# A Study on Cause & Manner of Death among Burnt Female Victims

# Biplab Shee<sup>1</sup>, Bhaskar Chowdhury<sup>2</sup>, Shouvanik Adhya<sup>3</sup>

<sup>1</sup>(Department of Forensic Medicine, Murshidabad Medical College & Hospital, Berhampur, West Bengal, India)

Corresponding Author: Bhaskar Chowdhury<sup>2</sup>

Abstract: This retrospective study was conducted in a peripheral medical college of west Bengal nearly 180 km away from state capital during September 2015 to August 2017 to assess the pathological cause & manner of death amongst burnt female victims coming for medicolegal autopsy. Total 100 burn cases were taken all togther in all age group of female deceased. It was predominantly 65% cases of early death within 36 hrs of onset because of shock either neurogenic or hypopvolumic & 32% cases were septicaemic shock & remaing 3% of other causes like injuries of vital organs. Among 100 cases 54% are from accidents,44% suicidal ,1% homicidal & 1% undetermined.

Keywords: homicidal, medicolegal autopsy, shock, suicidal

Date of Submission: 28-09-2017 Date of acceptance: 12-10-2017

### I. Introduction

Fire has been known to mankind for about 400,000 years. Although the use of fire was known to ancient man; it is probably the potential fury of an unharnessed fire that made man bow before it. India has an ancient culture where fire was worshipped since the civilization started. Along with water (jal), air (vayu), earth (prithvi), fire (agni) is perceived as one of the four basic components of universe.

Burns are injuries produced application of dry heat & these injuries are one of the most destructive injuries. Burns constitute a major role in the mortality &morbidity in the entire world & these are the fourth most common type of trauma worldwide ,following traffic accidents, falls & interpersonal violence. According to WHO (2000) report, 38,000 individuals died of fire related death & 95% of these death in India occurred in low middle income countries. A significant number of deaths in India occur due to burns every year & over 1,00,000 people are moderately or severely burnt every year in this country.

About 60,000 people suffer from burn, more than 50,000 treated in hospitals & about 10,000 succumb to the thermal to the thermal injuries in India. [4] Interestingly, in India ,burn injury is one of the important causes of death, especially in females. The reason for this endemic are manifold like dowry, marital infidelity, sexual jealousy & oedipal dominance of mother in law over the grooms, etc. [5]

Objectives of the present study are to find out the different cause of death with its percentage & to find out different manner of death in respect of their percentages.

#### II. Materials And Methods

The study consisted of 100 female cases alleged to have died of burns & brought for autopsy from September 2015 to August 2017 to assess the cause & manner of deaths & these findings are statistically analysed.

## **III. Results & Discussion**

In the present study it was observed that cause of death was burn shock (neurogenic & hypovolaemic shock) in 65% cases [Table 1] & nature of death was accidental in 54% cases, suicidal in 44% cases & homicidal in 1% cases & 1% undetermined.[Table 2]

Singh D, Singh A, Sharma A K, Sodhi L et al stated most burn deaths occurred in the age group 21-40 years (67 per cent) with female, Accidental burns were observed in 80 per cent of subjects followed by suicidal (16 per cent) and homicidal burn assaults (4.0 per cent). [6]

DOI: 10.9790/0853-1610051314 www.iosrjournals.org 13 | Page

<sup>&</sup>lt;sup>2</sup>(Department of Forensic Medicine, Murshidabad Medical College & Hospital, Berhampur, West Bengal, India)

<sup>&</sup>lt;sup>3</sup>(Department of Forensic Medicine, College of Medicine & JNM Hospital, WBUHS, Kalyani, West Bengal, India)

Sen and Banerjee in their study observed 368 female burn injuries, amongst which 292 cases were due to domestic accidents, 4 cases were due to industrial accidents while 72 cases were due to suicide. <sup>[7]</sup> In a study by Zanzad & Godbole <sup>[8]</sup> cause of death due to burn shock in 65.38% cases. However, in our study death in burnt female cases were burn shock in 66.67% cases. They observed that in 65.8% of the married female burn victims, nature of death was accidental,18.3% were suicidal & 15.8% were homicidal. In our study 50% of accidental, 38.89% suicidal &11.11% were homicidal.

TABLES
Table 1 Causes of death

Sl.no	Death due to	Total no. of case	Percentage
1	Burn shock (neurogenic & hypovolemic)	65	65%
2	Septicaemic shock	32	32%
3	Others	03	03%
Total		100	

Table 2 Manners of death

Sl.No	Manner of death	Total no of victims	Percentage
1	Accident	54	54%
2	Suicide	44	44%
3	Homicide	01	01%
4	Undetermined	01	01%
Total		100	

#### IV. Conclusion

Causes of most of the death of females are due to burn shock (cardiogenic shock & neurogenic shock) & accidental manner. The following may be recommended.

- 1. To take care for prevention of early shock by prompt intervention from all round facilities in burn unit.
- 2. General precautionary measurement in general population to prevent accidental burn injury by taking awareness & preventive measurement & also early admission in specialized setup for better outcome.

#### References

- [1] Vaghela PC, Ahir GN, Patel MH. Epidemiology of fatal burn cases in GK General Hospital, Bhuj.National Journal of Community Medicine. 2012;3(2):326-29.
- [2] WHO Report 2000. Available from :http://www.eho.int/whr/2000/en/Last accessed Nov 10 2014
- [3] Burns. World health organization. Available from :http://www.wwho.int/mediacentre/factsheets /fs365/en/. Last accessed Nov 11 2014
- [4] 4. Gupta R, Kumar V, Tripathi SK. Profile of the Fatal Burn Deaths from Varanasi region, India. 2012;6(4):608-11.
- [5] Kumar V. Bride burning –a social evil. J For Med Toxicology.1999;9(9):28-9
- [6] Singh D, Singh A, Sharma AK, Sodhi L. Burns mortality in Chandigarh zone; 25 years autopsy experience from a tertiary care hospital of India. Birns. 1998; 24: 150 -6.
- [7] Sen R, Banerjee C. Survey of 1000 admissions, to a burn unit in SSKM Hospital ,Calcutta.Burns 1981; 7(5): 357-60
- [8] Zanjad NP, Godbole HV. Study of fatal burn cases in medico-legal autopsies. J Ind Acad.For Med. 2007;29(3):42-49

Biplab Shee. "A Study on Cause & Manner of Death among Burnt Female Victims." IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 16, no. 10, 2017, pp. 13–14.

\_\_\_\_\_\_