Forensic Survey for Medico-Legal Cases: Real Figures from Liaquat University Hospital Hyderabad, Sindh

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ABTRACT

Background: Forensic medicine has made great role in the provision of justice and any disputed case related to human health that needs clarification by law is a medico-legal case. Emergency physicians are among the most common doctors along with the MLOs having such cases in their daily practice. Medicolegal cases are almost of equal nature around the globe requiring justifications of rights and to penalize the culprit.

Aim: To determine the nature and frequency of medicolegal cases at Liaquat University Hospital Hyderabad.

Study Design: Cross-sectional.

Place and duration of study: Medicolegal Section, Liaquat University Hospital Hyderabad from 1stJanuary 2015 to 31stDecember 2015.

Methods: A total of 3636 patients were collected carefully. Patients of all age groups of both genders were included registered as medico-legal while non-medicolegal cases were excluded.

Results: Three top issues were assaults, road traffic accident and fire arm injuries with 2758(75.85%), 489(13.45%) and 191(5.25%) respectively. Maximum issues were encountered in June, April and July with 388, 372 and 323as their respective number of cases presented.

Conclusion: Assaults were seen as most common presentation of medicolegal cases followed by road traffic accident and fire arm injuries in this region of Sindh Province of Pakistan.

Keywords: Fire arm injuries, Medico-legal, Road traffic accident, Assaults

INTRODUCTION

Medicolegal cases are the injuries that need investigations in order to fix the cause and responsibility of harm through the law enforcement bodies and agencies for the provision of justice and peace. 1 Medico-legal cases may include all sorts of injuries like accidents, unnatural types of death, suspicion of sexual abuse or assault, abortion of criminal nature, unclear unconsciousness, suspected cases of poisoning, court referred medical related issues, suspected deaths of offensive issues, injuries suspected of self infliction, attempts for committing suicide etc.2 It is an observation that physicians often avoid to deal with medicolegal cases due to their multiple concerns, like lengthier legal proceedings, political pressures and personal disputes as such issues really disturb their clinical practice along with social and family life. Medico-legal cases (MLCs) do not disturbs the participating staff if dealt proper and clear guidelines provided by forensic institutes (institutional medico-legal manual) that is usually available in all hospitals but even in the absence of theses manuals is available MLCs do not harm the physician if proper care, caution and attention is given to documentations, necessary investigations, information and timely referral if required.2 It is among the duties of a RMP (Registered Medical Practitioner) to judge the MLC and inform the law

Received on 24-10-2019 Accepted on 13-03-2020 authorities which saves that also saves him from allegations in the future.³

Medicolegal cases usually observed in common practice in the sub-continent are usually lodged to put a pressure on the opposite party in a clash, to take revenge or to obtain an extra favor from the judiciary. Medico-legal cases may vary from region to region in terms of their nature as well as frequency due the cultural and seasonal variations. The impression of MLC on general population is increasing disputes, increasing undue burden, police induced stress, wastage of time at courtsetc leads to either avoiding the MLCs or early withdrawal.^{4,5} There was need of literature on this topic regarding regional data information so we planned and achieved this piece of research on the available data with the hope that it will encourage the people working in this field to progress for further development in the medical writing on the concerned topics to increase the knowledgeable literature.

MATERIALS AND METHODS

This work was the actual number of medicolegal cases presented to the Medicolegal Section of the Liaquat University Hospital Hyderabad, Sindh during one year from 1st January 2015 to 31st December 2015. Consecutive sampling was used in sample selection with being a MLC as the only inclusion with no gender or age limits and the non-MLCs as the only exclusion. Data collection was

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accomplished by filling a questionnaire based on age, gender, nature etc. The data was analyzed through SPSS-20 to calculate frequency and percentage of study subjects and medico-legal cases.

RESULTS

The frequency of assault was 2758(75.85%), RTA cases 511(14.05%), it was 191(5.25%) for fire arm injuries. Alcohol intoxication was 92 (2.53%), poisoning cases were 34(0.94%), rape cases were 19(0.52%), 05(0.13%), and police torture cases were 03 (0.08%) where the others types of MLCs were 22 (0.61%) [Table1]. There were 248 (6.82%) MLCs presented in the month of January, it was 271(7.48%) in February, in March 270 (7.69% cases were registered in March whereas in the month of April this number of cases was 372 (10.23%). In the month of May the frequency and percentage of cases was 383(7.78%), in June MLCs seen were 388(10.69%), 323(8.88%) cases were seen in July, cases registered during the month of August were 322 (8.83%), 313(8.61%) MLCs were seen in September, there were 245(6.82%) cases registered in October and 250 (6.88%) MLCs were seen in November whereas 251 (6.90%) cases were filed in the month of December (Table2).

Table-1: Frequency of various medicolegal cases (n=3636)

Parameter	No.	%
Assaults	2758	75.9
RTA	511	14.05
Fire Arm Injuries	191	5.3
Alcoholism	92	2.53
Poisoning	34	0.94
Rape	19	0.5
Police Torture	3	0.08
Sodomy	5	0.14
Others	22	0.6

Table-2: Month-wise distribution of MLCs (n=3636)

Month	No.	%
January	248	6.82
February	271	7.48
March	270	7.42
April	372	10.23
May	283	7.78
June	388	10.67
July	323	8.88
August	322	8.86
September	313	8.61
October	245	6.84
November	250	6.88
December	251	6.90

DISCUSSION

The research results by Jitendra et al⁶ showed majority of MLCs (81.84%) as accidental while 9.73% as suicidal, 8.42% as homicidal, 9.21% cases as poisoning, assaults were responsible for 8.02% MLCs and deaths were reported as 3.09% which were inconsistent to our results which show assault as 75.9% of MLCs while RTA as 14.05%. They reported March 11.11% MLCs as maximum number and September as 2nd highest 9.28% as a monthly distribution that is inconsistent to our June 10.67% cases

followed by April 10.23%. Siddappa et al⁷ reported 69.03% of MLCs as accidental cases and 20.245 as suicidal followed by 10.72% as homicidal cases that also fall inconsistent to current finding possibly due to cultural differences. Yadav et al⁸ reported in his study results assault cases on top (39.6%) followed by accidental cases (38.1%) these findings were inconsistent to our study results. Another inconsistent result was seen from the study results of Malik et al9 who declared poisoning as the observed maximum number of cases reported. Hussain et al10 found burn cases on top in his research work that was also an inconsistent finding as compared to our study results. MLCs are different depending on the regional distribution in terms of their nature, frequency and percentage a Pakistani study from Rawalpindi by Malik et al¹¹revealed August as the month with maximum number 314(10.41%) of MLCs followed by November and January 298(9.88%) and 288(9.55%) respectively. His study showed 3015 patients of MLCs to visit the tertiary care hospital and most of them (38%) were of RTA and 32% were physical assault while 19%were caused by injuries due to sharp weapons inconsistent to our results. Yogesh et al12 reported trauma as 30% that is inconsistent to our findings of 14%.

The MLCs are among the major causes of mortalities as well as morbidities that need focused solutions round the globe otherwise the mortality rate may exceed to that of CDs (communicable diseases) by the year 2020 ending.

MLCs are important component of any emergency and it needs proper evaluation, management and referrals.

This can only be achieved by arranging training programs for emergency physicians and doctors working at the remote rural areas. Public awareness campaigns by government programs as well as through forensic and community medicine department of various universities can do a lot in this regard that may benefit all public communities.

CONCLUSION

Assaults are most common MLCs with road traffic accident as second and fire arm injuries as third common problem of this region and June and other summer months have more case presentation than other months.

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