e-ISSN: 2590-3241, p-ISSN: 2590-325X

**Original Research Article** 

# Profile of Medico-Legal Cases Coming to Casualty of Government Medical College and Associated Hospital Ratlam (M.P.)

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Received: 24-09-2021 / Revised: 29-11-2021 / Accepted: 26-12-2021

### **Abstract**

Background: The casualty department of a hospital deals with medical emergencies which comprise of saving lives and at the same time thorough documentation in all medico-legal cases. The aim of this study to assess the profiling of medico-legal cases reporting to the casualty department of District Hospital Ratlam. Materials & Methods: The present study is an observational retrospective study, conducted to know the distribution of various medico-legal cases arriving in the district hospital of Ratlam (M.P.) according to various parameters. All cases (Medico-Legal) that came to the hospital from 1 July 2018 to 30 June 2019 were taken in the study. Results: Total cases were 2624 in which male 1711(69.5%) outnumbered females 753(30.5%). The maximum number of cases were physical assault 1025(41.5%) followed by RTA 607(24.6%) and poisoning 159(6.4%). The maximum number of cases 964(39.1%) were of age group 21-30 years followed by 535(21.7%) cases of age group 31-40 years. Conclusion: Casualty or emergency department of a medical college receives all type of emergency cases including medico legal cases. The sensitive or important things of medico-legal work should be carried out under the supervision of senior medical officer as part of their training in the field, so as to avoid imprecision their training in the in giving the opinion.

Keywords: Medico-Legal Case, Hospital, Casualty.

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### Introduction

Any hospital from primary to tertiary care level is always judged by workload, provisions of services to those who are needy and they need it like ICU, CCU, Trauma care unit and casualty[1]. Out of all the department of any hospital casualty of any hospital is like entrance gate to any hospital where most of the medical emergencies and almost all cases of injury or illness with legal implications report to this unit of a hospital and attending doctor has not only to provide treatment to such patient but also has to register those cases carry out the investigation, if needed to their opinion from a specialist who is treated patient and formulate an opinion regarding injury or illness as and when asked by law enforcing agencies or judiciary. Profiling of medico-legal cases not only helps in knowing the burden of medicolegal cases reporting to hospital but also helpful in preventing preventable casualties in the future[2]. The aim of this study to assess the profiling of medico-legal cases reporting to the casualty department of District Hospital Ratlam.

# Materials and methods

This study is a hospital-based study carried out in the casualty and medico-legal section of district Ratlam (M.P.).

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Data of study collected from casualty department and medico-legal records department during the period from 1 July 2018 to 30 June 2019. Total 2464 medico-legal cases reported to casualty included in this study. The cases of scorpion, wild & domestic animal bite, which were not registered as medico-legal cases were excluded. The required information was obtained from the medico-legal register of the casualty and record department. The data obtained analyzed, observations presented in tables, graphs, discussed, and compare with other studies.

In the present study total of 2464 medico-legal cases which were reported to the casualty department included which accounts for 17.17% of cases (table 1).

Table 1: No. of departments involved in giving opinion in Medicolegal case

No. of Department Involved In	No. of Cases	%
Giving Opinion		
One Department	1167	47.36
Two Department	784	31.81
More than two Department	513	20.81
More than two Department	513	20.81

In the present study maximum number of cases were coming with an alleged history of physical assault (1025) followed by road traffic accident (607), poisoning (159), drunkenness (153) & burns (148) (figure 1).

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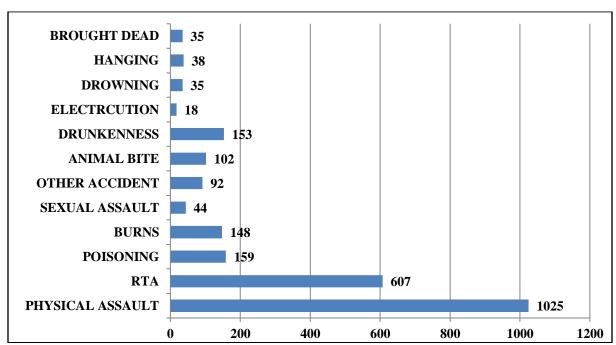


Fig. 1: Distribution of Medico-Legal Cases

Maximum no. of victims was male (1718) as compared to female (746). In respect to the age-wise distribution of cases, a large no. of cases was from the age group 21-30 years (965), followed by 31-40 years age group (537) and 11-20 years of age group (381) (figure 2).

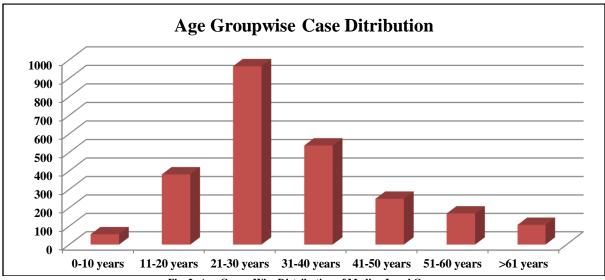


Fig. 2: Age Group Wise Distribution of Medico-Legal Cases

In the present study, males outnumbered females in every type of case except in burns where females were more (103) as compared to males (45). Similarly, cases of drunkenness (153) that presented to casualty were all males. In sexual assault cases, only male accused (44) were brought to casualty whereas female victims were taken to mother and child hospital which is located in a different area (figure 3).

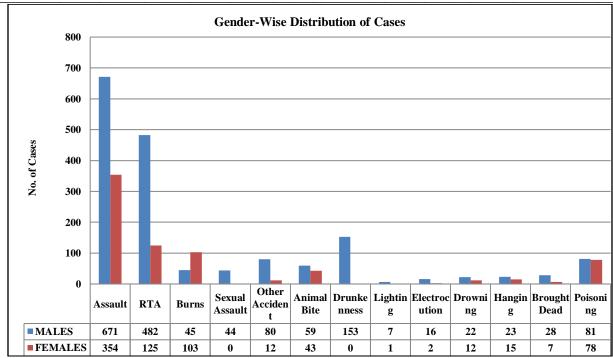


Fig. 3: Gender-Wise Distribution of Medico-Legal Cases

Among seasonal variation of the cases maximum no. of cases noted in the rainy season (904) i.e. between July to October followed by summer season (810) and winter season (750).

In a large no of cases (1167) opinion from a single department is sought followed by cases (784) in which opinion from two departments was sought and in the remaining cases, (513) opinion from more than two departments was sought.

# Discussion

The present study shows medico-legal cases accounts for 17.17% of cases reported to the casualty department which is in conformation with the findings of Patil Basavraj et al[1]. This may be because most of the medico-legal cases brought by the police or cases of injuries and trauma first report to the casualty department of a hospital and after O.P.D. timings and in nights particularly casualty is the only department that serves the patients.

Figure 2 bar chart shows the gender-wise distribution of cases in which males outnumbered females with 1711 (69.5%) male as compared to 753 (30.5%) females, males to females ratio was 3:1. Similar findings were reported by Malik Y et al[2], Timsinha S et al[3], Farooqui BJ et al[4].

Our study shows that most commonly affected age group was 21-30 years. This is in conformation with many other researcher[5-11] which may be because individuals in these age groups are working and economically most productive and their involvement in outdoor activities is the most. This exposes them to the risk of accidents and workplace hazards.

A large no of cases was of physical assault 1025(41.5%) followed by RTA 607(24.6%) & poisoning 159(6.4%). Patil B et al[1] reported the maximum number of cases of fall, Timsinha S et al[3] reported maximum no. of cases of RTA while Malik Y et al[2] reported maximum no. of cases of physical assault. This discrepancy may be because Ratlam is surrounded by notified tribal area and most irrigated land of the state where consumption of alcohol and quarreling at the time of sowing and cutting crop is most common due to which such incidents occur frequently.

Type of cases gender-wise distribution shows males outnumbered females in every type of case except burns where females outnumbered males. This may be because the adjoining area is a rural population, poor literacy rate, low socio-economic strata, still dowry related deaths are common among females. Similarly, in drunkenness cases all accused were males as consumption of alcohol is uncommon in females and it is prevalent in males. In sexual assault cases, the only assailant was brought to casualty as victims are taken to mother and child hospital.

Maximum no. of opinion in medico-legal cases was sought from a single department followed by opinion sought from two departments. Similar findings were observed by Malik Y et al[2].

Among seasonal distribution of cases maximum no. of cases were reported in the rainy season followed by the summer season. Similar findings were reported by Farooqui BJ et al[4] and Timsinha S et al[3]. This is because the surrounding population of Ratlam is mostly rural, tribal, and agrarian.

## Conclusion

Casualty or emergency department of a medical college receives all type of emergency cases including medico legal cases. The sensitive or important things of medico-legal work should be carried out under the supervision of senior medical officer as part of their training in the field, so as to avoid imprecision their training in the in giving the opinion.

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e-ISSN: 2590-3241, p-ISSN: 2590-325X

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Conflict of Interest: Nil Source of support: Nil