

Hanging, the Commonest Method of Suicide: A Retrospective Study over Two Years in Dhaka Medical College

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Abstract

This retrospective observational study was conducted on 416 postmortem cases of hanging victims at Dhaka Medical College morgue over a period of 2 years. It was done in the Department of Forensic Medicine & Toxicology, Dhaka Medical College from July 2014 to June 2016. The objective of this study was to evaluate the pattern of hanging, socio-demographic characters of victims, probable cause of suicidal hanging of studied population and to evaluate the present situation of hanging in Dhaka city. Out of 416 cases, 199 were male & 217 were female. Most victims were female 217 (52.16%) and married 285 (68.5%). The most affected age group was 21-30 years (45.19%). The nature of death was suicidal in most cases 406 (97.6%). Hanging is the most common methods of suicide because it produces quick & painless death.

Keywords: *Suicide, Asphyxia, Hanging.*

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Introduction

Hanging is a form of violent asphyxia which is caused by suspension of the body by a ligature which encircles the neck, the constricting force being the weight of the body.¹ When one commits suicide by hanging, it is said to be a case of suicidal hanging. Suicidal hanging is a social crime and a problem pertinent to the modern affluent society. A good number of people die each year by suicide, making it one of the ten leading cause of death in the world that accounting more than a million death annually.² Hanging produces painless death for the victims and no costs involvement. A thin rope around the neck that cause unconsciousness for 15 seconds can produce death, so the people prefer it as a common method of suicide.³

Asphyxial deaths are a common phenomenon. The stressful life with financial burden, poor socioeconomic status, homicidal intentions, psychiatric disorders, estranged relationships had contributed to a tremendous increase in suicidal hanging. Hanging is a popular

method of suicide. Death due to hanging is not unusual across the world, this makes the majority of asphyxia deaths.⁴ Many times suspicions are raised with the manner of deaths in cases of suspension of the body (complete & partial) and position of ligature marks, resulting in punishment of innocent or sparing the guilt. Hence this study is conducted to study in detail of the autopsy findings of deaths due to hanging so as to put an end to these speculations surrounding the deaths in hanging.³ This study helps to differentiate self-suspension from other forms of hanging. In this study only cases of suicidal hanging findings are analyzed & studied, other manners of suspension are excluded.

Methods

The study was conducted between July 2014 and June 2016, in the Dhaka Medical College Mortuary. A total 2530 autopsies were conducted of which suicidal hanging cases were 416 in number. The data was collected from the challan, inquest report & post mortem examination reports from the Forensic Medicine and Toxicology Department, Dhaka Medical College.

Results

A total 416 cases were suicidal hanging where most victims (188) belonged to age group 21-30 years, 139 to age group 11-20 years, 47 to age group 31-40 years, 29 to age group 41-60 years, 07 to age group 51-60 years, 04 to the age group 61 & above and 02 to age group 0-10 years (Table I).

Table I Distribution of the age

Age in year	Frequency	Percentage
0-10	02	0.48%
11-20	139	33.41%
21-30	188	45.19%

31-40	47	11.29%
41-50	29	6.97%
51-60	07	1.68%
61 and above	04	0.96%
Total	416	100%

Table II shows the distribution of marital status of victims, among them 285 were married & 131 were unmarried.

Table II Marital status of the victims

Marital status	Frequency	Percentage
Married	285	68.5%
Unmarried	131	31.5%
Total	416	100%

In sex variations, a majority of victims were female 217 than male 199 (Table III).

Table III Distribution of hanging victim according to sex

Sex	Frequency	Percentage
Female	217	52.16%
Male	199	47.9%
Total	416	100%

Distribution of hanging case according to nature, suicidal 406, accidental 10, homicidal 0 (Table IV).

Table IV Distribution of hanging case according to nature

Nature of hanging	Number	Percentage
Suicidal	406	97.6%
Accidental	10	2.4%
Homicidal	00	00%
Total	416	100%

Methods of committing suicide were hanging 396, poisoning 16, Jumping under train 02, others 02 (Table V).

Table V Methods of committing suicide

Method of suicide	Number	Percentage
Hanging	396	95.19%

Poisoning	16	3.84%
Jumping under train	02	0.48%
Other methods	02	0.48%
Total	416	100%

Discussion

The age group 21-30 are the common victims of suicidal hanging in our country. People of this age group go through many emotional & financial problems in their daily lives but they do not receive the necessary social & psychological support to overcome these issues. They feel that suicide is their only option of their troubles. In 2014, the total number of suicide in our country was 10200 and in 2015, 10500 people committed suicide. While looking forward the sex distribution of the victims, a female prevalence was observed in the present study (52%). The causes of this are the social stigma, early marriage, dowry system, sexual assault, adultery, financial independency and Eve teasing etc. Often females do not get any psychological or financial support from anybody when there was marital problem or other hardships, instead there is always a victim blaming mentality of the people around them which provokes them to commit suicide.⁵ The most chosen methods of suicide is hanging. In the current research, 396 cases of hanging were found which may be due to the availability of ligature material in every household & the painless death by it. Poisoning cases were 16 in number, jumping under a train was 02 and other methods were 02. Suicidal hanging were once considered to be for more common among men. Recent trends suggest that women are increasing likely to use hanging than other common methods of suicide like firearm and poisoning.

Conclusion

This study revealed that the number of suicidal hanging is increasing day by day. Young age groups are more vulnerable and quarrel between couples is the most common known cause, though most of the causes are found unknown. Visiting the scene of crime in every unnatural death is of immense importance for the Forensic pathologist to find out the cause and manner of death more accurately. A well designed system is needed to identify the causative factors and prevention of suicidal behaviors. Educating people, psychiatric helplines, media influence should be provided to reduce the rate of suicidal death by hanging in future.

References

1. Reddy KSN. The Essentials of Forensic Medicine and Toxicology. 34th ed. Hyderabad, India: Jaypee Brothers; 2011.
2. Aufderheide TP, Aprahamian C, Mateer JR, et al. Emergency airway management in hanging victims. *Ann Emerg Med.* 1994; 24: 897-903.
3. Knight B, Pekka S. *Knights Forensic Pathology.* 3rd ed. London: Arnold; 2004.
4. Modi. *Textbook of Medical Jurisprudence & Toxicology.* 24th Ed. Nagpur, India: LexisNexis; 2011.
5. Denning DG, Conwell Y, King D. Method choice, intent and gender in completed suicide. *Suicide lifethreat behave.* 2000; 30: 282-8.