



AN OVERVIEW OF MEDICO-LEGAL CASES REPORTING TO A TERTIARY CARE HOSPITAL OF SOUTH INDIA

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ABSTRACT **Background:** Proper handling of medico-legal cases is an important aspect of a healthcare facility. The spectrum of the medico-legal cases depends upon the cultural and socio-demographic diversity, the policies of law enforcing agencies and the manner of the injury. Therefore, it becomes imperative for the hospital administrators to study the pattern of such cases so that it would help them to deal with such cases promptly and in more appropriate way and improve upon their facilities accordingly. **Aim:** To study the pattern of Medico-legal cases reporting to a tertiary care hospital of South India. **Methods:** It is a record based cross-sectional study conducted in a tertiary care teaching hospital in South India over a period of 1 year from 1st October 2021 to 30th September 2022 where the Medico-legal register and case-sheets of medico-legal cases were thoroughly studied and data pertaining to their demographic profile, date, time and manner of injury were noted. **Results:** Out of 1561 cases studied, 1146 cases were males and 415 cases were females and a majority belonged to the age group of 21 to 40 years (46.5%). A total of 828 cases (53%) belonged to the urban areas. The peak hours for reporting of cases was between 12pm to 6pm (39%) while least number of cases had reported past mid-night. A majority of medico-legal cases reported during monsoons (46%). Road Traffic Accidents (58.2%) constituted the majority of cases, followed by poisoning (11.8%) and the manner of injuries were accidental in nature in majority of cases (77%) **Conclusion:** The study gives an insight about the spectrum of medico-legal cases reporting to the study hospital. It projects the domains which need to be focused by the government and healthcare policy makers in terms of providing appropriate facilities and implementation of laws for ensuring effective handling/management of the medico-legal cases.

KEYWORDS : Medico-legal case, Hospital administrator, Road traffic accident, Injury, Healthcare policy maker.

INTRODUCTION

A Medico-Legal Case can be defined as a case of injury or ailment, in which investigations by the law-enforcing agencies are essential to fix the responsibility regarding the causation of the injury or ailment.¹ It is a medical case with legal implications where the attending doctor, after eliciting history and examining the patient, thinks that some investigation by law enforcement agencies is essential or else it may be a legal case that requires medical expertise.^{2,3}

It is essential for all hospitals to maintain a Medico-legal register wherein complete details of the medico-legal cases need to be entered compulsorily; as identification, examination and reporting of Medico-legal cases is one of the legal responsibilities of all doctors working in a hospital.

Studying the pattern of medico-legal Cases is of utmost importance owing to its utility in the prevention of avoidable casualties in future and to understand the vulnerability of the community towards most frequently encountered and documented injuries.⁴ It provides the relevant data and gives an idea to the Government authorities and health administrators where in to focus to take preventive and corrective measures to reduce the burden of Medico-legal cases and to do the Root cause analysis of such incidents.⁵

OBJECTIVES

- To study the pattern of Medico-legal cases reporting to a tertiary care hospital of South India.
- To give suitable recommendations to the administrative authorities for prevention of avoidable Medico-legal cases based on the outcomes of our study.

METHODOLOGY

A record based cross-sectional study was conducted in a tertiary care teaching hospital in South India over a period of 1 year from 1st October 2021 to 30th September 2022. A total of 1561 Medico-legal cases were enrolled during the study period. The Medico-legal register and case-sheets of medico-legal cases were thoroughly studied and data pertaining to demographic profile, date, time and manner of injury were entered into Microsoft Excel (cases with incomplete data were excluded from the study). SPSS software was used for analysis purpose.

RESULTS

Out of 1561 medico-legal cases that reported during our study period,

1146 cases were males and 415 cases were females and a majority (53%) belonged to the urban areas.

Most of the patients belonged to the age group of 21 to 40 years (46.5%) and least belonged to the age group of above 60 years (9.8%).

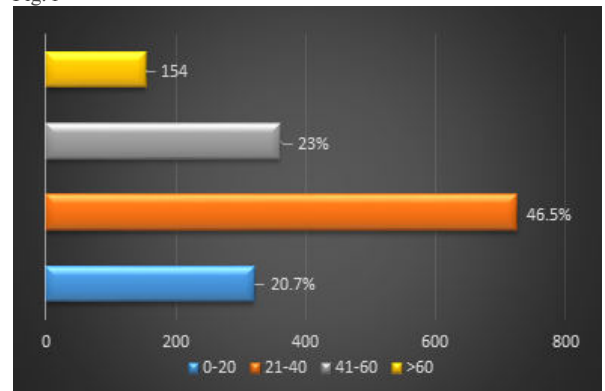


Fig 1. Age distribution of the cases

Maximum cases reported between 12pm to 6pm (39%) and least number of cases had reported past mid-night. Fig.2

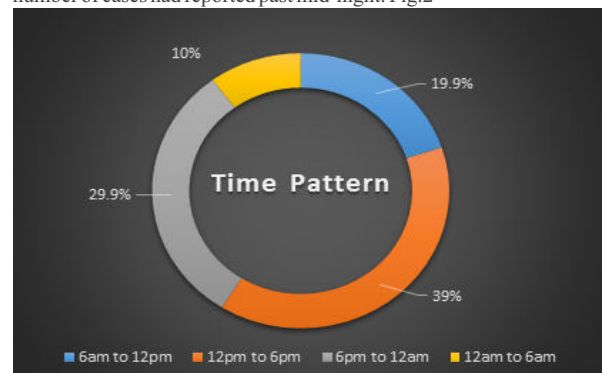


Fig 2. Time distribution of cases.

Table 1. Manner of injury

TYPES OF INJURIES	MEDICOLEGAL CASES		
	Male	Fem	Total
Road traffic accident	695	214	909 (58.2%)
Fall from height	126	50	176 (11.2%)
Snake bite/ insect bite	13	12	25 (1.6%)
Poisoning	104	81	185 (11.8%)
Assault	131	37	168 (10.76)
Workplace injury	62	7	69 (4.42%)
Self –harm	5	10	15(1.0%)
Electric shocks	5	1	6 (0.38%)
Brought dead	5	3	8 (0.5%)
Total	1146	415	1561

A majority of cases that reported were Road Traffic Accidents (58.2%), followed by poisoning cases (11.8%). Table 1

85.2% Cases that reported to our hospital had simple injuries. 1202 Medico-legal cases were accidental in nature, followed by 188 homicidal and 171 suicidal cases. Majority of cases reported during monsoons (46%), followed by 29% cases in summer and least during winter seasons.

1374 cases (91%) were brought by known people and the rest (9%) by unknown people that included police, NGO and bye-standers.

It was also observed that the Burns cases were referred out as the hospital under study did not have a Burns unit.

DISCUSSION

Most of the medico-legal cases that reported to our hospital during the study period were males (73.4%) and overall majority of cases belonged to the age group of 21-40 years (46.5%) followed by 41-60 years (23%). Similar finding was observed in a study conducted by Trangadia MM et al⁶, Hussaini SN et al⁷, Yattoo GH et al⁸ and Yadav A et al⁹. Such finding can be attributed to the fact that the males work mostly outside to earn their livelihood, making them more prone to accidents, road rages, assaults and workplace injuries. Females, on the other hand, have relatively less preponderance of such incidents as a significant number of females usually stay/work at home and look after the household, thus minimizing their exposure to the above mentioned injuries¹⁰⁻¹³.

Our study revealed that maximum number of cases (48.6%) reported with Road traffic accidents (RTA) as observed in other studies conducted by Haridas et al.¹⁰, SV Garg et al.¹¹, and Timsinha S et al¹⁴. RTA's were followed by poisoning cases (11.8%), fall from height (11.2%), assault (10.7%), workplace injury (4.4%), snake bite (1.6%), brought dead (0.5%), electric shock (0.38%). The ever increasing number of road traffic accidents can be attributed to multiple factors viz. poor condition and improper maintenance of roads, lack of sign boards and strict implementation of road safety regulations. Heavy rains, dense fog and hail storms reduce visibility and make the road surface slippery thus leading to increase in number of road traffic accidents during the rainy/monsoon season in our study area. Encroachment by street vendors has also added to overcrowding on the roads leading to addition in accidents. Significant number of poisoning cases were observed during our study period (11.8%). Similar findings were observed by Jitender et al¹⁶ (9.21%) and V Garg et al¹¹ (12.1%) in their respective studies. This can be attributed to the indiscriminate and unregulated use of pesticides, and their easy availability. Fall from height (11.2%) also accounted for a major portion of medico-legal cases in our study as was reported by Kulkarni, P et al in their study¹⁵. The cases of fall can be attributed to high rise buildings with poor safety measures, and slippery roads especially during monsoons.

In our study a total of 828 cases (53%) belonged to the urban areas as observed by Hussaini SN⁷ et al. This slight preponderance can be attributed to rising urbanization and industrialization in our state wherein most of the industries are located in urban areas leading to increased number of accidents and workplace injuries. Moreover, it is easier for the urban population to report to the hospital owing to its easy access.

Majority of medico-legal cases reported between 12pm to 6pm (39%), followed by 6pm to 12am (31%). Least number of cases reported between 12am to 6am (10%) which is consistent with the studies conducted by Yattoo⁸ et al and Trangadia⁶ et al. This can be explained by

the fact that daytime is the most effective time of the day when people attend their workplace and hence are exposed to accidents and injuries. 77% Medico-legal cases that reported during the study period were accidental in nature, followed by homicidal (12%) and suicidal cases (11%). On the contrary, in a study conducted by Yadav⁹ et al, it was found that homicidal cases were almost equal to accidental cases. This can be attributed to the fact that the majority of our medico-legal cases were road traffic accidents and falls.

CONCLUSION & RECOMMENDATIONS

The study gives an insight about the spectrum of medico-legal cases reporting to our hospital. It is quite evident from our observations that more emphasis on handling of medico-legal cases is the need of hour. The aspect of care pertaining to medico-legal cases cannot be neglected by the healthcare providers as a small mistake can lead them into a legal trouble.

Following recommendations have been framed based on the outcomes of our study:

- MBBS curriculum and Post graduate courses need to improvise in terms of emphasis on poly trauma management and emergency care.
- Regular CMEs and periodic workshops regarding importance of proper documentation and handling of medico-legal cases is required.
- A fully equipped/ staffed Burn unit is desired in the hospital.
- Road safety needs to be improved in terms of strict implementation of laws, proper signage, good maintenance of road and increasing awareness among people regarding the same.
- Educating the masses regarding the pre-hospital care will be of good use in reducing the loss of limb and life in the cases reporting to the hospital.
- Use of pesticides needs to be properly regulated by concerned authorities.
- The concept of Counseling sessions and mental health workshops need to be promoted among the younger age groups of society so as to reduce their chances of engaging in assaults and self-harm.
- Enforcement of Occupational Safety and Health Administration Standards (OSHA) in all workplaces.
- Creating an awareness regarding 'The Good Samaritan Law' among the common people is of utmost importance to save the Golden hour of the victims.

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