

Profile of Medico Legal Autopsies at Tezpur Medical College & Hospital, Tezpur, Assam: A One Year Retrospective Study

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Abstract: With the progress of human civilization there has been a marked development in every aspect of mankind which on the other hand has also resulted in increased number of deaths following unnatural causes. Medico legal autopsies thereby portray not only the causes of death but also reflect the socio economic and demographic profile of that particular region. The present study was conducted at Tezpur Medical College & Hospital, Tezpur, Assam to find out the various patterns of Medico legal autopsies during the period 1st January 2019 to 31st December 2019.

Keywords: Medico legal autopsies, deaths, unnatural, patterns.

Introduction

Autopsy/necropsy denotes examination of the dead body with a view to searching primarily for the cause of death. In 1302, a court in Bologna ordered the examination of one Azzolino, who had died under suspicious circumstances of alleged poisoning. [1] This procedure was carried out by two physicians and three surgeons, including Bartolomeo da Varignana. In the medico legal autopsy, the body belongs to the State for the protection of public interest until such time as a complete and thorough investigation into the circumstances attending the death has been completed.[2] Any or all portions of the body may be taken and kept for detailed examination as well as preserved for later trial purposes.[3] The increased numbers of unnatural deaths from road traffic incidents suggest an increase

in the number of rash drivers without driving licenses, drinking and driving, lack of traffic rule knowledge, increased high speed vehicles and road conditions. Whereas deaths by suicide and homicide suggest that the mindset of the society is changing with increased intolerance, drug addiction, poverty and behavioral changes.[4,5] The present study is a retrospective study of the medico legal autopsies carried out at Tezpur Medical College & Hospital, Tezpur, Assam during the period 1st January 2019 to 31st December 2019 where a thread bare analysis was done as which age group, sex predominance, seasonal variation, socio economic condition, education, cause of death and nature of death the medico legal autopsies belong.

Material and Method

The study has been carried out in the Department of Forensic Medicine, TMCH, Tezpur from 1st January 2019 to 31st December 2019 by examination of the inquest report and dead body challan, personal interview of accompanying police, attendants of deceased, in case of hospitalized patients from hospital records and findings recorded in autopsy report of the various medico legal autopsies during that period. A total of 278 autopsies were carried out during 1st January 2019 to 31st December 2019.

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Observation and Results

Incidence of male: female ratio. Out of the 278 cases 200 (71.94%) cases were of male and 78(28.06%) were of female. Hence the male: female ratio was 2.6: 1 which highlights a male preponderance.

Table No. 1: Age distribution of the cases.

Age group	Number of cases	Percentage
0 to 10 years	9	3.2%
11 to 20 years	41	14.8%
21 to 40 years	121	43.5%
41 to 60 years	94	33.8%
More than 60 years	13	4.7%
Total	278	100%

From table 1 it is evident that most number of autopsies was done in the age group of 21 to 40 years followed by 41 to 60 years.

Table No. 2: Month wise distribution of the cases.

Month	Number of cases	Percentage %
January	28	10.07
February	25	8.99
March	27	9.71
April	25	8.99
May	25	8.99
June	19	6.83
July	18	6.47
August	26	9.35
September	17	6.11
October	25	8.99
November	22	7.91
December	20	7.19

From table 2 it is found that most number of autopsies was conducted during the month of January and March.

Table No. 3: Educational qualification of the victims

Educational qualification	Number of cases	Percentage %
Post graduate and above	21	7.55
Graduate	38	13.67
HS passed	47	16.91
Matriculate	45	16.19
Read up to class X	79	28.42
Illiterate	48	17.27

From table 3 it is found that most number of autopsies was conducted upon the victims who have read up to class X and illiterate.

Table No. 4: Cause of death

Cause of death	Number of cases	Percentage %
Head injury	79	28.42
Burn injury	34	12.23
Hanging	45	16.19
Strangulation	03	1.08
Drowning	18	6.47
Electrocution	06	2.16
Natural cause	10	3.60
Hemorrhage and shock	35	12.59
Poisoning	46	16.55
Undetermined	02	0.72

From table 4 it is observed that 79 deaths were due to head injury followed by 46 deaths due to poisoning and 45 deaths due to hanging.

Table No. 5: Nature of death

Nature of death	Number of cases	Percentage %
Accidental	136	48.92
Suicidal	103	37.05
Homicidal	24	8.63
Natural cause	10	3.60
Pending investigation	05	1.80

From table 5 it is observed that 136 deaths were accidental deaths followed by 103 deaths of suicidal origin.

Discussion

In our study out of the 278 autopsies 200 (71.94%) were of the male sex whereas 78 (28.06%) were of the female sex which is similar to the study carried out Kishwar Naheed et al.^[6] The male preponderance of unnatural deaths may be attributed to the fact that males outnumber females in the general population in our state and also males lead a more stressful life than females carrying the responsibilities of the family and social lives and thereby make themselves more vulnerable.

From table 1 it is evident that most number of autopsies was done in the age group of 21 to 40 years followed by 41 to 60 years. The higher incidence of unnatural deaths in the young adult stage may be due to the fact that this is the period when they are by nature, trend to be more emotional, irrational and more aggressive and intolerant, thus making themselves more vulnerable to quarrels, commotion and instabilities of life.^[7,8] Again, it is the time when man starts serious thinking to build oneself, one's own family and society. So, when one does not get sufficient co-operation from the significant ones or if one faces repeated hurdles towards the goals, becomes frustrated which may result in the emotional outburst leading to quarrels, commission suicide, murder and accidental deaths.

From table 2 it is found that most number of autopsies was conducted during the month of January and March. The higher number of cases during the winter may be explained as most deaths were of accidental in origin due to low visibility during night time as a result of fog with indulgement in alcohol during driving.

From table 3 it is found that most number of autopsies was conducted upon the victims who have read up to class X and illiterate. The higher rate of people in this category may be attributed to the fact that most of them were leading a life style which requires much travelling to attend their work places which in turn makes them more vulnerable to accidents. More over lacking knowledge about road safety rules and indulgence in intoxicating substances are more common in this category which may be an important factor.

From table 4 it is observed that 79 deaths were due to head injury followed by 46 deaths due to poisoning and 45 deaths due to hanging. As head is most exposed vital region of the body it is more susceptible for injury and thereby death. Again as a result of advancement of the society and materialistic approach towards human life frustrations are likely to be present amongst the

masses which may compel them to commit suicide.

From table 5 it is observed that 136 deaths were accidental deaths followed by 103 deaths of suicidal origin.^[7] With the rapid process of human development machineries have become a part and parcel of our daily lives which may be either in the field of transport or industry thereby we are more susceptible to accidental deaths. Moreover due to increased level of stress and expectations in present day mankind suicidal deaths are also on an increasing trend.

Conclusion

The present study is an effort to evaluate the patterns of various medico legal autopsies from the view of Forensic Medicine personnel as to the cause, mode and nature of deaths and the socio demo graphic profile of the victims which in turn will be helpful in expediting methodologies for the policy makers and the society at large in prevention of unnatural deaths.

Ethical Clearance: Taken

Conflict of Interest: None declared

Source of Funding: None declared

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