

**Pattern of Medico-legal Cases Treated in Casualty Department of A Teaching Hospital in Bareilly, Utter Pradesh**

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**Abstract**

**Introduction:** With a sudden rise in population throughout the globe there is a surge in the medico-legal cases as well. These medico-legal cases differ among regions based on socio-economic status, cultural diversities, capability of law enforcing agencies and the prevailing standards of health care services available in the community. It is a responsibility of a registered medical practitioner to judge each and every cases properly and in doubtful cases, it is better to inform the police.

The objective of present study is to minimize medico-legal cases.

**Material and Method:** This is a record based retrospective study of medico-legal cases from Medical Record Department of Rajshree Medical Research Institute (RMRI), Bareilly, UP, from 1<sup>st</sup> January 2016 to 31<sup>st</sup> December 2017. During this study period the total 407 medico-legal cases were registered in casualty of RMRI Bareilly. The collected data was analyzed and presented in tables by using various parameters and compared with other studies.

**Observation and Result:** The study revealed that Males outnumbered the females. Majority of the victims are from age group 21-30 yrs. It was observed that majority of the victims were discharged from hospital after treatment. Maximum number of cases belongs to Bareilly district. Maximum number of cases are due to RTA. In present study most commonly opinions were sought from Orthopaedic department.

**Discussion and Conclusion:** In our study it was observed that most of the victims were males. Maximum number of medico-legal cases were RTA followed by Suicidal poisoning cases. So emergency department should be well equipped with all the antidotes and the drugs which are used for the treatment of agricultural poisons.

**Keywords:** Medico-legal cases, Casualty, Road traffic accidents, Law.

**Introduction**

With a sudden rise in population throughout the globe there is a surge in the medico-legal cases as well. These medico-legal cases differ among regions based on socio-economic status, cultural diversities, capability of law enforcing agencies and the prevailing standards of health care services available in the community. It is a

responsibility of a registered medical practitioner to judge each and every cases properly and in doubtful cases, it is better to inform the police. The RMRI is the first to provide a hospital in this area, started with the aim to provide tertiary care to the rural population of Bareilly. It deals not only with medical and surgical emergencies round the clock but also deals with a huge number of medico-legal cases which comprises accidents, assaults, burns, poisoning, sudden deaths etc. It is a well known fact that the initial few hours are golden period which can save the life of a patient in a case of emergencies. The nearest urban area, Bareilly is about 20-25 Kms and Rampur is 35-40 Kms away from RMRI, and the emergency department of the hospital should always be well equipped and trained to handle all kinds of cases coming to them. Our study is aimed to observe all the above mentioned facts by studying the profile of Medico-legal cases in the hospital. Maximum opinions were sought from orthopaedics, surgery and medicine departments which is consistent with workload of these departments in other studies [1]. It was observed that most of the cases were of RTA (74.20%) followed by poisoning (12.78%). This was consistence with study by Garg et al, Benomran et al and Gupta et al.[2,3,4].

**Materials and Methods**

This is a record based retrospective study of medico-legal cases registered in medico-legal register in Medical Record Department of Rajshree Medical Research Institute (RMRI), Bareilly, UP, from 1<sup>st</sup> January 2016 to 31<sup>st</sup> December 2017 (two years). A pre structured Performa was used to note down types of injuries and additional information like the demographic profile, age, mode of injury, time of occurrence, time period between injury and reporting to casualty was collected from victim’s attendants and police. During this study period the total 407 medico-legal cases were registered in

casualty of RMRI Bareilly. The collected data was analyzed and presented in tables by using various parameters and compared with other studies.

**Observation and Results**

In this two years retrospective study from 1 January 2016 to 31 December 2017, a total number of 407 medico-legal cases were reported and studied in casualty department of RMRI, out of which (68.55%) were males and (31.45%) were females. Males outnumbered the females. Majority of the victims are (28.74%) from age group 21-30 yrs followed by (26.29%) from age group 31-40 yrs (Table-1). It was observed that majority of the victims were discharged from hospital after treatment (74.70%) while in (19.90%) of the victims had took LAMA (Leave against medical advice) (Table -2). Maximum number of cases (87.97%) belongs to Bareilly district and (12.03% ) cases from others districts (Table-3). (74.20%) Cases are due to RTA followed by poisoning (12.78%) (Table-4). In present study most commonly opinions were sought from Orthopaedic department (45.70%) followed by surgery (33.67%), medicine (15.48%) and (5.15%) from others departments (Table- 5).

Table:- 1 Age, sex and ratio wise distribution of Cases.

Age group (in years)	Male (%)	Female (%)	Total (%)	Sex Ratio (M:F)
0 – 10	16 (61.54%)	10 (38.46%)	26 (6.39%)	1.6:1
11 – 20	53 (65.43%)	28 (34.57%)	81 (19.90%)	1.9:1
21 – 30	87 (74.36%)	30 (25.64%)	117 (28.74%)	2.9:1
31 – 40	70 (65.42%)	37 (34.58%)	107 (26.29%)	1.9:1
41 – 50	33 (76.74%)	10 (23.26%)	43 (10.57%)	3.3:1
51 – 60	14	12	26 (6.39%)	1.17:1

	(53.85%)	(46.15%)		
>61	06 (85.71%)	01 (14.29%)	07 (1.72%)	6:1
Total	279 (68.55%)	128 (31.45%)	407 (100%)	2.17:1

Table :-2 Shows mode of discharge

Numbers of victims	Numbers of victims	Percentage of victims
Discharge	304	74.70%
LAMA	81	19.90%
Others	22	5.40%
Total	407	100 %

Table:- 3 Area (District) wise distribution of cases

Area catered districts	Number of victims	Percentage of victims
Bareilly	358	87.97 %
Others	49	12.03 %
Total	407	100 %

Table:- 4 Types of Injury Cases

Mode of Injuries	Number of cases	Percentage of cases
Road Traffic Accidents	302	74.20 %
Poisoning	52	12.78 %
Assaults	34	8.35 %
Others	19	4.67 %
Total	407	100 %

Table 5: Opinions Sought From different Departments

Name of Departments	Cases	Percentage
Orthopaedics	186	45.70 %
Surgery	137	33.67 %
Medicine	63	15.48 %
Others	21	5.15 %
Total	407	100 %

**Discussion**

In our study it was observed that most of the victims were males, the males who work outside to earn their daily bread are more vulnerable, while females usually stay at

home and look after the house hold work. Our findings are consistent with study conducted by Malhotra S et al, Garg V and Yattoo GH et al [1, 2, 5].

Our study are similar with other study where road traffic accidents constituted majority of medico-legal cases. It was also noted that majority of the accidents happened in the National Highway because RMRI is situated on NH-24 [2].

Poor road condition prevailing for a decade in both urban and rural areas, increasing population in the city day by day contributes maximum number of road traffic accidents [2, 5, 6]. It was observed that most of the cases were of RTA followed by poisoning and other. This was consistence with study by Garg et al, Benomran et al and Gupta et al [2, 3, 4]. Rules and prevention regarding such are also written in standard books [7, 8].

It deals not only with medical and surgical emergencies round the clock but also deals with a huge number of medico-legal cases which comprises accidents, assaults, burns, poisoning, sudden deaths, operative deaths, suicide, homicide, any suspicious deaths and cases referred from police or court [7, 8].

The Government of India over time and time again has stressed upon the need of tertiary health care in rural areas. The same fact has been stressed upon in the Planning Commission report on tertiary care institutions for 12th five year plan [9].

**Conclusion**

Males and young age group are most commonly involved in Medico-legal cases. RTA followed by Suicidal poisoning cases have a high incidence in rural population. So emergency department should be well equipped with all the antidotes and the drugs which are used for the treatment of agricultural poisons. In the present study maximum number of patients were discharged successfully after treatment, some patients were referred

to higher centres and few victims had absconded or took LAMA (Leave against medical advice). Engaging medico-legal expert in a casualty or giving training to the medical officers to carry out medico-legal works safely and scientifically can definitely decrease the issues of negligence cases in a developing country like India.

### **Recommendation**

1. The doctor those are involved in handling medico legal cases need to be more trained. Casualties of Medical Colleges have lot of exposure of medico legal cases, So hospital has the need for round the clock availability of Forensic experts.
2. The 15 days posting under Forensic Medicine and Toxicology Department during internship should be mandatory for better exposure to medico legal cases.
3. The periodical CME programmes specially by involving forensic Medicine specialty and Integrated reorientation programmes should be made compulsory for all doctors in particular surgeon, obstetricians and gynecologists, radiologist and pathologists.
4. Doctor should well acquainted about when he has slightest doubt of Medico-legal cases then he should send police information (s.39 of Cr.P.C.).
5. Doctor should well aware about Laws in relation to medical practices (Legal obligation). Those are as followings IPCs. Sec 118, Sec 176, Sec 177, Sec 182, Sec 191, Sec 192, Sec 193, Sec 194, Sec 195, Sec 197, Sec 201, Sec 203 and Sec 204. IPC section 312 to 316 etc.

Conflict Of Interest: There is no conflict of interest in our study as we have not gained any financial benefits from any organization.

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