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Original Research Article

Autopsy Profile of Unidentified Bodies: A Two Year Retrospective Study

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Abstract

Identification means determination of individuality of a person. Determination of identity of an individual is important for civil and criminal matters. The aim of present study is to obtain a profile of unidentified dead bodies with reference to their age, sex, percentage of bodies that remain unidentified, cause and manner of death and to identify the place from where maximum numbers of dead bodies are brought. A total 1390 autopsies were conducted and amongst them 125 cases (10.93%) were found unidentified. Amongst 125 cases in 31 (24.8%) cases identity was established. Maximum deaths were due to natural disease (61.6%) followed by accidental deaths (20%). There is urgent need to form a separate portal for unidentified death registration at National level and the site should be easily visible, available and user friendly.

1. Introduction

Identification means determination of individuality of a person. Determination of identity of an individual is important for civil and criminal matters. Therefore it is carried out in the living and the dead. In India, determination of identity of a dead individual is primarily done by the Investigating Officer and the role of autopsy surgeon is complimentary. Identity of deceased is achieved through conventional means and scientific methods (1-3). In most of the cases identification is done through conventional means like showing photographs or clothes or ornaments or presence of tattoo or some deformity. In fresh dead bodies the conventional means of identification works and near relatives are able to identify the deceased.

This method is easy and economical. However, problem arises in decomposed or skeletonised bodies and here scientific means are used. The aim of present study is to obtain a profile of unidentified dead bodies with reference to their age, sex, percentage of bodies that remain unidentified, cause and manner of death and to identify the place from where maximum numbers of dead bodies are brought.

2. Material and methods

This is a postmortem examination based retrospective study conducted at Department of Forensic Medicine, Government Medical College and Hospital, Miraj. We examined all available files of inquest papers, autopsy reports, histopathology reports and toxicological analysis reports into the death of people through 1 January 2017 to 31 December 2018.

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A standard proforma was designed to collect the information to ensure consistency for the whole sample. All bodies that were brought as unidentified were included however; skeletonised bodies were excluded from the study.

3. Results

A total 1390 autopsies were conducted and amongst them 125 cases (10.93%) were found unidentified. The demographic data is presented in table no. 1. Table no. 2 shows age-wise distribution of cases.

Table 1: Showing sex-wise distribution of cases

Year	Male (%)	Female (%)	Total
2017	55 (93.22)	04 (6.77%)	59
2018	60 (90.90)	06 (9.09)	66
Total	115 (92%)	10 (8%)	125

Table 2: Age-wise distribution of cases

Age group	Number of cases	Percentage
11-20 years	02	1.6
21-30 years	08	6.4
31-40 years	26	20.8
41-50 years	38	30.4
51-60 years	31	24.8
61-70 years	19	15.2
71-80 years	01	0.8

Table 3: Month-wise distribution of cases

Month	Number of cases	Percentage
January	07	5.6
February	06	4.8
March	11	8.8
April	13	10.4
May	09	7.2
June	12	9.6
July	16	12.8
August	06	4.8
September	10	8
October	15	12
November	09	7.2
December	11	8.8

Maximum numbers of cases were from age group 41-50 and 51-60 (52.2%). Table no. 3 shows month-wise distribution of cases. Maximum deaths were noted in rainy season (35.2%) followed by winter season (33.6%). Table no. 4 shows cause of death.

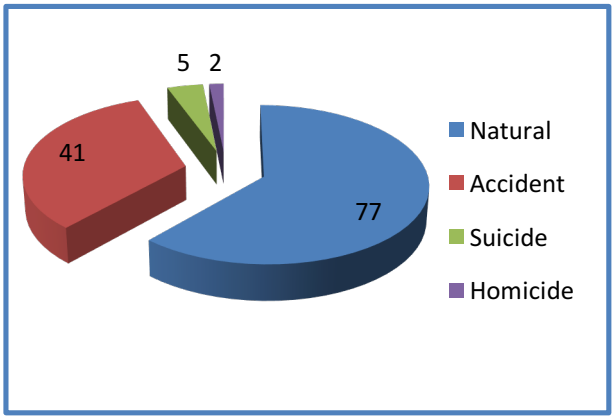
Table 4: Cause of death-wise distribution of cases

Cause of death	Number of cases	%
Natural disease	77	61.6
Poly trauma/ crush injury/injury to chest and /or abdomen/ decapitation	25	20
Head injury	11	8.8
Drowning	05	4
Electrocution	01	0.8
Stab wound over abdomen	01	0.8
Hanging	05	4

Table 5: Showing distribution of identified and unidentified cases

Cases	Male	Female
Identified cases	30	01
Unidentified cases	85	09

Fig 1: Showing manner of death



Maximum deaths were due to natural disease (61.6%) followed by accidental deaths (20%). (Figure 1) shows manner of death. Amongst accidental death, 33 deaths (80.48%) were because of railway and road accidents. In 113 cases (90.4%) clothes were handed over to the investigating officer for subsequent identification. In all cases on request of investigating officer, bones were preserved for DNA profiling. In all cases Police had taken photographs of deceased. In 24 cases (19.2%) tattoos were noted and amongst them 22 were male and 02 were females. Maximum number of cases [n = 54 (43.2%)] were brought from railway station, railway line and bus stands. 12 cases (9.6%) cases were hospitalized and admitted by 108 ambulances. Table no. 5 shows status of unidentified individuals. Amongst 125 cases in 31 (24.8%) cases identity was established. In 03 (2.4%) cases identity was

established on the same day while in 28 cases (22.4%) identity was established in subsequent days. The minimum duration to establish identity was 1 day and maximum duration was 273 days with mean duration of 33.42 days. In all these cases identity was established with conventional means.

4. **Discussion**

Miraj is a small but prosperous town and located in Southern part of Maharashtra. It has major railway junction and hub of hospitals. River Krishna flows throughout the year and therefore has flourishing agriculture, trade, business and industry. People from adjacent districts and Part of Northern Karnataka migrate in search for food, work and livelihood. Many of them may get some sort of shelter but few won't and resides at railway station or bus stand or footpaths. Total 125 unidentified bodies were brought in year 2017 and 2018 at mortuary of Government Medical College Miraj for postmortem examination and subsequent preservation in cold storage. This unidentified group consist of 10.93% of total autopsy workload. This finding is consistent with study conducted at Villupuram, Tamilnadu.[4] However, studies conducted at New Delhi (16%) and Kolkata (24.5%) showed more number of unidentified deaths.[3,5] Since both cities are metropolitan cities and therefore the residing population is more. Significantly a study conducted at Chandigarh showed only 3% of unidentified deaths[1] and study conducted at Ahmedabad showed 7.43% unidentified deaths.[6]

In the present study, gender-wise analysis reveals male (92%) outnumbered females (8%) and the findings are consistent with other studies. [1, 3-5]

Natural deaths account for 61.6% of total unidentified deaths in the present study. The findings are consistent with Chattopadhyay et al and Yadav et al.[3,5] The study conducted at Ahmedabad had 20.19% coronary artery disease as cause of death.[6] However, Kumar et al and Gitanjali had noted 47.1% and 26.93% death due to trauma respectively.[1,4] The trauma is attributed to road or railway accidents. In the present study amongst accidental death, 33 deaths (80.48%) were because of railway and road accidents. This is of great concern. Majority of railway deaths are because of fall from running train or walking along the rail road or not maintaining discipline at railway crossings.

As far as age is considered, in the present study, age group of 41 years to 60 were the most affected one and accounted for 52.2% of total unidentified deaths. The study conducted at New Delhi (31 to 50 years), Chandigarh (21 to 50 years), Kolkata (31 to 45 years), Villupuram, Tamilnadu (51 to 70 years) and Ahmedabad (31.73%) showed somewhat similar findings.[1,3-6] In the present study, maximum number of deaths were observed during rainy season (35.2%) followed by winter season (33.6%). The study conducted at Chandigarh exhibited more deaths during winter season.[1] In Northern part of India, the temperature during winter may fall considerably and probably may be the reason for more deaths.

About 54 (43.2%) cases were brought from railway station, along railway line and bus stands. Along with this the street footpath is also major abode of homeless people. The lack of proper shelter, food and medical care leads to poor living condition and usually they became the victims of various infections and other diseases causing death.[3]

5. Conclusion

Unidentified death poses challenge to Investigating Officer as well as the autopsy surgeon. Nowadays the Investigating Officer is requesting to preserve piece of bone for DNA profiling. But unless near relatives are available, there is no use of DNA profiling. It is desirable the Investigating Officer should take appropriate colour photos of deceased and apparels and upload on their district website with description of the deceased.

Now many district Police headquarters are having their website and a portal is provided to register such unidentified death. But most of the websites are restricted to district headquarters and the page is difficult to open. Sometime the page opens but photograph or description is missing. Therefore there is urgent need to form a separate portal for unidentified death registration at National level and the site should be easily visible, available and user friendly. After formation of such portal adequate advertisement should be made and people should be made aware of such initiative. This will reduce the time required to establish the

identity of deceased after postmortem examination and help the relatives to approach appropriate Police Station to obtain the dead body.

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