A Study to Identify the Various Bottlenecks in the Management of Medicolegal Cases at a Tertiary Care Teaching Institute of North India

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Abstract
Article 21 of the constitution guarantees protection of life and liberty to every citizen as well as non-citizens. Right to health care and medical assistance is integral to the right to life and the state has a constitutional obligation to provide health facilities. Failure of a government and other hospital to provide a patient timely medical treatment results in violation of the patient’s right to life.
A prospective observational study was conducted over a period of six months from 1\(^{st}\) October 2014 to 31\(^{st}\) March 2015 in the Accident & Emergency medicine department of Sher-i-Kashmir Institute of Medical Sciences, SKIMS, Srinagar. The data was collected as per the pretested and predesigned checklist and the various bottlenecks in management of these cases were identified.
The study found that problem related to preservation of evidence was a significant factor affecting the management of medicolegal cases. Proper labeling of medicolegal case files was not being done in many of the cases and a significant proportion of cases were not being entered in the medicolegal register. In many of the cases police was not intimated about receipt of the medicolegal case while as in most of the medicolegal cases police was not informed of the discharge/death/LAMA of the patient. Details of the injuries and details of doctor conducting the examination of the medicolegal cases were not mentioned in many of medicolegal case files. Medicolegal autopsy was not being done in any of the cases where it was recommended to ascertain the cause of death.

Keywords: Medicolegal, Bottlenecks, Injury, Autopsy.

Introduction
No greater opportunity, no greater responsibility, no greater obligation can fall to any other human being than to become a medical professional. In the care of suffering the medical professionals need scientific knowledge, technical skill, moral understanding of profession and awareness about the relevant laws of the land. Primarily doctors but also other ancillary and administrative staff of the hospital have several ethical and legal obligations in the performance of their duties. It is important therefore, that every concerned person of the hospital, related with treatment and care of the patients must understand the nature of obligations...
and thus fulfills these obligations to the best of his ability, to maintain nobility of medical profession. Most of doctor, irrespective of his/her specialty, would have faced certain cases, which at the time or subsequently, would be labeled as —medico-legal.¹

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 land.²

Injury is defined under section 44 IPC as “any harm whatever illegally caused to any person, in body, mind, reputation or property”.³ In simple language it is a medical case with legal implications for the attending doctor where the attending doctor, after eliciting history and examining the patient, thinks that some investigation by law enforcement agencies is essential.⁴ ⁵

Medico-legal cases constitute a significant proportion of workload in the Accident and Emergency Medicine Departments of tertiary care hospitals. The way in which medico-legal issues are handled has a profound impact on the public image of the hospitals. Usually all the big hospitals and the teaching institutions have an institutional medico-legal manual which gives, in a step-wise detail, the correct procedure of dealing with the various kinds of MLCs. The present study was conducted to identify various bottlenecks in management of medico-legal cases at SKIMS, Srinagar a tertiary teaching hospital.

**Materials and Methods**
A prospective observational study was conducted over a period of six months from 1st October 2014 to 31st March 2015 in the Accident & Emergency medicine department of Sher-i-Kashmir Institute of Medical Sciences (SKIMS), Srinagar. The study was carried out two days a week, all the medico-legal cases (MLCs) reporting to the Emergency medicine department on the selected days were followed from admission up to the discharge/death of the case. The data was collected as per the pretested and predesigned checklist and the various bottlenecks in management of these cases were identified.

A pilot study was carried out for a period of month to see applicability of the designed checklist. The data obtained was entered over a Microsoft excel sheet. The variables of interest have been tabulated in terms of frequency and percentage. Data was analyzed using SPSS software version 20.

**Observation and Results**
Over a period of six months, 204 medico-legal cases were followed from admission to discharge and various bottle necks were identified in their management. (Table 1)

**Table 1: Showing the Status of various Deficiencies in Medicolegal Case Management**

| S. no | Particular of case matter/issue | Yes   | No    |
|-------|---------------------------------|-------|-------|
| 1.    | Case file properly marked as medicolegal | 64.7% | 35.3% |
| 2.    | Case entered in medicolegal Register | 75.5% | 24.5% |
| 3.    | Police intimation done on reception of the case | 65.7% | 34.3% |
| 4.    | Police informed on discharge of the case | 14.7% | 85.3% |
| 5.    | Details of injury mentioned on the case file | 76.4% | 23.6% |
| 6.    | Samples properly collected, preserved and sealed | 80.7% | 19.3% |
| 7.    | Samples send to forensic science laboratory for toxicological examination | 42.3% | 57.7% |
| 8.    | Toxicological report received by medicolegal cell or the treating doctor | 0.0%  | 100%  |
| 9.    | Autopsy done in the mortuary of the hospital | 0.0%  | 100%  |
Figure 1: Case File Properly Marked as Medicolegal

Figure 1 shows that out of the 204 medicolegal cases studied, case files were properly marked as Medicolegal in 132 (64.7%) cases.

Figure 2: Case Entered in Medicolegal Register

Figure 2 shows that 154 (75.5%) cases were entered in the medicolegal register out of total 204 cases followed.

Figure 3: Police Intimation done on Reception of the Case
Figure 4: Police Informed on Discharge of the Case

Figure 4 shows that police was intimated on reception of 134 cases (65.7%) while as Figure 4 as police was informed on discharge of only 30 (14.7%) cases out of total 204 medicolegal cases.

Figure 5: Details of Injury Recorded in Case File

Figure 5 shows out of 204 medicolegal followed, details of injury i.e. type, shape, size, duration, direction, nature was mentioned in case files of 156 (76.4%) cases.

Figure 6: Samples Properly Collected, Preserved and Sealed
Figure 6 shows that out of total 52 poisoning cases followed, samples were properly, collected and preserved in 42 (80.7%) cases while Figure 7 shows that only 22 (42.3%) samples were send for toxicological examination to forensic science laboratory.

Figure 8: Toxicological Report Received by the Medicolegal cell or Treating Doctor

Figure 8 shows that in 22 poisoning cases whose samples that where send to forensic science laboratory, toxicological report was not received in any of the case.

Figure 9: Autopsy Done in the Mortuary of the Hospital

Figure 9 shows that in 32 medicolegal cases where autopsy was recommended to ascertain cause of death, autopsy was not done in any of the cases in the hospital.
Discussion
Medicolegal cases are an integral part of medical practice in emergency departments of major hospitals. Owing to the legal implications, these cases pose an additional workload on staff dealing with these emergencies. An apparently looking trivial trauma may have severe damage to the underlying organs and a high degree of suspicion is required to make clinically and medicolegally accurate diagnosis. A total of 204 medicolegal cases were followed over a period of six months from admission to discharge to elucidate the various bottlenecks in their management at SKIMS.

Case File Properly Marked as Medicolegal
The study shows that only 64.7% case files were properly marked/labeled as medicolegal. The proper labeling/marking of medicolegal case files helps in their easy identification and makes the staff conscious about them. As per Haryana medicolegal manual guidelines, the doctor/medical officer should mark with red pen on the top of first page of the file of the patient the letters “M.L.C.” or put the stamp “Medicolegal case”. The medical officer/doctor should also see that the card of the patient is marked/stamped “Medicolegal case” by the duty staff nurse on duty.

Case Entered in Medicolegal Register
The study revealed that only 75.5% of the cases were entered in the medicolegal register. According to A.K.Singh et al, a medico-legal register should be maintained in the casualty of every hospital and details of all medico-legal cases should be entered in this register, including the time and date of examination and the name of the doctor who is dealing with the case. This would be of immense help for future reference, when the patient through the court/ the police, requests for a copy of the medicolegal report.

Police Intimation done on Reception of the Medicolegal Case
The study found that on the receipt of a medicolegal case police intimation was done in 65.7% of the cases. According to A.K Singh et al, if a case falls under MLC category, the doctor must register the case as an MLC and/ or intimate the same to the nearest police station, either by telephone or in writing. An acknowledgement of receipt of such a message should be taken for future reference. If the intimation is given orally or on phone, the diary number (DD or the Daily Docket number) should be taken down as proof of intimation and should be properly documented in the patient’s records. According to the Honble Supreme Court, whenever any medicolegal case comes to the hospital, the medical officer on duty should inform the Duty Constable, giving the name, age, sex of the patient and the place of occurrence of the incident and should start the treatment of the patient. It will be the duty of the said constable to inform the nearest concerned police station or higher police functionaries for further action.

Police Informed on Discharge of the Case
The study revealed that police was informed on discharge of 14.7% of the medicolegal cases while in 85.3% medicolegal cases police was not informed on the discharge of the cases. As per Haryana medicolegal manual guidelines, no medicolegal case shall be discharged or leave against medical advice (LAMA) without informing the police and whenever a medicolegal case dies, the police officer I/C of the police post/policestation of the area should be informed immediately and a note to the effect be recorded on the file of the deceased.

Details of Injury Mentioned on the Case File
The study revealed that details of injury (type, shape, size, direction, duration, location, age etc) was recorded in case file of 76.4% cases while as nature of injury was mentioned only in 69.6% of the cases. As per Haryana medicolegal manual
The following particulars of each and every injury must be recorded:
- Type of injury
- Size
- Shape
- Location
- Age of injuries
- Direction
- Duration
- Nature of injuries

Samples Properly Collected, Preserved and Sealed and Send for Toxicological Examination

The study showed that in poisoning cases 80.7% of the samples were properly collected, preserved and sealed while as only 48% of the samples were sent to forensic science laboratory for toxicological examination. As per Haryana medicolegal manual guidelines, Stomach wash, urine, blood etc. in poisoning cases must be collected and preserved in bottles which should be properly sealed, labeled and made into a parcel. The sealed parcel along with a letter and a copy of medicolegal report is sent through the police official concerned forensic science laboratory for detection of suspected poison. The letter should give particulars of the case, details of the bottles, sample impression of the seal put on the bottle and the poison suspected.

Toxicological Report Received by Medico-legal cell or Treating Doctor

The study found that in suspected poisoning cases whose samples were send to Forensic science laboratory for toxicological examination, the report of the toxicological/chemical examination was not received in any of the case. According to C.K. Parikh, the most important proof that poisoning has occurred depends on evidence of absorption of a toxic substance in the body. The most direct evidence of such absorption is the detection of a toxic substance followed by its quantitative estimation. So toxicological report is important for determining cause of death in suspected poisoning cases and also gives a rough estimate of likely survival time after exposure to fatal amounts of various drugs.

Autopsy done in the Mortuary of the Hospital

The study revealed that in no case, medicolegal postmortem examination/autopsy was done in the hospital in cases were post mortem examination was recommended to ascertain the cause of death. According to C.K. Parikh, the objectives of a medicolegal autopsy are to determine cause of death, in unnatural deaths whether homicide, suicide or accident, to collect and document trace evidence and identify weapon, person or poison responsible for the death. In most accidental deaths, ideally an autopsy is required to rule out foul play. A medicolegal post mortem can be conducted only after a written request has been made by the police or by the order of the court. A medicolegal post mortem examination can be conducted only by a medical officer/doctor who has been authorized to do so. Autopsy or medicolegal postmortem examination has a central role in establishing cause of death and can also yield important information regarding the mechanism of injury.

Summary and Conclusion

The study found that problem related to preservation of evidence was a significant factor affecting the management of medicolegal cases. Proper labeling of medicolegal case files was not being done in many of the cases and a significant proportion of cases were not being entered in the medicolegal register. In many of the cases police was not intimated about receipt of the medicolegal case while as in most of the medicolegal cases police was not informed of the discharge/death/LAMA of the patient. Details of the injuries and details of doctor conducting the examination of the medicolegal case were not mentioned in many of medicolegal case files. Medicolegal autopsy was not being done in any of the cases where it was recommended to ascertain the cause of death.

Various recommendations’ that can be suggested include:
1. The doctors who are involved in treatment of such medico-legal cases need to be more trained in this field. Also due to increase in accidents and violence cases, hospitals have the need for round the clock availability of such medico-legal experts
in sufficient number to deal effectively with such cases to better serve laws of land.

2. The periodical CME programmes specially by involving forensic medicine and integrated reorientation programmes should be made compulsory for all doctors in dealing with medicolegal cases.

3. The medical ethics, acts related to medical practice should be emphasized in post graduate curriculum and examinations.

4. There is a need to increase awareness on the role of clinicians with respect to their ethical responsibilities as providers. There is also a need to formulate standard operating procedure (SOP) in the context of doctors, nurses and police and their respective medicolegal roles.

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