Original Research Article

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20171312

Dealing with unclaimed dead bodies- embrace the challenge

Arora Pankaj, Bhogal Ranjitpal Singh*

Department of Hospital Administration, PGIMER, Chandigarh, India

Received: 16 January 2017 Accepted: 16 February 2017

*Correspondence:

Dr. Bhogal Ranjitpal Singh,

E-mail: majorbhogal1984@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Worldwide a significant number of unclaimed dead bodies report to hospital and health authorities find it difficult to clear them from morgues. The epidemiology of these unclaimed dead bodies and various methods to identify them has been studied by various forensic experts but no study has considered pitfalls in dignified disposal of the dead bodies.

Methods: As a part of routine set up of mortuary, a designated person among the staff of mortuary has been assigned the task of keeping the record of unidentified dead bodies and facilitating their disposal with the help of local police and police under whose jurisdiction the case falls. The same data has been collected retrospectively between the period from 1st April 2014 to 31st March 2015.

Results: In this study our designated person, in coordination with local police, was able to expedite the process of disposing these dead bodies on an average in 9.7 days; in accordance with the law and as per the customary rituals, where ever possible. This reflects an extraordinary work beyond the routine tasks given to this indispensable and highly motivated worker.

Conclusions: However, this points to a possible need for development of a mechanism, where it is not dependent on individual efforts.

Keywords: Unclaimed dead bodies, Mortuary, The anatomy act, Disposal

INTRODUCTION

Hospitals are source of joy as well as sorrow. The birth of new born brings happiness to the family, but, death is a stark reality and a visit to mortuary reinforces this fact. In a tertiary care hospital with accident and emergency department, the number of deaths would be higher for obvious reasons, with a significant number of them unidentified at the time of death. Worldwide, on an average 4-10% of the total dead bodies reported to mortuary are unidentified and this proportion rises to 25% in country like India. Whatever is the proportion, hospital authorities due to many socio- legal issues, find it difficult to dispose unclaimed dead bodies from morgues. 3,4 Globally there are endeavours to create online database for the identification of these unclaimed dead

bodies.^{5–7} In some developed countries, unclaimed bodies are turned over to the State Anatomy Board after 72 hours if no claimant can be located through a "reasonable search".8 But in hospitals especially in developing countries like ours, the disposal of these unidentified dead bodies present a bigger legal and social challenge to the hospitals mainly because of absence of clear guidelines except act in Punjab Anatomy Act 1963" and other similar Acts. Most of the work on unidentified dead bodies explained epidemiology or on the different methods adopted to identify them individually or in groups at the time of disaster. 1,2,10-15 However, it did not highlight on developing procedures to improve turnover of unidentified dead bodies from hospital morgues. Therefore, the objective of the present study was to examine the profile of the unidentified dead bodies and importantly the modalities we have adopted for their disposal in our tertiary care teaching institute so as to bring to focus difficulties associated with preservation and disposal of unclaimed dead bodies.

METHODS

The study was a prospective record based study carried out in the mortuary of a 2000 bedded tertiary care hospital of north India for a period of one year from 1st April 2014 to 31st March 2015. The hospital caters to patients predominantly from northern states of India and admits more than 70000 patients annually with a gross death rate of 12-15/day. All the dead bodies that were not claimed by any near relative were included in the study for duration of one year to see the impact of our intervention. As a part of routine set up of mortuary, a

designated person among the staff of mortuary has been assigned the task of keeping the record of unidentified dead bodies and facilitating their disposal with the help of local police and police under whose jurisdiction the case falls.

RESULTS

There were 144 unclaimed bodies that were recorded during the study period. There was heavy preponderance of males with a male to female ratio of 23:1. There were 138 (96%) males and 6 (4%) females. Most of the victims (92; 69%) were in the age group of 21 and 50 years (approx.), followed by 51-60 years (18%) as given in Table 1. Out of the total reported unclaimed dead bodies 73 (51%) were disposed of by police of different states.

Table 1: Demographic distribution of unclaimed bodies.

June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	Variable	Number	Percentage
Males 138 96% Age Group in Years (Approx.) 11-20 10 6.94% 21-30 28 19.44% 31-40 36 25.00% 41-50 35 24.31% 51-60 26 18.06% 61-70 6 4.17% 71-80 3 2.08% Mode of Disposal Cremated by designated person of the institute 42 29% Donated to medical college 29 20% Himachal Pradesh Police 18 13% Haryana Police 22 15% Punjab police 12 8% Chandigarh Police 12 8% Raiway Police 1 1% More Distribution May 1 12% May 17 12% July 17 12% July 17 12% August 10 7% September 19 13% <td>Gender</td> <td></td> <td></td>	Gender		
Name	Females	6	4%
11-20 10 6.94% 21-30 28 19.44% 31-40 36 25.00% 41-50 35 24.31% 51-60 26 18.06% 61-70 6 4.17% 71-80 3 2.08% Mode of Disposal Cremated by designated person of the institute 42 29% Donated to medical college 29 20% Himachal Pradesh Police 18 13% Haryana Police 22 15% Punjab police 12 8% Chandigarh Police 1 1% Railway Police 1 1% Month Wise Distribution 1 1% May 17 12% May 17 12% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	Males	138	96%
21-30 28 19.44% 31-40 36 25.00% 41-50 35 24.31% 51-60 26 18.06% 61-70 6 4.17% 71-80 3 2.08% Mode of Disposal Cremated by designated person of the institute 42 29% Donated to medical college 29 20% Himachal Pradesh Police 18 13% Haryana Police 22 15% Punjab police 12 8% Chandigarh Police 20 14% Railway Police 1 1% Month Wise Distribution 1 1% Apr 12 8% May 17 12% June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11	Age Group in Years (Approx.)		
31-40 36 25.00% 41-50 35 24.31% 51-60 26 18.06% 61-70 6 4.17% 71-80 3 2.08% Mode of Disposal Cremated by designated person of the institute 42 29% Donated to medical college 29 20% Himachal Pradesh Police 18 13% Haryana Police 22 15% Punjab police 12 8% Chandigarh Police 20 14% Railway Police 1 1% May 17 12% May 17 12% June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	11-20	10	6.94%
41-50 35 24.31% 51-60 26 18.06% 61-70 6 4.17% 71-80 3 2.08% Mode of Disposal Cremated by designated person of the institute 42 29% Donated to medical college 29 20% Himachal Pradesh Police 18 13% Haryana Police 22 15% Punjab police 12 8% Chandigarh Police 20 14% Railway Police 1 1% Month Wise Distribution Apr 12 8% May 17 12% June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	21-30	28	19.44%
51-60 26 18.06% 61-70 6 4.17% 71-80 3 2.08% Mode of Disposal Cremated by designated person of the institute 42 29% Donated to medical college 29 20% Himachal Pradesh Police 18 13% Haryana Police 22 15% Punjab police 12 8% Chandigarh Police 20 14% Railway Police 1 1% Month Wise Distribution Apr 12 8% May 17 12% June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	31-40	36	25.00%
61-70 6 4.17% 71-80 3 2.08% Mode of Disposal Cremated by designated person of the institute 42 29% Donated to medical college 29 20% Himachal Pradesh Police 18 13% Haryana Police 22 15% Punjab police 12 8% Chandigarh Police 20 14% Railway Police 1 1% Apr 12 8% May 17 12% June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	41-50	35	24.31%
71-80 3 2.08% Mode of Disposal Cremated by designated person of the institute 42 29% Donated to medical college 29 20% Himachal Pradesh Police 18 13% Haryana Police 22 15% Punjab police 12 8% Chandigarh Police 20 14% Railway Police 1 1% Month Wise Distribution Apr 12 8% May 17 12% June 10 7% July 17 12% August 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	51-60	26	18.06%
Mode of Disposal Cremated by designated person of the institute 42 29% Donated to medical college 29 20% Himachal Pradesh Police 18 13% Haryana Police 22 15% Punjab police 12 8% Chandigarh Police 20 14% Railway Police 1 1% Month Wise Distribution Apr 12 8% May 17 12% June 10 7% July 17 12% August 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	61-70	6	4.17%
Cremated by designated person of the institute 42 29% Donated to medical college 29 20% Himachal Pradesh Police 18 13% Haryana Police 22 15% Punjab police 12 8% Chandigarh Police 20 14% Railway Police 1 1% Month Wise Distribution 1 1% Apr 12 8% May 17 12% June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	71-80	3	2.08%
Donated to medical college 29 20% Himachal Pradesh Police 18 13% Haryana Police 22 15% Punjab police 12 8% Chandigarh Police 20 14% Railway Police 1 1% Month Wise Distribution Apr 12 8% May 17 12% June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	Mode of Disposal		
Himachal Pradesh Police 18 13% Haryana Police 22 15% Punjab police 12 8% Chandigarh Police 20 14% Railway Police 1 1% Month Wise Distribution Apr 12 8% May 17 12% June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	Cremated by designated person of the institute	42	29%
Haryana Police 22 15% Punjab police 12 8% Chandigarh Police 20 14% Railway Police 1 1% Month Wise Distribution Apr 12 8% May 17 12% June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	Donated to medical college	29	20%
Punjab police 12 8% Chandigarh Police 20 14% Railway Police 1 1% Month Wise Distribution Apr 12 8% May 17 12% June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	Himachal Pradesh Police	18	13%
Chandigarh Police 20 14% Railway Police 1 1% Month Wise Distribution Apr 12 8% May 17 12% June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	Haryana Police	22	15%
Railway Police 1 / 1% Month Wise Distribution Apr 12 8% May 17 12% June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	Punjab police	12	8%
Month Wise Distribution Apr 12 8% May 17 12% June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	Chandigarh Police	20	14%
Apr 12 8% May 17 12% June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	Railway Police	1	1%
May 17 12% June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	Month Wise Distribution		
June 10 7% July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	Apr	12	8%
July 17 12% August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	May	17	12%
August 10 7% September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	June	10	7%
September 19 13% October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	July	17	12%
October 5 3% November 1 1% December 21 15% January 11 8% February 9 6%	August	10	7%
November 1 1% December 21 15% January 11 8% February 9 6%	September	19	13%
December 21 15% January 11 8% February 9 6%	October	5	3%
January 11 8% February 9 6%	November	1	1%
February 9 6%	December	21	15%
→	January		8%
March 12 8%	February	9	6%
	March	12	8%

Twenty nine (20%) unclaimed bodies were donated to nearby public sector teaching institutes for academic

purposes under the Punjab Anatomy Act, 1963. The results also show that 42 (29%) of such bodies were

disposed of by the designated official of the hospital in liaison with Non-Governmental Organizations.

DISCUSSION

Unclaimed dead bodies include albeit trivial yet, vital group in hospital mortuary as their dignified discharge from hospital mortuaries poses social, legal and administrative challenges. The Punjab Anatomy Act, 1963 and other existing rules that guide donation of dead bodies to medical colleges for medical dissection and research are not clear and increase confusion and apprehension. 9 In present study we found that by posting a designated person and clearly defining responsibility these unidentified dead bodies may be disposed with dignity with minimum delay. This person in coordination with NGOs and police was able to dispose of dead bodies as per the customary rituals of their faith, where ever possible. This reflects an extraordinary work beyond the routine tasks given to this indispensable and highly motivated worker. However, this also points to a need for a mechanism to be developed where disposal of these dead bodies is not dependent on individual efforts. Our study has shown that most of unidentified dead bodies were of males, in their economically viable age group, these findings mirror the finding of Kumar. 16 This might again be due to the fact that ours is a 'patriarchal' society where male counterpart from different parts of country migrates interstate for earning their livelihood.⁴ The data on migration by last residence in India as per census 2001

shows that the total number of migrants has been 314 million, out of which 41 million (13%) were interstate migrants.¹⁷

In our study the average time taken to dispose these unclaimed bead bodies was 9.6 days which is less than average time of 10-15 days taken according to another study conducted by Kumar in our country. 16 However Figure 1, depicting average time taken to dispose off unclaimed dead bodies per month shows two peaks which indicates longer time to dispose dead bodies in these two months. The possible explanation behind the delay might be multifaceted efforts required by police, as required by law, either to identify the dead body or in case of identification a rightful claimant to claim the same. These factors include communicating with their counterparts of the jurisdiction to where the deceased belonged, waiting time of 72 hours, hue and cry notice with publication of photographs, requisition from heads of the medical colleges for donation of these dead bodies for academic purposes etc. These efforts are imperative to increase the identification rate, but they consume lot of time and has also been noted in other studies conducted by Chattopadhyay and others. 4,16 These all efforts at identifying the dead bodies or relatives are done by the police to avoid any future allegations by the relatives at later date.

The algorithm depicted in Figure 2 describes the approach we have devised to dispose these unclaimed dead bodies with dignity.

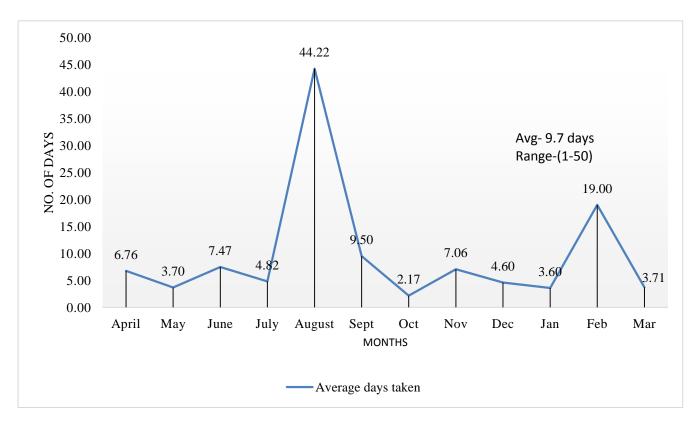


Figure 1: Month wise average days taken to dispose off the dead bodies.

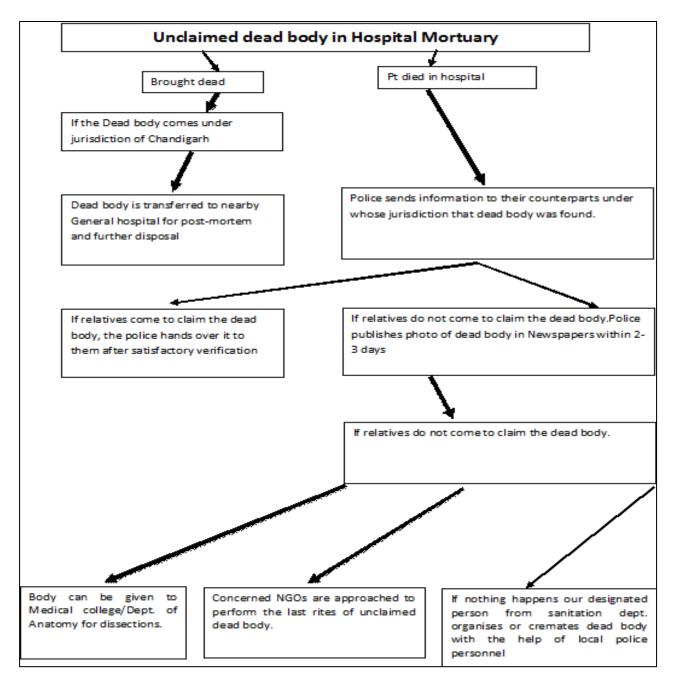


Figure 2: Algorithm describing the approach to dispose these unclaimed dead bodies.

Most notably, it is the first type of case report and algorithm to our knowledge where a collaborative effort by all stake holders, with our designated person acting as a fulcrum, successfully disposed these unidentified /unclaimed dead bodies in a decent and dignified manner barring an odd exception. But this leads to wider issue of disposal of unclaimed dead bodies. Due to lack of uniform protocols, certain efforts would be undertaken by different hospitals with varying success. It may be worthwhile to have a relook at relevant act and related rules so as to make it easier for such bodies to be handed over for medical education and research purposes. In addition, identification portals like ZIPNET etc. should be given wider publicity so that process of identification is made clear.⁷ The study highlights the results from a

single hospital in Non- metro city. In case of metropolis like Delhi, or Mumbai, the number of unclaimed dead bodies would be even higher, hence a nodal officer from the city may be designated to handle this disincentive but important activity. In the meantime the approach mentioned above may be adopted by other hospitals. There are two primary limitations of the study, first the data has been collected inadvertently, and as a result, the findings may not be reflective of management viewpoint beyond the key leaders involved in this procedure to solve the issue of unclaimed bodies. Secondly, the data represents the experience of one locale of a single facility, thereby limiting the generalizability of our suggestions to other health facilities. Therefore, more such types of studies should be conducted using same or

different type of modalities that can help policy makers to formulate national guidelines.

In conclusion, our study attempts to draw attention to hitherto ignored aspect of disposal of unclaimed dead bodies which has legal, social as well as ethical implications. A uniform mechanism may need to be developed to facilitate timely disposal to fulfil the adage care for womb to tomb. An amendment to the act is also suggested to incorporate private as well as dental colleges in the definition of 'Authorised Institute.'

ACKNOWLEDGEMENTS

The authors express their sincere thanks to Mr Padam for his support and assistance in conducting this study.

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the

Institutional Ethics Committee

REFERENCES

- 1. Hanzlick R, Smith GP. Identification of the unidentified deceased: turnaround times, methods, and demographics in Fulton County, Georgia. Am J Forensic Med Pathol. 2006;27(1):79–84.
- 2. Evert L. Unidentified bodies in forensic pathology practice in South Africa: demographic and medicolegal perspectives. Available at: http://repository.up.ac.za/handle/2263/24911. Accessed on 19 July 2016.
- 3. Saurav C, Aayushi G, Behera C, Karthik K, Millo T, Gupta S. Medico-legal autopsy of 1355 unclaimed dead bodies brought to a tertiary care hospital in Delhi, India (2006-2012). Med Leg J. 2014;82(3):112–5.
- 4. Chattopadhyay S, Shee B, Sukul B. Unidentified bodies in autopsy A disaster in disguise. Egypt J Forensic Sci. 2013;3(4):112–5.
- 5. NamUs National Missing and Unidentified Persons System. Available at: http://namus.gov/ . Accessed 28 June 2016. Accessed on 19 July 2016.
- Unidentified Deadbodies: Welcome. Available at: http://unidentifieddeadbodies.com/. Accessed on 19 July 2016.
- 7. Zonal Integrated Police Network (zipnet.in). Available at: http://zipnet.in/index.php?page=

- un_identified_dead_bodies. Accessed on 7 July 2016.
- 8. 8. This Is What Happens to Unclaimed Bodies in Washington, DC | VICE | United States. Available at: https://www.vice.com/read/this-is-what-happens-to-unclaimed-bodies-in-washington-dc-406. Accessed on 28 June 2016.
- 9. Laws of India: The Punjab Anatomy Act, 1963. Available at: http://www.lawsofindia.org/statelaw/3481/ThePunjabAnatomyAct1963.html. Accessed on 19 July 2016.
- Authorities order disposal of dead body | Kangla Online. Available at: http://kanglaonline.com/2013/07/authorities-order-disposal-of-dead-body/. Accessed on 21 March 2015.
- 11. Cavard S, Alvarez JC, De Mazancourt P, Tilotta F, Brousseau P, de la Grandmaison GL, et al. Forensic and police identification of 'X' bodies. A 6-years French experience. Forensic SciInt. 2011;204(1-3):139–43.
- 12. Andrews J. Death and the dead-house in Victorian asylums: necroscopy versus mourning at the Royal Edinburgh Asylum, c. 1832–1901. Hist Psychiatry. 2012;23(8901):6–26.
- 13. Castel JG. Legal aspects of human organ transplantation in Canada. The Canadian Bar Review. 1968: 385-407.
- 14. Collins JA, Hanlon A, More SJ, Wall PG, Duggan V. Aspects of the owning/keeping and disposal of horses, and how these relate to equine health/welfare in Ireland. Ir Vet J. 2011;64(1):11.
- 15. De Angelis D, Gibelli D, Palazzo E, Sconfienza L, Obertova Z, Cattaneo C. Skeletal idiopathic osteosclerosis helps to perform personal identification of unknown decedents: A novel contribution from anatomical variants through CT scan. Sci Justice. 2016;56(4):260–3.
- Kumar A, Dasari H, Singh A. Cause of Death in 'John Doe & Jane Doe': A 5 year review. J ClinDiagn Res. 2014;8(8):1-4.
- 17. Census of India: Migration. Available at: http://censusindia.gov.in/Census_And_You/migrations.aspx. Accessed on 11 July 2016.

Cite this article as: Pankaj A, Singh BR. Dealing with unclaimed dead bodies- embrace the challenge. Int J Community Med Public Health 2017;4:992-6.