

Profile of Medicolegal Death in Females in Thoothudi Medical College- A Retrospective Study

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Abstract

The cause of unnatural deaths in females differ from that of males. Unnatural death is an intentional (hanging, poison ingestion) or unintentional death (road traffic accidents) as a result of external factors. The socioeconomic differences in lifestyle are associated with differences in attitudes towards life and hence accordingly the incidence of physical violence, suicides are encountered. There is an increasing incidence of traffic accidents among females in recent years, this may be a result of development in education and occupational opportunities for female sex. A total of 70 cases were analysed, in analysing religion 60 (85.71%) cases belong to Hindu religion. 62 (88.57%) cases were married, 55 (78.57%) cases were house wife, 49 (70%) cases were illiterate, 20 (28.57%) cases was seen in 61-70 years of age group, road traffic accidents 16 (22.85%) cases were noted. Distribution and causes of unnatural female deaths in present study is not similar to the pattern found in most of the other Indian studies The present study revealed that the unintentional trauma, mainly the road traffic accidents are responsible for unnatural deaths of females i.e pedestrian and pillion riders. This highlights the importance of timely interventions of road safety measures.

Keywords: Female Deaths, Autopsy, Road Traffic Accidents

Introduction

The cause of unnatural deaths in females differ from that of males. Unnatural death is an intentional (hanging, poison ingestion) or unintentional death (road traffic accidents) as a result of external factors. Suicide rates in Indian females is 93878 in 2016⁽¹⁾ There is an increase in incidence of unnatural deaths in female especially first few years of marriage. The most obvious reason behind such deaths are unending demands of dowry (cash/kinds) by their husbands &/or in laws, for which they sometimes kill or torture the bride in such a way that she commits suicide⁽²⁾. The socioeconomic differences in lifestyle are associated with differences in attitudes

towards life and hence accordingly the incidence of physical violence, suicides are encountered⁽³⁾ There is an increasing incidence of traffic accidents among females in recent years, this may be a result of development in education and occupational opportunities for female sex. This study has been carried out to access the pattern of female deaths and various factors associated with such deaths in Thoothukudi district of Tamilnadu, India

Materials and Methods

The present study is a retrospective study conducted in Department of Forensic Medicine, Thoothukudi Medical college in the period Jan 2018 to June 2018. All the deceased females brought to the department as medicolegal cases were included in the study. All the documents pertaining to the deceased such as history of the case, accident register, inquest report, First Information Report, post-mortem certificate, viscera report, Histopathology reports were analysed in a systematic manner.

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Inclusion criteria:

1. Medicolegal cases of female sex.

Exclusion criteria:

1. Transgenders.
2. Unknown bodies, whose identity was not established at the time of autopsy.

Results and Discussion

A total of 70 cases were analysed, in analysing religion 60 (85.71%) cases belong to Hindu religion, 6 (8.57%) cases belong to Christian and 2 (2.85%) cases belong to the Muslim religion. **Fig:1.**

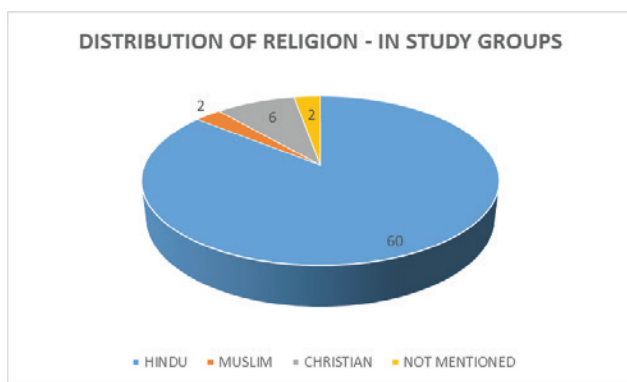


Fig:1. Distribution of religion among the study group

In analysing marital status 62 (88.57%) cases were married, 6 (8.57%) cases were unmarried. Marital status was not mentioned in 2(2.87%) cases

In analysing occupation of the deceased 55 (78.57%) cases were house wife, 7(10%) cases were labours, students and business one case each and not mentioned in 2(2.85%) cases. **Fig:2.**

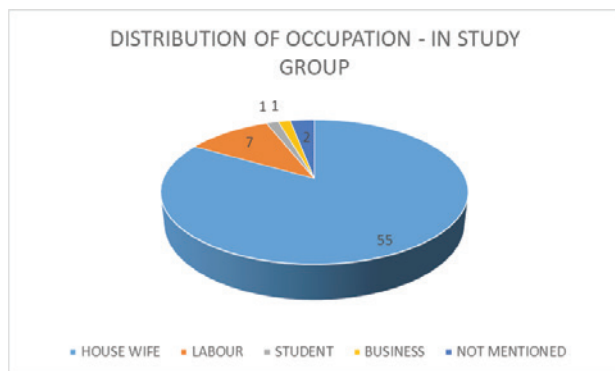


Fig:2. Distribution of occupation of the individuals in the study group

In analysing education status 49 (70%) cases were illiterate, 16 (22.85%) cases completed high school, 1(1.42%) case completed degree and education status not mentioned in 4 (5.71%) cases.

In analysing distribution of cases among age groups 20 (28.57%)cases was seen in 61-70 years of age group. In age group of 19-30 years 12(17.14%) cases were seen. In 31- 40 years 10(14.28%) cases were seen. In 81- 90 years of age group 8(11.42%) cases were seen. 71- 80 years 7 (10%) cases were seen. **Fig:3.**

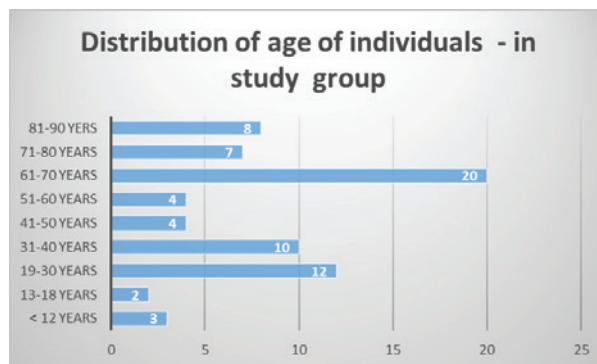


Fig:3. Distribution of age of the individuals in study group

In analysing history of the cases 16(22.85%) cases were involved in road traffic accident. This is in consistent with the study conducted by Thounaojam *et.al*⁽⁴⁾, in which 68. % were victims of road traffic accident. This is in contrast with the study conducted by Pathak A *et.al*⁽⁵⁾ were burns is the leading cause of death in 45% of cases followed by death due to injuries.

In this study history of burns was seen in 8(11.42%) cases. 10 cases sudden death was noted. In study conducted by Gonnade U *et.al*⁽⁶⁾reported that 73 % of burns cases were females. Out of which 88.75% were female.

In 8 (11.42%) cases hanging was seen. Drowning was seen in 8 (11.42%)cases. Poisoning was seen in 8(11.42%) cases. Homicide in 2(2.85%) cases and lightening, electrocution, insect bite one case each.

In analysing road traffic accidents 16 (22.85%) cases were noted, in which 8 (11.42%) cases were pedestrians, 6 (8.57%)cases were pillion riders and none of the pillion riders was wearing helmet. all the cases of pillion riders died of injury to the head. This consistent with the study conducted by Prasannan.k⁽⁷⁾. 2(2.85%) cases were two-wheeler riders and helmet were not worn in these 2 cases(2.85%).

In analysing viscera of the cases 26(65%) cases viscera was not preserved, in 40 (57.14%) cases viscera report not showed any poison or substance of abuse. In 2(2.85%) cases organophosphorus poison was detected. Carbofuran and Para phenylene Diamine was detected in one case each. No opinion to the cause death was given in 5(7.14%) cases in these five cases autopsy findings,

Histopathology reports, Viscera reports, Inquest reports were within normal limits. In this 4 (5.71%) cases body was in decomposed state and in one case (1.42%) not decomposed. In 6(8.57%) cases though autopsy findings, histopathology, viscera reports within normal limits, from the history of the case and inquest reports opinion was given as “Cause of death consistent with history of the case.” Table:1.

Table:1. Distribution of cause of death in the study group.

Injuries	Road Traffic Accident	Pedestrian	8(11.42%)
		Rider- Two Wheeler	6(8.57%)
		Pillion Rider	2(2.85%)
	Train traffic accident	Crossing the rail track	4(5.71%)
	Homicide	Blunt weapon	1(1.42%)
Asphyxia	Hanging	10(14.28%)	
	Drowning	8(11.42%)	
	Strangulation	2(2.85%)	
Sudden Deaths	Cardiovascular System	5(7.14%)	
	Renal Disease	1(1.42%)	
Autopsy, Histopathology, Viscera Reports With In Normal Limits	No Definite Opinion to the cause of death	Body Decomposed	4(5.71%)
		Not decomposed	1(1.42%)
	Cause of Death Consistent with History	Insect bite	1(1.42%)
		Lightening	1(1.42%)
		Electrocution	1(1.42%)
Poison	3(4.28%)		
Thermal Deaths	Burns	8(11.42%)	
Death Due to Poison Ingestion	Organophosphorus	2(2.85%)	
	Carbofuran	1(1.42%)	
	Paraphenylene diamine	1(1.42%)	

In analysing manner of death accident was seen in 32 (45.71%) cases, suicide in 9 (12.85%) cases, natural deaths in 10 (14.28%) cases. Homicide in 3 (4.28%) cases. No definite opinion to the manner of death was given in 6 (8.57%) cases.

It was noted that in 2018 1,51,417 fatal accidents were reported by States and Union Territories. The State of Tamilnadu, India, recorded the highest number of road accidents (63, 920) in 2018 while the highest numbers reported as killed in 2018 were in the State of Uttar Pradesh (22,256). Both these States have maintained their leads in terms of number of accidents and number of persons killed since 2017 despite the several road safety initiatives taken by both the Central and State Government. In India 78,974 (16.91%) deaths was caused by vehicle hitting the pedestrian

According to the report titled “Road Accident Analysis in Tamil Nadu March 2019”, out of the 978 persons killed in the accidents involving two-wheelers, 508 riders and pillion riders did not wear a helmet. “About 52 per cent of the death in two-wheelers were occurred due to non-wearing of helmets.”

Conclusion

Women, especially the young are vulnerable for intentional unnatural deaths associated with family disputes, highlighting the importance of utilising available counselling service Where burns are the leading cause of death. Distribution and causes of unnatural female deaths in present study is not similar to the pattern found in most of the other Indian studies The present study revealed that the unintentional trauma, mainly the road traffic accidents are responsible for unnatural deaths of females i.e pedestrian and pillion riders. This highlights the importance of timely interventions of road safety measures.

Conflict of Interest: Nil

Ethical Clearance: Nil

Funding: Nil

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