

Profile of Medico-Legal Cases in Casualty of a Rural Tertiary Care Centre in Tamil Nadu - A Retrospective Study

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Abstract

Medico legal cases constitute a substantial amount of cases coming to the casualty. Profiling of medico legal cases is an integral step for the reducing preventable causalities in future and to study the crime rate in that particular area. All medico legal cases received at the casualty department in Trichy SRM Medical college & Research Centre, Irungalur, Trichy during the one-year period from May 2016 to April 2017 were studied. A total of 918 cases were received in the casualty department of our hospital during the study period. Out of this Male patients were predominant (72.1%) while the rest were females (27.9%). Most of the cases belonged to the age group between 21- 30 Years. Road Traffic accidents were the single most common cause for seeking treatment in casualty among the medico legal cases. Maximum number of medico legal cases were seen during the October followed by July. Most cases were reported during the afternoon (between 12 noon to 06 PM). Accident was the single most common manner of causation among all medico legal cases. These results could be useful in interpreting the types and strategic planning can be made accordingly for the benefit of the community.

Keywords: Medico legal cases, Profile, Casualty, Road traffic Accidents, Age

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Introduction:

A medico-legal case (MLC) is a case of injury or illness where the attending doctor, after eliciting history and examining the patient, thinks that some investigation by law enforcement agencies is essential to establish and fix responsibility for the case in accordance with the law of the land.¹ Medicolegal cases constitute a substantial amount of cases coming to the casualty. Besides treating them, the casualty medical officer is expected to do exhaustive documentation of these cases. Profiling of medico legal cases is an integral step for the reducing preventable causalities in future and to study the crime rate in that particular area. By the year 2020 it is estimated that in

countries like India, mortality from injury will be more than those from communicable diseases. Despite this documentation, injuries are still not well recognized as major public health problem in this country.² This study is done to know the magnitude of medico legal cases coming to casualty of our hospital.

Objective of the Study:

1. Profiling of medico-legal cases coming to the Casualty department of Trichy SRM Medical college & Research Centre, Irungalur, Trichy.
2. Suggestions for improving medico-legal work in Casualty

Materials and Methods

All medico legal cases received at the casualty department in Trichy SRM Medical college & Research Centre, Irungalur, Trichy during the one-year period from May 2016 to April 2017 were studied. Related general information like the age, sex, religion, education, types of medico-legal case, history part etc. of the cases were collected from the MLC register maintained in the hospital. Other parameters of cases were studied from the case papers of

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respective MLC cases. The collected data was analyzed, observations discussed and compared with other studies.

Results:

A total of 918 cases were received in the casualty department of our hospital during the study period. Out of this Male patients were predominant (72.1%) while the rest were females (27.9%) (Table: 1). Most of the cases belonged to the age group between 21- 30 Years (Table: 2). Road Traffic accidents were the single most common cause for seeking treatment in casualty among the medico legal cases (Table: 3). Maximum number of medico legal cases were seen during the October followed by July (Table :4). Most cases were reported during the afternoon (between 12 noon to 06 PM) (Table 5). Accident was the single most common manner of causation among all medico legal cases (Table : 6).

Table :1 Gender wise Distribution

Gender	Cases	Percentage
Male	662	72.1
Female	256	27.9
Total	918	100

Table: 5- Time wise Distribution

Time Period	Cases	%
06AM -12 Noon	215	23.42
12 Noon – 06 PM	339	36.93
06 PM – 12 Midnight	290	31.59
12 Midnight – 06 AM	74	08.06
Total	918	100.00

Table : 2 - Age wise Distribution

Age Groups (Years)	Cases	Percentage
0-10	02	00.22
11-20	99	10.78
21-30	248	27.02
31-40	169	18.40
41-50	136	14.81
51-60	118	12.85
61-70	89	09.69
71-80	32	03.49
81-90	16	01.75
90-99	09	00.99
>100	00	00.00
Total	918	100.00

Table 3- Mode of Injury

Type of Cases	Number of cases	%
Road Traffic Accidents	405	44.1
H/o Fall	177	19.3
Poisoning	146	15.8
Occupational injury	46	05.0
Assault	45	04.9
Accidental Cut injury	35	03.8
Burns	26	02.8
Hanging / Strangulation	09	01.0
Animal Bites	09	01.0
Bull Gore Injury	07	00.8
Electric Shock	05	00.6
Sexual offences	02	00.2
Unknown	05	00.6
Firearm Injury	01	00.1
Total	918	100.0

Discussion:

Out of 918 cases, 662 cases (72.1%) were males. This is in consistence with many studies by various authours.³⁻⁸ The males were predominant as they are actively involved in work, sports, recreation and travel. The inherent nature of the males to be more violent and adventurous compared to females make them vulnerable to injury.

Table 4- Month wise distribution

Month	Cases	Percentage
May 2016	85	9.26
June 2016	73	7.95
July 2016	91	9.91
August 2016	83	9.04
September 2016	74	8.06
October 2016	94	10.24
November 2016	60	6.54
December 2016	68	7.41
January 2017	76	8.28
February 2017	71	7.73
March 2017	78	8.50
April 2017	65	7.08
Total	918	100.00

Table : 6 – Manner wise Distribution

Manner	Cases	Percentage
Accidental	734	79.96
Suicidal / Attempt	139	15.14
Assault / Homicidal	045	04.90
Total	918	100.00

It was observed that most cases were in the age group of 21-30 years (27.02%) followed by 31- 40 Years (18.40%). This is consistent with other studies.³⁻⁸ These age groups are in the most active phase of life. They are also bound to be involved in assaults and accidents due to their carefree lifestyle.

Road traffic Accidents contributed to 405 cases (44.1%). Road traffic accidents are common as our medical College Hospital is situated on a busy National Highway. Due to rapid modernization and urbanization in India, road accidents are on the rise. Drunk driving also plays a major role. These findings are consistent with studies done by Garg et al³, Benomran et al⁷, Harish et al Gupta et al.⁹ Most of the medico legal cases (94 Cases) were received during the month of October (10.24%). 342 cases (37.25%) were received during the four-month period of July to October. This finding is consistent with Manoj et al⁶ and Garg et al.³ The cases are high during monsoons as there is higher chance of accidents occurrence.

It was observed that 339 cases (36.93%) were received in our hospital casualty during 12 noon to 6 PM period. This finding is consistent with Trangadia et al¹⁰, Gupta et al⁸ and Garg et al³. As the frustration increases progressively during the day, many medico legal cases are received during the afternoon period.

Accidental cases contributed to a maximum of 734 cases (79.96%). This is consistent with study done by Garg et al³.

Conclusion:

This study shows that accidents are increasing at an alarming rate. Accidents are a growing menace that reduces valuable man power due to disability and death. Basic education regarding traffic rules from school level, strict enforcement of law and order with proper maintenance of roads goes a long way in reducing accidents on road. Training the interns in medico legal documentation and in issuing medical certificates in the casualty is also the need of the hour. These results could be useful in interpreting the types and strategic planning can be made accordingly for the benefit of the community.

Ethical Clearance: *Done*

Conflict of Interest: *None*

Financial Assistance: *None*

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