## Under Graduate:

#### Paediatrics including Neonatology

The course includes systematic instructions in growth and development, nutritional needs of a child, immunization schedules and management of common diseases of infancy and childhood including scope for Social Paediatrics and counselling.

#### (i) GOAL:

The broad goal of the teaching of undergraduate students in Paediatrics is to acquire adequate knowledge and appropriate skills for optimally dealing with major health problems of children to ensure their optimal growth and development.

#### (ii) OBJECTIVES:

## (a) KNOWLEDGE:

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

- 1. Describe the normal growth and development during foetal life, neonatal period, childhood and adolescence and outline deviations thereof;
- 2. Describe the common paediatric disorders and emergencies in terms of Epidemiology, aetiopathogenesis, clinical manifestations, diagnosis, rational therapy and rehabilitation;
- 3. Age related requirements of calories, nutrients, fluids, drugs etc, in health and disease;
- 4. Describe preventive strategies for common infectious disorders, malnutrition, genetic and metabolic disorders, poisonings, accidents and child abuse;
- 5. Outline national Programmes relating to child health including immunization Programmes.

## (b) SKILLS:

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

- Take a detailed paediatric history, conduct an appropriate physical examination of children including neonates, make clinical diagnosis, conduct common bedside investigative procedures, interpret common laboratory investigation results and plan and institute therapy.
- 2. Take anthropometric measurements resuscitate newborn infants at birth, prepare oral rehydration solution, perform tuberculin test, administer vaccines available under current national programmes, start an intravenous saline and provide nasogastric feeding.
- 3. Observe diagnostic procedures such as a lumbar puncture, liver and kidney biopsy, bone marrow aspiration, pleural tap and ascitic tap;
- 4. Distinguish between normal newborn babies and those requiring special care and institute early care o all new born babies including care of preterm and low birth weight babies, provide correct guidance and counseling in breast feeding
- 5. Provide ambulatory care to all sick children, identify indications for specialized / inpatient care and ensure timely referral of those who require hospitalization

## (C) INTEGRATION:

The training in paediatrics should prepare the student to deliver preventive, promotive, curative and rehabilitative services for care of children both in the community and at hospital as part of team in an integrated form with other disciplines, e.g. Anatomy, Physiology, Forensic Medicine, Community Medicine and Physical Medicine and Rehabilitation.

# LIST OF LECTURE/ SEMINARS

Lectures: 3rd / 4th Semester:

- 1. Introduction of Paediatrics.
- 2. History taking in children.
- 3. Examination of Children.
- 4. Normal Growth
- 5. Normal Development.
- 6. Introduction to newborn and normal newborn baby.
- 7. Temperature regulation in newborn.
- 8. Breast feeding and lactation management.
- 9. Infant and child feeding (include complimentary feeding)
- 10. Normal fluid and electrolyte balance in children.
- 11. Immunization.

Lecturers: 7th / 8th / 9th Semester:

- 1. Birth Asphyxia
- 2. Low Birth Weight Babies.
- 3. Neonatal Respiratory Distress.
- 4. Jaundice in newborn.
- 5. Neonatal Infections.
- 6. Neonatal convulsions.
- 7. PEM and its management.
- 8. Vitamin and micronutrient deficiencies.
- 9. Nutritional anaemia in infancy and childhood.
- 10. Acute diarrhoea.
- 11. Hypothyroidism in children.
- 12. Congestive heart failure diagnosis and management.
- 13. Congenital heart disease.
- 14. Rheumatic heart disease.
- 15. Hypertension in children.
- 16. Acute respiratory infections.
- 17. Bronchial asthma.
- 18. Nephrotic syndrome
- 19. Acute glomerulonephritis and hematuria
- 20. Abdominal pain in children.
- 21. Chronic liver disease including ICC.
- 22. Haemolytic anaemia including thalassemia.

- 23. Leukaemias.
- 24. Bleeding and coagulation disorders.
- 25. Seizure disorders.
- 26. Cerebral Palsy.
- 27. Common exanthematous illness.
- 28. Childhood tuberculosis

Other Lectures to be covered:

- 1. Fluid and electrolyte balance -pathophysiology and principles of Management.
- 2. Acid-base disturbances pathophysiology and principles of management.
- 3. Adolescent growth and disorders of puberty.
- 4. Congenital heart disease.
- 5. Acute respiratory infections, Measles, Mumps, Chicken pox
- 6. Other childhood malignancies.
- 7. Coagulation disorders Haemophilia
- 8. Mental retardation.
- 9. Approach to a handicapped child.
- 10. Acute flaccid paralysis.
- 11. Behaviour disorders.
- 12. Meningitis.
- 13. Diphtheria, Pertussis and Tetanus.
- 14. Childhood tuberculosis.
- 15. HIV infection.
- 16. Malaria.
- 17. Neurocysticercosis.
- 18. Enteric fever.
- 19. Immunization.
- 20. Paediatric prescribing.
- 21. Common childhood poisonings.

#### Integrated Seminar Topics:

- 1. Convulsions
- 2. Coma
- 3. PUO
- 4. Jaundice
- 5. Portal hypertension
- 6. Respiratory failure
- 7. Shock
- 8. Rheumatic Heart Disease
- 9. Hypertension
- 10. Diabetes mellitus
- 11. Hypothyroidism
- 12. Anemia

- 13. Bleeding
- 14. Renal failure
- 15. Tuberculosis
- 16. Malaria
- 17. HIV infection
- 18. Perinatal asphyxia (with obstetrics)
- 19. Intrauterine growth retardation (with obstetrics)