses causes the heart to stop beating. Occurs as a result of compression on the vagus nerves and carotid sinuses, which causes vasodilation inhibition, leading to cardiac arrest [1-7].
5. II-III cervical vertebra fracture or dislocation.

This is found in Judicial Hanging, a sudden jerk at a height of 1-2 meters by the body weight of the victim can cause fractures and dislocations of the upper cervical vertebrae that compress or tear the spinal cord causing sudden death [1,2].

## 5. Fatal Period

In judicial hanging, death occurs very quickly due to fractures in the cervical vertebrae which result in bleeding in the medulla oblongata. Often found the heart is still beating for a while later. If the death due to arterial closure also occurs quickly due to brain ischemia, while death occurs more slowly in venous obstruction. If the airway is blocked, then death can take under 5 minutes.

## 6. Case Report

Reported a case with victims of a man with the initials DA, age 28 years, the work of employees of PT Serdang Hulu, The victim was taken to RS. Pirngadi Medan by the police with the request for a post mortem explanation. The body was found Tergantung dipohon in block I Apdeling II PT. Serdang Hulu serdang hamlet village upstream Cape Mount district Sei Bengai Langkat with the explanation that his death was allegedly caused by a suicide by using a nylon rope and an examination of the corpse and an examination of the corpse was carried out on the spot.

## 7. General Examination

Sign - the sign of death: Lebam bodies were found , Ki of bodies were found , Pembusukan : common skin blackish brown, flaky skin, body and bag testicles swell, anus prominent and out grubs , hair is removed, the skin and facial muscles are not found , visible facial bones full of maggots, found maggots on the face, neck, chest, anus with a size of 1.0 cm, foul smelling. Body positions such as sexual intercourse (coitus).



Identical to the General: Found a corpse, male, circumcised, known, young adult, body length 166 cm, black hair, straight, easily pulled out, further decay process.

Identifikasi K Husus: Not Found.

### 8. External Examination

Head: Found heads mostly hairless, found a bit of hair next to the right with a size of 3 cm that is easily removed, it was found a little hair left side with a length of 3 cm that is easily removed, not back of the head hair found 9 cm, which is easily removed.



He found the skin peeled off easily, dark brown in color. There were no signs of fractures.

Neck: Found a blue cloth with a length of 117 cm, a width of 5 cm, one end wrapped around the victim's neck as much as one loop with a slip knot, the location of the knot on the back of the head is right on the midline of the body with a distance of 4 cm from the right ear, 5 cm from the left ear.



There was a neck lesion in the shape of the letter V which was slanted, dark brown in color, hard touch, 21 cm long, 2 cm wide on the front, with a distance of 0.5 cm below the top of the Adam's apple.



Width on the right side 2 cm with a distance of 5 cm from the right ear, the injury ends on the back of the head with a width of 2 cm, 2 cm from the right ear, and 3 cm from the midline of the body.

The width of the lesion on the left side is 2 cm with a distance of 3 cm from the left ear, the injury ends on the back of the head with a width of 2 cm, with a distance of 3 cm from the left ear, 2 cm from the center line of the body. There were no signs of fractures



## 9. Autopsy

Head: On the opening of the skin and muscles of the head: found the inner scalp blackish brown. No skull fractures were found.



At the opening of the headbone: a thick gray membrane is found.



At the opening the thick membrane of the brain: There were no tissues of the brain, Tidak common fracture of the skull base.

Neck: At the opening of the skin of the neck: There is blood absorption in the neck muscles on the front that extends to the right and left along the lesion on the skin with a width in front of 3 cm, with a length of 15 cm



At the opening of the upper feeding tract, blood absorption is found.



## 10. Supporting Investigation

Results of POLDASU criminal laboratory examination of gastric contents for toxicology examination, result: poison.

## 11. Check Up Result

On external examination, a blue cloth was found with one end wrapped around the victim's neck as much as one loop with a slip knot, where the knot is located on the back of the head right in the midline of the body. There was a lesion on the neck in the shape of the letter "V" which was tilted, blackish brown in color, hard touch, the front was below the Adam's apple, the left side was under the left ear, on the right side was below the right ear, the injury ended on the back of the right and the back of the head left. On deep examination: At the opening of the neck skin: There is blood absorption in the neck muscles on the front that extends to the right and left along the lesions on the skin. From the results of the external and internal examinations, it is strongly suspected that the cause of death of the victim was the entanglement of the rope around the neck which caused obstruction of the airway due to the pull of the rope because the victim's body was hanging and eventually the victim died from suffocation. There were no elements of accident or murder.

## 12. Discussion

Pandemic COVID-19 that have reached the period of 7 months and there are no signs of ending that has brought the situation of crisis health getting worse and the economic situation is more worrying exceeds crisis s economy in 1998 first brought the atmosphere has become increasingly difficult to survive life [8-10].

Based on the history of investigators who went to the crime scene of the victim, one of the employees who was laid off due to the impact of the Covid-19 pandemic so that he did not have a job and was in debt, this reason was strong enough to encourage the victim to take the decision to end his life. The victim found a blue cloth wrapped around the neck as much as one loop with an open knot and the location of the back of the neck (typical Hanging), the wound showed ante-mortem, no other signs of violence and poisoning. So the cause of death is believed to be victims ended his life by hanging himself and the reason the one offering the affected pandemic Covid-19 prolonged that has brought the situation to crisis health are increasingly downloading akutkan and economic situation getting worse causing him to be unable to survive and decide to end his life by hanging himself. Hanging himself is one of the ways victims often use to end his life because this method is quite cheap and can be done anywhere, especially those who live in rural areas. Because this case is a case of suicide, the investigation will be stopped and no suspect will be found. The COVID-19 pandemic has been rolling for 7 months and it is not yet known when it will end, while its impact has caused not only a health crisis but also a difficult economy on all levels of society, causing despair and ending her life by hanging herself. We hope that the COVID-19 pandemic will end quickly, because if this pandemic continues, there may be other victims in the same way [11,12].

### **13. Conclusion**

A corpse has been examined, male, circumcised, young adult, recognized, body length 166 cm, straight black hair and easy to pull out. From the results of the external and internal examinations, it was concluded that the cause of death of the victim was the entanglement of the rope around the neck which caused obstruction of the airway due to the pull of the rope because the victim's body was hanging and eventually the victim died from suffocation. There were no elements of accident or murder. The prolonged pandemic not only kills humans due to corona infection but also has a difficult economic impact on all levels of society, causing despair and ending her life by hanging herself.

### **14. Legal Aspects**

The medicolegal aspect of a death case is one of three aspects, namely murder, accident and suicide. The case above is believed to be the death of the victim due to suicide so that there is no element of a criminal act that causes the victim to die. Thus there are no suspects and the investigation can be stopped, unless other evidence is found later.

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