

Medicolegal view of Suicide by Hanging

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Hanging

- ❑ It is a form of asphyxia which is caused by suspension of the body by a ligature which encircles the neck, the constricting force is either the weight of the whole body or the weight of the head alone is called hanging.
- ❑ Only 2kg weight is enough for death of a person by hanging- compression of Jugular veins.

Types of hanging

- **According to the position of the knot used-**
 - Typical hanging
 - Atypical hanging

Types of hanging

▶ Typical Hanging



Types of hanging

▶ Atypical Hanging

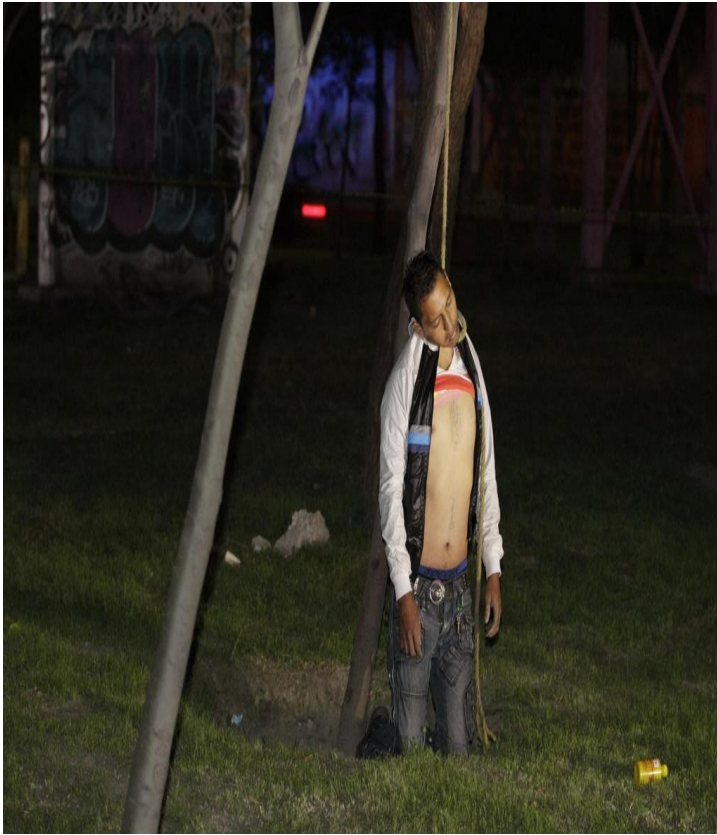


Types of hanging

- ❑ **According to the degree of suspension-**
 - Partial hanging
 - Complete hanging

Types of hanging

▶ Partial hanging



Types of hanging

▶ Complete Hanging



Types of hanging

❑ **Medico-Legal Classification-**

- Suicidal Hanging
- Homicidal Hanging
- Accidental Hanging
- Judicial Hanging
- Post Mortem Hanging (Suspension)

Types of hanging

▶ Suicidal Hanging

- ❖ Hanging is always suicidal unless otherwise proved.
- ❖ Partial hanging is invariably suicidal except in sexual asphyxia, which is accidental.
- ❖ Between the complete and partial hanging, partial one is more suicidal.
- ❖ Hanging of a young/married lady with torture mark on throughout the body
—*indicates provoked suicidal hanging.*

Types of hanging

➤ **Homicidal Hanging**

Homicidal hanging is a rare type of death where someone is hanged to cover up a murder by another means. This can involve rendering the victim unconscious or instilling a fear of death before the hanging occurs.



Types of hanging

▶ Accidental Hanging

- ❖ It may occur among infants, children & adults.
- ❖ Infants-e.g.-Umbilical cord causing constriction around the neck.
- ❖ Children-e.g.-During play by acting judicial hanging.



Fig. 20.23
An infant who was found hanging from a drawer. A mortuary reenactment enabled correlation of markings around the neck with the scene description

Types of hanging

▶ **Judicial Hanging**

It is the legal death sentence carried out by the court of law.

- ❖ It is a long drop hanging.
- ❖ Cause of death was fracture or dislocation of cervical vertebra mainly C2,C3,C4.
- ❖ Special kind of rope used in Bangladesh: Manila rope.

Types of hanging

▶ Judicial Hanging



Causes of Death

❑ Cause of death in case of hanging-

- ❖ Asphyxia- by compression or constriction of laryngeal or tracheal Lumina.(anoxic anoxia)
- ❖ Cerebral venous congestion or apoplexy- by compression of jugular or vessels
- ❖ Both asphyxia & venous congestion
- ❖ Cerebral anoxia-by blocking of carotid vessels
- ❖ Reflex vagal inhibition-by pressure on the vagal sheath or carotid bodies.
- ❖ Fracture or dislocation of cervical vertebra.

Case Presentation - 01

➤ **Introduction:**

The first reported death in Ad-din Women's Medical College was a Tragic Suicide.

➤ **Patient Profile:**

Bulbuli Akhter, AWMC-1 Student, took her own life by Hanging.

➤ **Incident Details:**

According to her Parents the incident occurred after repeated academic failures in her Professional Exams.

➤ **Background:**

Academic stress compounded by parental expectations, may have contributed to her mental health decline.

Case presentation - 02

➤ **Introduction:**

Another tragic incident occurred on November 21,2011 . Where a 22 year old female medical student allegedly committed suicide at Adabor, Dhaka.

➤ **Patient Profile:**

The deceased, Tahsina, daughter of Muslimudddin Ahmed , was a 3rd year student at Holy Family Medical College.

➤ **Incident Details:**

She was found hanging from the Grill of a window by her Family. Despite being rushed to a city Hospital in Mohammadpur, she was declared Dead. The body was sent to Dhaka Medical College Morgue for autopsy.

Case presentation - 02

➤ **Background:**

According to her family, academic frustration led her to take this step.

➤ **Controversy:**

Fellow Students of Holy Family Medical College protested, claiming it was a case of Homicidal hanging as-

- She was hanged from Grill of a window and it was Partial hanging.

❖ **Medical Perspective:**

However, International Forensic guidelines confirm that Partial hanging is always suicidal, there is no 2nd thought.

❑ **Only 2kg weight can kill a person by suicidal hanging.**

Case Presentation – 03

➤ **Introduction:**

Raudha Atif, a 20 year old Maldivian model and 2nd year medical student was found dead at her college dormitory room on 29th March, 2017.

➤ **Patient Profile:**

Raudha was featured on the cover of Vogue magazine in 2016 and was pursuing her medical degree at Islami Bank Medical Collge.

➤ **Incident Details:**

College authorities claimed that Raudha committed suicide by hanging herself on a Ceiling fan.They also claimed that they had to break-down the door to enter her room and bring her body down before the police arrived to the scene.

Case Presentation – 03

➤ **Controversy:**

Raudha's father, Mohammad Athip, Rejected the suicide claim and filed a murder case against her classmate, Sirat Parveen. In response to the allegations, the body was exhumed and a second autopsy was conducted.

➤ **Investigation:**

The second post-mortem report followed the first one, Confirming that the cause of death was suicide.

Case Presentation – 03

Pic: Raudha Atif



Discussion

- ❖ **The first 2 cases** highlights the critical need for mental health support in academic environment and the importance of addressing familial and societal pressure on students.
- ❖ **The 3rd case** highlights the complexities involved in investigating controversial deaths, where personal and familial biases may influence the investigation. While Forensic evidence and multiple investigations concluded the death as suicide.

Suicide Trends Among Bangladeshi Medical students:

A Study from January 2018 to November 2019 identified 13 medical student suicides(Mamun et al,2020a):

- **Methods:** Hanging(12),Poisoning(1)
- **Institution Type:** Government medical college(9), Private medical college(4).
- **Gender:** Female -08, Male-5
- **Academic year:** Most were 4th /5th year students(7-8) , followed by first-year students.

Key Risk Factors:

- ▶ Academic Failure, particularly in professional exams.
- ▶ Marital and family conflicts.
- ▶ Financial hardships.
- ▶ Relationship struggles, including breakups and failure in love.

Source: Suicide of Bangladeshi medical students: Risk factor trends based on Bangladeshi Press reports. February 2020 : Asian journal of Psychiatry.48:e101905

According to the World Health Organization (WHO)

- ▶ Approximately 77% of suicides occur in low-income and middle-income countries (LMICs).
- ▶ Suicide rates in Southeast Asia (10.2 per 100,000) were higher than the global average (9.0 per 100,000) in 2019 due to population growth and population age structure.
- ▶ Suicide ranks as the fourth largest cause of death for those between the ages of 15 and 29 years and claims more lives annually than HIV, malaria, breast cancer, war and murdered individuals.

According to the 2022 Bangladesh Education Statistics

- ▶ Out of 174,888 students and 826 institutions, 28.93% of students were admitted to medical college, and 4.11% to dental college, with approximately two-thirds being female (64.42%). Bangladesh is considered as a hub of medical studies in south-east Asia. However, medical students appear to have had greater suicide rates (up to 3–5 times higher) than the general community over the past 130 years, with some estimates being even higher.

- ▶ Surveys show that Bangladeshi public and private medical students' suicidal ideation ranging from 23.8% to 27.4%, -which is of concern. However, according to several study findings, medical students in Austria, Turkey, Pakistan and China had, respectively, rates of suicide thoughts and attempts within a year of 11.3% and 0.3%, 12% and 2.1%, 35.6% and 4.8%, and 8.2% and 4.3%.
- ▶ One study reported that 33.5% of Bangladeshi medical students had poor mental health status, and another reported that 39.1% of Bangladeshi medical students had various degrees of depression. In contrast, a web-based study reported 80.2% of Bangladeshi medical students had moderate to severe depression symptoms.

Recommendation:

- ▶ As Suicidal behavior is common among medical students, we should take responsibility to support and prevent it.

Institutional responsibilities:

- ▶ Establishment of Mental health supporting Centre.
- ▶ Formation of Student counselling committee.
- ▶ Formation of Student-Guardian-Teacher Committee.
- ▶ Formation of Violence and Harassment prevention Committee.
- ▶ Monthly departmental discussion regarding students performance i.e. attendance, exams , attitude , health issues etc.

Guardian Responsibilities:

- ▶ Parental counselling with their Subjects.
- ▶ Familial Harmony.
- ▶ Financial Stability.
- ▶ Proper Monitoring of his/her Subject.
- ▶ Co-operation with the Institution.
- ▶ Continuous/ Periodical Communication with institution/ teachers.
- ▶ Taking regular updates from batchmates.
- ▶ Hand over to responsible Local guardians.

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A Study on Student Suicides in Bangladesh, 2023

- ▶ According to a survey by the non-governmental organization Aachol Foundation. At least 513 students committed suicide across Bangladesh in the last year.
- ▶ Of the 513, there were 227 school students, 140 college students, 98 university students, and 48 madrasa students. Besides, 204 were male students and 309 were female students among the deaths.
- ▶ Dhaka division records highest suicide cases in 2023. A total of 149 cases were reported in Dhaka

Main Reasons

- ❑ Emotional Distress (32.2%)
- ❑ Relationships and Affairs (14.8%)
- ❑ Mental Health Issues (9.9%)
- ❑ Domestic Arguments and Abuse (6.2% and 1.4%)
- ❑ Family Pressure Regarding Studies (4.5%)
- ❑ Exam Failures and Underachievement (3.4% and 1.8%)
- ❑ Sexual Harassment (2.5%)
- ❑ Humiliation (0.8%)

Study of suicidal Hanging cases in General at Dhaka Medical College,2024

- Study Design:
 - A retrospective observational study
- Sample size:
 - 177 cases of suicidal hanging.

Age Distribution:

Age Group (in years)	Frequency(n)	Percentage
12-20	64	36%
21-30	69	39%
31-40	26	15%
41-50	15	08%
>=60	03	02%

▶ Gender Distribution:

Gender	Frequency	percentage
Male	105	59%
Female	72	41%

▶ Marital Status:

Marital Status	Frequency	percentage
Married	112	63.27%
Unmarried	65	36.7%

Causes of Death

Reason for Suicide	Frequency	Percentage
Unexplained	74	41.8%
Familial disharmony	62	35%
Failure in love	19	10.73%
Emotional Conflict with parents	8	4.5%
Financial Crisis	6	3.38%
Failure in Exam	6	3.38%
Sexually harassed	2	1.1%

Conclusion

- ▶ Understanding the Forensic, Academic, and psychological factors leading to student suicides is critical for preventing similar Tragedies.
- ▶ Doctors and Forensic experts must work together to build a support system for students and provide clear forensic insights in such cases.

Tightening a knot is also an art.



Thank you