

FORENSIC MEDICINE
(INCLUDING MEDICAL JURISPRUDENCE AND TOXICOLOGY)

GOAL

The broad goal of the teaching of undergraduate students in Forensic Medicine is to produce a physician who is well informed about medicolegal responsibilities in practice of medicine. He/She will also be capable of making observations and inferring conclusions by logical deductions to set enquiries on the right track in criminal matters and connected medicolegal problems. He/She acquires knowledge of law in relation to medical practice, medical negligence and respect for codes of medical ethics.

OBJECTIVES :

KNOWLEDGE :

At the end of the course, the student should be able to:

1. Identify the basic medicolegal aspects of hospital and general practice.
2. Define the medicolegal responsibilities of a general physician while rendering community service either in a rural primary health centre or an urban health centre.
3. Appreciate the physician's responsibilities in criminal matters and respect for the codes of medical ethics.
4. Diagnose, manage and identify also legal aspects of common acute and chronic poisonings.
5. Describe the medicolegal aspects and findings of post-mortem examination in case of death due to common unnatural conditions & poisonings.
6. Detect occupational and environmental poisoning, prevention and epidemiology of common poisoning and their legal aspects particularly pertaining to Workmen's Compensation Act.
7. Describe the general principles of analytical toxicology.
8. Medical jurisprudence in view of the Consumer Protection Act – wherein doctors have been covered under its ambit. They have both rights as well as responsibilities. Under medical insurance acts of negligence covered as well as rights for effective service delivery.

SKILL

At the end of the course, the student should be able to :-

1. Make observations and logical inferences in order to initiate enquiries in criminal matters and medicolegal problems.
2. Diagnose and treat common emergencies in poisoning and manage chronic toxicity.
3. Make observations and interpret findings at postmortem examination.
4. Observe the principles of medical ethics in the practise of his profession.

INTEGRATION

Department shall provide an integrated approach towards allied disciplines like Pathology, Radiology, Forensic Sciences, Hospital Administration etc. to impart training regarding medicolegal responsibilities of physicians at all levels of health care. Integration with relevant disciplines will provide scientific basis of clinical toxicology e.g. medicine, pharmacology etc.

Syllabus

1.MEDICAL JURISPRUDENCE

1 hour

Legal Procedure – Inquests, subpoena, Conduct money, Procedure of Criminal Trial, Record of evidence, types of evidence, Medical evidence, types of witnesses, Dying declaration.

2.MEDICAL LAW AND ETHICS

7 hours

Indian Medical Council and State Medical Council organisations, functions, and powers – Rights and privileges of Registered Medical Practitioner, Infamous Conduct. Professional negligence (Malpractice)

DUTIES OF MEDICAL PRACTITIONERS:

Doctrine of Res ipsa Loquitur, Contributory negligence, vicarious responsibility
Human right act, COPRA in relation to medical practice

Doctrines covering the practice of medicine: consent, Euthanasia.

3. MEDICO-LEGAL AUTOPSY

2 hours

Protocol, Technique, Postmortem report Examination of set of bones Exhumation

4. THANATOLOGY (DEATH)

1 hour

Types of death-modes of death and their patho-physiology-causes of death, classification and medico – legal aspects of natural death Issuing death certificate:

5. POST MORTEM CHANGES:

2 hours

Signs of death and changes following death and their medico-legal importance
Adipocere, mummification, embalming-Estimation of post mortem interval (time of death) –
Presumption of death and survivorship.

6. VIOLENT ASPHYXIAL DEATHS

3 hours

Classification-Hanging, Strangulation by ligature Throttling, Smothering, Gagging,
Overlaying, Burking, Choking, Drowning and sexual asphyxia.

7. **Thermal death** due to cold, heat ,electricity and radiation

1 hour

8. **Anaesthetic and operative deaths**

1 hour

9.MECHANICAL INJURIES (WOUND)

9 hours

Classification and mechanism of wound production Abrasions, Contusions, Incised wounds, Chop wounds, stab wounds and Lacerated wounds and their medico-legal Importance. Firearm classification and cartridges.Firearm wounds by different firearms and their medico – legal importance – Torture injury: Bomb explosion wounds.Regional injuries on the body and medico – legal importance.Medico – legal aspects of wounds – Issue of medico – legal certificates for legal purposes. Homicide & types of homicide Simple and Grievous injuries – causes of death from wounds

10.IMPOTENCE AND STERILITY.

1 hour

Definition, causes, and medico-legal importance. Sterilization and Artificial insemination and their medico – legal importance

11.VIRGINITY, PREGNANCY AND DELIVERY

1 hour

Definition, diagnosis and medico-legal importance of virginity, pregnancy and delivery Pseudocyesis, Superfecundation, Superfaetation Legitimacy and Paternity and their medico-legal importance. Surrogate Mother hood.

12. SEXUAL OFFENCES

2 hours

Classification – Rape – definition, examination of victim and the accused – Incest, Unnatural sexual offences, types and their medico legal importance. Sexual Perversion – types and their medico – legal importance – Indecent assault. Determination of neonatal sex prevention Act .Examination of seminal fluid

13.ABORTION

2 hours

Definition, classification, methods of procuring abortion, diagnosis and evidences of abortion, medico-legal questions arising in suspected cases of abortion. Medical Termination of Pregnancy Act.

14. INFANTICIDE

1 hour

Definition, still birth, dead birth and live birth signs of live birth and autopsy in Suspected case of infanticide Causes of death and medico – legal importance. Abandoning of infants, concealment of birth, Battered baby syndrome, Cot death.

15

1 hour

Examination of blood stains and hair , suspected biological stains and fibres.

collection preservation and transmission to FSL.

16 **Analytical toxicology and F.S.L, Viscera packing** 1 hour

At the level of M.O collection preservation and transmission. ORGANISATION OF FORENSIC SCIENCE LABORATORY Locard's Principle; Lie detection, Narcoanalysis, Hypnosis

17. **FORENSIC PSYCHIATRY** 2 hours

Delusion, Hallucination, Illusion, Impulse, Obsession, Delirium, Lucid interval
Classification of unsoundness of mind and medico – legal aspects. Restraint of the insane.

18. **TOXICOLOGY** 10 hours

General consideration – Law on poisons, prevention of narcotic drugs act.
classification of poisons. Diagnosis of poisoning in the live and dead. Duties of the medical practitioner in suspected case of poisoning. General principles of treatment of poisoning.
Corrosive poisons, Non-metallic poisons, Insecticides and weed killers, Metallic poison, Organic irritant poison, Somniferous poisons, Inebriants, Deliriant, Spinal poisons, food poisoning, cardiac poisons, Asphyxiants, war gases Curare, Conium. Drug dependence and Addiction.

PRACTICAL:

1. Age estimation by physical & dental exam.
2. Age estimation by Radiological examination.
3. Exam of bundle of bones & give medicolegal report
4. Examination of injuries & give wound certificate
5. Exam of a case of drunkenness & give drunkenness certificate.
6. Viscera packing.
7. Opinion on sexual offences.
8. Foetal autopsy & opinion
9. Examination of pathological & forensic specimens.
10. Examination of instruments, weapons.
11. Examination of toxicological seeds.
12. Examination of toxicological plants.