

## Original Article



# The Profile of Autopsy Cases at Rajshahi Medical College

Laila Yesmin<sup>1</sup>, Md. Kafil Uddin<sup>2</sup>, Md. Rafiqul Islam<sup>3</sup>, Sandwip Talukdar<sup>4</sup>,  
Md. Zubaidur Rahman<sup>5</sup>, Joya Debnath<sup>6</sup>.

### Abstract

**Objective:** The objective of the study was to explore the profile of Autopsy cases at Rajshahi Medical College. **Materials and Methods:** This observational study was carried out at Rajshahi Medical College. From January 2021 to June 2021. A total of 248 autopsy cases were included as a sample size during the study. **Results:** Most of the autopsy cases were found to be male ( 75% ), More than 40.72% death were due to poisoning, followed by suicidal hanging cases (19.76% ),homicide cases (14.51%), different types of accidental cases( 8.47%). In case of road traffic accidents (RTA) 70% cases were by 2-wheeler vehicles followed by 25% were by 4-wheeler vehicles, 3% were by heavy vehicles and 2% were pedestrian cases. Death from suicidal hanging were mostly common in the age group 15-25 years, Homicide in 47-67 years, poisoning in 47-67 years, Accidental fall from height in 15-25 years and Natural death in the age group of 67 years and above. **Conclusion:** This study helps to interpret several sorts of medico-legal situations, by policy makers, health care programmers, judiciary and investigation and then takes appropriate action to minimize mortality.

**Key words:** Autopsy, accidental death, poisoning.

**Date of received:** 05.09.2021

**Date of acceptance:** 21.11.2021

**DOI:** <https://doi.org/10.3329/kyamcj.v12i4.58219>

**KYAMC January. 2022;12(04): 205-207.**

## Introduction

The name 'autopsy' comes from the ancient 'Autopia,' derived from the Greek word 'autos,' i.e. 'Oneself.' An autopsy is done frequently when a doctor is suddenly deceased when a death certificate is not issued or when death is considered to be causing an anomaly.<sup>1</sup> Autopsy means the methodical investigation of a dead individual in medicine, law and/or science. Three kinds are present: i. Academic: Dead corpse dissection carried out by anatomy students. ii. Pathological, clinical or hospital: pathologists conduct a diagnosis or a diagnosis for a cause of death.<sup>2</sup>

Without the consent given by the relatives, doctors cannot order this autopsy. ii. Medico-legal or forensic: Species of scientific exam of a dead corpse carried on in instances of

sudden, mysterious, dark, unnatural, litigious or criminal death by legislation of the National Code of Protection of Citizens' Rights.<sup>3</sup> The fundamental objective of this autopsy is to determine the cause and manner of death.

In this study our main goal is to explore the profile of Autopsy cases at Rajshahi Medical College.

## Materials and Methods

It was an observational type of study.

The study was carried out at Rajshahi Medical College, Bangladesh from January 2021 to June 2021. Data were collected from postmortem registers/records by using a pre-designed format.

1. Associate Professor, Department of Forensic Medicine & Toxicology, Khwaja Yunus Ali Medical College, Sirajganj, Bangladesh.

2. Assistant Professor & HOD, Department of Forensic Medicine & Toxicology, Rajshahi Medical College, Rajshahi, Bangladesh.

3. Associate Professor, Department of Anaesthesia, Khwaja Yunus Ali Medical College and Hospital, Sirajganj, Bangladesh.

4. Assistant Professor, Department of Forensic Medicine & Toxicology, North Bengal Medical College, Sirajganj, Bangladesh.

5. Associate Professor & HOD, Department of Forensic Medicine & Toxicology, Khwaja Yunus Ali Medical College, Sirajganj, Bangladesh.

6. Associate Professor, Department of Forensic Medicine & Toxicology, Khwaja Yunus Ali Medical College, Sirajganj, Bangladesh.

**Corresponding author:** Dr. Laila Yesmin, Associate Professor, Department of Forensic Medicine & Toxicology, Khwaja Yunus Ali Medical College, Sirajganj, Bangladesh. Cell Phone: +8801790352725, Email: lailayesmin2019@gmail.com

**Study population:**

A total of 248 autopsy cases were studied. Samples were collected by purposive sampling.

**Data analysis:**

All collected data were coded and analyzed by SPSS 11. Both descriptive and inferential statistics done. Descriptive statistics included frequency distribution, percent, mean, standard deviation; graph, tables, figures and inferential statistics.

**Results**

Table-I, shows age distribution of the cases where most of the victims were belongs to 26-46 years (50%), followed by 45% cases were belong to 15-25 years, 3.5% cases were belong to 47-67 years and 1.5% cases were belong to >67years of age group. The following table is given below in detail:

**Table-I:** Age distribution of the cases

Age group	Percentage ( % )
15-25 years	45
26-46 years	50
47-67 years	3.5
>67 years	1.5
<b>Total</b>	<b>100.0</b>

Figure-I, shows gender distribution of the cases where maximum cases were male (75%).

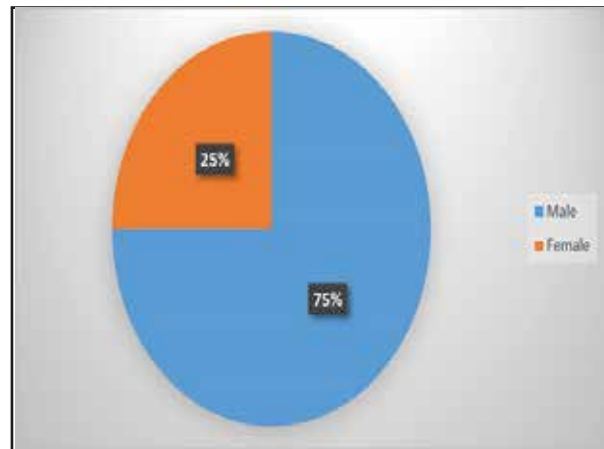


Figure-I: Gender distribution of the cases.

Table-II, shows distribution of study group by the cause of death, poisoning cases were common mostly (40.72%) followed by suicidal hanging cases (19.76%) , homicide cases (14.51%) ,different types of accidental cases (8.47%). The following table is given below in detail:

**Table-II:** Distribution of study group according to cause of death.

Cause of death	No. of cases (n)	Percentage(%)
Suicidal hanging	49	19.76
Homicide	36	14.51
Poisoning	101	40.72
Accidental (RTA)	21	8.47
Drowning	07	2.82
Firearm injury	03	1.20
Fall from height	03	1.20
Natural death	21	8.47
Venomous bite (snake bite)	01	0.40
Unknown causes of death	06	2.42
<b>Total</b>	<b>248</b>	<b>100</b>

Figure-2, shows distribution of the study group according to road traffic accidents (RTA) where 70% cases were by 2-wheeler vehicles, followed by 25% were by 4-wheeler vehicles, 3% were by heavy vehicles and 2% were pedestrian cases. The following figure is given below in detail:



**Figure-II:** Distribution of the study group according to road traffic accidents (RTA)

Table-III, shows distribution of cause of death according to age where suicidal hanging cases were common in the age group 15-25 years (50%), homicide cases were common in 47-67years (35%), poisoning cases were common in 47-67years (30%), fall from height were common in 15-25 years (35%), natural death were common in >67 years. The following table is given below in detail:

**Discussion**

In Kannan K et al. study out of 159 cases maximum numbers of autopsy cases were in the age group of 21-30 years which is the most productive age in one’s life.<sup>5</sup> These findings are consistent with findings of Curran WJ et al.<sup>6</sup> Where, in our

**Table-III:** Distribution of cause of death according to age

Cause of death	Age group, %			
	15 - 25 years	26 - 46 years	47 - 67 years	>67 years
Suicidal hanging	50%	45%	3 %	2%
H omicide	20%	22%	35%	23%
P oisoning	23%	25%	30%	20%
A ccidental (RTA)	30%	25%	23%	20%
Dro w ning	30%	25%	23%	20%
Firearm injury	30%	25%	20%	23%
Fall from height	35%	23%	20%	20%
N atural d eath	20%	23%	20%	35%
Venomous bite (snake bite)	20%	23%	20%	35%
Unknown cause	20%	23%	16%	39%

study we found most of the victims belongs to 26-46 years' age group (50%), In Curran WJ et al. study majority of victims were males (74.2%).<sup>6</sup> Similar findings are seen in studies done by ME Bansude et al. were males (82%) & females (18%).<sup>7</sup> Which was quite similar to our study where male cases were (75%). Study conducted in Sri Lanka reported that 40 % deaths were accidental while 32% were suicides, 24% homicides and 4% other deaths due to pregnancy and parturition-related issues.<sup>8</sup>

Likewise another study mentioned that manner of 63.22% deaths are accidental ,followed by 24.83% suicidal and then 8.06% undetermined and last is homicidal with 3.88%.<sup>9</sup> Similarly in our study we found cause of death due to poisoning (40.72%) followed by suicidal hanging cases were (19.76%), homicide cases were (14.51%), and different types of accidental cases were (8.47%).In case of road traffic accidents (RTA) 70% cases were by 2-wheeler vehicles followed by 25% were 4-wheeler vehicles , 3% were by heavy vehicles and 2% were pedestrian cases. Bhullar DS et al. had found maximum numbers of cases are of Accidental 72.50% followed by homicidal 23.75% and then suicidal 3.75% as this study was focused only on nature of female death cases.<sup>10</sup> Deaths due to road traffic accidents & its complications constituted majority of cases 57.9% followed by poisoning 17% and burns 11.3%. Similar findings are observed in studies done by Sharma BR et al.<sup>11</sup>

## Conclusion

This study helps to interpret several sorts of medico-legal situations, by policy makers, health care programmers, judiciary and investigation and then takes appropriate action to minimize mortality.

## Acknowledgement

We are grateful to Assistant. Professor Dr. Md. Kafil Uddin, Head of Department of Forensic Medicine & Toxicology, RMC, for his endless support to conduct this study properly.

## References

- Worldwide death statistics <http://www.ecology.com>> Birth-death-rates Accessed on 6-7-2018
- IANS inputs <http://www.ians.in> Accessed on 6-7-2018
- [www.icmr.nic.in/ disease\\_burden/ Karnataka Disease BurdenProfile.pdf](http://www.icmr.nic.in/disease_burden/Karnataka_Disease_BurdenProfile.pdf) cited on 10/08/2018
- “UN data-record view-Crude death rate (deaths per 1,000 population)”. Accessed on 09-01-2019
- Kannan K, Mathiharan K. Ed. In: Modi-A textbook of Medical Jurisprudence and Toxicology. 24thEd.LexisNexis Butterworth's Nagpur: 2012.p.293,295,297,360.
- Curran WJ. The Medico-legal autopsy and Medico-legal investigation. Bull N Y Acad Med 1971 July;47(7):766-75
- ME Bansude, Kachare RV, Dode CR, Kumre VM. Trends of unnatural deaths in latur district of Maharashtra. Journal of Forensic Medicine,Science and Law.2012; 21:2.
- Murthy MSN, Dutta BN, Ramalingaswami V. Coronary atherosclerosis in North India (Delhi Area). J PatholBacteriol 1963;85:93-101.
- Mugadlimath A, Kadagoudar S, Sheelvant S, Bambeshwar K. Profile of medico legal autopsy cases at tertiary care centre in Bagalkot, Karnataka. Indian Journal of Forensic Medicine and Pathology.2017;10(2):63-66.
- Bhullar DS, Oberoi SS, Aggarwal OP,Tuli H. Profile of Unnatural deaths (between 18-30 years of age) in GMCH Patiala,(India). JFMT. 1996;13(3):5-8.
- Sharma BR. Trends of Poisons and Drugs used in Jammu. Journal of Forensic Medicine and Toxicology. 1996;13(2):7-9.