

## **Final Paediatric Appointment –duration 8 weeks**

### **Paediatric Appointment – Objectives**

**On completion of training the student should be able to.....**

1. Diagnose common illnesses in neonates and children in Sri Lanka; identify those at risk of illnesses and initiate measures of preventing such illnesses.
2. Comprehensively manage common Paediatric problems in a primary health care centre.
3. Identify and adopt measures to correctly refer patients who need referral to a specialist clinic.
4. Identify patients needing transfer to a secondary or a tertiary health care centre and assess the urgency of transfer and to provide appropriate management till the child is taken over at the other institution.
5. Write clearly and meaningfully notes on BHT, referral and transfer forms and diagnosis cards as appropriate.
6. Communicate effectively with doctors, nurses, community health workers parents and caretakers and able to work as a team on matters of health in Sri Lankan children.
7. Give relevant advice regarding the patients problems to the patient and or to his/her parents or relatives.
8. Provide health education on common health problems in Sri Lanka to the parents/ relatives eg. nutrition, family planning, diarrhea, worms, scabies, immunization, growth and development, sanitation etc.
9. Cooperate as a member of the team of workers in a Paediatric unit.
10. Initiate procedures, which are necessary for the prevention of disease in the community.
11. Demonstrate interest in the follow-up of patients.
12. Demonstrate a scientific approach to the solution of the various problems related to health care.
13. Assess the growth and development of children and prevent/ correct where necessary the detrimental factors, for which purpose he/ she should demonstrate an understanding of
  - Infant feeding
  - Immunization
  - Normal growth and development
14. Demonstrate positive attitude towards continuing his education independently.
15. For each of the diseases recall the
  - (a). Relevant anatomy, physiological and biomedical facts
  - (b). Prevalence and incidence in Sri Lanka
  - (c). Important pathological aspects
  - (d). Clinical features
  - (e). Natural history
  - (f). Complications
  - (g). Laboratory and special investigations
  - (h). Differential diagnosis
  - (i). Management with special reference to the resources available in Sri Lanka
  - (j). Prognosis
  - (k). Method of prevention

### **Objectives of the neonatal unit appointment**

Two students will be appointed at a given time to serve as shadow neonatal house officers. Each student will get an opportunity to work as a shadow HO twice (48hrs) during an eight week appointment. At the end of the appointment students are expected to

**Be able to**

- a. Explain the scientific basis of, observe and explain correctly
  - i. Neonatal resuscitation in the labour room & the theatre
  - ii. Exchange transfusions
  - iii. Phototherapy
  - iv. Gavage feeding
  - v. Insertion of nasogastric tubes
  - vi. Insertion of cannulations
  - vii. Withdrawal of venous and capillary blood for investigations
  - viii. Giving incubator care
  
- b. Recognize an ill baby
- c. Explain and recall the criteria for admission to the SBU
- d. Observe and explain the scientific basis of and recall the procedure of including
  - i. fluid therapy
  - ii. antibiotic treatment
  - iii. temperature regulation
  - iv. follow up plans
  - v. use of observation charts
  - vi. monitoring ill babies and well babies
  
- e. Explain the scientific basis of and recall the management of
  - i. surfactant deficient lung diseases
  - ii. meconium aspiration syndrome
  - iii. birth asphyxia
  - iv. preterm baby
  - v. septicaemia
  - vi. neonatal jaundice
  - vii. infant of a diabetic mother
  - viii. neonatal convulsions
  - ix. necrotizing enterocolitis
  - x. feeding problems
  
- f. Interpret haematological, biochemical and CSF values of test done in the neonatal unit.
- g. Explain clinical and laboratory features and management up to surgical interventions of neonatal surgical problems

**These objectives are achieved through**

- 1. Lectures**
- 2. Bedside teaching**
- 3. Ward classes**
- 4. Life support classes- demonstrations followed by hands on experience- NALS, BLS, ALS**
- 5. Outpatient department work**
- 6. Teaching and ward classes at neonatal unit and post natal wards**

#### **Topics for continuous assessment**

Shock

Anaphylactic shock

Dehydration

Diabetic ketoacidosis

Fluid therapy

Blood & blood product

Transfusion

Urine testing

Stools testing

Setting up an intravenous infusion

Venepunctures

Injections and immunizations

Administration of per rectal drugs

Severe asthma

Stridor

Cardiac failure

Cardiac pulmonary resuscitation (neonates & children)

Nebulisation

Oxygen therapy

Monitoring a ill child

Observation charts

Convulsions

Hypertensive

Encephalopathy

Snake bite

Poisoning

Neonatal emergencies

Lumbar puncture

Anthropometric measurements

(height, weight and head Circumference)

Growth charts

### **Common Paediatric /neonatal problems**

#### **Topics on Neonatal Medicine**

1. Resuscitation of an asphyxiated baby
2. Neonatal examination
3. Care of the normal newborn
4. Care of the sick neonate
5. Fluid therapy
6. Hyperbilirubinaemia, Phototherapy exchange transfusion

#### **Knowledge Competence**

A. Students are expected to know the management of emergencies in paediatrics.

#### **Paediatric emergencies:**

2. Cardio pulmonary resuscitation

3. Neonatal resuscitation
4. Convulsions and status epilepticus
5. Acute severe asthma
6. shock
7. Severe dehydration
8. Anaphylactic reactions
9. Poisoning
10. Snake bite
11. Hypertensive encephalopathy
12. Hepatic encephalopathy
13. Diabetic ketoacidosis
14. Supraventricular tachycardia
15. Pneumothorax

**B. Diagnosis and management of the common paediatric problems observed in the ward.**

**C. Intravenous fluids, blood and products**

Students are expected to know the following:

1. Fluid requirements
2. Commonly and intravenous fluid preparations and their indications and contraindication.
3. Blood and blood products available
4. Complications of fluid and blood therapy
5. Setting up an intravenous line
6. Observations during fluid therapy

**D. Immunisations**

1. Current immunization schedule [EPI]
2. Non EPI vaccines – availability, cost ect.
3. Maintenance of cold chain
4. Indication and contraindications of vaccines
5. Side effects of vaccines
6. Route of administration

**E. Notifiable diseases**

1. Notifications and forms
2. Notification diseases
3. Preventive measures implemented

**F. Nutrition**

1. Breast feeding – importance
2. Formula feeding and its disadvantages

3. Infant feeding
4. Weaning
5. Nutrition of the toddler and beyond
6. Measurement of growth parameters
7. Growth charts and their application and interpretation
8. Undernutrition and overnutrition

## **G. Health education**

### **Neonatology**

1. Premature, Low birth weight (Preterm +IUGR babies)
2. Respiratory disorders
3. Neonatal sepsis/ Necrotising enterocolitis
4. Neonatal jaundice
5. Neonatal convulsions
6. Infants of diabetic mothers

### **Cardiology**

1. Congenital heart disease
2. Rheumatic fever/ Rheumatic heart disease
3. Infective endocarditis
4. Cardiac failure
5. Myocarditis/ Cardiomyopathies/ Pericarditis

### **Respiratory Medicine**

1. Tonsillitis/ Otitis Media
2. Epiglottitis/ Laryngotracheobronchitis
3. Wheezy bronchitis
4. Bronchiolitis
5. Pneumonia
6. Bronchial Asthma

### **Gastroenterology**

1. Diarrhoeas – Acute/chronic/ dysenteries

## **Liver & biliary system**

1. Viral hepatitis
2. Biliary atresia
3. Chirrhosis/ Portal hypertension

## **Nutrition**

1. Failure to thrive
2. Rickets
3. Malnutrition

## **Haematology**

1. Anaemias
2. Bleeding disorders (Haemophilia/ ITP)
3. Malignancies

## **Renal Medicine**

1. Nephrotic syndrome/ Nephritic syndrome
2. Urinary tract infections
3. Chronic renal failure/ Acute renal failure

## **Rheumatology**

1. Arthritis – JCA/ Septic/ Reactive etc.
2. Connective tissue disorders (SLE/ HSP/ Kawasaki)

## **Neurology**

1. Convulsions (Febrile/ Afebrile)
2. Infections – Meningitis/ Encephalitis/ Abscess
3. Development delay/ Cerebral palsy

## **Endocrinology**

1. Diabetes
2. Thyroid disorders
3. Growth hormonal problems

4. Congenital adrenal hyperplasia/ Cushings/ Addisons
5. Pubertal problems

### **Fevers**

1. Malaria/ Typhoid/ Infectious mononucleosis
2. Pyrexia of unknown origin
3. Fevers with rashes

### **Musculoskeletal disorders**

1. Duchannes muscular atrophy
2. CDH/ Perthes' disease