

**SHORT COMMUNICATION****Forensic Medicine Expert in Department of Emergency Medicine : The Need of Hour****Mangeshkar A,<sup>1</sup> Nema P,<sup>2</sup> Tomar MS,<sup>3</sup> Nigam M.<sup>4</sup>**Associate Professor,<sup>1</sup> Assistant Professor,<sup>2</sup> Senior Resident,<sup>3</sup> Professor & Head.<sup>4</sup>

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**Abstract:**

Emergency medicine is a new branch introduced by NMC in the gazette notification dated 14th February 2022. In India, since we lack specialized postgraduates in emergency medicine, postgraduates in General Medicine, Anaesthesia, Respiratory Medicine, General Surgery and Orthopedics are made eligible to work as faculty in this department. This is a welcome step as the casualties coming to the hospital with natural pathologies will be dealt by specialized doctors after introduction of this department in a tertiary care centre. However, the medicolegal cases reaching to the hospital in the form of casualties or otherwise still have to be dealt with less professional and unspecialized hands. Incorrect, incomplete, or inappropriately followed protocols in handling and reporting a Medico-legal case often delay legal proceedings and thus deprive a patient of his rights. The significance of critical cases in emergency medical services cannot be undermined especially in a densely populated country like India, where everyone is living with stress and competing to strive for the basic needs of life. Doctors in the Emergency department have to diagnose and treat a high volume of patients and are also responsible for preparing reports for unnatural cases like accidents, attempted suicides and homicides. Thus, any act of omission or commission in patient care as well as in preparing proper medicolegal reports and documentation by a doctor advances negligence and health risks of critically ill patients which is against the criminal justice system and hence liable for the breach of duty. This warrants the inclusion of Forensic Medicine experts in the Emergency Medicine department.

**Keywords:** Emergency medicine; Forensic medicine; Toxicology; Medico-legal cases; National medical commission.**Introduction:**

Forensic Medicine is a branch of Medical Science which deals with the application of medical knowledge to aid in the administration of justice in the court of law<sup>1</sup>. Forensic medicine being a multi-disciplinary branch inculcates in its practice the key principles of Forensic Pathology, Forensic Psychiatry, Forensic Dentistry, Forensic Radiology and Forensic Toxicology etc. Toxicology is the Science dealing with properties, action, symptoms, toxicity, lethal dose, estimation, laws, treatment, and autopsy findings (cases of death) in relation to poison. The Emergency Medicine department is the point of first and most crucial contact of the patient in times of crisis not just to safeguard life but also to protect the rights and privileges of the injured for which he needs to be assured of the best medical care and the legal proceedings thereafter.

Medicolegal cases are cases of injury, illness, or any ailments 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. Simply put, MLC includes – a medical case with legal implications or a legal case requiring

medical expertise. The increasing incidences of violation of civil rights; and the increasing complexity of household, agricultural or industrial toxicology and fatalities related to such exposure require greater aptitude and more skillful and scientific application of the principles of Forensic Pathology<sup>2</sup> and Forensic Toxicology. Thus to ensure the demand that the patient expects from the team of doctors under whose care he has submitted his consent is not just to be cured of the unpleasant illness but also be compensated for the unfortunate loss, due to an unexpected event, which should be documented and reported in a manner most prudent to ensure timely and appropriate justice. To make Emergency Medicine Department more robust and professionally sound, there is need of a consultant from Forensic Medicine department who with his expertise in medicolegal documentation, examination, evidence collection etc. along with knowledge of emergency care can effectively fill in the current lacunae in Emergency Medicine and consequently help in the betterment of the quality of care.

**Present scenario of Casualty/Emergency Department:** Any case reaching to the Casualty or Emergency department is first handled by MBBS graduate doctors or PG residents as the case may be, and are referred to specialized doctors depending on the condition of the patient. However all the medicolegal reports of the cases like Injury report, sexual assault survivors or accused examination report, drunkenness report, weapon examination report, medical certification of cause of death etc. are still handled by unspecialized MBBS doctors, who are overburdened by the influx of patients without any specialized training in medicolegal

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field.

On the other hand, doctors in the Department of Forensic medicine are kept devoid of involvement in emergency services and casualty though they are especially trained in dealing with all above mentioned medicolegal work which includes, all types of medicolegal report writing as per state and central government guidelines, management general and specific and identification of poisoning cases in emergency situations, snake bites or other animal bites, household, agricultural or industrial toxicology dealt under the specialty called Toxicology which forms a major bulk of emergency medicine cases.

**The current trend in NMC:** The National Medical Commission has been toiling hard to design and repeatedly redesign the curriculum of various departments in the medical education system to cope up with the changing dynamics of the health care system. In keeping up with the globally accepted standards in health care delivery system the National Medical Commission has done tremendous work in bringing up the competency based medical education system (CBME) to produce Indian Medical Graduates who are in tune with the global standards. In one such attempt to keep pace with rising need of Emergency Medicine Physicians to provide the best care in need of crisis the commission vide Gazette Notification of the National Medical Commission (Postgraduate Medical Education Board) New Delhi dated 14th February, 2022 in teachers eligibility qualifications the commission has brought in a welcoming concept by inclusion of other branches like General Medicine, Anesthesia, Respiratory Medicine, General Surgery and Orthopedics to be a part of the Emergency Medicine team. However various reports have shown that the percentage of cases that report to the casualty department have a huge proportion with Medicolegal implications in which trauma and poisoning are the major ones. WHO estimated that death due to envenomation is around 100000 annually. Approximately half of these deaths were reported in India.<sup>3</sup> Also over the past decade, poisoning has become an increasing cause for concern not only in India but globally.<sup>4</sup> It is repeatedly reported that poisoning is one of the most common modes of suicide in countries like India.<sup>5</sup>

**Forensic Medicine- skills and curriculum:** Professionally speaking Forensic Medicine and Toxicology (is the name of the subject and postgraduate degree in the majority of universities), a broad term used to describe a medical speciality which deals with the examination and diagnosis of individuals who have been injured because of external or unnatural causes such as poisoning, assault, suicide and other forms of violence, and apply findings to law (i.e. court cases). Such cases also warrant court attendance, answering queries to police investigating authorities etc. Forensic Medicine has in its course curriculum, the court procedures and detailed understanding of other legal and statutory provisions. More than 25% of the UG and PG curriculum in FMT is covered by Toxicology whereas Toxicology covers a small portion of the General Medicine curriculum, and almost negligible in any other clinical subjects like Anaesthesia, General Surgery, Orthopaedics etc. whatever the reason, practically speaking neither any physician or surgeon

would like to practice Toxicology nor would they be interested in the legal hassle thereof.

Toxicology is developing as a separate specialty/super specialty and many authors have classified Toxicology into Clinical Toxicology and Forensic Toxicology, with the understanding that Clinical toxicology would deal with the diagnosis and treatment part while Forensic Toxicology deals with the application of medical knowledge of Toxicology, to aid in the administration of justice. Forensic Pathology deals with Postmortem examination and Histopathology. Every such poisoning case involves one or the other legal hassle, investigational queries, and expert opinions by Forensic experts. So, this means better knowledge of every aspect of toxicology including diagnosis and treatment gives better application in justice.

**The need of a Forensic Medicine expert in Emergency Medicine:** The need for inclusion of a Forensic Medicine experts in the TEQ of NMC is to build a robust Emergency Medicine team which will not just be providing the accurate and timely diagnosis and treatment, after medical care, but also to have an overall approach to systematic documentation of the legal formalities for timely resolution of the aftermaths of the legal framework which will ensure health and well-being of the patient and his family which would also reduce the pendency of the court cases as a result of inappropriate documentation. Some documented evidences that speak in itself about the need of the Forensic Medicine expert in the Emergency Medicine unit/casualty are quoted below to understand the gravity of the need which is yet to be addressed.

1. The Ministry of Health And Family Welfare document states that a specialist doctor in Emergency Medicine department/casualty should guide his subordinate staff in history taking and examination of Medicolegal cases.<sup>6</sup> This is possible only when a trained specialist is posted in areas of concern to handle such cases. In our country currently majority of the casualties are handled by MBBS graduates who do not have the required knowledge of amicably handling issues of medicolegal concern.
2. The Ministry of Home Affairs vide its website has officially published the charter of duties of a Medical Officer which states that doctors posted in the Emergency Medicine department/ Casualty are expected to timely intimate all cases of death, cases of surgical fatality, medico legal complications, dangerously ill cases, etc. to the Medical Superintendent.<sup>7</sup> Which is again a task entrusted upon the an individual who does not have sufficient knowledge in handling issues of Medicolegal concern.
3. The standard operating procedure for casualty and trauma care in medical college hospitals published by the Health & Family Welfare department Government of Odisha in the year 2017 states that in all medico-legal matters, where the CMO is in need of expert advice, the faculty on call from the department of Forensic Medicine should be contacted and proper guidance obtained, it also mentions that the Emergency Medicine team works in Liaison with courts & police in medico legal cases.<sup>8</sup>

4. The State of Karnataka has officially published the duties of a senior specialist/specialist/G.D.M.O in its standard operating procedure for casualty which states that these categories of doctors mainly work in the casualty and attend emergencies to give medical aid in medico-legal and accident cases. They maintain accident register in proper order to keep good information of cases, issue wound certificates and other medico-legal certificates, assist courts when summons are served to give evidences in accident and medico legal cases.<sup>9</sup>

From the manual issued by the Ministry of Health and Family welfare and various standard operating procedure for duties and functioning of the casualty departments issued by the individual states it is evident that handling of medicolegal issues is an important task of the Emergency Medicine/Casualty team. Emergency department physicians often encounter medico-legal cases when patients initially present to the hospital, and thus there is a strong need for them to have robust medico-legal management and reporting system.<sup>10</sup> Safely preserving Forensic evidences is a common issue faced by Emergency department physicians who provide the first line of management however untrained and inexperienced Emergency department physicians may fail to recognize such cases.<sup>11</sup> As per government Order<sup>12</sup> all the medical officers dealing with medicolegal cases should be assured workshop by department of Forensic Medicine.

#### Conclusion:

Summing up the need of expertise in functioning of an efficient Emergency Medicine Team, inclusion of a Forensic Medicine expert would be an apt solution as a Forensic Medicine expert has an intensive training in dealing with day to day medicolegal issues of the Emergency Medicine department/Casualty. The syllabus of MD Forensic Medicine & Toxicology curriculum itself contain training on handling of all the emergencies including road traffic accidents/trauma, management of poisoning, insect bite and all other common medicolegal cases. Forensic Medicine Expert and Toxicologists specialize in the prevention, evaluation, monitoring, management and treatment of injury and illness from exposure to drugs and chemicals, as well as biological and radiological agents. In medical colleges & tertiary care centers Emergency Medicine department run short of doctors and face medicolegal issue round the clock for which and the doctors are not trained enough to handle such situations. The solution of all such problems is that there must be a dedicated clinical Forensic unit in the Emergency Medicine department. Hence there should be separate faculty recruited for Emergency Medicine department to deal all medicolegal issues so that society and the public can be benefited.

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