



STUDY OF MORTALITY PATTERN ON AUTOPSY IN A TERTIARY CARE MEDICAL COLLEGE IN JAMMU

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ABSTRACT

The word "autopsy" was coined from the Ancient Greek *autopsia*, "to see for oneself". In this retrospective study, all the cases which are autopsied during the period from April 2020 to December 2020, were analyzed. In the present study road traffic accident cases accounts for maximum number. Due to the presence of Jammu Srinagar national highway close to medical college, every day we get to see many number of road traffic accident cases, followed by poisoning and firearm wounds as rural population relies on farming and there is easy availability of pesticides along with being on indo pak border ceasefire violations attribute towards firearm deaths. Hence, a medico legal autopsy is very important to study the behavior of mortality pattern in a society and to aid the legal framework in tackling criminal offenses.

KEYWORDS : Autopsy, RTA, Poisoning, Firearm.

INTRODUCTION

Autopsy (auto means self, opis means view) literally means to see for oneself.(1) A Medicolegal autopsy (Necropsy) is a special type of scientific examination of dead body carried out under the law of the state mainly for the protection of its citizens and to assist the identification and prosecution of the guilty in cases of unnatural deaths. As such it requires State permission and must meet with certain essential requirements.(2-4) It does not require the consent from relative of the deceased. In every cases it must be complete and every organ must be examined. A poor autopsy is worse than no autopsy at all, as it is more likely to lead to a miscarriage of justice.(5) In a complete autopsy all body cavities and all organs of the trunk, chest, and head are opened.

Different types of autopsies, commonly performed include:

1. Medico-Legal Autopsies
2. Clinical or Pathological autopsies
3. Anatomical or academic autopsies
4. Virtual or medical imaging autopsies (6-8)

The present study was conducted with aim to evaluate the pattern of autopsy related deaths over a period of 9 months, in a tertiary care medical college in Jammu.

MATERIALS AND METHODS

In this retrospective study, autopsies conducted at mortuary unit from April 2020 to December 2020 were included. The postmortem reports, inquest papers and notes of the hospitals were studied. Among 936 autopsies, the data was analyzed regarding age, sex, time since death, manner/cause of death and residential status of urban/rural victims and compared with the previous studies.

RESULTS

Total 1040 autopsies were performed at mortuary over 9 months of which records of 936 autopsies could be traced back from the department of Forensic Medicine and Toxicology. Most dead bodies were of males (86.32%) as compared to females (13.68%). Most common age of victims was > 40 years (35.90%). Urban population were more affected as compared to rural population. Road Traffic Accident (RTA) was the most common cause of death causing (46.15%) deaths, followed by poisoning with victims (11.97%), and firearm related deaths (10.26). Electrocution, hanging, strangulation, suffocation

and drowning together contributed the rest (table 1). Most commonly, dead bodies were brought to mortuary for autopsy 12- 24 hours after death (48.72%). This shorter duration of interval between death and postmortem of the same could be because of the fact that a vast majority of cases were in urban area.

Table 1- Distribution of autopsy cases over spectrum of study.

Cause of Death	Percentage
RTA	46.15%
Poisoning	11.97%
Firearm related	10.26%
Drowning	8.00%
Rest all	23.62%
Total	100%

DISCUSSION

In the present study road traffic accident cases accounts for maximum number (46.15%). Due to the presence of National highway 1A close to medical college, every day we get to see many number of road traffic accident cases. In 2011, mishaps on National Highways accounted for 30.1% of the total road accidents and 37.1% of the total number of persons killed in 2011. It has been reported that State Highways accounted for 24.6% of the total accidents and 27.4 % of the total number of persons killed in road accidents in 2011. The total number of accidents that occurred in urban areas (53.5%) was found to be more than that in the rural areas (46.5%), while rural areas had more fatalities (63.4%) than urban areas (36.6 %). More number of persons were injured in urban areas (59.4 %) when compared to rural areas (40.6 %) [9]. In 2020, the month-wise distribution of road accidents has shown that more accidents occurred in the month of November (8.8%) followed by october (8.74%) and december (8.72%). The least number of road accidents were reported to occur in the month of May [10]. As the traffic increases in winter capital due to "Darbar Move" and immigration of inhabitants from hilly areas.

Pesticidal compounds have been found to cause most self-poisoning deaths in rural jammu [11-13]. Farmers form a significant proportion of the population, commonly use organophosphorus compound such as parathion as insecticides [14]. A large number of suicidal cases are encountered due to the easy accessibility or improper handling of these compounds [15,16]. As jammu is an active

border area, firearm related deaths are also a major contributing factor in pattern of deaths. Security forces personnel due to continuous cease-fire violation are the main input (17,18). Due to vicinity with water bodies, drowning cases are also reported but more often so in rural areas. It has been found that over half of the world's drowning occurs in the Western Pacific Region and WHO South-East Asia Region. [19].

CONCLUSION

Although practitioners' anxieties have been heightened due to concerns surrounding informed consent and the retention of organs in requesting permission to perform an autopsy [20]. The patterns which came out from the study conclude that a medico legal autopsy is very important to study the behavior of mortality pattern in a society and to aid the legal framework in tackling criminal offenses.

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