

Unnatural Death under Age 19 Years

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Abstract: A two-year retrospective study was carried out on the cases of unnatural deaths with age under 19 years old subjected to medicolegal autopsies from 2014 – 2015. The main objectives of the study were: a) To ascertain the various aspects of unnatural deaths. b) To analyze the probable reasons for the same. c) To find remedial measures to bring down the incidence. The incidence of unnatural deaths was found to be persistently increasing. Maximum number of such deaths 283 (72%) belonged to the age group of 13 - 19 years. Rural population was more prone to poisoning whereas the urban became victim of road-traffic accidents. Males preferred drowning whereas females preferred self-immolation (burns) and poisons to end their own lives.

Keywords: Unnatural Deaths, Dowry Deaths, Road Side accidents.

INTRODUCTION

Unnatural deaths are known to claim a substantial number of lives, the world over, with the vehicular accidents accounting for a lion's share. The vehicular accident rate per thousand vehicles is greater in developing countries than in the developed. In India, one person dies in less than every five minutes due to vehicular accidents. The increased pace of mechanization, increasing number of fast moving vehicles, unskilled or semi skilled drivers, drunken drivers and the woefully inadequate road system have ushered in this man made epidemic in India.

Ignorance and intentional violation of traffic rules, encroachment of the roads by shopkeepers, hawkers and stray animals play an important role in contributing to the increase of vehicular accidents [1].

Poisoning is a major problem all over the world, though the type of poison and the associated morbidity and mortality varies from place to place and changes over a period of time. The use of poisons for suicidal and homicidal purposes dates back to the Vedic era in India. The exact incidence of this problem in India remains uncertain. The prevailing system of dowry, which is mainly responsible for all such deaths, is a product of emerging capitalist ethos - the offshoot of an unequal society, a result of rampant consumerism, aided and abetted by the black-market economy. Its increasing incidence is symbolic of continuing erosion and devaluation of women's status in independent India.

The other means of unnatural deaths - include hanging, drowning, burns, jumping from height, etc for suicidal purposes [2]. This is so because methods used by individuals bent on self- destruction depend upon the availability of the lethal instruments. Crime rate in a community is directly linked with the rate of poverty

and illiteracy. India being a poor country with a high unemployment and illiteracy rate, the crime rate though disproportionate, still contributes its bit towards unnatural deaths.

MATERIALS & METHODS

The present study was carried out from Government Mohan Kumaramangalam Medical College, Salem, was conducted during the period January 2014 – December -2015. The reports of the relevant samples / viscera subjected to chemical analysis on autopsy to establish the poison consumed in suspected cases of poisoning and to establish / rule out any intoxication in other cases were thoroughly scrutinized. The use of kerosene oil was also subject to confirmation from the reports of chemical analysis in cases of burns. Proper history was obtained from the relatives' friends of the deceased, hospital records and the concerned investigating agencies. The reports of relevant samples preserved during autopsy and subjected to histopathological examination to arrive at a conclusion regarding the cause of death due to a disease process, but under suspicious circumstances were also taken into consideration [3].

RESULTS

Trends of Unnatural Death (Table – 1)

Out of a total number of 393 cases of unnatural deaths autopsied during the period of study, more than one third cases 129 (32 %) were the victims of road-traffic accidents. Poisoning accounted for 19.8 % (78 cases) whereas burns claimed 15.77 % (62 cases) and drowning claimed 14.75% (58 cases). Followed by Hanging 12.46% (49 cases) and eletrocutation was least with 0.76% (3 cases) [4].

Preferred mode of suicide: Table 2

Poisoning 31.57 %, burns 25.10 %, drowning 23.48% and hanging 19.83 % were the most common methods adopted to end one’s own life in this part of the world. Among various poisons Organophosphorus was 23 cases (29.48%), Monocrotophos was 18 cases (23.07%) and Aluminium Phosphide was 7 cases (8.97%). The use of kerosene oil as an accelerant was found in 70% of the samples sent for chemical analysis in deaths due to burns. 61 % (37 cases) of the burn victims had 70 to 80 percent burns

Table-1: Trends of Unnatural Deaths

Cause of death	Number of cases	Percentage
RTA	129	32.82%
Poisoning	78	19.84 %
Burns	62	45.77%
Drowning	58	14.75%
Hanging	49	12.46%
Violence	13	3.30 %
Electrocution	4	1.01%

Table-2: Preferred mode of suicide

Cause of death	Number of cases	
	Male	Female
Poisoning	34	44
Burns	17	45
Drowning	41	17
Hanging	14	35

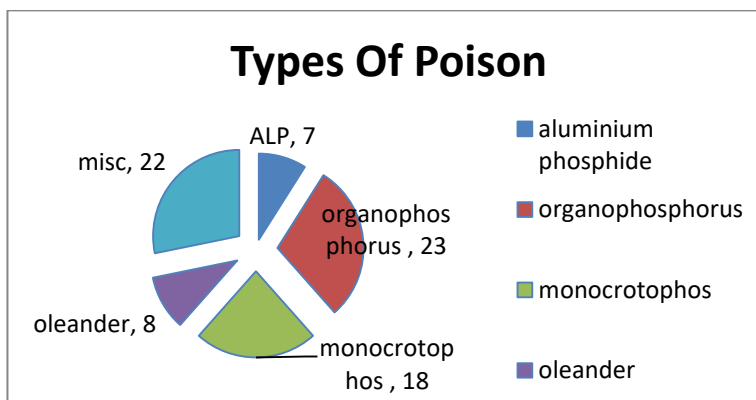


Fig-Trends of poison

DISCUSSION

Unnatural death is one of the indicators of the level of social and mental health. Responsibility for prevention of violence in our society does not rest only on the law- enforcement personnel. Public health and other human service agencies must assist in preventing primary violence as they have done to prevent other major causes of morbidity and mortality. The present study reveals that poisoning was the commonest method employed for suicides is poisons followed by burns. In the present study, the higher incidence of unnatural female deaths due to burns followed by poisoning. The males preferred drowning followed by poisons [5].

The high incidence of burn deaths, especially among the young females is often attributed to cooking on open unguarded flames. Loose, voluminous, highly inflammable, synthetic garments / saris of the victims are alleged to catch fire suddenly while cooking. Kerosene oil, match sticks, and other cooking material, being easily available in houses, is usually preferred by Indian women to commit suicide, and as for killing, it helps to hide not only the torture and other means of violence but also helps to tamper with or even destroy the circumstantial evidence.

The ongoing revolution of evolving faster and better means of transport, the world over, has brought

along with it an important and unwelcome guest - road traffic accidents. These have taken an almost epidemic form in the recent past. This is particularly true of our country where one person becomes victim of this man made dragon in less than every five minutes [6].

CONCLUSION & SUGGESTIONS

Unfortunately but realistically, there is little that the autopsy surgeon can contribute to the elucidation of factors leading to the unnatural deaths [7]. The most energetic efforts of physicians, other members of the health team, families, friends, social organizations and the authorities may never eliminate such deaths. However, in an attempt to at least try to decrease its toll the Following suggestions are made:

- Strict implementation of traffic rules, with special attention to be paid to:
- Drunken drivers
- Unskilled or semiskilled drivers
- Use of mobile phones and smoking while driving
- Use of high beam lights & music system at high volume, while driving within the city limits.
- Reckless and rash driving, etc.
- Educating the general public about the road safety measures. Media, particularly, can play a more active role in this area.
- Encroachment of roads by shopkeepers and hawkers should be dealt with strictly. Parking at unauthorized places should be penalized heavily. Stray animals should be removed from the roads and placed in government cattle sheds.
- Properly planned and maintained wide roads can go a long way in preventing accidents [8,9].

Marriage counseling, discouraging costly and ostentatious marriage rituals, strict implementation of anti-dowry laws may help in decreasing or preventing the tensions of day to day married life. The storage and sale of commonly used agrochemicals should be controlled through strict regulations passed and implemented by the concerned authorities [10].

REFERENCES

1. Behrman, R. E. (2000). Overview of Pediatrics. Nelson's Textbook of Pediatrics. 16th edition.
2. Chadwick, D. L., Chin, S., Salerno, C., Landsverk, J., & Kitchen, L. (1991). Deaths from falls in children: how far is fatal?. *The Journal of trauma*, 31(10), 1353-1355.
3. Nandy, A. (2010). *Principles of forensic medicine including toxicology*. New central book agency.
4. Gordon, I., Shapiro, H. A., & Berson, S. D. (1988). Regional injuries of medico-legal importance. *Forensic Medicine, A Guide to Principles*. Edinburgh, Churchill Livingstone, 252-3
5. Knight, B. (1996). Head and Spinal Injuries. *Forensic Pathology*. II edition, 1996, Arnold.
6. Kraus, J. F., Rock, A., & Hemyari, P. (1990). Brain injuries among infants, children, adolescents, and

young adults. *American Journal of Diseases of Children*, 144(6), 684-691.

7. Modi, N. J. (1983). Injuries from burns, scalds, lightening and electricity. *Asphyxiants. Modi's Text Book of Medical Jurisprudence and Toxicology*. 20th Ed. Bombay: NM Tripathi, 182.
8. Demling, R. H., & Way, L. W. (1994). Burn and other thermal injuries. *Current surgical diagnosis and treatment*.
9. Sharma, B. R., Sharma, V., Harish, D., & Vij, K. (2003). Suicides in northern India: causes, methods used and prevention. *Medicine, science and the law*, 43(3), 221-229.
10. Taylor, A. S., & Simpson, K. (1957). *Taylor's principles and practice of medical jurisprudence* (Vol. 2). J. & A. Churchill.