

Pattern of Medico-Legal Cases in the Casualty of Costo-Rural hospital of Raigad district, Maharashtra

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Abstract: It is important to profile the different types of medico legal cases reported to casualty in order to assess the various medico legal cases arriving to the rural health centre so that the necessary health care facility and the preventive measures can be adopted and to minimise the crime rate in that particular area. The present study attempts to emphasize the pattern of medico-legal cases brought to casualty of Costo-rural hospital of Murud, Raigad district. The present retrospective study is conducted for a period of one year in 2013 in which all the 424 medico-legal cases were reported to the Casualty.

In this study male predominance was noted with most common involved age group was 21 – 30 years. Most of the medico-legal cases registered were due to routine medical examination for fitness, age determination and examination of accused and drunkenness. These results could be useful in interpreting the types and strategic planning can be made accordingly for the benefit of the community

Keyword: Medico-legal case, Road traffic accident, Burns, Poisoning, Assault, Bites.

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I. Introduction

A Medico legal case 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 land¹

Registration of medico-legal cases is an important aspect for the prevention of avoidable casualties in future and to study the genuine crime in the area so that firm steps should be taken by law and enforcement agencies. Profiling helps in knowing the burden of medico legal cases on different departments which helps to sort out in stipulated time². Road traffic accidents is a major concern of casualty cases due to increase in motorization, expansion of the road network, population crowd, speed of vehicle and work competition³. The on duty doctor in the casualty department has to first stabilise the patient of any emergency. Under section 39 of CrPC it is duty of doctor to register a particular case as a Medico-legal case whenever indicated and has to examine the same. In the present study an attempt is made to know the workload of clinical medico-legal cases and their pattern.

II. Aims and Objectives

1. To study the profile of medico legal cases coming to casualty of Rural health centre.
2. To give suggestions for improving quality of Medico legal work in casualty.
3. To make recommendations to administrative authorities according to outcome of study.

III. Material and Methods:

This is a retrospective study, conducted in medico legal section and casualty of Rural Hospital, Murud Maharashtra during the period from Jan 2013 to Dec 2013. Total 424 medico legal cases recorded/admitted in medico legal register of the hospital at casualty department were included in the study which comprised of information regarding various parameters 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.

Observations and Result:

A total of 424 individuals were brought for medico legal examination to accident and emergency department during the study period reported, out of which, male predominance was noted with 85.61% of cases and females were 14.39%.

Table 1: Sex wise distribution of Medico-Legal Cases

Gender	Cases	%
Male	363	85.61
Female	61	14.39
Total	424	100.00

Table 2: Age wise distribution of Medico-Legal Cases

Age	Cases	%
0 – 10	3	0.71
11-20	26	6.13
21-30	129	30.42
31-40	120	28.30
41-50	89	20.99
51-60	38	8.96
>60	19	4.48
Total	424	100.00

Maximum patients coming to casualty were from the age group of 21-30 years i.e. 30.42%, followed by 28.30% cases belonging to 31-40 years age group.

Table 3: Indication wise distribution of Medico-Legal Cases

Sr No	Indication for registering MLC	Cases	%
1	Medical Examination	207	48.82
2	Assault and domestic violence	90	21.23
3	Road traffic accident	36	8.49
4	Alcohol intoxication	19	4.48
5	Dog bite	10	2.36
6	Snake bite	2	0.47
7	Scorpion bite	1	0.24
8	Unknown bite	2	0.47
9	Burns	6	1.42
10	Sexual assault	1	0.24
11	Poisoning	11	2.59
12	Brought dead	16	3.77
13	Fall from height	14	3.30
14	Attempted suicide	7	1.65
15	Electrocution	2	0.47
	Total	424	100.00

Most of the medico-legal cases registered were due to routine medical examination for fitness, Age determination and examination of accused and drunkenness contributes 48.82% followed by the assault cases and cases of domestic violence 21.23% which is followed by road traffic accidents 8.49% cases.

Table 4: Poison wise Medico-Legal Cases

Sr No	Type of Poison	Cases
1	OP poison	4
2	Phenol	2
3	Ratol poison	1
4	Rat kill	1
5	OC poison fumes	1
6	Drug intoxication	2
	Total	11

Among observed poisoning cases, commonly used poisons were OP compound and Phenol. Also cases of Rat poison, drug intoxication were observed.

IV. Discussion

During the study period 424 cases presented to the casualty and the males cases (85.61%) outnumbered the females (14.39%) in all age group which is in concordance with the studies conducted by various researchers Garg⁴, Malik⁵, Haridas⁶. The male predominance may be explained by the fact that males were active in various day to day outdoor activities and other social activities as per customs. Also male by nature indulge in more violent activities as compared female. They were main bread winners of the family. Collectively therefore they were more vulnerable and exposed to such situations which fall as MLCs in our study

The maximum numbers of cases were reported in the age group of 21-30 years (30.42%) followed by 31-40 years of age (28.30%) as this age group is economically most productive and lead more active life, involved in outdoor sports and outdoor house hold activities making them more susceptible to accident or injury. These results are similar to the studies conducted at various regions^{7,8,9}.

The most common reason for registering Medico-Legal Cases in this rural hospital was routine medical examination for fitness, Age determination, Examination of accused, examination of alcohol consumption cases. As the region of Murud-Janjira is one of the famous historical regions. It is costal region with hot and too humid environment. It is popular picnic spot which is commonly visited by youngsters and common publics for celebrating different occasions with beverages. Being western costal region, law and enforcement agencies are more vigilant and aware regarding security of public; also have constant watch over nuisance creator. So this is one the reason for more medical examination cases at costal-line rural hospital. The second common reason for registering Medico-Legal Cases in this rural hospital was assault and domestic violence. However other similar studies such as Haridas⁷, Bhullar DS¹⁰ and Aggarwal KK¹¹ showed most of the Medico-Legal Cases are due to assault. In this study we found that insecticides are commonly used by farmers as it is easily available with them, poverty and drought. The most common age group involved in poisoning was 21-30years. Death due to insecticides followed by rodenticides were the prevalent forms of poisoning found in this study and is supported by other researchers¹²⁻¹⁵.

V. Conclusion:

The casualty department of any hospital not only caters to the needs of 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 doctors who are involved in handling medico legal cases need to be more trained. Also, due to increase in violence and accidents, the need for round the clock availability of medico legal experts, in as much number needed, in casualty and emergency departments to deal with medico legal cases is felt.

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