

Autopsy study of Brought Dead cases at Malda, West Bengal

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Abstract: Factually, "brought dead" (also known as dead on arrival) means those deaths occurred before reaching at emergency. In those scenarios, doctor can't issue death certificate without knowing actual cause of death. That is the reason for which autopsy is necessary & compulsory for establishment of definite cause of death. In the present study 840 brought dead cases were studied in different parameters at Malda Medical College & Hospital, West Bengal from January 2016 to December 2012 (one year study). In present study, it was found that majority of victims who were brought dead were males, died in unnatural manner, most commonly in road traffic accident, followed by hanging.

Keywords: Autopsy, brought dead, cause of death, manner of death

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I. Introduction

Brought dead or received dead is a condition where the subject is found dead clinically by the examining medical person. It may be those cases where the subject was alive before some time, but on arrival in hospital, no signs of are present. It also may be cases when the subject was dead recently or sometimes ago, but to confirm death and for PM Examination brought to hospital like Road traffic accident spot dead cases, suicidal and homicidal death cases, known and unknown body recovered from railway compartments and stations, Decomposed body or even skeletonised remnants found by someone and inform police. Meticulous and thorough PM examination is essential to establish the identity, where unknown, to determine cause and manner of death whether it is a natural cause or unnatural.

The incidence of brought dead cases are increasing day by day at Malda Medical college & Hospital because of high referral rate from the peripheral health centres as it is the only Govt. Tertiary care Hospital in this district and also only centre in this district where PM Examination performed.

II. Materials And Methods

The present retrospective study was conducted in the Dept. of Forensic Medicine & Toxicology, Malda Medical College. In the present work, materials consists of brought dead cases brought to Malda Medical College & Hospital (declared dead at the emergency of MMCH and PM examination done in Morgue), as well as brought dead cases from all Primary Health Centers, Rural hospitals, Private Hospitals and brought to MMCH for PM Examination.

Criteria for case selection:

1. Both known and unknown cases are taken into consideration consists of both male and female cases
2. All age groups are included in this study.
3. All types of death are taken into consideration excluding stillborn brought death cases.

Collection of Data:

1. From the inquest report- age, sex, place, time of incidence and time of declaration of death
2. Postmortem report
3. Forensic science Laboratory report and Histopathological report.

III. Results & Discussion

During the study period of 1year (1st January 2016 to 31st December 2016) total 1440 Medicolegal Postmortem were conducted at the MMCH mortuary, out of which 840 cases are brought dead cases considered for study.

In the table No.1 of number wise distribution of cases, it is seen that out of 840 cases , known male subject was 540 cases i.e. 64.28% of total brought dead cases and known female subject was 202 cases i.e. 24% of total brought dead cases, unknown male subject was 87 cases i.e. 10.35% of total brought dead cases and unknown female case was 11 cases i.e. 1.3% of total brought dead cases. Sex wise distribution is similar to other study1. Total number of natural death was 82 cases i.e. 9.76% of total brought dead cases and total number of unnatural death cases was 747 cases i.e. 88.92% total brought dead cases. This study is consistent with other study2. In this study 1.30% of total brought dead cases nature of death not known.

In the table No.2 of age and nature wise distribution of cases, it is seen that cases with age <10years , only 11 cases i.e. 1.30% of total brought dead cases the manner of death was natural and 32 cases i.e. 3.80% of total brought dead cases the manner of death unnatural. In age group of 10-18 years there is no natural death cases and 90 cases i.e. 10.71% of total brought dead cases the manner of death was unnatural. In the age group of 19-30years only 5 cases i.e. 0.59% of total brought dead cases the manner of death was natural and 219 cases i.e. 26% of total brought dead cases the manner of death was unnatural. In the age group of 31 -50 years only 16 cases i.e. 1.90% of total brought dead cases the manner of death was natural and 272 cases i.e. 32.38% cases the manner of death was unnatural and 11 cases i.e. 1.30% cases the manner not known. So the commonest age group of brought dead is 31-50years followed by 18-30years. Most active age in life 18 to 50 years consists of 58.38 of total brought dead cases. In the age the group of 51-70years natural death was 50 cases i.e. 5.95% cases of total brought dead cases and unnatural death was 112 cases i.e. 13.33% cases of total brought dead cases. In this age group there is increase the natural dead cases and relative decrease in unnatural dead cases. In the age group of >70years there is no natural dead cases and unnatural dead cases was 22 i.e. 2.61% of total brought dead cases. The reason behind it may be in this age group either the disease patient was expired at home and not brought to any hospital or admitted to hospital and expired subsequently or if expired on way to Hospital, not brought to emergency and taken back to home and cremated. Incidence of natural death increases with age but extremes of age group is vulnerable, 11 no's of natural death in the age group of <10years due to high infant and under 5years mortality rate.

Table No. 3 describes age and cause wise distribution of unnatural death cases. Most common cause of death among unnatural death cases was Road traffic accident cases consists of 224 cases i.e. 30% of total unnatural death cases and hanging cases was 196 cases i.e. 26.23% of total unnatural death cases. Others are drowning 8.56%, railway accident 5.75%, poisoning 5.22%, electrocution 5.22%, strangulation 3.48%, burn 3.07%, gunshot 2.14%, snake bite 1.07%. Among the RTA cases most vulnerable age group is 31-50years and among the hanging cases most vulnerable age group is 19-30years. The reason behind it may be the most active age group and working class people belong to 19-50years, and increase tendency of self destruction due to depression in adult age group 19-30 years.

Table No.4 describes time of occurrence wise distribution of unnatural death cases. Between 12 Midnight to 6AM number of unnatural death was 108 i.e. 14.45% of total Unnatural death. Between 6AM to 12Noon number of unnatural death was 199 i.e. 26.63% of total Unnatural death cases. Between 12 Noon to 6PM number of brought death was 217 i.e. 29% of total Unnatural death. Between 6PM to 12Midnight number of unnatural death was 223 i.e. 29.83% of total brought death cases. Overall with passage of time of the day the incidence of unnatural death increases. RTA incidence maximum during 6AM to 6PM, time of daily activity and peoples are outside their home. In case of hanging the incidence increases during the later half of the day i.e. 12 Noon to 12 Midnight. Drowning incidence also coincides with RTA timing.

Table No.5 describes age and manner wise distribution of unnatural death cases. Total number of homicidal death was 55 i.e. 7.36% of total unnatural death. Total number of suicide was 258 i.e. 34.53% of total unnatural death cases. Total number of accidental death was 382 i.e. 51.13%. So Accident was the commonest manner of brought and also unnatural death followed by suicide followed by homicide.

TABLES

Table 1 Number wise distribution of cases

Number of cases	Known		Unknown		Natural	Unnatural	Not Known
	Male	Female	Male	Female			
840 (100%)	540 (64.28%)	202 (24%)	87 (10.35%)	11 (1.3%)	82 (9.76%)	747 (88.92%)	11 (1.30%)

Table 2 Age and Nature of death wise distribution of cases

Age	Natural	Unnatural	Not Known
< 10 Years	11(1.30%)	32(3.80%)	0
10- 18 Years	0	90(10.71%)	0
19- 30 Years	5(0.59%)	219(26%)	0
31-50Years	16(1.90%)	272(32.38%)	11(1.30%)
51-70Years	50(5.95%)	112(13.33%)	0
>70Years	0	22(2.61%)	0

Table 3 Age and Cause wise Distribution of Unnatural Death cases

AGE in years	RTA	Hanging	Strangulation	Poisoning	Drowning	Stab injury	Chop injury	Gunshot	Blast	Snake Bite	Electrocution	Burn	Railway Accident	Others	Undetected	Total
<10	11	0	0	0	16	0	0	0	0	0	5	0	0	0	0	32
10-18	44	27	0	0	0	0	1	0	2	3	7	0	0	0	6	90
19-30	54	66	5	12	16	0	2	5	2	3	11	11	22	10	0	219
31-50	71	49	16	11	27	5	5	11	0	2	11	12	16	36	0	272
51-70	38	38	5	16	5	0	0	0	0	0	5	0	5	0	0	112
>70	6	16	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Total	224 (30%)	196 (26.2%)	26	39	64	5	8	16	4	8	39	23	43	46	6	747

Table 4 Time of incidence wise distribution of Unnatural death cases

Cause of Death	12 Midnight-6 Am	6AM-12Noon	12Noon-6PM	6PM-12Midnight	Total
RTA	27	87	72	38	224
Hanging	38	27	54	77	196
Strangulation	0	5	6	15	26
Poisoning	4	12	6	17	39
Drowning	4	17	34	9	64
Stab injury	0	0	0	5	5
Chop wound	8	0	0	0	8
Gunshot	0	0	0	16	16
Blast	0	0	0	4	4
Snakebite	5	0	0	3	8
Electrocution	0	6	16	17	39
Burn	0	5	15	2	22
Railway accident	22	6	6	9	43
Others	0	28	8	11	47
Undetected	0	6	0	0	6
Total	108(14.45%)	199(26.63%)	217(29%)	223(29.83%)	747

Table 5 Age and Manner wise distribution of Unnatural death cases

Age	Homicide	Suicide	Accidental	Others & Not Known	Total
<10years	0	0	32	0	32
10-18years	1	27	56	6	90
19-30years	12	89	108	10	219
31-50years	37	72	127	36	272
51-70years	5	54	53	0	112
>70years	0	16	6	0	22
Total	55(7.36%)	258(34.53%)	382(51.13%)	52	747

IV. Conclusion

In Malda District of West Bengal Brought dead case study shows 88.28 % subjects are known and 11.65% subjects are unknown, out of both male subjects are 64.28% and 10.35% respectively and female subjects are 24% and 1.3% respectively. So most brought death subjects are known and brought death is more in male subjects. Most of the brought death cases are died due to unnatural cause 88.92% than natural causes 9.76%. incidence of natural death is more common in 51-70 years age group followed by 31-50 years followed by <10 years age group followed by 19-30 years age group. Incidence of unnatural death is more common in 31-50years age group followed by 19-30 years age group followed by 51-70 years age group followed by 10-18 years age group followed by <10years age group and least in >70 years age group. Two common cause of unnatural death was RTA followed by Hanging. Incidence of RTA was maximum during 6AM to 6PM time when peoples are out of their homes and in engaged in activity. Incidence of hanging was more between 12 noon to 12 Midnight as depression increases with the passage of time of the day. Overall with passage of time of the day the incidence of unnatural death increases.

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