

## Unknown and Unclaimed Descendents: A Silent Mass Disaster

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### Abstract

Autopsy of an unknown descendent is always a challenging task for the forensic experts, unfortunately which often brings no significant results. The reasons may be reluctant investigating authority, lack of proper history, decomposed, skeletonized or mutilated body etc. Unfortunately, much desired interest is not shown by investigating authority as well as forensic experts, unless and until there is suspicion of foul play or any obvious prima facie evidence suggestive of homicidal manner of death. As a result most of the time actual cause and manner of death remains a mystery. Here we have studied 104 cases of such unknown and unclaimed descendents with respect to their incidence, identification and cause of death. Incidence of unknown cases was found to be 4.17% of total cases. 19% of the total cases was identified successfully by means of different parameters of identification. 58% deceased died due to unnatural cause. Cause of death in most of the cases was found to be multiple injuries (27%), followed by head injury (14%), whereas pulmonary TB was the leading culprit among natural deaths.

**Keywords:** Unknown; Identification; Medico Legal Autopsy; Death; Cause of Death.

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### Introduction

Identification denotes establishment of individuality of a person living or dead. It implies "fixation of personality of the individual from absolute view point by noting the place exactly occupied by him or her in the community". It may be complete or partial when certain facts as to identity of an individual have been determined while others required for complete identification have been left out un-explored and unknown[1]. Unidentified bodies are people who die and have no identification on them & it's either unknown or uncertain as to who they are [2]. The number is increasing with time

due to increase in population and urbanization. Unclaimed body - Body of person who dies in hospital, prison or public place or a place to which members of public have got access and which has not been claimed by any person [3]. Autopsy of an unknown descendent is always a challenging task for the forensic experts, unfortunately which often brings no significant results. The reasons may be reluctant investigating authority, lack of proper history, decomposed, skeletonized or mutilated body etc. Most of the previous studies on this topic were carried out by foreign authors and they were directed to individual body identification or identification of victims of mass disasters. The prime objective of this study was to assess the status of unknown descendents in our region and problems associated with them, which has never been discussed before.

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### Material and Methods

This was a cross-sectional study carried out for the period of 1 year. All unknown cases brought to the mortuary at our institute for post mortem examination during study period were included. All known cases and unknown cases donated to dept of

Anatomy for academic purpose were excluded from the present study. Specially prepared proforma has been filled by information obtained from the police inquest, post mortem examination and interview of investigating officer. Parameters with respect to identification of deceased were noted like clothes, moles, scars, tattoo, malformations, occupational marks, implants, belongings, photographs, fingerprints etc. Follow up has been taken for the period of three months in each & every case as to the identity of deceased with the help of investigating officer.

## Results

The incidence of unknown cases is shown in Table 1 which ranged from 4 - 5% of total cases for the last 4 years. Before starting this study, yearly load of such unknown cases for the last three years was calculated by using the data available at the department of forensic medicine at our institute. During the study period of one year 104 (i.e. 4.17%) cases of unknown descendents have been encountered out of 2490 cases

of total autopsy load at our institute and we got the constant graph for the last 4 years.

Table 2 comprises different identifying features from which identity of the deceased was established. Identifying features like clothes, belongings, tattoo marks, scars, moles, photographs etc were noted in 78 cases, whereas in 22 cases no any specific identifying feature was appreciated due to limiting factors like decomposition, skeletonisation etc. It shows that out of 19 (18.26%) identified deceased, in most of the cases identification was made by means of clothes & visual features.

Cause of death is shown in Table 3. It reveals that 52 (50%) deaths were unnatural and 26 (i.e. 25%) deaths were natural. Among unnatural deaths multiple injuries and head injury was the leading causes. Among natural deaths, tuberculosis was the leading culprit in 12 (11.54%) cases. In 14 (13.46%) cases opinion as to the cause of death was kept 'Reserved' due to non availability of reports of viscera and histopath etc, whereas in 8 cases despite of through investigation cause of death remained obscured.

**Table 1:** Year wise Incidence of Unknown Cases

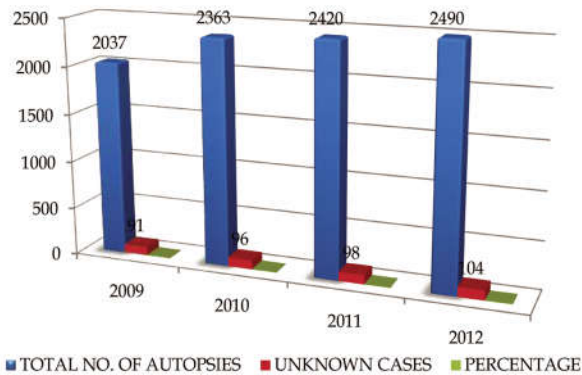
Sr. No.	Yr	Total Autopsies	Unknown cases	%
1	2009	2037	91	4.46%
2	2010	2363	96	4.06%
3	2011	2420	98	4.04%
4	2012	2490	104	4.17%

**Table 2:** Parameters of Identification and Cases Identified

Sr. No.	Identifying features	No. of cases	%
1	Visual features	3	15.79%
2	Clothes & belongings	6	31.58%
3	Tattoo	2	10.53%
4	Implant device	1	5.26%
5	Combined	7	36.84%
	<b>Total</b>	<b>19</b>	

**Table 3:** Cause of death

Sr. No.	Cause of Death	No. of cases	Percentage %
1	Multiple injuries	27	25.96
2	Head Injury	14	13.46
3	Pulmonary Tuberculosis	12	11.54
4	Violent asphyxial deaths	09	8.65
5	Coronary Artery Insufficiency	06	5.77
6	Septicemia	06	5.77
7	Non viable foetus	04	3.85
8	Shock due to burns	01	0.96
9	Poisoning	01	0.96
10	Hepatic encephalopathy	01	0.96
11	Cerebral malaria	01	0.96
12	Opinion Reserved	14	13.46
13	Undetermined	08	7.69
	<b>TOTAL</b>	<b>104</b>	



**Graph 1:** Incidence of Unknown Cases



**Image 1:** Unknown descendent died due to Tuberculosis



**Image 2:** Tattoo mark revealing the identity of a person



**Image 3:** Putrefied body identified due to implant device

## Discussion

Many a times, in case of people like beggars, destitute etc involved in fatal accidents leads to the extensive damage to the body and makes them unidentifiable. Sometimes, factors like inadequate history, decomposition etc poses difficulty in identification. Unfortunately, much desired interest is not shown by investigating authority as well as forensic experts, unless there is suspicion of foul play or any obvious prima facie evidence suggestive of homicidal manner of death. As a result most of the times, actual cause and manner of death remains a mystery. More studies have also shown that such groups of people are more vulnerable to many preventable causes of deaths, which are usually overlooked by public health authorities.

There are many legal as well as social problems that may arise from the unidentified bodies. Deliberate refusal by the relatives of the dead due to socioeconomic conditions like poverty, drug addiction, Psychological disorders, bad character etc, accidental exchange of unknown dead bodies are the usual problems faced by relatives, investigating authorities as well as autopsy surgeons [4]. As far as the global scenario is concerned many people had observed that trend of such cases is increasing over the time. Therefore, it is high time for to make an extensive research into this matter of subject and set a standard protocol in order to solve the problems associated with unknown descendents.

In this study the incidence of unknown descendents was found to be 4.17% of the total autopsy load. More studies have observed somewhat similar incidence as that of present study [5,6,7]. Whereas Riepert T et al had observed ascending graph of unknown cases over a period of 10 years i.e.5% - 10% of total autopsies. He hypothesized that the increase in the number of unknown corpses since 1985 from 5% to nearly 10% of the total number of autopsies may be caused by increasing mobility and anonymity of the population[8].

In present study only 18.26% of unknown individuals were identified which closely correlates with one of the Indian studies conducted in Kolkata where the rate of identification was found to be 17.8% [9]. Whereas in studies that are carried out abroad, authors had been able to identify much higher percentage of descendents (>50%), which might be due to easy availability of advanced techniques of identification as well as ante mortem records like fingerprinting, DNA analysis, dental records, etc at their centres[5,6]. To be mentioned specifically, out

of the 19 cases that were identified, medical implant device in thigh have revealed identity in a case, which was found in advanced putrefied state. Similar case was reported by Zanjad et al [10]

More studies have shown that most of the deaths of unknown descendents were unnatural [8, 11]. In study of 1577 cases author came across with 60 unidentified cases in which it was observed that most of the deaths were attributed to (30%) cranio-cerebral damage, similarly in our study almost 50% deaths were unnatural, attributed to multiple injuries(27%) & head injury (14%)[7].

Kumar A et al in a study of 735 cases of homeless, unclaimed persons in South Delhi found that most of the victims (n = 451, 61.36%) died from natural causes [12]. Saurabh Chattopadhyay et al also reported that out of total of 614 unidentified, half (48.3%) of the cases were natural deaths due to some diseases, pathological conditions or old age [9]. We found that most of the natural deaths were due to infections, among which tuberculosis (TB) was most common (i.e. 50% of all natural deaths). This could be due to the factors like homelessness, malnutrition and old age, which make these people more vulnerable to such natural diseases due to low immunity. It also reflects the high prevalence of tuberculosis in Indian community. Unfortunately TB is still considered as a social stigma among the rural population of India and it was noticed that many times these patients are exiled from the community & eventually no one is there to claim such descendents. Similarly HIV has also become a social stigma of the recent time, unfortunately which was not worked out in this study.

### Conclusion

To get maximum output from such cases, people working as investigating authority should be properly trained and strengthened. Also we can recommend that nationwide projects of preservation of ante mortem records of DNA sample, Fingerprints, Dental records should be run by the government authorities e.g. DNA banking; which may help us in future, for identification purpose in case of emergencies like disasters. Moreover, disposal of such descendents should be carried out in a dignified way. Lastly, this is the high time for to establish the standard protocol for autopsy of unknown descendents so that they will get the justice in real sense..

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### References

1. Karmakar RN editor JB Mukherjee's forensic medicine and toxicology. 4th. edition. Kolkata. academic publishers 2011.
2. Travis County Medical Examiner Office 2009 Annual Report [http://www.co.travis.tx.us/medical\\_examiner/pdfs/annual\\_report2009.pdf](http://www.co.travis.tx.us/medical_examiner/pdfs/annual_report2009.pdf) pg 34.
3. The Karnataka Anatomy Act, 1957. <http://www.lawsofindia.org/statelaw/2318/TheKarnatakaAnatomyAct1957.html> pg3.
4. Ajay Kumar, Dasari Harish, Amandeep singh, Kulbhushan, GA Sunil Kumar. Unknown Dead Bodies: Problems and Solutions. J Indian Acad Forensic Med. 2014 Jan-Mar; 36(1):77-81.
5. Hanzlick R, Smith GP. Identification of the unidentified deceased: turnaround times, methods, and demographics in Fulton County, Georgia. Am J Forensic Med Pathol. 2006 Mar; 27(1):79-84.
6. C. Cattaneo, D. Porta, D. De Angelis, D. Gibelli, P. Poppa, M. Grandi. Unidentified bodies and human remains: An Italian glimpse through a European problem. Forensic Science International. 2010;. 195:167.e1-167.e6.
7. Ajay Kumar, Dasari Harish, K.H. Chavali, Amandeep Singh. Patterns of Cause of Death in Unknown Dead Bodies A Three Year Study in a Tertiary Care Hospital. J Indian Acad Forensic Med. 2012 Oct-Dec; 34(4):304-08.
8. Riepert T, Neumann C, Schweden F, Urban R. Identification of unknown cadavers in forensic medicine practice. Arch. Kriminol. 1996 Jul-Aug; 198(1-2): 23-30.
9. Chattopadhyay S, Biplab Shee Biswajit Sukul. Unidentified bodies in autopsy-A disaster in disguise. Egyptian Journal of Forensic Sciences. 2013 Dec; 3(4): 112-15.
10. N. P. Zanjad, H. V. Godbole, X- Ray examination - A good tool for identification in decomposed body. JIAFM. 2007; 29(4):92-93
11. Ishorst-Witte F, Heinemann A, Puschel K. Morbidity and cause of death in homeless persons. Arch Kriminol. 2001; 208(5-6):129-38.
12. Kumar A, Lalwani S, Behera C, Rautji R, Dogra TD. Deaths of homeless unclaimed persons in south Delhi (2001-2005): a retrospective review. Med Sci Law. 2009; 49(1):46-50.