

ORIGINAL ARTICLE

TYPES OF MEDICO-LEGAL CASES REPORTED AT THE CASUALTY DEPARTMENT OF AYUB TEACHING HOSPITAL ABBOTTABAD

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Background: Medicolegal data is very important for administrators, health officials, philanthropists, social workers, law enforcement agencies. Because it is used for planning and implementation of strategies in order to reduce further incidents. This study is conducted with the aim to determine different types of medicolegal cases and patterns of weapons used. **Methods:** A total of 246 cases were studied from 1st September 2017 to 31st January 2018. All information was collected on a *pro forma*. Statistical analysis was done by MS Excel. **Results:** Out of 246 cases, 219 were male and 27 were female with age ranging from 3 to 72 years. Among total, 162(65.85%) patients were injured due to blunt weapon, 17 (6.91%) cases of firearms, 23 (9.34%) in road traffic accidents, 15 (6.09%) sharp-edged weapons, 7 (2.84%) cases were of sexual violence, 11 (4.47%) were of poisoning. **Conclusion:** Injuries of blunt weapons followed by sharp edge and accidental cases occurred more frequently.

Keywords: Medico-Legal Case' Injury; Road Traffic Accidents; Physical Assault; Poisoning

Citation: Jadoon OK, Shireen F, Afzal E, Seema N, Ahmad I, Khan HS. Types of medico-legal cases reported at the casualty department of Ayub teaching hospital Abbottabad. J Ayub Med Coll Abbottabad 2020;32(1):51-3.

INTRODUCTION

Doctors while dealing the patients are not only responsible for treatment but are also liable to give the cause of their action, especially under accidental circumstances like suicidal, homicidal and accidental cases. Medico-legal cases are those in which some criminality is involved. Medicine and Law existed together from very beginning. The role of a physician is to prevent and cure diseases. He is thought an intermediary tool between God and man.¹ This relation has been evolved and today law enforcement agencies need doctors' assistance in the cases of trauma.²⁻⁴ Medico-legal cases are essential component of medical practice and comprise the most important constituent of legal actions.

Reporting such cases identify socioeconomic burden of a country.^{5,6} An accident and emergency department is the backbone of every tertiary care hospital because it is providing medical as well as legal services. Patients' legal insults provide an important insight into the trend of social problem occurring in a community. Types of evidence presenting in emergency departments highlight important social problems and help to study the pattern of crime and plan strategies to counteract them.^{7,8} In addition to the medical emergencies, the cases of medico-legal nature are also examined by the doctors known as Medico-Legal Officers (MLOs) and Casualty Medical Officers (CMO's). Such cases constitute substantial proportion of the workload in Casualty

Department of Government Hospitals. Studying the pattern and magnitude of forensic related cases is an important aspect to be used for reducing the crime rate.⁹

This study is conducted with the aim to determine different types of medicolegal cases and patterns of weapons used.

MATERIAL AND METHODS

This cross-sectional study was conducted over a period of 5 months from 1st September 2017 to 31st January 2018 at the Casualty department of Ayub Teaching Hospital Abbottabad. Data of cases brought to the department were recorded on a *pro forma* after informed written consents from patients/victims were obtained. Data included records from casualty register and additional information was obtained by interviewing the patients or attendants. It included biodata of the patient, nature of the injury, time of the injury, time interval between incident and examination, treatment received, manner of the incident and outcome of the treatment. The secondary data were analyzed, observations of the study were shown in table which was discussed and compared with other studies. Data analysis was done using MS Excel.

RESULTS

Out of 246 cases, 219 (89.02%) were male and 27 (10.97%) females. Majority of the patients were within the age range of 3-72 years. Among total,

162 (65.85%) patients were injured due to blunt weapon, 17 (6.91%) due to firearms, 23 (9.34%) suffered injuries in road traffic accidents 15 (6.09%) because of sharp-edged weapons, 7 (2.84%) case were of sexual violence, 11 (4.47%) of poisoning and 11 (4.47%) other cases were found. Distribution of cases show that 195 (79.26%) of the cases were homicidal in nature, 5 (2.03%) of cases were suicidal and 46 (18.69%) cases were accidental in nature. The mean time interval between injuries and examination was 1 hour.

DISCUSSION

Medico-legal cases are one of the major groups of all emergencies presented to casualty department of any hospital. Different trends of societies like social, economic, religious, cultural and geopolitical factors influence its patterns. In our study, male (89.02%) outnumbered female (10.79%), which is consistent with other studies.^{10,11} This is due to the reason that the males are more exposed to trauma and violence due to their more exposure to environment. It was observed that majority of the victims (66.23%) were brought to casualty department within 1 hour of injury, followed by 13.43% of the victims within 1–2 hours of the incidence.

Our findings are consistent with study conducted by Yadav *et al*¹² who observed 51.94% cases were brought within 1 hour and 20.12% within 1–2 hours of incidence. It can be explained by the fact that urban population have easy access to tertiary care hospital and also have more health awareness. In the present study, majority of the medico-legal cases were homicidal (79.26%) in nature, followed by accidental (18.69%) and then suicidal (2.03%). Our study is at variance with Siddappa SC,⁹ who observed 69.03% accidental cases, followed by suicidal in 20.24% and then homicidal in 10.72% cases and also not in consonance with the study conducted by Yadav *et al*,¹² where physical violence cases (39.6%) were almost equal to accidental cases (38.1%).

The present study revealed that (23%) road traffic accident cases were brought to the hospital. This finding is similar to studies of Garg V⁸ Malik Y.¹⁰ Yadav A¹² observed that maximum cases reported to casualty were of poisoning. This is different from our results. The current study is also in contrast with the findings of Hussain SN,⁶ showing that majority of cases brought to hospital were of poisoning. Commonly used weapon for assault was hard and blunt type object followed by sharp-edged objects. This is in accordance with the study by Haridas *et al*.¹³ In the present study we

observed that most of injury cases were due to physical violence and fall in age group of 21–30 years. Similar results were observed by Haridas *et al*, Bhullar *et al* and Aggarwal *et al*.¹³⁻¹⁵

Limitations of this study is a duration that is shorter for which data is collected. A longer duration would have drawn a better picture of the situation. Nonetheless, careful collection of data in this study gives an insight into the problem.

CONCLUSION

In our setup, trauma by blunt weapon and sharp edge weapon is a considerable public health problem. Homicidal victims followed by road traffic accident are more incident. A comprehensive approach for preventive strategies ought to be developed by public health officials. Further research can be conducted to find out incidence, etiology and outcome of these medico-legal issues for concerned sections of the society. For prevention of homicidal cases proper education, awareness, training of safety standards by administrators and by law enforcement agencies should be conducted.

AUTHORS' CONTRIBUTION

OKJ: Literature search, conceptualization of study. EA: Data collection, analysis. FS: Data collection, analysis, data interpretation. HSK: Data collection, write-up, proof reading. NS: Write-up, proof reading. IA: Data collection, write-up, proof reading.

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Submitted: 2 January, 2019

Revised: 11 June, 2019

Accepted: 27 September, 2019

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