

# Evaluation of all Medicolegal Cases Brought to Casualty of GMC & SSG Hospital, Vadodara

Beejaysinh Rathod<sup>1</sup>, Sunil B. Bhatt<sup>2</sup>, Hardik R. Prajapati<sup>3</sup>, Aditya Itare<sup>4</sup>, Pratik Dabhi<sup>5</sup>

<sup>1</sup>Assistant Professor, <sup>2</sup>Associate Professor & Head, <sup>3</sup>Senior Resident Doctor, <sup>4</sup>Assistant Professor, <sup>5</sup>Resident Doctor, Forensic Medicine Department, Govt. Medical College & SSG Hospital, Vadodara, Gujarat.

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## Abstract

**Background:** Any medical college hospital's emergency room should constantly be prepared to treat a wide range of cases that are brought in. Knowing the patterns of cases that are presented before it is crucial for this reason, as is making the necessary arrangements to handle them.

**Materials and methods:** The present study is retrospective study to know the trends of medico legal cases brought to SSG Hospital, Vadodara from July 1st, 2016 to December 31st, 2016. Cases include those brought to the hospital's casualty department.

**Results:** A total number of 5408 cases were reported between July 1st, 2016 to December 31st, 2016. Among the 5408 cases reported, 79.99% were male and 26.01% were female making a male to female ratio 3:1. It was observed that urban victims constituted 51.09% and the rural victims were 48.91%. Similar 27.59% were in the age group 21-30 years followed by 21.95% in the 31-40 age group. The maximum number of cases were of RTA's (38.31%) followed by assault (20.25%) and poisoning (9.28%).

**Conclusion:** The current study offers data on the trend of medico legal cases brought to SSG Hospital, Vadodara, including details on the cases' age, sex, and etiological factors. Data is examined statistically and shown in tabular form.

**Key words:** Medicolegal cases, Casualty, RTA, Poisoning, Assault, Urban cases, Rural cases.

## Introduction

A medico legal case is an injury or illness case in which the attending physician determines, following

patient examination and history taking, that law enforcement agencies should look into the matter in order to determine who is legally responsible for what in accordance with the law of the land. <sup>(1)</sup>

**Corresponding Author: Sunil B. Bhatt**, Associate Professor & Head, Dept of Forensic Medicine, Government Medical College & SSG Hospital, Vadodara, Gujarat.

**E-mail:** drbhattfm4@gmail.com

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This is necessary in order to carry out a detailed inquiry. Following an investigation of this kind, law enforcement can identify the offenders, make an arrest, take their case to court, and administer punishment. Justice is served to the victim. It is necessary to have knowledge of the patterns of medicolegal situations that are brought to the emergency or casualty department in order to make the necessary plans for personnel, medications, tools, and equipment to handle these cases.

The present study is conducted to assess the current trends of medico legal cases brought to SSG Hospital, Vadodara, Gujarat.

**Ethical permission:** Medical College & SSG Hospital, Baroda, ECR/85/Inst/GJ/2013/RR-16 Dated 05/06/2017.

### Objectives:

1. To study the magnitude of various medico legal cases brought to casualty of SSG Hospital, Vadodara, Gujarat.
2. To estimate the pattern of medico legal cases with respect to age and sex and also from an etiological point of view.
3. To advise administrative authorities in light of the study's findings.

### Material and Methods

A record based retrospective study is carried out to know the trends of medico legal cases brought to the Casualty department, SSG Hospital, Vadodara, Gujarat. All cases reported during the period July 1st, 2016 to December 31st, 2016 were analysed. Non medico legal cases were excluded. A total number of 5408 medicolegal cases were registered in the casualty. Data related to time of reporting the casualty, age, gender, cause of being MLC were collected from the records. The collected data was analysed and depicted in the form of tables, graphs by using various parameters and compared with other similar studies.

### Observations and Results:

5408 medicolegal cases in all were reported for the current study; of these, males accounted for 73.99% of the cases and females for 26.01% (Table 1) (Chart 2) with a male to female ratio of 3:1. Majority of the cases 2763 (51.49 %) belong to urban areas and 2645 (48.91 %) cases came from rural background (Table 3). The maximum number of cases were reported in the age group of 21-30 years (27.59%) followed by the age group 31-40 years (21.95 %) (Chart 1). Majority

of the cases (36 %) reported to casualty between 6 pm to 12 am followed by 12 pm to 6 pm (33.52 %) followed by 12 am to 6 am (16.25 %) and 6 am to 12 pm (14.22%) respectively. Out of total reported cases, the majority (38.31 %) were of road traffic accidents (RTA), followed by Assault in 20.25 %, poisoning in 9.28 %. Cases including self-inflicting injuries, crush, found injured on road, bitten by police, drowning, chemical exposure, firearm etc. were contributing 13.35 % among all the cases. Least common cause of MLC was cases of blast injury, 2 cases. When a month wise distribution of cases was analysed, the maximum number of cases was observed in month of July and October followed by September, November, December and August (Table 2).

### Discussion

In the present study, a total 5408 cases were registered as MLC and out of them 79.99% were male and 26.01% were female making a male to female ratio 3:1. Our observations are similar to the findings of various studies.<sup>(2-17)</sup> This is because males are more involved in outdoor activities so they are more vulnerable to accidents or injuries.

It was observed that urban victims constituted 51.09% and the rural victims were 48.91%. Similar findings were also observed by Hussaini SN et al,<sup>(5)</sup> who found 55.91% in urban population and 44.08% in rural population and Siddappa SC,<sup>(18)</sup> who found 52.48% in urban population and 47.52% from rural population.

In our study maximum numbers of cases reported to casualty were from the age group 21-30 years (27.59%), followed by 31-40 years (21.95%) and 41-50 years (15.59%), which is similar to other studies.<sup>(2-10,12,13,17)</sup> This may be due to the fact that individuals of this age group lead more active lives, are more involved in outdoor, sports and recreation activities and take risks for work, which leads to more injuries and accidents among these groups.

Present study revealed that the maximum number of cases were of RTA's (38.31%) followed by assault (20.25%) and poisoning (9.28%).

Present study revealed that maximum cases reported to casualty were of RTA (38.31%). This finding was consistent with other studies.<sup>(3,6-8,12,17-19)</sup> The maximum incidence of RTA cases could be attributed to rapid increases in vehicles, poor road infrastructure, rash and negligent driving, and drunken driving. Another reason to explain the high incidence of RTA cases is the proximity of the study area to the national highway which harbors heavy



TABLE NO.: 3 REGION WISE DISTRIBUTION

REGION WISE DISTRIBUTION			
MONTHS	URBAN	RURAL	TOTAL
JULY	464	477	941
AUGUST	463	369	832
SEPTEMBER	479	423	902
OCTOBER	456	498	954
NOVEMBER	480	408	888
DECEMBER	421	470	891
			5408

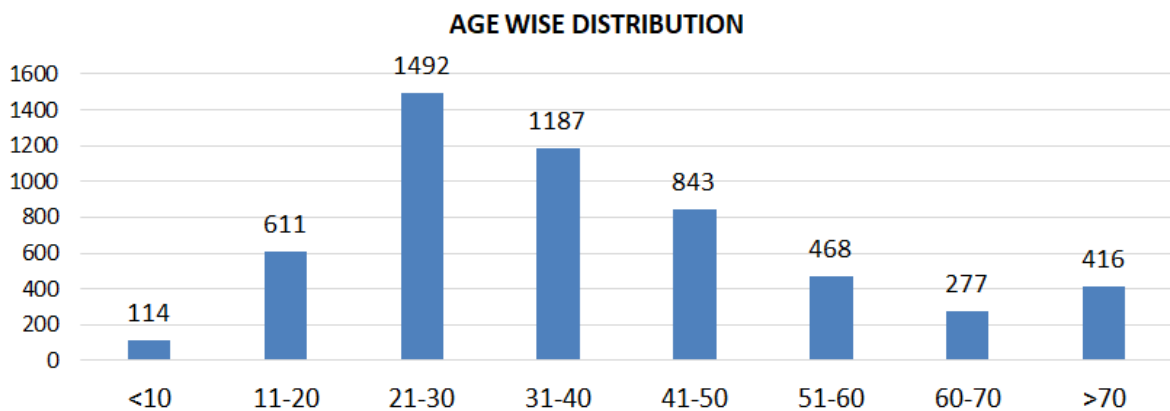


FIGURE NO.1 : AGE WISE DISTRIBUTION

GENDER WISE DISTRIBUTION OF CASES

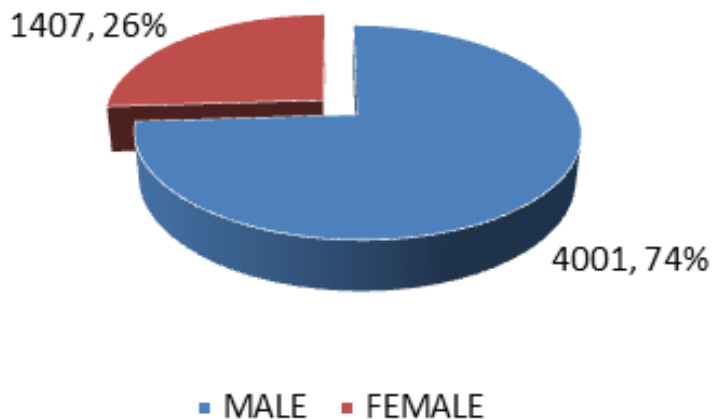


FIGURE NO. 2 : GENDER WISE DISTRIBUTION OF CASES

**Conclusions and Recommendations:**

A bad opinion is worse than none at all since the latter can distort the facts and result in the administration of injustice. According to the current survey, the majority of medico-legal cases involved

traffic accidents, which primarily affected young people living in metropolitan areas. By providing appropriate information, awareness, and training on safety standards, administrators and law enforcement agencies can prevent such incidents. Under a road safety program, all of the cities in our nation should

be evaluated according to a number of criteria, such as the quality of the roads, how well traffic signals work, how well inhabitants follow traffic laws, etc.

This study evaluated medicolegal cases; the data could be utilized by the organization to secure sufficient medical personnel, obtain sufficient medical supplies, and implement health education initiatives in the community that target preventable illnesses such as safe pesticide use, road safety, and first aid protocols.

**Ethical permission:** Medical College & SSG Hospital, Baroda, ECR/85/Inst/GJ/2013/RR-16 Dated 05/06/2017.

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