

Profile of Medico-Legal Cases at a Tertiary Care Hospital in Ahmednagar, Maharashtra

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Abstract

Background: Casualty Medical Officer has to give emergency treatment first and stabilize the patient. He also has to carry out thorough documentation of different medico-legal cases. Dr. Vikhe Patil Memorial Hospital is a tertiary care center, situated in rural area near Ahmednagar, Maharashtra. **Objectives:** 1. To study profile of different clinico-medico-legal cases at tertiary care center. 2. To analyze the data for better patient care. **Study Design:** Present study is record based retrospective study conducted at Casualty of Dr. Vikhe Patil Memorial Hospital attached to Padmashree Dr Vithalrao Vikhe Patil Foundation's Medical College, Ahmednagar from 1st January 2015 to 30th November 2015. **Results:** Present study reveals 224 medico-legal cases. Out of total cases, road traffic accidents constitutes majority of cases (138, 61.60%), followed by poisoning (30, 13.40%), burns (22, 9.80%), physical violence (14, 6.25%), fall from height (10, 4.5%), sexual offenses and trauma by animal (4, 1.7% each) and snake bite (2, 0.9%). Present study reveals male domination (152, 67.85%). Most of the cases occurred between age group of 21-30 years (66, 29.40%), followed by 31-40 years (44, 19.40%). Maximum number of the cases was from rural area (170, 75.90%). The study also reveals maximum number of cases occurred in May (30, 13.40%), followed by April and October (28, 12.50% each).

Keywords: Medico-Legal Cases; Tertiary Care Center; RTA; Casualty.

Introduction

A medico-legal case is 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. The case therefore has both medical and legal implications [1]. These cases are an integral part of medical practice that is frequently encountered by Medical Officers working in Casualty.

Medico-legal cases are those related to crime against human body like alleged cases of assault, road traffic accidents, burns, poisoning, snake bite, insect bite, industrial accidents, alcoholic

intoxications etc. and others like insurance and sickness-fitness cases. Study and analysis of medico legal cases is an inherent aspect for the obviation of preventable causalities in future and to study the rate of crime in that area [2].

Material and Methods

This is a record based retrospective study of medico-legal cases registered in medico-legal register in casualty of Dr. Vikhe Patil Memorial Hospital which is a tertiary care center attached to Padmashree Dr Vithalrao Vikhe Patil Foundation's Medical College, situated in rural area near Ahmednagar, from 1st January 2015 to November 2015. Related general data like type of medico-legal cases reported in casualty during this period, age and sex of cases, months and season concern in arrival of medico-legal cases in casualty were collected from medico-legal register. During this study period the total 224 medico-legal cases were registered in casualty of Dr. Vikhe Patil Memorial Hospital. The collected data was analyzed with Microsoft excel and presented in

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tables, graphs and pie charts by using various parameters and compared with other studies.

Observations and Results

Table 1: Age wise distribution of medico-legal cases

Age in Years	No of cases	Percentage
0-10	4	1.7
11-20	36	16.0
21-30	66	29.4
31-40	44	19.4
41-50	26	11.6
51-60	26	11.6
Above 60	22	9.8

Table 1 shows maximum cases were between age group 21-30 years, followed by 31-40.

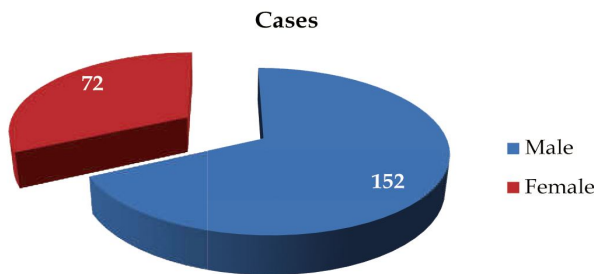


Chart 1: Sex wise distribution of medico-legal cases
Chart 1 shows male dominance.

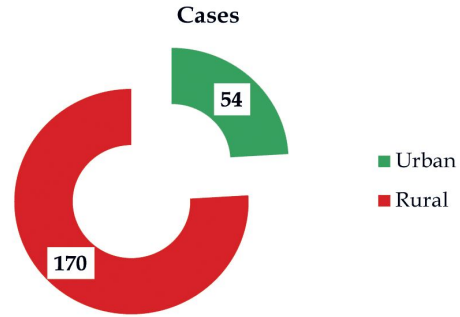


Chart 2: Area wise distributions of medico-legal cases
Chart 2 shows that most of the cases were from rural area.

Table 2: Profile of medico-legal cases

Profile	Cases	Percentage
Road Traffic Accidents	138	61.60
Poisoning	30	13.40
Burns	22	9.80
Physical violence	14	6.20
Fall from height	10	4.50
Sexual offences	4	1.78
Bullock horn injury	4	1.78
Snake bite	2	0.89

Table 2 reveals that maximum cases reported were of Road traffic accident, followed by poisoning.

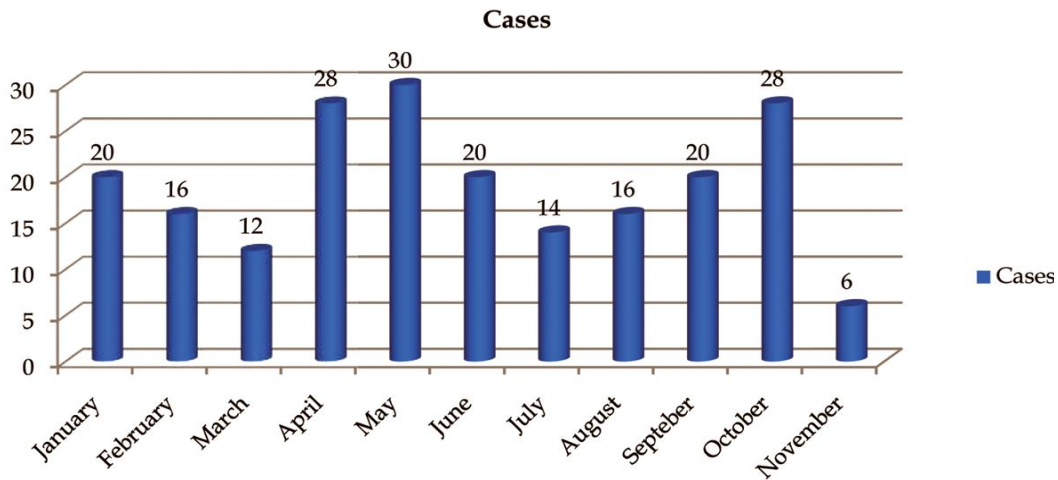


Chart 3: Month wise distribution of medico-legal cases
Chart 3 shows that most of the cases were reported in May, followed by April and October

Table 3: Season wise distribution of medico-legal cases

Season	Cases	Percentage
Summer	86	38.39
Winter	68	30.35
Rainy	70	31.25

Table 3 revealed that majority of cases was reported in summer

Discussion

Our study revealed total 224 medico-legal cases from Casualty of Dr. Vikhe Patil Memorial Hospital

attached to Padmashree Dr. Vithalrao Vikhe Patil Foundation's Medical College, Ahmednagar from 1st January 2015 to 30th November 2015.

Present study showed that most of the cases were between age group 21-30 years (29.40%) followed by age group 31-40 (19.40%). The findings are similar with other study [3-6]. Most of the cases were between 21-40 age groups, as this age group was more active, bread earner so involved more in outdoor activities.

Our study revealed that most of the cases were of male (67.80%). This is similar with the various studies

by other authors [3-6]. As our study was carried out in rural area, males were involved in farming and related outdoor activities and females are mostly involved in household activities as per rural customs. Therefore males were more vulnerable and exposed to situations falling as MLCs in our study.

This study showed rural dominance which is in consistence with study by Abhishek Yadav et al [7].

In present study, we found that most of the cases were of RTA (61.60%) followed by poisoning (13.40%) and physical violence (6.25%). This was consistence with other studies [3-5]. As rural infrastructure like roads, electrification, transport were not developed, rural population was more prone to road traffic accidents. As rural people have easy accessibility to poisons and they are more exposed to agriculture poisons, poisoning is second most common in this study. Poverty, illiteracy, property disputes and dowry custom were major issues leading to burns (9.8%) and physical violence (6.25%) in present study [7].

Our study maximum numbers of cases were noted in to the month of May, followed by April and October. These were the months when farmers were involved in more agricultural activities. In present study, maximum cases occurred in the summer which is consistent with study by Gautam Biswas et al [8], as this is a season of vacations and marriage, probably leading to increase frequency of travel by road. The other reason is that probably because this season makes people tired, irritable and rash, leading to rise in accidents.

Conclusion

The casualty department is a backbone of any hospital where different emergencies as well as medico-legal cases are handled. Our study showed maximum number of medico-legal cases were due to RTA, followed by assault, poisoning. In most of the hospitals, CMOs are MBBS only. These can be

prevented by proper education, awareness and training of casualty medical officers. They must be trained by Forensic Experts in relation to their medico-legal duties. From our study, importance of tertiary care centre in rural areas is evident.

Conflict of Interest

Nil.

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