

## Development of the Clinical Forensic Medicine Program All Over the India: Need of Time

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### Abstract

Clinical Forensic Medicine is the application of forensic medical techniques to living. To address the unmet forensic needs of victims who are survivors of violent crimes and trauma there is urgent need of examination of victims of violence by a *specialty trained person* in medico-legal matters i.e. clinical forensic physicians. In this program, the clinical forensic physicians will evaluate adult and pediatric victims of blunt and penetrating trauma, sexual and physical abuse and collect evidentiary material when indicated. In this paper the importance of clinical forensic medicine program and recommendations given by the "Survey Committee Report on Medico-Legal Practices in India 1964" regarding its implementation are presented.

**Keywords:** Clinical forensic medicine; Victims of violence; Forensic physicians; Survey committee report.

### Introduction

Forensic medicine is the medical specialty that is practiced at the interface with the law. It involves the assessment and interpretation (of findings) in an individual who has become involved either as a suspect or victim in some form of alleged criminal action. In practice however, the role of practitioners of forensic medicine has widened to include civil jurisdictions and matters of medical ethics.

The term forensic medicine is often used as an "umbrella terminology" to mean forensic pathology and clinical forensic medicine. The Clinical Forensic Medicine is the practice of assessing the physical condition of the living who allege that they are victims of an assault or examining the alleged perpetrator of the

offence. It may cover a wide field of subjects including forensic pharmacology, criminology and traffic medicine.[1] The term 'forensic physician' is increasingly used for doctors engaged in the non-pathological aspects of forensic medicine.[2] To address the unmet forensic needs of victims who are survivors of violent crimes and trauma there is urgent need of examination of victims of violence by a *specialty trained person* in medico-legal matters i.e. clinical forensic physicians.

Clinical forensic medicine is the application of forensic medical techniques to living patients. In emergency department, these techniques include the evaluation and documentation of traumatic injuries and the collection of evidentiary material for possible medico-legal presentation.[3]

### Need of this program

- This Clinical Forensic Medicine Program will address the unmet forensic needs of patients who are survivors of violent injury and trauma and those patients who have not yet succumbed to mortal injuries.[4,5,6,7]
- Trauma victims present regularly to

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emergency department in need of acute care.

- Currently physicians and residents, principally from the specialities of emergency medicine, pediatrics, surgery and gynecology, are performing clinical forensic examinations. These physicians generally have little or no forensic training and yet may be expected to render “expert forensic opinions”. [3]
- The emergency physician is well trained to provide competent medical treatment but may be unable, uncomfortable, or unwilling to provide the patient with an equally competent forensic evaluation. [3]
- This unique forensic examination accurately documents and analyzes the patient’s injuries prior at the time of intervention by other medical or surgical specialties.
- Common forensic errors of omission and commission occur with regularity in emergency departments. [5,8]
- These errors include the inadvertent failure to recognize, collect and preserve evidentiary material and an inability to accurately describe a wound’s characteristics. [8]
- Interpretative errors frequently occur in the assessment of wound ballistics, bullet trajectory, and pattern injuries associated with blunt and penetrating trauma.
- These errors may deny the patient, the courts, or an accused suspect access to pertinent and critical information and evidence, which would substantiate their claims of innocence or guilt. [3]
- Clearly, the medical practitioner must have an intimate knowledge of policing, and in particular, of methods of investigating major crimes. In this regard, Clinical Forensic Medicine Program can provide better provision.
- *Under Graduate, Post Graduate Education*
  - ◆ Undergraduate and postgraduate education in forensic medicine is of

variable quality and quantity.

- ◆ A comprehensive list of skills and attitude recommended by Medical Council of India Regulation, 1997 desirable for Bachelor of Medicine and Bachelor of Surgery (MBBS) Graduate and postgraduate for *Forensic Medicine and Toxicology*:
  - At the end of the course, the student shall be able to make observations and logical inferences in order to initiate enquiries in criminal matters and Medico-legal problems
  - He should be able to carry on proper Medico-legal examination and documentation/reporting of injury in living cases in prescribed forms
  - He should be able to preserve relevant ancillary/biological materials for medico-legal examination
  - He should be able for estimation/ Certification of Age
  - He should be able to examine the cases of Sexual offences:
    - Examination/Certification of Victim
    - Examination/Certification of Accused
  - He should be able for Examination/Certification of Alcoholic [Prescribed Forms ‘A’ & ‘B’]
  - He should be able to make Sickness Certificate, Fitness Certificate and Death Certificate
- ◆ However, as there is no Clinical Forensic Medicine Program in most of the institutes, there are significant defects in the teaching by present Forensic Medicine Department. Present teaching is only theoretical regarding this aspect, because of which the doctors are making

inadequate medico-legal examination or inadequate medico-legal report writing.

- ◆ It is hoped that implementation of Clinical Forensic Medicine Program will give an opportunity to the present staff of Forensic Medicine to teach students all clinical medico-legal aspect in an efficient way which will definitely improve the medico-legal examination and medico-legal report writing.

#### *Services provided by this program*

Implementation of the clinical forensic medicine program would provide a uniquely skilled and qualified forensic professional whose responsibilities would be:

- Medico-legal examination and medico-legal report writing of cases of:
  - Physical assault (including domestic violence, alleged assault by police, attempted murder, grievous injuries)
  - Self-inflicted injuries
  - Non-accidental injuries in children (child abuse)
  - Burn injuries
  - Road traffic victims
  - Rape and other sexual offences
  - Fitness to be interviewed or detained
- Medico-legal assessment of alcohol or drug affected individuals particularly in the area of traffic medicine.

{In the event that the patient has been transferred from the emergency department to operating room, then an medico-legal evaluation will be undertaken in the operating suite in concern with the patient's trauma surgeons.

The clinical forensic physician will work in cooperation with the patient's treating physicians.

This is done in such a manner as will not compromise the patient's hospital care or

physical well being}

- Medico-legal assessment of allegations of child sexual abuse:
  - In this area, it is of critical importance that the practitioner has a very clear understanding of the anatomy and patho-physiology of injuries, and the interpretation of findings.
  - Most of the medical officers are inadequately trained, so they are not documenting their findings properly and they are not taking photographs.
- Making of anatomical diagrams and taking photographs of medico-legal importance as evidentiary material
- Medico-legal assessment of poisoning cases
  - Collection of all the evidentiary material for medico-legal purpose in cases of poisoning, burn, firearm injuries and other cases of medico-legal interest
- Proper labeling, sealing and forwarding all collected evidentiary material to concerned authority along with respective forms (chain of custody)
- Making summery of all the relevant information of medico-legal important points after discharge or death for giving to concerned authority
- To give certificate of 'compose mentis' while recording dying declaration
- To help clinicians in matters regarding whether particular case is to be made MLC or not (if there is any confusion regarding the same)
- Teaching of undergraduate and postgraduate students in living medico-legal cases by giving them practical demonstration
- Crime scene visit can be made as early as possible after the examination of cases by Clinical Forensic Unit  
(At present as in most of the cases death is delayed Forensic Pathologist comes to

know regarding the case after a lengthy time period which makes crime scene visit not so fruitful)

- This unit will help the investigating authorities (police) to decide whether in particular medico-legal cases (i.e. admitted patient of long duration where clinicians are able to certify death) the postmortem is necessary to determine the cause of death or manner of death as per the guidelines laid down by the 174 CrPC.
- Would help to decide in medico-legal cases where organ transplantation has to be carried out or not as per the guidelines given by the Transplantation of Human organs Act.
- This unit will help in (legal) formalities in starvation or malnutrition cases
- Training of Nurses in medico-legal field (Forensic Nursing)
- *Chain of evidence*: One of the most important aspects of any case with forensic potential is the preservation of the chain of evidence, or accounting for the whereabouts of all evidence at all times, until its use by the courts. This preservation of the chain of evidence includes both proper documentation, and the securing and handling of evidence at all times. Should this be expected from a treating physician or attending nursing staff, without specific forensic knowledge or training?

#### *Academic Activities*

- The Clinical Forensic Medicine Unit will provide teaching in the areas of clinical forensic medicine to a wide variety of student groups, including undergraduates and postgraduates in Medical and its related fields, Law, Science and Criminology.
- In addition, teaching will be provided to police members and trainees, Defence Force personnel, ambulance officers, community service agencies, private

organizations and community groups.

#### *Clinical Forensic Nursing Service (CFNS)*

- It is imperative that nurses in the clinical environment be taught to recognize and preserve vital fragments of trace evidence by careful handling of the patient's clothing and other biological material in the absence of a Forensic Medicine Specialist.
- Nurses will provide forensic services in areas such as in Police and Custodial Services, forensic psychiatric services and obtaining biological samples. The success of these programs will forge new opportunities for nurses to expand their career path into other areas of clinical forensic service delivery.
- Increasingly, recruitment or access to forensic medical practitioners who can offer timely response to providing forensic services in India has become difficult. This situation is mirrored across foreign countries and has been recognized as a burning issue in these countries.
- The Clinical Forensic Medicine Unit will establish a Forensic Nurse Examiner Network if funding from the Government/ any other organization is provided. This unit will offers specialist training and clinical experience for the nurses to competently provide forensic medical examinations to victims of sexual assault and other assaults.
- Such qualified Forensic Nurse Examiners will work as a part of the larger team with Forensic Medical Officers.

#### *Pediatric Forensic Medicine*

- Pediatric Clinical Forensic medicine encompasses the areas of suspected non-accidental injury of children, sexual abuse and physical and emotional neglect.
- The examination of children for forensic

reasons is a specialised area in which both appropriately trained pediatricians and forensic physicians have expertise.

- Such examinations are usually performed as part of a comprehensive, integrated, forensic and child health service.

#### *Sexual and Physical Assault*

- The examination of people who have been sexually assaulted is a specialised area which requires an integrated approach from a number of health professionals.
- The forensic medical assessment of physical injuries may be the only objective evidence in relation to a physical assault.
- It is vital that the injuries are documented accurately and interpreted expertly.
- Given the limited expertise in Forensic medicine of Emergency Departments and of the medical profession in general, it is preferable that forensic physicians or forensic medical officers with appropriate training conduct these services.

#### *Survey Committee Report on Medico-Legal Practices in India 1964*

The view is held that clinical forensic examinations require no special training. This attitude is basically wrong as few realize the difference between clinical forensic medicine examinations and other clinical examinations. The unfortunate result of this state of affairs is that the police are often unable to present their cases satisfactorily to the court because essential elements in the medico-legal examinations are wanting.

The successful practice of clinical forensic medicine will depend upon a re-orientation in the approach to the work on the part of the Medical Officers concerned. The re-orientation can be brought about by giving training as recommended by the Central Medico-legal

Advisory Committee (Chapter V). The special features of such examinations can be emphasized and Medical Officers can be taught to appreciate the importance of such examinations.

#### *Recommendation of Central Medico-Legal Advisory Committee*

The Central Medico-legal Advisory Committee during its first session in 1956, considered the suggestion of the Ministry of Home Affairs, Government of India, to create a special cadre of medico-legal officers. The Committee then felt that the question of creating a special cadre of medico-legal officers whose exclusive field would be to undertake all medico-legal examinations was not practicable at that time. However, the Committee recommended that each State should give advance medico-legal training to at least one officer in each district and in important cities and towns and such an officer should undertake the specialised medico-legal work himself and also co-ordinate all general medico-legal work by other Government Medical Officers in his jurisdiction.

In discussing this important question and also that of the training of Medical Officers during the sixth session, the Committee recommended that every medical officer on his first appointment to Government service should receive three months training in medico-legal work under a professor of Forensic Medicine. Officers engaged in medico-legal work at the district level should receive further advanced training for six months under a Professor of Forensic Medicine. The Ministry of Health, Government of India, emphasized on the State Governments the need for training of medical officers in medico-legal work.

#### *Status of Clinical Forensic Medicine in India*

- In India at present, Clinical Forensic Medicine program where especially medico legally trained persons will evaluate the living victims of violent crimes has not been developed and

implemented all over yet.

- At some places like Mumbai, there is a post of Police Surgeon.
- These Police Surgeons operate at both a forensic and a therapeutic level.
- Their forensic role entails gathering and preserving evidence; the therapeutic role involves treatment and care.
- Performing these two activities by one-person leads to inadequacies in medico-legal examination and report writing
- Therefore, time has come to implement the proposed model by Knight[9] regarding the development of Clinical Forensic Medicine Program.

#### *Status in other countries*

- The use of forensic medical techniques on living patients is well known in Latin America, Australia, Europe, and many Asian countries.[4,6,3]
- However, prior to 1991, clinical forensic medicine had not been introduced into the graduate or post-graduate medical curriculum of American medical education.[3]
- The "Police Surgeon" in the United Kingdom and Australia is a physician who is empowered to perform forensic examinations on living patients.
- The association of Police Surgeons in Great Britain is currently involved in developing a uniform training program for police surgeons.
- The forensic pathology community within the United States has long recognized the need for a "Police Surgeon" type physician to perform examinations on living patients.[4,6,3]
- Currently in the U. S. physicians and residents, principally from the specialities of emergency medicine, pediatrics, surgery and gynecology, are performing clinical forensic examinations. These physicians generally have little or no forensic training and yet

may be expected to render "expert forensic opinions".[3]

- The concept of training emergency physicians in the application of forensic techniques was presented at the American College of Emergency Physician's Annual Meeting in Boston, October, 1991.[1]
- Only in Victoria and New South Wales are there full-time forensic clinicians.

#### *Why Clinical Forensic Medicine has not gain recognition*

- It has been previously suggested that there were following reasons why clinical forensic medicine had lagged in establishing itself as a medical speciality.[11]
- Firstly, the knowledge and skills of the discipline overlap extensively into other specialities, so that there is no clear delineation of the work of the speciality. Secondly, an academic environment<sup>1</sup> has not provided support for the development of the speciality.
- Secondly, the lack of Academic Departments that have prevented the development of clinical forensic medicine as a unique discipline.

#### *Academic Departments*

- The key to the future lies in the establishment of departments of clinical forensic medicine, paralleling the other forensic medical specialties.
- There can be no compelling reason why the clinical function roles should not be fostered in the same fashion.
- The academic model will assist in producing a body of expertise; the absence of which has been a barrier to any progress in the past.[12]
- Knight[9] has previously proposed this model and it is difficult to understand why the proposal has foundered.

- Many senior police officers are supportive of such an idea. The universities may be a little more resistant but pressure must be brought to bear at the right quarter.
- If the institutions are able to facilitate relatively obscure programs then they must be able to provide a similar facility for what have been one of the most neglected areas of clinical medicine and one of substantial significance in the system of justice.
- It is easy to demonstrate that the skills of recent graduates, the knowledge of the medical population generally and that the practice of clinical forensic medicine have suffered enormously because of the absence of this process.
- The relevance of teaching and the provision of services in this area should be compelling arguments to even the most socially isolated medical faculty.
- Surprisingly, the most disappointing aspect has been the lack of impetus and pressure from the medical profession itself.
- Generally, the desire for change has not been taken up by the individuals or organizations which are providing services in this area.
- There are compelling arguments for the formation of university departments of clinical forensic medicine, or for the inclusion of clinical forensic medicine as a major area in existing department.

### Discussion

- The presence of Forensic Physician or a forensically trained emergency physician within the emergency department would relieve the untrained or unwilling resident or physician of many of the unwanted court appearances.
- This Forensic physician would also collect forensic evidence, which might

have otherwise been inadvertently overlooked or destroyed in the delivery of patient care.

- In addition, valuable forensic material and evidence would be documented and collected in a manner which would facilitate presentation at a later date.
- It is in the interests of victims, detainees, and the criminal justice system as a whole that a high quality, professional forensic medical service is maintained throughout the India.

### Conclusion

- We can no longer watch and wait whilst others are setting agendas that are, or may be, incompatible with the future of this speciality.
- In some other countries, the deficiencies have been recognized and there are active programs in place to reverse this trend.
- There is urgency in tackling these issues.
- In Europe, themes of commonality in the teaching and practice of forensic medicine are being explored.
- In the United Kingdom, the Royal Commission into the criminal justice system is examining the very foundations of the medico-legal system.
- Worldwide, unsafe convictions and allegations of injustices are eroding confidence in the practice of the various forensic specialties.
- The time has come for us to become guardians of our own profession.
- As Pennington[13] argues, unless we are seen to be setting and maintaining professional standards then others will do so, to our detriment.
- Undoubtedly, the transition will not meet with universal approval and for many the status quo will be the preferred option.

- However, unless we can embrace a professional ethic and cause clinical forensic medicine to be established as a recognized speciality, then it will become a fragmented archival curiosity and the backwater of a larger pool.
- The only certainty is that the destiny of this speciality is very much in the hands of the current forensic persons.
- The question that remains is whether we have the desire or motivation to bring about the changes required to help the society, and to ensure the future and proper recognition of this speciality.
- If this program is implemented, it would provide the core for the development of a high quality medico-legal service.

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