

# Pattern of Medico-Legal Cases in a Tertiary Care Centre at Sangli, Maharashtra: A Retrospective Study

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## Abstract

A medico-legal case is the one where besides the medical treatment; investigations by law enforcing agencies are essential to fix the responsibility regarding the present state/condition of the patient. Medico-legal cases therefore have both medical and legal implications. Medico-legal cases are an integral part of medical practice that is frequently encountered by medical officers working in casualty. The casualty department is a backbone of every hospital because apart from medical emergencies, it also deals with the medico-legal cases. The study was conducted in a retrospective manner and all the medico-legal cases which came to the emergency department of the BVDU & MC hospital during January 2018 to December 2018 were studied. The study revealed that majority of the victims in this study population was males (70.99%) as compare to females (29.01%). Most of the victims were belonging to younger age group (21-30 years). Highest numbers of victims in the study population were Hindu (86.82%) and belonged to rural area (72.75%). Road traffic accident cases (40.22%) were highest in number among all registered medico-legal cases.

**Keywords:** *Casualty, Tertiary care centre, Medico-legal cases, Road traffic accidents and Poisoning.*

## Introduction

Generally doctor has two duties, medical and medico-legal. It is true in Indian context also. Cases coming to hospital are made "medico-legal" on various grounds. These ground, though follow same general principles in most parts of the world, may differ country to country as per the laws of the land.<sup>1</sup> It is the responsibility of a registered medical practitioner to judge each and every case properly and in doubtful cases, it is mandatory to inform the police as required by law. This saves the doctor from unnecessary and needless allegations later.<sup>2</sup> A medico legal case (MLC) is a case of injury or illness where attending doctor after eliciting, listing and

examining patient; is of opinion that some investigation by law enforce agencies is essential to establish and fix responsibility for the case in accordance with the law of the land.<sup>3</sup>

MLC constitutes road traffic accidents (RTA), sexual offences, assault, poisoning, suicidal attempt, burns, drug overdose etc. Majority of the medico-legal cases are due to road traffic accidents.<sup>4</sup> All the medico-legal cases are registered in casualty. Casualty department is very crucial for any hospital as all the medical and surgical emergencies first report there. Further, it serves as an outpatient department after the routine outpatient department hours.<sup>5</sup> With this background present study has been conducted to find out the pattern of medico-legal cases at a tertiary care centre, BVDUMC & H, Sangli, Maharashtra.

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## Materials and Method

This is a retrospective study, conducted in medico legal section and casualty of BVDUMC & H, Sangli, Maharashtra, for a period of 1 year (i.e. from January

2018 to December 2018). Total 455 medico legal cases recorded in medico legal register of the hospital were included in the study. Information regarding various parameters of the study were obtained from medico legal register and hospital record of individual patient. The data thus obtained was analyzed; observations were presented in tables & graphs, discussed and compared with other studies.

## Results

A total of 455 cases were selected for the present study and the following observations were made. It is observed that more number of medico-legal cases in this study population is seen with the male (70.99%) as compare to the females (29.01%).

**Table 1: Distribution of study population according to sex.**

Sex	No of Cases	Percentage%
Male	323	70.99
Female	132	29.01
Total	455	100

From the present study it is observed that more number of victims in this study population are of 21-30 years age group (31.2%), followed by 31-40 years age group (16.93%).

**Table 2: Distribution of study population according to age group.**

Age Group	No of Cases	Percentage%
0-10 years	37	8.14
11-20 Years	50	10.99
21-30 Years	142	31.2
31-40 Years	77	16.93
41-50 Years	70	15.38
51-60 Years	43	9.45
>60 Years	36	7.91
Total	455	100

From the present study it is also observed that more number of victims in this study population belongs to rural habitat (72.75%) as compare to urban habitat (27.25%).

From the present study it is observed that more number of victims in this study population belongs to Hindu religion (86.82%) as compare to Muslim religion (11.87%).

**Table 3: Distribution of study population according to habituation.**

Habituation	No of Cases	Percentage%
Rural	331	72.75
Urban	124	27.25
Total	455	100

**Table 4: Distribution of study population according to religion.**

Religion	No of Cases	Percentage%
Hindu	395	86.82
Muslim	54	11.87
Christian	6	1.31
Total	455	100

The present study reveals that RTA cases (40.22%) were more in number than any other medico-legal cases in our study population. Next to RTA cases, poisoning cases (17.81%) were more in number.

**Table 5: Distribution of study population according to type of Medico-legal case**

Type of MLC	No of Cases	Percentage%
Assault	30	6.6
RTA	183	40.22
Brought Unconscious	17	3.74
Poisoning	81	17.81
Animal Bite	14	3.08
Electrocution	7	1.54
Accidental Injuries	50	10.99
Brought Dead	9	1.97
Violent Asphyxia	11	2.41
Criminal Abortion	3	0.66
Burns	4	0.88
Others	46	10.1
Total	455	100

## Discussion

Atul S and others have conducted a retrospective study on 264 medico-legal cases registered in medico-legal register in casualty of SRMS IMS Medical College, Bareilly from January to December 2014. Study revealed that majority of the victims was males as compared females. Most of the victims were of younger age group (21-30 years) and road traffic accidents comprised of the maximum number of medico-legal cases.<sup>6</sup> These findings were in agreement with the present study.

Manoj KK and others conducted a study from August 2014 to July 2015 of all medico legal cases coming to Department of Forensic Medicine and Toxicology, Rajendra Institute of Medical Sciences, Ranchi, Jharkhand. Study shows that majority of the victims were males. Rural population was more affected as compared to urban population. Majority of the victims represented from younger age group (21-30 years). Road traffic accidents comprised of the maximum number of medico-legal cases.<sup>7</sup> Our study correlates with the above mentioned findings.

A retrospective study of medico-legal cases done by Jitendra T and others at casualty of Sri Aurobindo Medical College and PGI, Indore for a period of 1 year, from 1<sup>st</sup> June 2016 to 31<sup>st</sup> May 2017 revealed that maximum number of medico-legal cases were of road traffic accident, seen among young individuals. Majority of the victims were males.<sup>8</sup> These findings are in agreement with the present study.

The study conducted prospectively by Mohammed SM and others over a period of one year from 1<sup>st</sup> October 2014 to 31<sup>st</sup> September 2015 on all medico legal cases registered in the Accident and Emergency Medicine department at Sher-I-Kashmir Institute of Medical Sciences, SKIMS, Srinagar. Study revealed that majority of the victims were males, younger age group (21-30 years) and most of the victims were of rural population. RTA cases were highest in number among all registered medico-legal cases.<sup>9</sup> Our study correlates with the above mentioned findings.

Santhosh CS and others have conducted a prospective study for a period of one year from 1<sup>st</sup> October 2014 to 30<sup>th</sup> September 2015 on a 4066 medico-legal cases attending Casualty department of J.J.M. Medical College and Bapuji Hospital, Davangere, Karnataka. This study shows that maximum number of medico-legal cases are accidental (RTA) in nature, seen among young individuals. Majority of the victims were males.<sup>10</sup> These findings are in agreement with the present study.

Visnuraj Kumar J and others conducted a retrospective study at the casualty at the Manakula Vinayagar Medical College, Pondicherry from 1<sup>st</sup> January 2014 to 31<sup>st</sup> December 2014 on a 2391 medico-legal cases, study revealed that maximum number of medico-legal cases were due to RTA, followed by poisoning. Majority of the victims were males and of younger age group (21-30 years).<sup>11</sup> Our study correlates with the above mentioned findings.

## Conclusion

The casualty department of any hospital not only treats the patients who reports in emergencies but also carry out legal responsibilities to examine, document and certify medico legal cases. This puts a lot of burden on casualty department. The present study shows that majority of the victims are males as compare to females. Younger age group (21-30 years) is more commonly affected. Most of the victims in this study population are Hindus. Rural habitant population is more commonly affected. RTA cases were highest in number among all registered medico-legal cases. This can be reduced by implementing strict road traffic rules as well as by improving the road condition by concerned authorities, at the same time users of the road and vehicles also realize their responsibility in following traffic rules. Awareness regarding proper protective measures and effect of intoxicating substances on once driving ability will also help to reduce the incidences of Road traffic accidents.

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**Ethical Clearance:** taken from IEC, BVDUMC & H, SANGLI.

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