



Original Research Paper

Pattern of Death of Unidentified Cases: A mortuary based study from Patna Medical College, Bihar

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Abstract

Objectives: To know the pattern of deaths in relation to the age, sex, pattern of injuries and cause of death in the unknown cases.

Methods: In this prospective study, all unknown cases brought for autopsy at Patna Medical College, Patna between 1st January to 31st December were studied. Information regarding unclaimed bodies with regard to age, sex, cause and manner of death was sourced from the autopsy reports and the inquest papers of the investigating officers.

Results: Out of 114 medicolegal autopsies done, 89(78.07%) were of male. Majority (24.5%) of unknown cases belong to 21- 30 years age group. 71(62.28%) cases died unnaturally while 43 (37.72%) of the cases died naturally. Of all unnatural deaths, railway accident injuries was the most common (26.76%) cause of death. Among 43 natural deaths, in 22 (51.16%) cases, chest and abdominal diseases combined were responsible.

Conclusions: The government should take initiative at large to prevent unnatural deaths. It is high time that law enforcement agencies should ensure and adopt the protocol of criminal investigation under provision of law and correlating with all concerned intermediary agencies like FSL, NHRC and others for concluding the cause and manner of unnatural deaths.

Keywords: Death, Unidentified, Mortuary, Pattern.

Introduction

The principle of identification is an age old process, as seen in the work of our philosophers of the ancient times (principium identitatis). Unidentified and unclaimed dead body means body of deceased persons, if such person has no relatives, or if it is not claimed by any of his relatives or friends or servants within 48 hours of

his death. As and when a dead body recovered by the police is unidentified and unclaimed, the police officer making enquiry under section 174(14) shall arrange to give the fact of discovery the widest possible publicity with a view to its identification as also to the tracing out of the deceased relations, friends, or acquaintances to whom it can be made over for disposal. There is

need for further clarification belonging to religions – Muslim, Christians etc. for its disposal. Usually, unclaimed dead bodies are sent for medico-legal autopsy^[1]. Post mortem examination acts as one of the investigative tool that helps the officials concerned in Positive identification of the deceased, determination of time since death, cause of death, manner of death, time between injury and death and to find out and recover any clue(s) from the body if, that can possibly help^[2]. The unknown body brought for autopsy is preserved in the mortuary for 72 hours from the time, it comes to mortuary. If there is no claim for the body, after 72 hours the police officials are legally authorized to dispose of the body^[3,4]. Globally, World Population Data (WPD) sheet, indicates a global population clock of crude mortality due to Unknown/ unidentified cases in developing countries is 44 million per year^[5]. The aim of study is to find the pattern of deaths in relation to the age, sex, pattern of injuries and other parameter of the unknown victims and to ascertain the root cause of all types of deaths.

Material and Method

This prospective study was conducted in the Department of Forensic Medicine and Toxicology, Patna Medical College, Patna, Bihar, India between 1st January 2016 to 31st December 2018. All the medico legal autopsies of unknown/unidentified bodies during this period were included in the study. Information regarding unclaimed bodies with regard to age, sex, cause and manner of death was sourced from the autopsy reports and the inquest papers of the investigating officers. The age of the deceased and pattern of injury was ascertained with the available data from the investigating officer and was corroborated with anatomical features on the dead body.

Results

A total of 114 unknown/ unidentified cases were brought for medico-legal autopsy into the department during the study period. Table 1

shows that out of 114 medicolegal autopsies done, 89(78.07%) were of male. Table 2 shows that majority (24.5%) of unknown cases belong to 21- 30 years age group followed by cases of 41-50 years age group (23.68%). Least number of cases was of the age group 0-20 years age group (1.74%). Table 3 shows that 71(62.28%) cases died unnaturally while 43 (37.72%) of the cases died naturally. Table 4 shows that, among 71 unnatural deaths, railway accident injuries was the most common (26.76%) cause of death. Head injuries accounted for 18 (25.35%) cases. Gunshot, Stab and Burn injuries accounted for 01 (1.40%) case each. Among 43 natural deaths, chest diseases were responsible in 21 (48.84%) cases whereas in rest of 22 (51.16%) cases, chest and abdominal diseases combined were responsible.

Table 1: Sex wise distribution in Unknown Cases

Gender	Number of cases	Percentage
Male	89	78.07 %
Female	25	21.93 %

Table 2: Age wise distribution in Unknown Cases

Age (Years)	Number of cases	Percentage
0 -10	01	0.87%
11 -20	01	0.87%
21 -30	28	24.5%
31 -40	15	13.15%
41 -50	27	23.68%
51 -60	19	16.66%
61 -70	17	14.91%
71 -80	6	5.26%

Table 3: Cause of death in Unknown Cases

Cause of Death	Number of cases	Percentage
Unnatural	71	62.28%
Natural	43	37.72%

Table 4: Pattern/ Cause of unnatural death in Unknown Cases

Sr. No.	Cause of Death	Number of Cases	Percentage
1	Strangulation	3	4.22 %
2	Decapitation Cut throat Neck Injuries	3	4.22%
3	Gun Shot injuries	1	1.4%
4	Stab injuries	1	1.4%
5	Railway accident injuries	19	26.76%
6	Polytrauma	7	9.85%

7	Head-injuries	18	25.35%
8	Head and Limb injuries	5	7.11%
9	Head and Chest injuries	3	4.22%
10	Abdominal injury	4	5.63%
11	Chest injuries	2	2.81%
12	Opinion reserved cases	4	5.63%
13	Burn injuries	1	1.4%

Table 5: Pattern/ Cause of natural death in Unknown Cases

Sr. No.	Cause of Death	Number of Cases	Percentage
1	Chest diseases	21	48.84%
2	Chest and abdominal diseases	22	51.16%

Discussion

Unidentified cases brought for postmortem examination consist of small but a very important group of cases in every autopsy surgeon's career. Most of the work done in the past were on the individual body identification or identification of victims of mass disasters^[6,7,8]. Male predominance accounted for 78.07% of total cases which is lower in comparison to a study done in Chandigarh^[9] and similar to a study done in Kolkata^[10]. The age group 21-40 years was responsible for 37.65% of total cases which is similar to other studies done in the past^[9,10]. Most of the cases among unnatural death group were due to rail accidents probably because of majority of population of our region belong from the low socioeconomic strata. Chest and abdominal diseases combined were responsible for majority of natural deaths which is in accordance with other studies done in the past^[3,8]. The findings of our study reveal that accident is an important cause of mortality in the study area. Males are the most affected population; the common age group affected is 21–30 years.

Conclusion

The government should take initiative at large to prevent unnatural deaths and law enforcement agencies to step up investigations and collection

of evidence to avoid delay of justice. It is high time that law enforcement agencies should ensure and adopt the protocol of criminal investigation under provision of law and correlating with all concerned intermediary agencies like FSL, NHRC and others for concluding the cause and manner of unnatural deaths. More studies are recommended in the future to find the actual cause of accidents and prevalence of homelessness and its health-related effects on morbidity and mortality, which will help in providing health care facilities to the needy.

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