

# The Pattern of Suicidal Cases in Sylhet Region

Md. Shyful Islam Rony<sup>1\*</sup> Nusrat Afroze<sup>2</sup> Sumon Mutsuddy<sup>3</sup>Md. Shamsul Islam<sup>4</sup> Sharmin Sultana<sup>5</sup> Marina Haque<sup>6</sup>

## ABSTRACT

**Background:** Suicide remains a major global public health concern, claiming 705000 lives per year. Understanding the pattern of suicide is crucial for effective prevention strategies. To highlight the importance of recognizing patterns for designing effective prevention strategies and intervention.

**Materials and methods:** This retrospective study was done at Department of Forensic Medicine of Sylhet MAG Osmani medical college to analysis the pattern of suicidal cases during the study period from January 2024 to January 2025. After reviewing all postmortem report 100 cases of death were found due to suicidal cases during the study period.

**Results:** The highest number of the victim 40 were from the age group 21 to 30 years followed by 30 from the age group of 11 to 20 years and 91 cases come from different rural areas where 64 cases were male and 36 cases were female. The commonest method was hanging (47) then poisoning (42) lastly through drowning (11).

**Conclusion:** A deeper understanding of these patterns can inform targeted intervention, promote mental health awareness and ultimately help to reduce the incidence of suicide globally.

## KEY WORDS

Hanging; Drowning; Poisoning; Public health; Suicide.

## INTRODUCTION

Suicide is a profound public health challenge claiming thousands of lives each year worldwide.<sup>1</sup> It is a complex phenomenon influenced by a range of psychological, social, economic and cultural factors. Recognizing the patterns of suicide-such as who is most at risk, when and how suicides occur and the underlying causes is crucial for developing effective prevention strategies.<sup>2</sup> Patterns often vary across different demographic groups with differences observed in age, gender, socioeconomic status and geographic region. Furthermost, certain

methods, timing trends and emerging societal influences such as the role of technology and global crises also shape suicide behavior.<sup>3</sup> A deeper understanding of these patterns can inform targeted interventions, promote mental health awareness and ultimately help reduce the incidence of suicide globally.<sup>4</sup> The people choose various methods for suicidal purpose, Among the different methods, hanging is more common and considered as easier method.<sup>5</sup> Other methods are poisoning, jump over running rail, fall from height, gunshot, now a days commonly practiced in Bangladesh. This study focus on mainly three methods of suicide hanging, poisoning and drowning.<sup>6-8</sup> The Bangladeshi people causes suicide by poisoning as it is available in rural area. Drowning is another method but it occurs accidentally comparative to suicidal purpose.

## MATERIALS AND METHODS

This reports based on a retrospective study carried out in the Department of Forensic Medicine of Sylhet MAG Osmani Medical College to analysis of pattern of suicidal cases during the study period January 2024 to January 2025.

After reviewing all postmortem reports 100 cases of death were found due to suicide during the study period. Data were collected on detail information from following sources: Investigating police officer recognizance, postmortem entry register and postmortem findings from the postmortem reports.

The data analysis was carried out by using descriptive statistics and presented with frequency tables and charts.

1.  Associate Professor (cc) of Forensic Medicine & Toxicology

Brahmanbaria Medical College, Brahmanbaria.

2.  Associate Professor (cc) of Forensic Medicine & Toxicology

Rangpur Community Medical College, Rangpur.

3.  Professor of Forensic Medicine & Toxicology

Chittagong Medical College, Chattogram.

4.  Associate Professor of Forensic Medicine & Toxicology

Sylhet M A G Osmani Medical College, Sylhet

5.  Associate Professor (cc) of Forensic Medicine & Toxicology

Comilla Medical College, Cumilla.

6.  Assistant Professor of Forensic Medicine & Toxicology

Kumudini Women's Medical College, Tangail.

\*Correspondence :  Dr. Md. Shyful Islam Rony

Email: ronyforensic2020@gmail.com

Cell : +88 01729 63 95 11

Date of Submitted   0.07.2025

Date of Accepted   28.07.2025

## Original Article

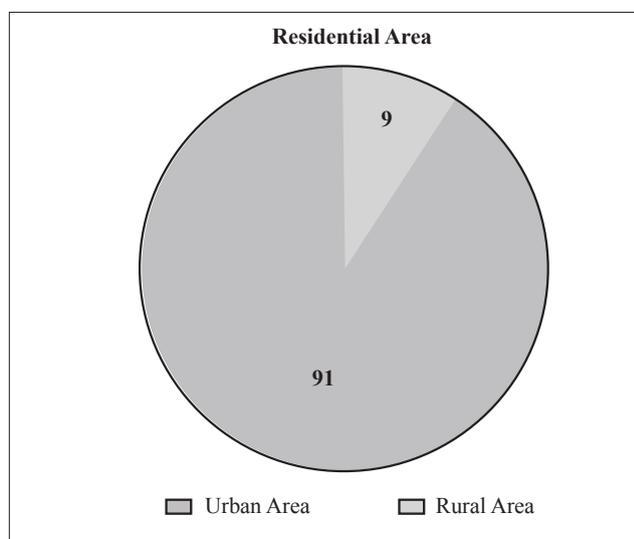
## RESULTS

A total of 167 cases underwent autopsy between January 2024 to January 2025 among them 100 deaths were autopsied, were suicide. Therefore, we can conclude that one of the most frequent causes of unnatural death is suicide in this region. The results are shown in the following charts. Figure 1 shows gender distribution of the death bodies where out of 100, 64% were male and 36% were female. It was discovered that both male and female commit suicide at a young age but the number of victim is more in male. The following figure is given below in details:



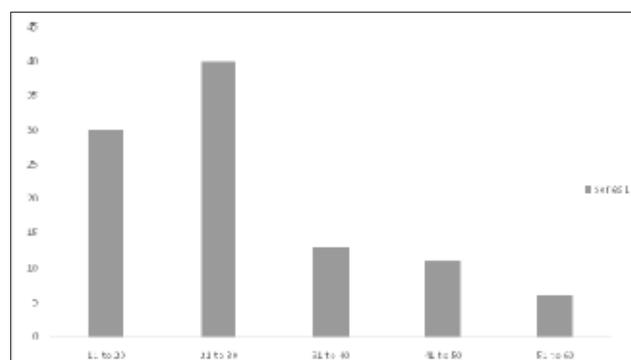
**Figure 1** Gender distribution in the death bodies

Figure 2 shows residential distribution of the dead. Here 91 from different rural areas and 09 came from urban areas. The following figure is given below in details:



**Figure 2** Residential distribution

In Figure 3, a bar chart showing the age ranges of victim in which suicidal tendency grows is from 11-20 years upto 51-60. In the present study the lowest age is 12 and highest is 56 years. Maximum victims 40% is from age group 21-30 followed by age group 11-20 years (30%) and 31-40 years (13%). Thus it is observed that more than 1/3<sup>rd</sup> of total victims are from the age group 21-30. However, victims above 71 years and below 10 years have lesser prevalence being 3% and 0% respectively.



**Figure 3** Age distribution

Table I shows the number of married female victim are more than male who are married. And the number of married victim are more than non married victim. That means family of a married person has a effect on the victims.

**Table I** Marrietal status

Sex	Married	Unmarried
Male	25(51.02%)	24(48.97%)
Female	37(72.54%)	14(27.45%)
Total	62	38

Table II shows, causes of death of the victim of present study. Here highest number of victim chosen hanging for suicide then poisoning lastly drowning in a little number of cases.

**Table II** Causes of death of victim

Cause of death	Frequency	Percentage (%)
Hanging	58	58%
Poisoning	33	33%
Drowning	09	09%
Total	100	

## DISCUSSION

From the above study we come to know that married person are more than unmarried people become victim. Family caoas, financial instability, impotancy, sterility, extra marietal affair etc are the common causes for mental problems. These causes are common for both

**Original Article**

urban-rural area, male-female people. From the Table I, married female (72.54%) are more victim than married male (51.02%). Similar study are observed by other authors. According to sex variation the tendency of suicide is more common in male compare to female.<sup>9-11</sup> In our findings Al-Azad MAS study mentioned Financial crisis, extra marietal affair, impotancy and sterility in both, dowry, less mental attachment with in law families are the common causes for the female victims. And unemployment, financial crisis, dowry, social harassment, having no children/only girl child etc are common incase of male victims. Hence, unmarried victims are suffering from bad results in exams, unemployment, ditching from mental attachment etc. What ever the causes are, people are becoming very much sensitive day by day. They do not want to tolerate any type of instabilities for long time. They try a little to share their problems with other, many don't try at all. They think they tolerate a lot or why should they do so, Suicide is the solution of their all problems. That's why they take these steps in various way. We should study more on this Suicidal ideas and the person who is suffering from frustrations. How they become relieved or get less stressed. Family and close relatives are helpful for getting their stress relived. Counseling can be helpful sometime. We also found that suicidal tendency is more prone to rural incomparison to urban because of lack of lifestyle, educational and behavioral issue. This study also shows that suicidal tendency observed more in mulim than hindus. On sex differentiation, study shows the the victimized persons of high tendency is female than male. All of the methods of suicide, hanging is the most common method.

More studies should be done on this topic. And awareness socially, in the Mosque, Mandir, social medias can be more helpful. Everyone has crises in his/her life. No one is happy at utmost level. That's why we should, share ourselves and get mental help to get healthy personality, live a life and get a normal end.<sup>12-13</sup> Similar observation are studied by other authors.

**LIMITATION**

It is a single center study with a small sample size conducted for a short period.

**CONCLUSION**

A deeper understanding of these patterns can inform targeted intervention, promote mental health awareness and ultimately help to reduce the incidence of suicide globally.

**RECOMMENDATION**

The analysis of study recommend that public awareness and proper counseling should be under concerned, it we want to prevent such unnatural death.

**DISCLOSURE**

All the authors declared no competing interest.

**REFERENCES**

1. Umadethan B. Principles and Practice of Forensic Medicine, 2<sup>nd</sup> edition, New Delhi, India : CBC Publishres & Distributors Pvt Ltd. 2017;30.
2. Reddy KSN. The Essentials of Forensic Medicine and Toxicology, 34<sup>th</sup> edition, Hyderabad, India: Jaypee Brothers. 2017;98.
3. Nandy A. Principles of Forensic Medicine including Toxicology. 3<sup>rd</sup> edition, Kolkata, India. 2010;287.
4. Rao N. Testbook of Forensic Medicine & Toxicology, 2<sup>nd</sup> edition, New delhi, India : Jaypee brothers; 2012, 162
5. Biswas G. Review of Forensic medicine & Toxicology, 2<sup>nd</sup> edition, New delhi, India : Jaypee brothers. 2012;83.
6. Bardale R. Principles of Forensic Medicine & Toxicology, 2<sup>nd</sup> edition, New Delhi, India: Jaypee Brothers. 2017;170.
7. Mohanty S, Sahu G, Mohanty MK et al. Suicide in India-A four year retrospective study. J Forensic Leg Med. 2007; 14(4):185-189.
8. Dayanand G G, Nuchhi U C, Yoganarasimha K.G. 'A Study of Demography of Medico-Legal Autopsies in Bijapur. Indian Journal of Forensic Medicine & Toxicology. 2013;7(1):37-41.
9. Santhosh CS, Bande Nawaz. Pattern of Suicidal Deaths at District Hospital Davangere : A Cross-Sectional Study. Indian Acad Forensic Med. 2013; 35(3):233-235.
10. Sharma B. R, Singh VP, Sharma R. Unnatural deaths in northern India a profile. JIAFM. 2004; 26(4) : 971-973.
11. Al-Azad MAS, Rahman MS, Ahmad M. Medico-legal issues and socio-demographic profile of suicidal deaths in people of Dhaka city : A study of 827 cases. JAFMC Bangladesh. 2017; 13(1) : 33-36.
12. Subedi N, Chataut TP, Pradhan A. A study of suicidal deaths in central Nepal. European Journal of Forensic Sciences. 2015; 2(3) :1-4.
13. Baral MP . Profile of autopsy cases in central level hospital of Nepal. A retrospective study of two years .ASIAN JOURNAL OF MEDICAL SCIENCES. 2020 ; 11(3): 47-50.