

A Study of Unnatural death at MVJ Medical College and Research Hospital

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Abstract

Unnatural deaths includes death caused due to criminal intent of a person behind or result of negligent act or planned omission of some person and also those where there is no illegal intent at all but death followed due to some accident or mishap. Unnatural deaths may imitate the law and order situation in a particular area of authority. This study is concerned with study pattern of unnatural deaths in MVJ medical college and research hospital for a period of two years. We found 236(87%) cases of unnatural deaths by analyzing 273 cases of deaths. Study revealed 99 cases of unnatural deaths in 2014 and 137 cases in 2015 with 14% increment. Deaths were more common in males 152 (64.4%) than in females 84 (35.6%). Majority of unnatural deaths occurred among the age group of 31-40 years. The frequency patterns of unnatural deaths are 67% RTAs, 7% homicide and 26% suicide. Poisoning is preferred method used to commit suicide with 36 (58%) out of 61 suicidal cases, followed by 14 (24%) of hanging, 5 (9%) of burns, 3 (5%) of drowning and 3 (4%) fall from height. Major cause of suicide was family problems 27 cases (44%), 15 (24%) were due to love affair. Female outnumbered male in committing suicide due to lack of support from family and society.

Key words: Unnatural death; Accidental; Suicide; Homicide

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Introduction

Unnatural deaths happen all over the world and are one of the indicators of the level of social and mental health.¹ Unnatural death is a category used by coroners and statisticians for classifying all human deaths not accurately describable as death by natural causes. Hence it include events such accident, homicide and suicide.² According to forensic medicine Unnatural death is caused by external causes injury or poisoning, includes intentional injury such as homicide or suicide and unintentional injury in an accidental manner.³ Many traditional and socio-economic factors of a nation are usually allied to the causation of unnatural deaths. Road traffic accidents (RTA) and poisoning are a major problem all over the world. Tremendous advances in the field of agriculture, industrial and medical have been paralleled with outstanding changes in the drifts of acute poisoning in developing countries. The fatalities of burns are not just due to accidents but also became a social calamity in India.⁴ In 1967, (ICD) International Classification of Diseases presented "undermined" as suicidal or accidental.⁵ Crime rates in a community are direct measure of poverty and illiteracy. This study is an attempt to explore the pattern of unnatural deaths in

Hoskote-Bangalore Rural, referred to Forensic Medicine Dept. of MVJ Medical College for Postmortem examinations and aids in assembling the prerequisite for the community interests as well as academic interests.

Aims and Objectives

1. To study the profile of unnatural deaths at MVJMC & RH
2. To assess the pattern of unnatural deaths, age and sex wise distribution and common methods used to commit and causes of suicide.

Materials and Methods

This study is a prospective of unnatural deaths autopsied at MVJ Medical college and research hospital, Hosakote, Bangalore rural over a 2-year period 2014 and 2015. Related clinical data from hospital records, time and manner of death from initial investigations and police reports, reasons for death from relatives and friends along with autopsy findings associated to each of these cases were taken for analyses. These materials were reviewed and analyzed as to victim demographic data, such as age and gender, manner of death and cause of death.

Inclusion Criteria:

- All cases of unnatural deaths autopsied at MVJMC & RH
- Unnatural death cases with complete and proper inquest report

Exclusion Criteria:

- Decomposed and Unknown dead bodies where

exact age and cause of death were not clearly established.

During the study period 236 cases were autopsied. Out of which 99 cases of unnatural deaths in 2014 and 137 cases in 2015 were autopsied with 14% increment.

Observation and Results

Graph 1: Year wise incidence of Unnatural deaths

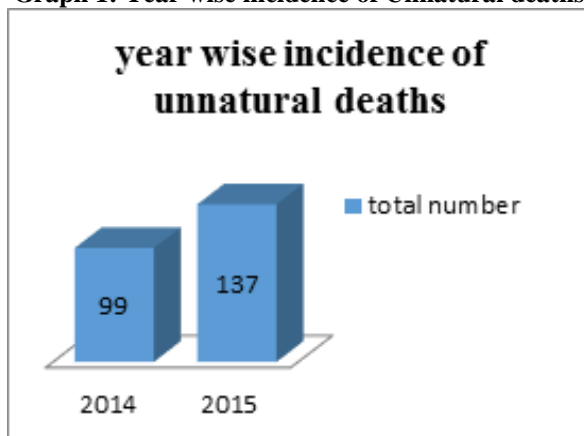
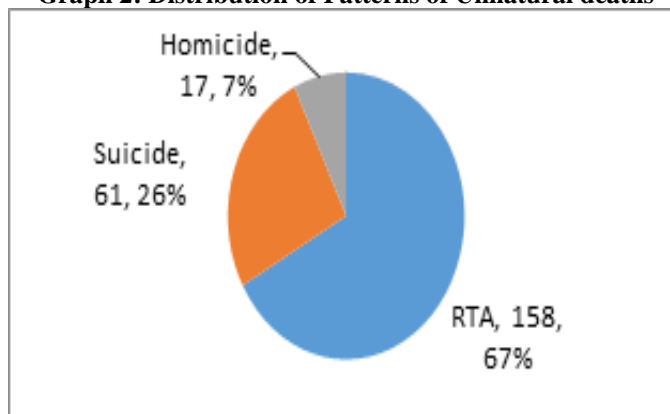


Table 1: Age and sex wise distribution of Unnatural deaths

| Age group | Male | (%) | Female | (%) | Total No. | (%) |
|-----------|------|-----|--------|-----|-----------|-----|
| <20 | 8 | 5 | 6 | 7 | 14 | 6 |
| 21-30 | 37 | 24 | 23 | 28 | 60 | 25 |
| 31-40 | 74 | 49 | 39 | 46 | 113 | 48 |
| 41-50 | 28 | 18 | 12 | 14 | 40 | 17 |
| >51 | 5 | 4 | 4 | 5 | 9 | 4 |
| Total | 152 | 100 | 84 | 100 | 236 | 100 |

Study revealed deaths were more common in males 152 (64.4%) than in Females 84 (35.6%). Majority of unnatural deaths occurred among the age group of 31-40 years (48%) followed by 21-30 years (25%) and more than 51 year old age were least affected.

Graph 2: Distribution of Patterns of Unnatural deaths



The frequency patterns of unnatural deaths are 67% RTAs, 7% homicide and 26% suicide.

Table 2: Distribution of methods used to commit suicide

| Methods | Male | (%) | Female | (%) | Total | (%) |
|------------------|------|-----|--------|-----|-------|-----|
| Poisoning | 14 | 59 | 22 | 57 | 36 | 58 |
| Hanging | 4 | 19 | 10 | 27 | 14 | 24 |
| Burns | 1 | 6 | 4 | 11 | 5 | 9 |
| Drowning | 2 | 8 | 1 | 3 | 3 | 5 |
| Fall from Height | 2 | 8 | 1 | 2 | 3 | 4 |
| Total | 23 | 100 | 38 | 100 | 61 | 100 |

Poisoning is preferred method used to commit suicide with 36 (58%) out of 61 suicidal cases, followed by 14 (24%) of hanging, 5 (9%) of burns, 3 (5%) of drowning and 3 (4%) fall from height. Suicidal deaths were higher in female (38) than male (23).

Table 3: Causes for Suicide

| Causes | Total | Percentage (%) |
|------------------|-------|----------------|
| Family problems | 27 | 44 |
| Love affairs | 15 | 24 |
| Failure in Exams | 7 | 12 |
| Dowry related | 7 | 12 |
| Illness | 5 | 8 |
| Total | 61 | 100 |

Major cause of suicide was Family problems 27 cases (44%), 15 (24%) were due to love affair. Female outnumbered males in committing suicide due to lack of support from family and society.

Discussion

Unnatural deaths includes death caused due to result of negligent act, criminal intent of a person behind or planned omission of some person and also those where there is no illegal intent at all but death followed due to some accident or mishap.⁶ Our study showed 236 cases of unnatural deaths by analyzing 273 cases of deaths. Out of which 99 cases of unnatural deaths in 2014 and 137 cases in 2015 were autopsied with 14% increment. This finding is in close agreement with a study conducted in Dhaka i.e. 18%.⁵

In our study it revealed deaths were more common in males 152 (64.4%) than in Females 84 (35.6%). Other study also had shown similar results males (70.5%) to female (29.4%).⁷ This is due to male involvement in outdoor work activities, movements and exposure to environment. Majority of unnatural deaths occurred among the age group of 21-40 years 713(73%), the most active period of life in both sexes, which coincides with 3681 (53%) of the study conducted in Dhaka city.⁸

Amongst the manner of deaths, road traffic accidents (RTA) cases predominates rest of the unnatural deaths. RTAs were more than double the number of suicide, 158(67%) versus 61(26%) but the reports in Faisalabad, India had found homicidal deaths were more common than accidental and suicidal.⁹

RTA is the most common cause of unnatural

deaths more so in India where traffic rules, condition of the roads and vehicle conditions are accountable. Along with this speeding, drug abuse, inadequate training and disrespect for traffic rules at personal level also contribute for unnatural deaths. Suicidal deaths were more predominant in females 38(62%) than males 23 (38%). Poisoning is preferred method used to commit suicide with 36 (58%) out of 61 suicidal cases.

Common cause of suicide in our study was family problems 27 cases (44%) due to lack of support from family and the society. It is in contrast to the findings of study conducted in KIMS, Bengaluru where Hanging is the preferred method to commit suicide and Insanity is the common cause for committing suicide.⁴ Method of committing suicide is what is convenient and readily available at the time and it can change over the period of time.¹⁰

Conclusion

- From the study it can be concluded that majority of victims of unnatural deaths were males who were died due to road traffic accidents.
- Involving more of younger age group, which is an exhausting economic power by losing productive population.
- These deaths can be prevented by strict implementation of traffic rules regulation and national health schemes.
- Suicidal poisonings need early redressed by framing policies from Govt. front. Education and encouragement of leaders of the society will reduce unnatural deaths.

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Conflict of interest: Nil

Ethical clearance

The present study was approved by "Institutional ethical committee" of MVJ Medical College and Research Hospital, Hoskote, Bangalore Rural.

References

1. Ahmed M. Rahman M. and Hossain M. Pattern of unnatural death in two district. TAJ.1992;5:65-66.
2. Forensic Medicine for Lawyers; London: Tottel Publishing. 2008.pp.278-287;ISBN 1-84592-241-7.
3. McGraw-Hill Concise Dictionary of Modern Medicine; 2002 by the McGraw-Hill Companies, Inc.
4. C Ramesh, Hanumantha, Ananda K, Devidas Tondare. Autopsy Study of Unnatural Deaths among Young People of 13-21 years Age Group Conducted at KIMS Hospital, Bengaluru. IJFMT 2014; Vol.8, No. 2:16-20.
5. Mostaque Rahim, TC Das. Mortuary Profile for Unnatural deaths at Forensic Medicine Department of Dhaka Medical College. Bangladesh Medical Journal, July 2009;Vol. 38, No. 2:44-47.
6. Ghulam Mustafa Yousfani and Muhammad Umar Memon. Spectrum of Unnatural Deaths in Hyderabad: An Autopsy Based Study. Journal of Dow University of Health Sciences, Karachi 2010, Vol. 4(2):54-57.
7. Dr. Awdhesh Kumar, Dr. Surender Kumar Pondey and Dr. Singh, T. B. A Descriptive Study on Trend of Unnatural deaths in Varanasi, India. International Journal of Current Research, March 2015;Vol. 7(3):14041-14044.
8. Md. Belayet Hossain Khan, Md. Mosharraf Hossain. Study on Unnatural death Patterns in Dhaka City. AKMMC J 2011;2(2):18-20.
9. Altaf Pervez Qasim, Saeed Akbar Tariq, Muhammad Naeem. Profile of Unnatural Deaths; in Faisalabad. Medical Forum Monthly May 2014.
10. Shaw. Suicide in children and adolescents: A 10-Year retrospective review; American Journal of Forensic Medicine & Pathology; 2005;Vol. 26(4):309-315.