

Original Article

Suicidal Death Autopsy Analysis at Dhaka Medical CollegeM N Hossain¹, Z Rahman², S Akhter³**Abstract**

A cross sectional study was carried out at the department of Forensic Medicine in Dhaka Medical College during the period of January 2008 to December 2009. Data were collected from 3rd copy of the post mortem reports which were preserved in the department of Forensic Medicine with the verbal consent of the doctors who performed autopsy report. During this period total 5114 autopsies were conducted. Out of this 970 cases (19%) were suicidal in nature. It was noticed

Keywords: Suicide, Death, Autopsy, Hanging, Poisoning.

Introduction

Suicide is one of the major causes of mortality especially in young female in our country. Suicide defined as a self inflicted cause of death. Suicidal death indicates the socio-economical and health status of the community.¹ Hanging is the major method of suicide in our country, but other suicidal deaths are due to poisoning (especially organophosphorus compound), burn, drowning, firearm, fall from height, road traffic accident etc, which maybe suicidal, homicidal, accidental in nature.² In Forensic Medicine all deaths are included in certain manners, namely; natural, suicidal, homicidal, accidental, sudden etc. Poisoning is commonly accidental, but a large number are suicidal in nature. It is now the most common method of self destruction in advanced communities, due to easy availability of toxic drugs. The most common methods used for suicide included hanging then poisoning. 80% of suicidal death occurred within 30 years of life.³ Our study focused upon suicidal death occurred by hanging and poisoning of autopsy cases held in the morgue of Department of Forensic Medicine at Dhaka Medical College in the years from 2008 to 2009.

Materials and Methods

This cross sectional study was conducted from

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that all suicidal deaths occurred from 10 years to all age group respectively, but top amongst age group of suicidal deaths occurred in between 21 to 30 years of people. Suicidal deaths are more common in female than male. Suicidal deaths due to hanging is highest, next common causes of death due to organophosphorus compound poisoning. Suicidal deaths by hanging is more in female than male but in poisoning cases male are more victimised than female. Objectives of our study are to see the occurrence and methods of suicidal death.

January 2008 to December 2009 in Dhaka medical College at Forensic Medicine Department. Data were collected from 3rd copy of the post mortem reports which were preserved in the department of Forensic Medicine. The verbal consent of the doctors who performed autopsy report I had been taken. Age, sex distribution of victims and method of suicidal death are showing in tables and figures. During this period total 5114 autopsies were conducted. Among these 970 were deaths due to suicide in nature. Out of these 574 cases were deaths due to hanging. Their ligature materials, types of knots and suspension points were evaluated. In poisoning cases during post mortem examination, some viscera were preserved and sent to the chief chemical examiners office, Dhaka, for toxicological analyses. Detailed and complete postmortem examinations of the bodies were also done.

Results

During the period of January 2008 to December 2009, 970 cases autopsy of suicidal death were done at Dhaka Medical College morgue. Among them 59% (574) cases due to hanging, 31% (300) cases due to poisoning, others 10% (96) cases were due to burn, fall from height, firearm, drowning, road traffic accident etc.

Table 1: Age distribution of the victims both male and female (n= 970).

Age distribution	No	Percentage
0-10 years	11	1.13%
11-20 years	329	33.9%
21-30 years	501	51.6%
31-40 years	108	11.13%
Above 40 years	21	2.16%

Table 2: Number of suicidal death by different methods (n= 970)

Method of suicide	Male	Female	Number of autopsy	%
Hanging	159	415	574	59%
Poisoning- Organophosphorus and Others Like sedatives, alcohol, Opium etc.	162	138	300	31%
Other cases like burn, fall from height, firearm, Drowning etc.	57	39	96	10%

Table -3: Different ligature materials used for hanging:-

Ligature Materials	Percentage (%)
Rope	51%
Clothing	23%
sheet	06%
Cable	5%
Others	15%

From above results table -1, table - 2 and table - 3, showing out of 970 suicidal deaths majority of the victims were within 21 to 30 years age group. Most common method of suicidal death is hanging 592 (59%), followed by poisoning 300 (31%), and other cases 96 (10%) suicidal deaths like burn, drowning, fall from height, firearm, road traffic accident etc. Suicidal death by hanging which is more in female

than male but in poisoning and other cases males are more than female, during the study period of 2008 to 2009 at Dhaka Medical College. Table -3 showing 51% cases used rope as a ligature material, 23% cases used clothing, 6% cases used sheet, 5% cases used cable, and others (15%) included one each of the followings- phone wire, steel rope, bicycle chain.

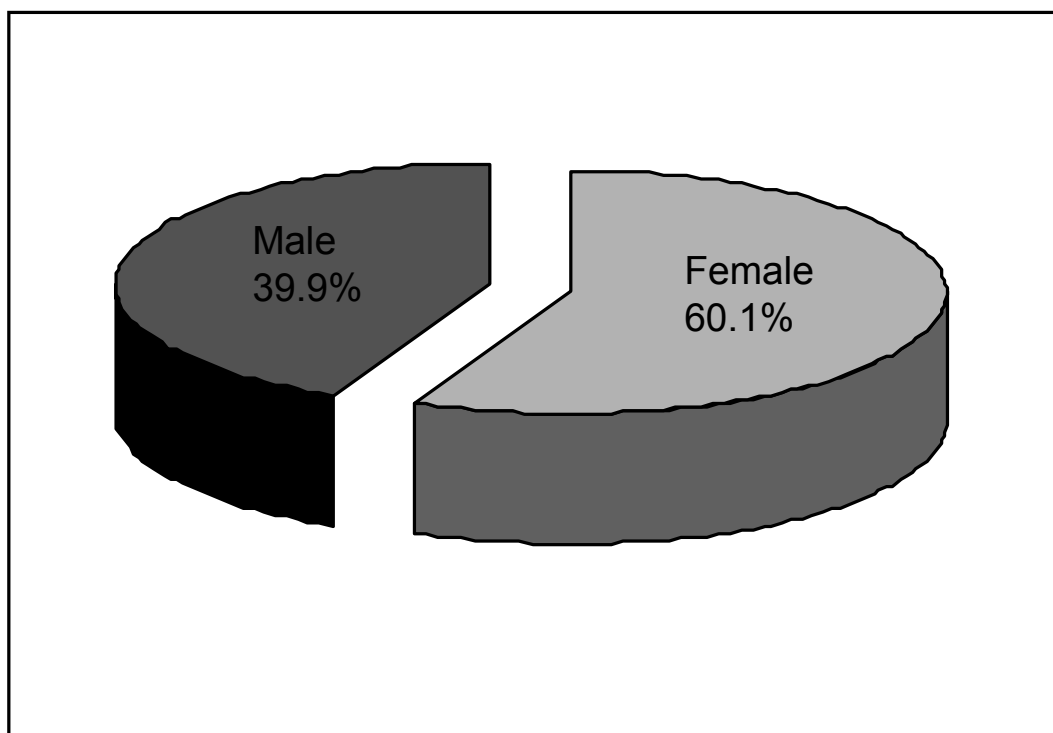


Figure 1: Distribution of suicidal deaths by sex.

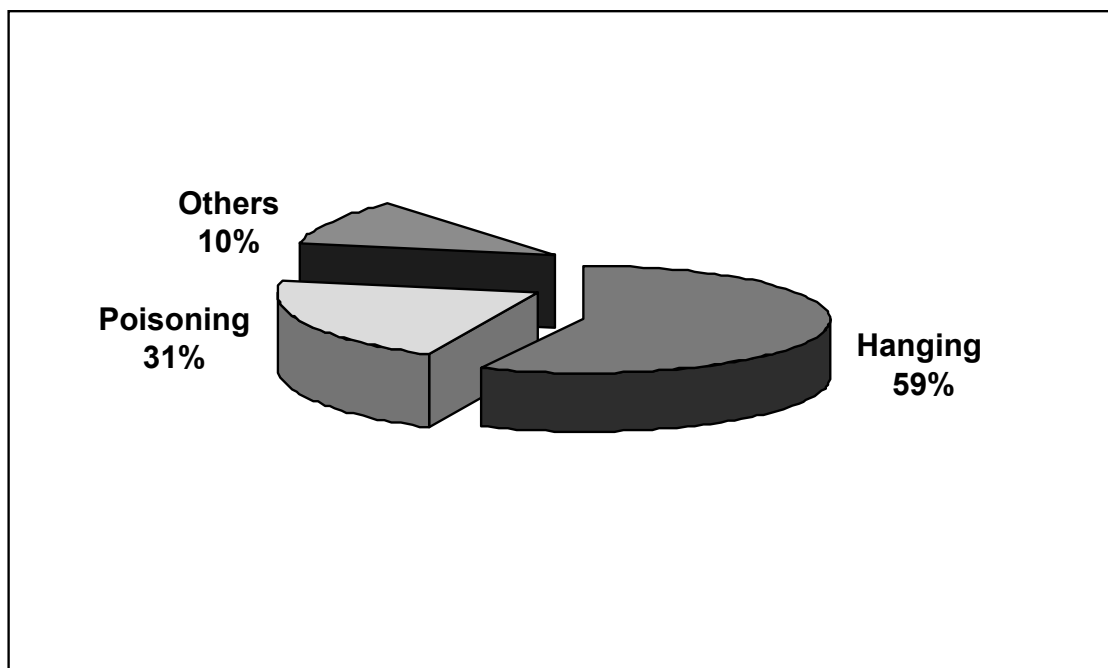


Figure 2: Number of suicidal death according to mode of suicide.

Discussion

The findings of this report suggest that suicide is an important cause of death in our country. Among 970 cases 60.1% (592) were female and 39.9% (378) were male. It was found that suicide is one of the major causes of mortality in our country. Among 970 victims, 574 cases (59%) died due to hanging, 300 cases (31%) died due to Organophosphorus compound (OPC) and other poisoning like sedatives, alcohol, opium. 96 cases (9.89%) died due to burn, fall from height, firearm, drowning etc. In our study, suicidal death occurred in all age group, but majority cases were within 21-30 years age group. Hanging is one preferred means of committing suicide in this subcontinent.⁴ However deaths by hanging may be accidental or even homicidal. The later is very rare.⁵ Partial hangings are almost always suicidal in nature. There may be a suicidal note left behind. There should be a motive for committing suicide.⁶ In our study in case of hanging, death due to asphyxia by using different ligature material like rope, sheet, cable and others included one each of the followings- phone wire, steel rope, bicycle chain and iron chain. In our study mode of suicide by hanging was more in female. 415 (72%) cases were female and 159 (28%) cases were male (among 574 hanging cases). Mode of suicide among male was by ingestion of OPC, endrin and other poisons like sedatives, opium etc was more in male 162 (54%) cases than female 138 (46%) cases. Rural population of this country is mostly dependent on agricultural cultivation with the advanced of times.

Pesticides are now a day routinely used for modern cultivation method. OPC, endrin are easily available in village shop and acts as a common agent for suicidal purpose after trivial family problem⁷. According to spousal violence in Bangladesh, ICDDR, Dhaka reported that suicidal death is an issue of growing concern in Bangladesh. Causes of suicidal death in our country regarding the risk factors are low status in society, lack of decision making, marital conflict, chronic illness, mental illness. It was also reported that analysis of actual suicidal death in Bangladesh among women aged 15-44 years, were preceded by quarrels or serious tension with husband. Never married women are more likely to end their life in suicide than other marital categories. Suicide among unmarried women of reproductive age may be linked to extramarital sex - forced or consensual and subsequent unwanted pregnancies⁸. Reid RJ, et al. in a study on suicidal mortality occurs due to emotion, sentiment, poverty, dowry agreement, 2nd marriage of husband, rape followed by pregnancy, adultery, failure in love, failure in examination etc.⁹ The number of young women and girls being sexually harassed in Bangladesh are rapidly increasing. So, they have committed suicide in order to escape sexual harassment or Eve teasing, which was reported by daily newspaper in our country. In recent years in Bangladesh researchers have documented the prevalence of physical, sexual and emotional abuse, association between violence and physical and mental health⁷. Suicide occurred among young men and women in

Bangladesh. Actual suicide may be an indicator of mental instability.¹⁰ Suicide is one of the three leading causes of death among 15-44 years old people globally.¹¹ Incidence of suicidal death whether hanging or poisoning are not unfamiliar in our society. Incidence, etiology and nature of suicide vary from one community to another and depends mainly upon age, sex customs, economic status, education status, marital status, environmental and social circumstances.² Suicide is an important cause of death in Bangladesh, represents as public health concern especially for young females.¹² From our study findings, it can be apprehended that methods of suicidal deaths, hanging is more common in Bangladeshi females.

Conclusion

To prevent suicide, status of mental health and social wellbeing should not be ignored and socio-economical development is needed. To improve the mental health status family bonding and counseling may take play an important role. There should be proper employment facilities for the youth. This will prevent tendency of committing suicide among young group of people in Bangladesh.

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