



A Study of Pattern of Medico-Legal Cases in a Premier Hospital in Delhi

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Abstract

Employee State Insurance Hospital (ESIH) is catering to the worker population and their dependants and so occupation related medico-legal cases are expected to occur more in such a hospital. This study was done to analyze the pattern of medico-legal cases coming to an insurance based hospital covering the worker population in an industrial area. The study revealed that fall from height and road traffic accidents are the leading causes of medico-legal cases even in ESIH rather than occupation related injuries. The study outlines the importance of effective measures to reduce home hazards as a large number of medico-legal cases were due to lack of effective care of children at home. It also highlights the importance of implementation of traffic rules and suggests measure to decrease the road traffic accidents. It reinforces the importance of ergonomics and occupational safety among the worker population

INTRODUCTION

Medico-Legal Case (MLC) can be defined as a case of injury or ailment, etc., in which investigations by the law-enforcing agencies are essential to fix the responsibility regarding the

causation of the said injury or ailment. In simple language it is a medical case with legal implications for the attending doctor where the attending doctor, after eliciting history and examining the patient, thinks that some

investigation by law enforcement agencies is essential.^{1,2}

A large number of MLC's are managed in a government hospital setup. Employee State Insurance Hospital(ESIH) is slightly different in that it is catering to the worker population and their dependants and so occupation related medico-legal cases are expected to occur more in such a hospital. In this context an analysis was performed of the pattern of such cases handled by the emergency department of ESIH.

AIMS AND OBJECTIVES

To study the pattern of medico-legal case presenting to the Emergency Department of ESIH Basaidarapur, Delhi.

MATERIALS AND METHODS USED

This study was a retrospective hospital based observational study.

Three hundred and ninety three cases categorized as MLC's were studied from the casualty records from October 2012 to mid March 2013.

Data was collected in terms of age, sex, and diagnosis mentioned in the records.

The profile of these MLC's was studied by grouping the total number of such cases (393) during the period October 2012 to March, 2013 under the following heads:

- a) Road traffic accidents;
- b) Assault, including gunshot injuries;
- c) Poisoning or ingestion of an unknown substance

- d) Factory or Crush Injuries
- e) Fall from height

RESULTS

- 1) A total of 393 cases were studied, out of these 282 were male and 111 were females.
- 2) The age groups to which the belonged to were:

| Age (in years) | Number of cases |
|----------------|-----------------|
| 0-10 | 80 |
| 10-20 | 22 |
| 20-40 | 202 |
| >40 | 89 |

- 3) Out of them 220 people were industrial workers with the others being their dependants.
- 4) The study reveals that the total medico-legal cases managed in the emergency department of ESI hospital Basaidarapur from a random sample of 4 months could be categorized as follows:
 - a) Physical Assault: 33(8.43%)
 - b) RTA: 88(22.5%)
 - c) Factory Injuries: 76(19.43%)
 - d) Poisoning: 33(8.43%)
 - e) Fall from Height: 133(34.01%)
 - f) Others: 11(2.81%)
 - g) Burns: 17(4.34%)

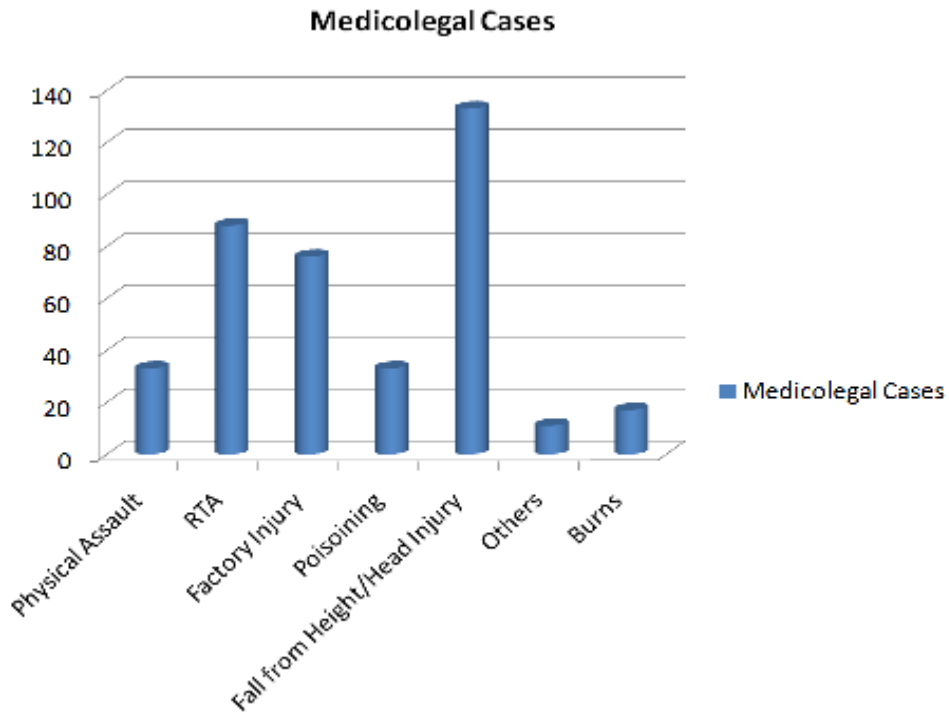


Figure 1

Figure 1: A graphical representation of the categorization of the medicolegal cases made in the casualty department of ESIC Hospital, Basaidarpur over a period of 6 months

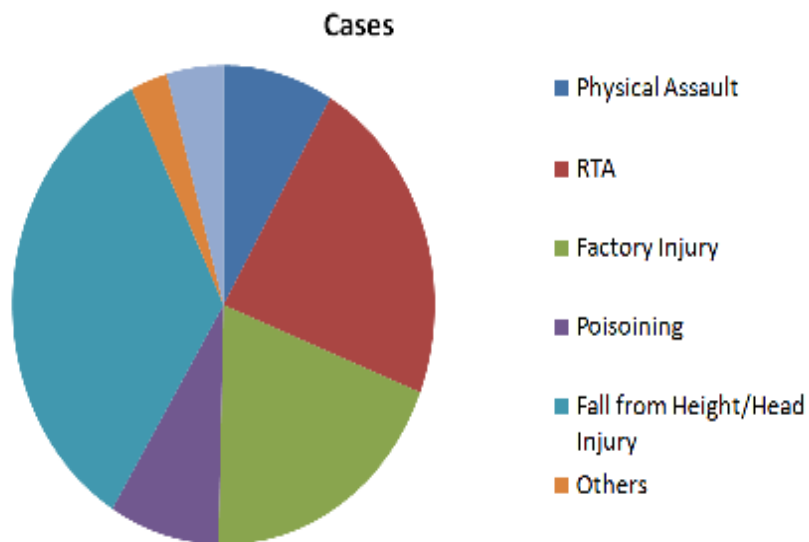


Figure 2

Figure 2: A pie chart representation of the categorization of the medicolegal cases managed in ESIC hospital casualty over a period of 6 months.

DISCUSSION

In our study out of a total of 393 patients 34.01% were 'Fall from height' cases, 22.5 percent were road traffic accidents, 19.43 percent were factory injuries, physical assault and poisoning were 8.43 percent each and 4.34 percent were burns.

In comparison a study in Safdarjung Hospital in 1990 revealed that 54.52 percent of their MLC's were road traffic accidents, assaults comprised 31.27 percent and poisoning cases were 13.66 percent .3

The study shows that the concept of ESI hospital is to cater to the majority of factory and industrial worker population with the significant number of medico-legal cases being factory injuries and crush injuries.

The highest number of MLC's were fall from height or head injury due to the it.The reason for this maybe that the people who are covered in ESI scheme are not only industrial workers but their dependants too. Also the type of houses these people are living in are kaccha houses and the roof mostly don't have boundaries. In the fall from height category a major section was of small children which could be due to lack of proper care at home.

In our study factory injury was found to be the 3rd highest number of MLC's which is lower than the expected number for ESI setup. It could be due to the fact that the availability of form 16 or accident form from the employer makes the registration of MLC's non binding for doctors.Otherwise if all cases were registered as MLC's there would have

been a significant increase in the number and percentage of factory injuries.

This study also shows a high number of road traffic accidents and they being the cause of the second highest number of medico-legal cases.The road rage in Delhi is increasing day by day,which is clearly highlighted by the fact that in an insurance based hospital like ESIC too the number of road traffic accidents is more than the number of factory injuries coming to the emergency department.This can be decreased by following proper road traffic rules.Delhi has the highest number of vehicles in India and the non obedience of traffic rules and drunken driving contribute to increase in such incidences.Proper implementation of traffic rules can decrease the number of road traffic accidents.Also cameras at red lights can decrease the number of traffic rule violators. Also proper counseling for developing positive attitude and controlling the aggression in youth have to be promoted.4

The study thus highlights a couple of points:

- 1) The hospital is meeting the objectives of providing medical care to the insured patients and their dependants.
- 2) A major section of MLC's were fall from height. This can be easily decreased by having boundaries on rooftops and taking proper care of children at home.
- 3) There appears to be a lack of awareness regarding proper precautions by the employees and the employers while working in the industrial environment.

This situation can be improved by following proper safety precautions in industrial environment by both the employer and the employee.

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