

Trends of Unnatural Deaths in Male Population in and Around Khammam

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Abstract

Deaths in males due to unnatural causes especially in the 2nd and 3rd decades of their life have been observed in Indian society for the last few decades. 21 to 40 year found to be the most common age group affected, married male 75.00%, Hindu 87.50 %, residing in urban area 87.00, studied up to degree 71[31.19%] and belong to middle socioeconomic group 65[58.03%]. Majority of victims were unemployed 80[36.03%] and maximum cases encountered in summer in day time. Pattern of unnatural deaths in males, accidental deaths accounted for 86[76.78%] cases followed by suicidal 14[12.50%] and homicidal 12[10.71%]. Unnatural male deaths encountered in our study were Road Traffic Accidents, poisoning, hanging, burns, assault, snake bite, drowning and fall from height. In suicidal deaths, poisoning was the most common method followed by hanging, burns and drowning. In homicidal deaths 2 stabbing cases were encountered followed by blunt force. In accidental deaths head injury was most common. Homicidal deaths were due to marital disputes, extra marital relationships, revenge. Common motive behind them was mental stress due to quarrel with his family members. The aim of this study is to find out the pattern of unnatural deaths in male and various factors associated with such deaths their preventive measures to bring down the incidence.

Keywords: Unnatural Death, Road traffic Accident, Poisoning, Hanging.

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Introduction:

Under section 174 Cr P C, 1973, the unnatural death defined as that a person has committed suicide or he has been killed by another or he has been killed by an animal or by a machinery, an accident or the person has died under circumstances raising a reasonable suspicion that some other person has committed an offence¹. Thanatology deals with death in all aspects. Section 46 I P C death denotes death of a human being unless the contrary appears from the context². Death is unnatural, means when caused prematurely against the order of nature by injury, poison, or other means of violence². This could be homicidal, suicidal, and accidental or

of unexplained origin.

Registration of Births and Deaths Act, Sec. 2[b] defines death as permanent disappearance of all evidence of life at any time after live birth has taken place². Death may be natural [resulting from disease] or unnatural deliberate action of other [homicide], intentionally self-inflicted [suicide], and result of an environmental influence [accident]³. The prevailing system of socio-economic unequal, political system, urbanization, globalization, unemployment, modern civilization, the, the off shoot of an unequal society, a result of rampant consumerism, aided and abetted by the black market economy are responsible for increasing such unnatural deaths in male population³.

According to National Crime Records Bureau [NCRB] 2015 report, 2 lakh people died of unnatural reason such as murder, natural

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disaster, accident and suicide in India³. Rural population was more prone to poisoning whereas the urban became victim of road traffic accidents. The other means of unnatural deaths include hanging, drowning, jumping from height, etc. for suicidal purposes⁴. Commonest reason behind unnatural deaths in male was RTA, which needs continuous challenging for strong investigation, role out the various contributing factors, reasons, causes and manner of such deaths in male population.

A rapid increase in unnatural deaths in males especially in the young age of life was observed in our society for last few decades as a result of accidents or suicides. This drew the attention of people and forced the socio-political system to investigate the high incidence of unnatural deaths in male population⁴

There has been a steady increase in the number of road traffic accidents, while accidental burns, poisoning, drowning, hanging, electrocution accidental burns and fall from heights are also on the rise. All deaths due to unnatural causes, it is the male population who is gets affected the most, especially in the 2nd and 3rd decade of their life. The pattern of deaths in males as suicide, homicide and accidental deaths are changing constantly, revealing complex social and cultural developments in society.

Unnatural death is one of the major indicators of the level of social and mental wellbeing. Responsibility for prevention of unnatural deaths in our society does not rest only on the law enforcement .Public health and other human service agencies must assist in preventing unnatural deaths as they have done to prevent other major causes of morbidity and mortality.

The main objective of this study is to find out the socio-economic profile, causes of death in male people, pattern of deaths and various reasons associated with them, cause and manner of deaths and their prevention.

Aims & Objectives:

- To find out the status of prevalence in male
- To ascertain various aspects of unnatural

deaths in male

- To analyze the socioeconomic data of unnatural deaths in male population
- Significant factors responsible for such deaths and to understand the pattern of unnatural deaths in male and analyze the same.
- To find out remedial measures to bring down the incidence of unnatural deaths
- To analyze the probable reason for the same
- Determine the final cause of death from chemical analysis, histopathological examination, and other investigations

Materials & Methods

The material for the present study comprised 222 cases of unnatural male deaths. The study was carried out in the Dept. of Forensic Medicine & MGH, Khammam; Telangana during the year Jan 2015 to Dec 2015.

A standardized Pro-forma specially designed for this purpose was used and filled in each case after detailed interviews with the investigating officials and accompanying regarding age, religion, residency status, marital status, socio-economic background, level of education, occupation, place of death /time of death, cause and manner of death victims have been collected from medico legal autopsy.

The relevant samples / viscera were subjected to chemical analysis on autopsy to establish the poison consumed in suspected cases of poisoning. Results was compared with previous studies and concluded.

Results and Discussion

A total of 821 autopsies were done with total deaths in male 587 including natural deaths 365 and unnatural deaths 222 with 234 female deaths including 122 natural and unnatural deaths of female 112, which give a male to female ratio of 1:98. These findings were similar to study conducted by authors.¹⁻⁴The high incidence was most probably due to road traffic accident.

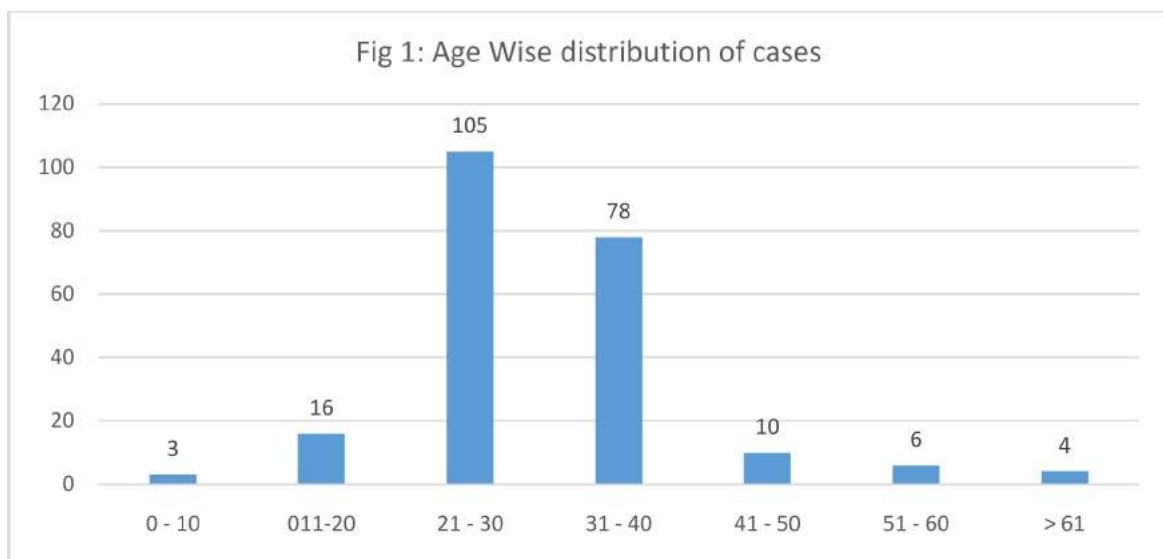
In this study, the 21 -30 energetic age group found to be the most common age group affected in

105[47.29%] cases followed by 31-40 year 78[35.13 %] cases(Figure 1).These two constituted 183[82.43%] male unnatural deaths in 3rd and 4th decade of life. In the age group of 11-20 years 16[7.20%] cases was affected whereas in the age group of 0-10 years 3[1.35%] cases was affected.In the age group of 41-50 years 10[4.50%]cases and 51-60 age group 6 cases was seen in our study. Only 4[1.80%] cases seen in age above 61years. Our results are in consonance with those of other workers in the field.¹⁻⁵ Males of this age forms the most important and crucial part of reproductive, earning of male's life.Habitat wise distribution of unnatural death shows that the death amongst the male residing in urban 178[80.18%] outnumbered the rural area 44 [19.18%].These are similar to studies.⁵⁻¹⁰The high incidence in rural victims was due to illiteracy, unemployment, educated, middle socioeconomic group, urbanization, alcohol addiction were responsible.

According to religion wise distribution, Hindu 192 [86.48%] were more affected than Muslims 12 [5.40%] and Christians 8[4.50%] which are consistent with the findings of other studies.⁶⁻⁸In India majority of people belong to Hindu community.

In present study, married males 120[54.50%] outnumbered the unmarried 89[44.14%] and 4[1.80%] widower. The similar observations were made by authors.¹⁻⁸ High married male deaths were due to family responsibility and economic burdens after marriage.

Our study revealed that the most of the victims, 188[84.68%] were living as nuclear family when compared with joint family 34 [15.31%].These are cohort with studies.⁵⁻⁸ Nowadays in India almost all families are nuclear when compared with joint family the reason might be due to migration,urbanization, globalization,lack of job opportunities, increased family needs that why there are living as nuclear family.



In this study, highest number of victims belong to middle socioeconomic status 152[68.46%] followed by 65[29.27%] low and 5 [2.250%] high. These are consistent with authors.^{7,11,13}The middle socioeconomic was most vulnerable class the reason may be bike driving, no control on life styles, no constant source of income and economic burdens thereby helping the family and

the society. In our study, majority of victims were studied up to degree 71 [31.91%] followed by 64[28.82%] studied up to intermediate 50 [22.52] and 16[7.20%] primary and graduate 14[6.30%] and remaining were 8[3.60%] postgraduate 8[3.60%] and 5[2.25%] professional graduates. Illiterate male deaths 22 [9.90%] were reported, which are similar to other studies.⁵⁻¹⁰

Fig 2: Pattern of Unnatural Deaths in Male

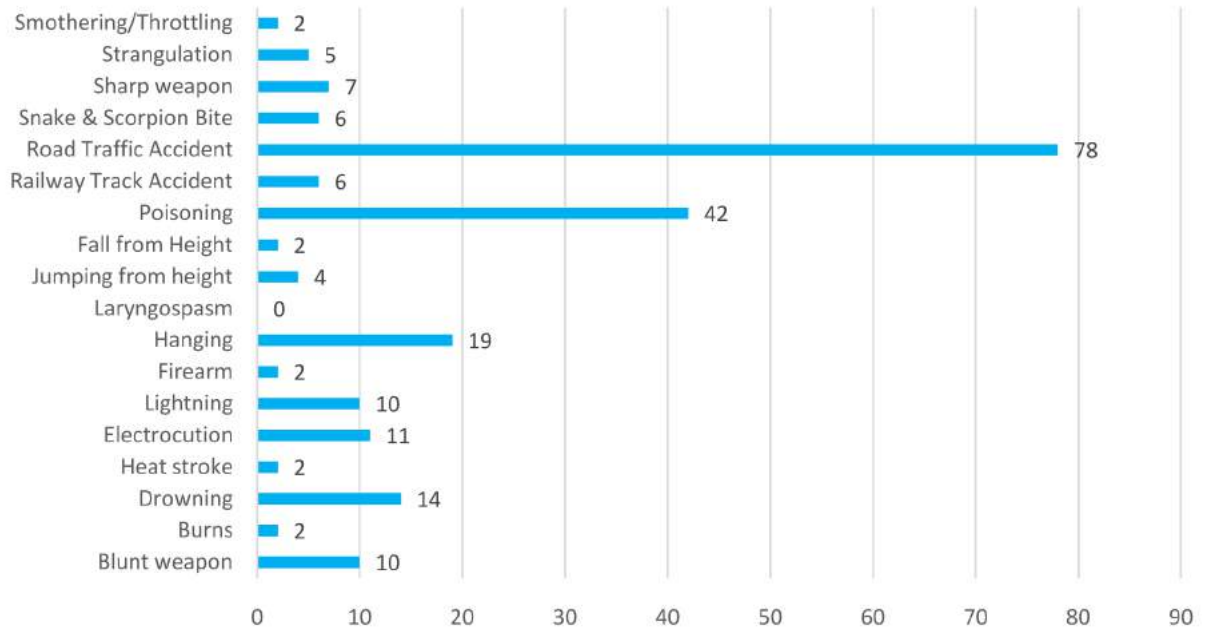


Fig 3: Distribution of Accidental Death Modalities in Male

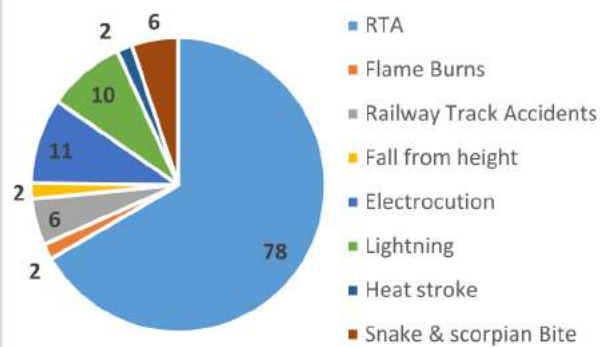


Fig 5: Distribution of Homicidal Death Modalities in Male

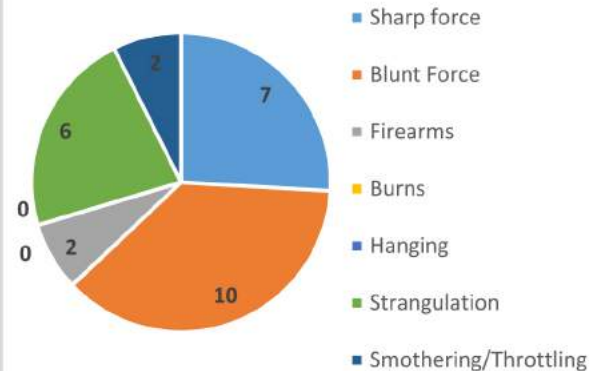
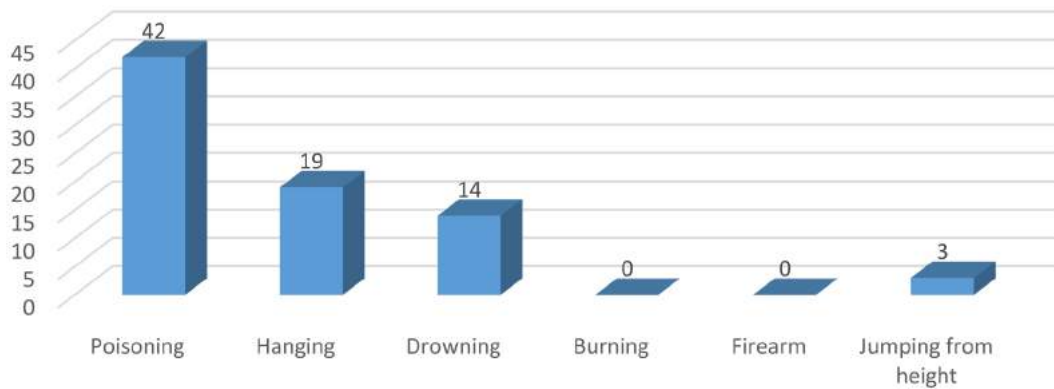
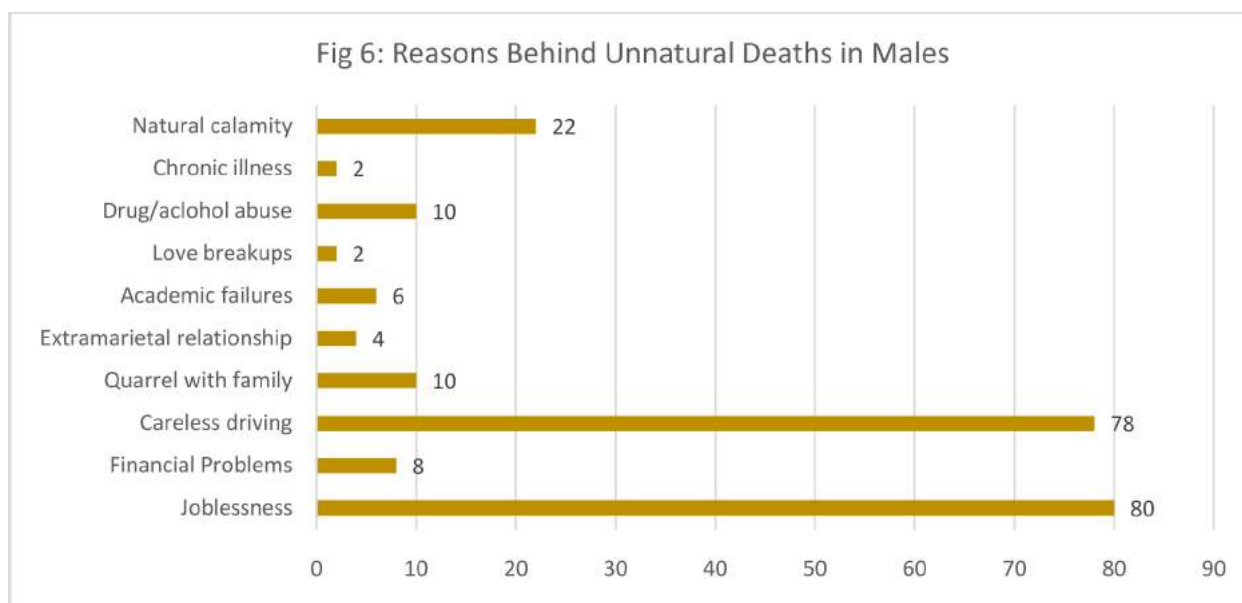


Fig 4: Distribution of Suicidal Death Modalities in Male





Education also plays important role in unnatural deaths in male thus unemployment in our society, which helps to cope up with the pre and post marital pressure situations.

In present study, unemployed constituted the largest single category amounting 80[36.03%]. There were about 51[22.97%] students next 20 construction workers and least 10 were laborer. 4.50% of cases had own business, 3 victims each were tailors, drivers and electricians. Employee persons 30[13.51%] of cases including teachers 4.50%, clerks 4.50% and 2.89% doctors. These findings were supported by studies conducted by authors.¹⁰⁻¹⁵ Seasonal pattern of deaths in male, maximum number of 119 [53.60%] cases were encountered during summer season followed by 62 [27.92%] rainy season and minimum 41[18.46%] deaths occurred during winter. Month wise distribution showed, highest incidence of deaths in May followed by June and minimum deaths, 5 occurred in November. Similar findings were made by Indian studies. It explains that the highest incidents of vehicular accidents occurred in the summer season this might be due to lack of work, and leisure time spent at the home more chance to quarrel with family members leads to commit suicide.

In our study, occurrence of incident was more in the outside home 101 [45.49%] which are including 93[14.28%] Road traffic accidents

followed by 20[9.00%] at work place deaths and 18 [8.10%] front of home. Inside home deaths 65[29.27%] were poisoning and hanging deaths. Occurrence of drowning deaths 16[7.20%] at water lake/well and run over train 6[2.70] and least 2 deaths happened at forestry. These notes are similar to studies done by authors.^{6,7,14}

We observed that the highest number of incidents 112[50.45%] occurred in evening time [12 noon-8pm] whereas night hours 6pm-4am 68[30.63%]. 19.81% of cases takes place in early hours of day [4 am-12noon]. Same results were obtained by authors.^{6,20} The reason might be as suicidal manner the family members are engaged with their work and accidents takes place more cases in day time and least homicidal cases also takes place in day time.

According to survival period, majority of 106 [47.74%] cases were died up to 6 hours of incident followed by 6 hours to 24 hours 38[17.11%] cases next 24 hours to 1 week 18 [8.10%] cases and 1 week to 1 month 3 [1.35%] cases and more than 1 month 2[0.90%] cases. 22.52 % of victims were spot death and 5 brought dead cases reported. Which are similar to authors.^{5,13}

In present study, pattern of unnatural deaths in male population, the manner of death was based on history, circumstantial evidences and post-mortem findings, we noticed that in most

of the cases were manner of death was accidental 117[52.70%] followed by suicidal 78[35.13%] and 27[12.16%] cases were homicidal in nature. Similar observations made by studies conducted by authors.¹⁰⁻²⁰

In our study, in accidental deaths, a total of 222 out of which 117[52.70%] cases were accidental deaths, most of the deaths were road traffic accidents 78[35.13%]. Death due to electrocution 11[4.95%] followed by lightning 10[4.50%] and snake & Scorpion bite and railway track injuries each one 6. Death due to accidental flame and heat stroke were 2 cases each. These findings are similar to authors.¹⁰⁻²⁰ (Figure 3)

In present study, 78 [35.13%] cases were due to suicide. Poisoning 42[18.91%] was the commonest cause of death, followed by hanging 19[8.50%] and drowning 14[6.30%] and minimum 3 deaths due to jumping from height. The reason for poisoning being most common cause of death is easy availability everywhere. These results were similar to studies conducted by other authors.¹⁰⁻²⁰ (Figure 4)

In this study, 27 cases were homicidal in nature, among males. Blunt force 10[4.50%] was the commonest method used followed by 7[3.15%] sharp force. 2.70% of cases were of strangulation and smothering / throttling and firearms deaths were two each. (Figure 5)

In present study reasons behind male deaths, we are observed that joblessness 80[36.03%] and 78[35.13%] careless driving are main reasons behind deaths in male. Admirer to costly bikes, misusing internet, smart phones, financial problems, extra marital affairs breakup in human cardinal relationships, drug/alcohol abuse, globalization, urbanization, chronic illness, natural calamity are the major factors leading to death. 2.70% of academic failures and 0.09% of love failures. Alcoholic persons was responsible for death in 12[10.71%] cases indicating the effect of alcohol, drugs etc. on the family and society. Similar results were obtained by other studies.^{13,16,19} (Figure 6)

Our study showed that most common cause of unnatural death in male is road traffic accident

78[35.13%] followed by poisoning 42[18.91%], hanging 19 [8.55%], drowning 14[6.30%] are the main causes of death in males. Our observations are supported by studies conducted by authors.^{15,18,21,22} The cause of death was concluded as a result of accident / poisoning on the basis of history, police inquest papers, hospital records, remaining part of/source of poison, visiting scene of offence and suggestive autopsy findings. However, viscera were preserved and sent to FSL for toxicological analysis to confirm the suspicion of poison.

Conclusion:

In our study most of unnatural male deaths were young aged 21-30, Hindu, habitat to rural area, married, working persons, belong to low socio-economic status, educated up to high school from joint family. Most of incidents takes place outside homes in day time. The pattern of unnatural male deaths as follows suicide, accident and homicide. It was observed the most common manner of death was accidental followed by suicidal and least homicidal type. Accidental deaths are major contributors and young age group is favorable victims although no age group is completely immune.

We observed that the most common cause of death was accident. It was observed that the quarrel with family members, speed driving was the most common reasons

Recommendations: Our study strongly indicates that, provide basic needs of people, economic independency, essential education and awareness, alternative job opportunities.

A change in attitude and mindset of legislature to provide work opportunities for eligible people. The most important thing is fatalities in male population prevented by psychotherapy counselling.

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