

INTERNSHIP SKILLS

(i) Community Medicine

Interns shall acquire skills to deal effectively with an individual and the community in the context of primary health care. This is to be achieved by hands on experience in the district hospital and primary health Centre. The details are as under: -

(I) Community Health Centre/District Hospital/Attachment to General Practitioner:

- (1) During this period of internship an intern must acquire
 - (a) clinical competence for diagnosis of common ailments, use of bed side investigation and primary care techniques;
 - (b) gain information on 'Essential drugs' and their usage;
 - (c) recognise medical emergencies, resuscitate and institute initial treatment and refer to suitable institution.
- (2) Undergo specific Government of India/Ministry of Health and Family Welfare approved training using Government of India prescribed training manual for Medical Officers in all National Health Programmes (e.g. child survival and safe motherhood-EPI, CDD, ARI, FP, ANC, safe delivery, Tuberculosis, Leprosy and others as recommended by Ministry of Health and Family Welfare:-
 - (a) gain full expertise in immunization against infectious disease;
 - (b) participate in programmes in prevention and control of locally prevalent endemic diseases including nutritional disorders;
 - (c) learn skills first hand in family welfare planning procedures;
 - (d) learn the management of National Health Programmes;
- (3) Be capable of conducting a survey and employ its findings as a measure towards arriving at a community diagnosis.
- (4)
 - (a) conduct programmes on health education,
 - (b) gain capabilities to use Audiovisual aids,
 - (c) acquire capability of utilization of scientific information for promotion of community health
- (5) Be capable of establishing linkages with other agencies as water supply, food distribution and other environmental/social agencies.
- (6) Acquire quality of being professional with dedication, resourcefulness and leadership.

(7) Acquire managerial skills, delegation of duties to paramedical staff and other health professionals.

(II) TALUQA HOSPITAL

Besides clinical skill, in evaluation of patient in the environment and initiation of primary care, an Intern shall: -

(1) effectively participate with other members of the health team with qualities of leadership;

(2) make a community diagnosis in specific situations such as epidemics and institute relevant control measures for communicable diseases;

(3) develop capability for analysis of hospital based morbidity and mortality statistics.

(4) Use essential drugs in the community with the awareness of availability, cost and side effects;

(5) Provide health education to an individual/community on :

- a) tuberculosis;
- b) small family, spacing, use of appropriate contraceptives;
- c) applied nutrition and care of mothers and children;
- d) immunization;
- e) participation in school health programme.

(III) PRIMARY HEALTH CENTRE

(1) Initiate or participate in family composite health care (birth to death), Inventory of events;

(2) Participation in all of the modules on field practice for community health e.g. safe motherhood, nutrition surveillance and rehabilitation, diarrhea disorders etc.

(3) Acquire competence in diagnosis and management of common ailments e.g. malaria, tuberculosis, enteric fever, congestive heart failure, hepatitis, meningitis acute renal failure etc.;

(4) Acquire proficiency for Family Welfare Programmes (ante natal care, normal delivery, contraception care etc.)

The following has been added in terms of notification published on 15.12.2008 in the Gazette of India and the same is annexed as Annexure-V.

(5) A village attachment of at least one week to understand issues of community health along with exposure to village health centres, ASHA Sub Centres should be added.

(ii) GENERAL MEDICINE

(I) Interns shall acquire following training during their term.

(1) acquire competence for clinical diagnosis based on history physical examination and relevant laboratory investigation and institute appropriate line of management;

(2) this would include diseases common in tropics (parasitic, bacterial or viral infections, nutritional disorders, including dehydration and electrolyte disturbances) and system illnesses

(II) The intern shall have assisted as a care team in intensive care of cardiac, respirator, hepatic, neurological and metabolic emergencies.

(III) The intern shall be able to conduct the following laboratory investigations:

(a) Blood: (Routine haematology smear and blood groups);

(b) Urine: (Routine chemical and microscopic);

(c) Stool: (for ova/cyst and occult blood);

(d) Sputum and throat swab for gram stain or acid fast stain and

(e) Cerebro Spinal Fluid (CSF) for smear.

(IV) Conduct following diagnostic procedures:

(a) Urethral catheterisation; Proctoscopy; Ophthalmoscopy/Otoscopy; Indirect laryngoscopy;

(b) therapeutic procedures; Insertion of Ryles Tube; Pleural, ascetic tap, Cerebro Spinal Fluid (CSF) tap, installing or air way tube, Oxygen administration etc.

(V) Biopsy Procedures:

Liver, Kidney, Skin, Nerve, Lymph node, and muscle biopsy, Bone marrow aspiration, Biopsy of Malignant lesions on surface, Nasal/nerve/skin smear for leprosy.

(VI) (a) Familiarity with usage of life saving procedures:

including use of aspirator, respirator and defibrillator,

(b) Competence in interpretation of different monitoring devices such as cardiac monitor, blood gas analysis etc.

(VII) Participate as a team member in total health care of an individual including appropriate follow-up and social rehabilitation.

(VIII) Other competencies as indicated in general objectives.

(iii) PAEDIATRICS

The details of the skills that an intern shall acquire during his/her tenure in the department of Paediatrics are as follows:

The intern shall be able to:

- (1) diagnose and manage common childhood disorders including neonatal disorders and acute emergencies(enquiry from parents of sick children), examining sick child making a record of information;
- (2) carry out activities related to patient care such as laboratory work, investigative procedures and use of special equipments. The details are given as under:-
 - (a) diagnostic techniques: blood (including from femoral vein and umbilical cord), obscess, cerebrospinal fluid, urine, pleura and peritoneum and common tissue biopsy techniques;
 - (b) techniques related to patient care: immunization, perfusion techniques, feeding procedures, tuberculin testing & breast feeding counselling;
 - (c) use of equipment: vital monitoring, temperature monitoring, resuscitation at birth and care of children receiving intensive care;
- (3) screening of newborn babies and those with objective risk factors for any anomalies and steps for prevention in future;
- (4) plan in collaboration with parents and individual, collective surveillance of growth and development of new born babies, infants and children so that he/she is able to:
 - (a) recognise growth abnormalities;
 - (b) recognise anomalies of psychomotor development;
 - (c) detect congenital abnormalities;
- (5) assess nutritional and dietary status of infants and children and organise prevention, detection and follow up of deficiency disorders both at individual and community level such as:
 - (a) protein-energy malnutrition
 - (b) deficiencies of vitamins especially A, B, C and D;
 - (c) Iron deficiency;
- (6) institute early management of common childhood disorders with special reference to Paediatrics dosage and oral rehydration therapy.
- (7) Participate actively in public health programme oriented towards children in the community.

(iv) GENERAL SURGERY

An intern is expected to acquire following skills during his/her posting:

- (A) Diagnose with reasonable accuracy all surgical illnesses including emergencies
- (B) (a) resuscitate a critically injured patient and a severe burns patient;
(b) control surface bleeding and manage open wound;
- (C) (a) monitor patients of head, spine, chest abdominal and pelvic injury;
(b) institute first-line management of acute abdomen;
- (D) (a) perform venesection;
(b) perform tracheostomy and endotracheal intubation;
(c) catheterise patients with acute retention or perform trocar cystostomy,
(d) drain superficial abscesses,
(e) suturing of wound,
(f) perform circumcision,
(g) biopsy of surface tumours,
(h) Perform vasectomy

(v) CASUALTY

The intern after training in Casualty must be able to:

- (1) identify acute emergencies in various disciplines of medical practice;
- (2) manage acute anaphylactic shock;
- (3) manage peripheral-vascular failure and shock;
- (4) manage acute pulmonary oedema and Left Ventricular failure (LVF);
- (5) undertake emergency management of drowning poisonings and seizures;
- (6) undertake emergency management of bronchial asthma and status asthmaticus;
- (7) undertake emergency management of hyperpyrexia;
- (8) undertake emergency management of comatose patients regarding airways positioning, prevention of aspiration and injuries;
- (9) assess and administer emergency management of burns;
- (10) assess and do emergency management of various trauma victims;
- (11) identify medicolegal cases and learn filling up forms as well as complete other medicolegal formalities in cases of injury, poisoning, sexual offenses, intoxication and other unnatural conditions.

(vi) OBSTETRICS AND GYNAECOLOGY

Technical skills that interns are expected to learn:

- (1) diagnosis of early pregnancy and provision of ante-natal care;
- (2) diagnosis of pathology of pregnancy related to
 - (a) abortions;
 - (b) ectopic pregnancy;
 - (c) tumours complicating pregnancy;
 - (d) acute abdomen in early pregnancy;
 - (e) hyperemesis gravidarum;
- (3) detection of high risk pregnancy cases and suitable advise e.g. PIH, hydramanios, antepartum haemorrhage, multiple pregnancies, abnormal presentations and intra-uterine growth retardation;
- (4) antenatal pelvic assessment and detection of cephalopelvic disproportion;
- (5) induction of labour and amniotomy under supervision;
- (6) management of normal labour, detection of abnormalities, post-partum hemorrhage and repair of perennial tears;
- (7) assist in forceps delivery;
- (8) assist in caesarean section and postoperative care thereof;
- (9) detection and management of abnormalities of lactation;
- (10) perform non-stress test during pregnancy;
- (11) per speculum, per vaginum and per rectal examination for detection of common congenital, inflammatory, neoplastic and traumatic conditions of vulva, vagina, uterus and ovaries;
- (12) medicolegal examination in Gynecology and obstetrics.
- (13) To perform the following procedures:-
 - (a) dilation and curettage and fractional curettage;
 - (b) endometrial biopsy;
 - (c) endometrial aspiration;
 - (d) pap smear collection;
 - (e) Intra Uterine Contraceptive Device (IUCD) insertion;
 - (f) Minilap ligation;

- (g) Urethral catheterisation;
- (h) Suture removal in postoperative cases;
- (i) Cervical punch biopsy;

(14) to assist in major abdominal and vaginal surgery cases in Obstetrics and Gynaecology.

(15) to assist in follow-up postoperative cases of obstetrics and gynaecology such as:

- (a) Colposcopy;
- (b) Second trimester Medical Termination of Pregnancy (MTP) procedures e.g. Emcredyl Prostaglandin instillations;

(16) To evaluate and prescribe oral contraceptive.

(vii) OTO RHINO LARYNGOLOGY (ENT)

(1) Interns shall acquire ability for a comprehensive diagnosis of common Ear, Nose and Throat (ENT) diseases including the emergencies and malignant neoplasma of the head and neck;

(2) he/she shall acquire skills in the use of head mirror, otoscope and indirect laryngoscopy and first line of management of common Ear Nose and Throat (ENT) problems;

(3) he/she shall be able to carry out minor surgical procedures such as:

- (a) earsyringing antrum puncture and packing of the nose for epistaxis,
- (b) nasal douching and packing of the external canal,
- (c) Remove the foreign bodies from the nose and ear
- (d) Observed or assisted in various endoscopic procedures and trachesotomy;

(4) an item shall have participated as a team member in the community diagnosis e.g. Chronic Suppurative Otitis Media (CSOM) and be aware of national programme on prevention of deafness

(5) he/she shall possess knowledge of various ENT rehabilitative programmes.

(viii) OPHTHALMOLOGY

An intern shall acquire following skills: -

(1) he/she shall be able to diagnose and manage common ophthalmological conditions such as:-

Trauma, Acute conjunctivitis, allergic conjunctivitis, xerosis, entropion, corneal ulcer, iridocyclitis, myopia, hypermetropia, cataract, glaucoma, ocular injury and sudden loss of vision;

(2) he shall be able to carry out assessment of refractive errors and advise its correction;

(3) he shall be able to diagnose ocular changes in common systemic disorders;

(4) he/she shall be able to perform investigative procedures such as:-
Tonometry, syringing, direct ophthalmoscopy, subjective refraction and fluorescein staining of cornea.

(5) he/she shall have carried out or assisted the following procedures:

- (1) Subconjunctival injection;
- (2) Ocular bandaging;
- (3) Removal of concretions;
- (4) Epilation and electrolysis;
- (5) Corneal foreign body removal;
- (6) Cauterization of corneal ulcers;
- (7) Chalazion removal;
- (8) Entropion correction;
- (9) Suturing conjunctival tears;
- (10) Lids repair
- (10) Glaucoma surgery (assisted);
- (11) Enucleation of eye in cadaver;

(6) he/she shall have full knowledge on available methods for rehabilitation of the blind.

(ix) ORTHOPAEDICS

GOAL:

The aim of teaching the undergraduate student in Orthopaedics and Rehabilitation is to impart such knowledge and skills that may enable him to diagnose and treat common ailments. He shall have ability to diagnose and suspect presence of fracture, dislocation, acute osteomyelitis, acute poliomyelitis and common congenital deformities such as congenital talipes equinovarus (CTEV) and dislocation of hip (CDH).

(A) **THERAPEUTIC-** An intern must know:

- (a) Splinting (plaster slab) for the purpose of emergency splintage, definitive splintage and post operative splintage and application of Thomas splint;
- (b) Manual reduction of common fractures – phalangeal, metacarpal, metatarsal and Colles's fracture;
- (c) Manual reduction of common dislocations – interphalangeal, metacarpophalangeal, elbow and shoulder dislocations;
- (d) Plaster cast application for undisplaced fractures of arm, fore arm, leg and ankle;
- (e) Emergency care of a multiple injury patient;
- (f) Precautions about transport and bed care of spinal cord injury patients.

(B) **Skill that an intern should be able to perform under supervision:**

- (1) Advise about prognosis of poliomyelitis, cerebral palsy, CTEV and CDH;
- (2) Advise about rehabilitation of amputees and mutilating traumatic and leprosy deformities of hand;
- (3) An intern must have observed or preferably assisted at the following operations:
 - (1) drainage for acute osteomyelitis;
 - (2) sequestrectomy in chronic osteomyelitis;
 - (3) application of external fixation;
 - (4) internal fixation of fractures of long bones.

(x) DERMATOLOGY AND SEXUALLY TRANSMITTED DISEASES

An intern must be able to: -

- (1) conduct proper clinical examination; elicit and interpret physical findings, and diagnose common disorders and emergencies.
- (2) Perform simple, routine investigative procedures for making bedside diagnosis, specially the examination of scraping for fungus, preparation of slit smears and staining for AFB for leprosy patient and for STD cases;
- (3) Take a skin biopsy for diagnostic purpose;
- (4) Manage common diseases recognizing the need for referral for specialized care in case of inappropriateness of therapeutic response.

(xi) PSYCHIATRY

An Intern must be able to:

- (1) diagnose and manage common psychiatric disorders;
- (2) identify and manage psychological reaction and psychiatric disorders in medical and surgical patients in clinical practice and community setting.

(xii) TUBERCULOSIS AND RESPIRATORY DISEASES

An intern after training must be able to: -

- (1) conducting proper clinical examination, elicit and interpret clinical findings and diagnose common respiratory disorders and emergencies;
- (2) perform simple, routine investigative procedures required for making bed side diagnosis, specially sputum collection, examination for etiological organism like AFB, interpretation of chest X-rays and respiratory function tests;
- (3) Interpret and manage various blood gases and pH abnormalities in various respiratory diseases;
- (4) Manage common diseases recognizing need for referral for specialized care in case of inappropriateness of therapeutic response;
- (5) Perform common procedures like laryngoscopy, pleural aspiration, respiratory physiotherapy, laryngeal intubation and pneumo-thoracic drainage aspiration.

(xiii) ANAESTHESIA

After the internship in the department of Anesthesiology an intern shall acquire knowledge, skill and attitude to:

- (1) perform pre-anaesthetic check up and prescribe pre-anaesthetic medications;
- (2) perform venepuncture and set up intravenous drip;
- (3) perform laryngoscopy and endotracheal intubation;
- (4) perform lumbar puncture, spinal anaesthesia and simple nerve blocks;
- (5) conduct simple general anaesthetic procedures under supervision;
- (6) monitor patients during anaesthesia and post operative period;
- (7) recognise and manage problems associated with emergency anaesthesia;
- (8) maintain anaesthetic records;
- (9) recognise and treat complication in post operative period;
- (10) perform cardio-pulmonary brain resuscitation (C.P.B.R.) correctly, including recognition of cardiac arrest.

(xiv) RADIO-DIAGNOSIS

An intern after training must be able to identify and diagnose:

- (1) all aspects of 'Emergency Room' Radiology like –
 - (a) all acute abdominal conditions;
 - (b) all acute traumatic conditions with emphasis on head injuries;
 - (c) differentiation between Medical and surgical radiological emergencies;
- (2) Basic hazards and precautions in Radio-diagnostic practices.

(xv) PHYSICAL MEDICINE AND REHABILITATION

An intern is expected to acquire the following skills during his/her internship: -

- (1) competence for clinical diagnosis based on details history and assessment of common disabling conditions like poliomyelitis, cerebral palsy, hemiplegia, paraplegia, amputations etc;
- (2) participation as a team member in total rehabilitation including appropriate follow up of common disabling conditions;
- (3) principles and procedures of fabrication and repair of artificial limbs and appliances;
- (4) various therapeutic modalities;
- (5) use of self help devices and splints and mobility aids;
- (6) familiarity with accessibility problems and home making for disabled;
- (7) ability to demonstrate simple exercise therapy in common conditions like prevention of deformity in polio, stump exercise in an amputee etc.;

(xvi) FORENSIC MEDICINE AND TOXICOLOGY

The intern is to be posted in the casualty department of the hospital while attached under Forensic Medicine Department with the following objectives:

- (1) to identify medicolegal problem in a hospital and general practice;
- (2) to identify and learn medicolegal responsibilities of a medical man in various hospital situations;
- (3) to be able to diagnose and learn management of basic poisoning conditions in the community;
- (4) to learn how to handle cases of sexual assault;
- (5) to be able to prepare medico-legal reports in various medico-legal situations;
- (6) to learn various medicolegal post-mortem procedures and formalities during its performance by police.