UNIVERSITY OF TRIPOLI – FACULTY OF MEDICINE

PEDIATRIC DEPARTMENT

MODULES OF PEDIATRIC SYLLABUS

2018

Welcome to the paediatric department at Tripoli University for medical sciences

CONTENTS

Course description

A twelve week rotation. Five weeks at Tripoli children hospital, rotating in the inpatient and outpatient departments. One week at the pediatric department –Tajoura hospital. Five weeks at Tripoli medical center, one week at university.
Emphasis is on acquiring skills, and medical knowledge to be able to assess and diagnose common pediatric health issues.

Course Objectives

1. To recognize the normal neonate and normal and abnormal child and the range of normality, including growth and development.
2. To adapt and modify history taking, examination skills and therapeutic prescribing to infants, children and young people.
3. To be able to communicate with children of different ages and their careers.
4. To recognize the size and the importance of the common disorders in Libya and their presenting symptoms and signs.
5. To formulate an appropriate management plan based on diagnosis.
6. To recognize the seriously ill child.
7. To plan emergency management for life-threatening conditions.
8. To appreciate the impact of illness on family dynamics.
9. To recognize and plan ways of disease prevention, promotion of health and the protection of children.
10. To recognize the etiological factors and the patho- physiology of the common paediatric disorders.

INTENDED LEARNING OUTCOMES (ILOs)

1. Knowledge and understanding (lectures/tutorials)
2. Practical skills (clinical with teaching staff & clinical skills at faculty and afternoon sessions at hospital.
3. Professional attitudes and behavioural skills (bedside sessions/tutorials.)
4. Communication skills (one lecture during course and applied at tutorial & clinical sessions).
5. Intellectual skills (At pre-final test / clinical cases and tutorial presentation).
6. General and transferable skills (all through the course).

Intellectual Skills

1-Interpret the most important symptoms & signs of disease in Pediatric age group

2- Interprets various investigational tools to set up a priority based action plan for the most important pediatric conditions.

3-Interpret patient's data in an organized & informative manner.

4-Formulate appropriate management plans for individual patients presenting with common and or critical pediatric disorders**.**

Practical Skills

1-Obtain &record good detailed history for a patient in the Pediatric age group

2- Perform an adequate & complete systemic examination for a patient & identify deviations from normal

3-Check vital signs in neonates, infants, children and adolescents

4-Perform an adequate development assessment for deferent age group.

5-Assess nutritional status and growth for infants, children and adolescents using anthropometric assessments as well as perform Tanner staging

6-Identify pathologic findings in X-Ray and ECG

7-Simulate first aid measures for different neonatal and Pediatric emergencies

8- Oxygen management & administration and nebulizer treatment**.**

9-Perform competently basic life support and cardiopulmonary resuscitation in pediatric manikin.

10-Insert a nasogastric tube in pediatric manikin.

11- Collect urine and blood culture.

12-Insert a cannula in a peripheral vein &Give IM, SC and IV in pediatric manikin.

General and Transferable Skills

1-Respect the patient and maintain their secrets.

2-Respect superiors, colleagues and any other members of the health profession.

3-Present medical information in written, oral forms.

4-Work constructively and cooperatively within a team.

5-Practice self and peer evaluation.

6-Manage time effectively.

7-Leadership management.

Module one

Total teaching hours – Lectures- 49 hrs.
- Tutorials -82 hrs.

A. Weight of theoretical and clinical/ tutorial sessions in the course.

Nos.	TOPICS	Numbers of Hours		
		Lectures	Tutorials & Case Studies	Clinical
1.	Neonates	5 hrs.	10 hrs.	210hrs.
2.	CVS	4 hrs.	5hrs.	84 hrs.
3.	Respiratory	3 hrs.	8hrs.	129 hrs.
4.	Gastroenterology	5 hrs.	7hrs.	153 hrs.
5.	Endocrine	6 hrs.	5 hrs.	58 hrs.
6.	Hema/ Onco& Immunology	4 hrs.	4 hrs.	54 hrs.
7.	Nephrology	4 hrs.	6 hrs.	60 hrs.
8.	Neurology	4 hrs.	9 hrs.	145 hrs.
9.	Rheumatology	2 hrs.	3 hrs.	30 hrs.
10.	Metabolic disorder	2 hrs.	2 hr.	45 hrs.

11.	Emergency	2 hrs.	3 hrs.	38 hrs.
12.	Infectious	3 hrs.	2 hrs.	12 hrs.
13.	General	2 hrs.	11 hrs.	63 hrs.
14.	Social & preventive	1 hr.	3 hrs.	involved in general
15.	Genetics	2 hrs.	1 hr.	ıvolved in general & neonates.
16.	Nutrition	0 hr.	3 hrs.	involved in general
Total		49 hrs.	82 hrs.	1081hrs.by teaching staffs. + 94hrs. by demo.

A. Lecture

1. NEONATOLOGY:

(1). THE FIELD OF NEONATOLOGY (NORMAL NEWBORN):

1. To identify the relevant antenatal factors that has impact on the newborn.
2. To describe the components of the APGAR score and the routine care at birth.
3. To outline the physiological adaptations to extra-uterine life.
4. To describe common benign abnormalities seen in newborn (including benign rashes).
5. To recognise and manage oral thrush and nappy dermatitis.
6. To describe the screening programmes undertaken in the newborn period.

(2). NEONATAL SEPSIS:

1. To understand the size of the problem and the related mortality and morbidity.
2. To identify the risk factors for infection in the newborn.
3. To describe common symptoms and signs of neonatal infection.
4. To outline a management plan for a baby with suspected infection.
5. To outline methods of prevention of infection.

(3). NEONATAL JAUNDICE:

1. To understand bilirubin metabolism.
2. To differentiate physiological and pathological neonatal jaundice.
3. To itemise common causes of pathological neonatal jaundice.
4. To plan basic investigations to identify possible common causes.
5. To outline a management plan for unconjugated hyperbilirubinaemia
6. To define prolonged neonatal jaundice, list its common causes and outline an investigation plan and management.
7. To define kernicterus, describe its clinical picture itemise risk factors and outline its management.

(4).Hypoxic-Ischemic Encephalopathy (HIE)(BIRTH ASPHYXIA):

1. To define birth asphyxia (Apgar score and cord pH).
2. To define risk factors for birth asphyxia.
3. To classify severity of birth asphyxia.
4. To itemise common complications of birth asphyxia.
5. To define hypoxic ischemic encephalopathy and describe its grades, clinical picture and prognosis.
6. To outline a management plan for a baby with birth asphyxia.

(5). LOW BIRTH WEIGHT, PRETERM AND SMALL FOR GESTATIONAL AGEBABIES.:

1. To define small for gestational age (SGA), low birth weight (LBW) and preterm (PT).
2. To understand the magnitude of these problems.
3. To describe disadvantages and common short-term problems of SGA, and PT babies.
4. To outline management of the PT babies.
5. To describe common long-term sequel of prematurity.

II. CARDIOVASCULAR SYSTEM

(1). Acquired Heart Diseases:

1. To list acquired heart diseases (myocarditis, Kawasaki disease).
2. To understand aetiology of myocarditis and its relation to cardiomyopathy.
3. To recognize clinical features of myocarditis.
4. To recognise role of chest x-ray and echo in suspected myocarditis.
5. To outline the management plan for myocarditis.
6. To recognize clinical features of Kawasaki disease (typical diagnostic criteria).
7. To recognise role of echo in Kawasaki disease.
8. To outline the management plan for Kawasaki disease.

(2). Congenital Heart Diseases I (Cyanotic CHD):

1. To classify CHDs (basic classification).
2. To recognise different ways of CHD presentation.
3. To discuss TGA, Fallot tetralogy and tricuspid atresia as examples for cyanotic CHDs (summarise clinical features, diagnosis, complications and management).
4. To recognise the indications for endocarditis prophylaxis.

(3).Congenital Heart Diseases Ii (Acyanotic CHD):

1. To classify CHDs (basic classification).
2. To recognise different ways of CHD presentation.
3. To discuss VSD, ASD, PDA and PS as examples for acyanotic CHDs
   (Summarise clinical features, diagnosis, complications and management).
4. To recognise the indications for endocarditis prophylaxis.

(4). HEART FAILURE:

1. To outline the pathophysiology (hemodynamics) of heart failure.

2. To list the common causes of heart failure according to the child's age.

3. To identify its important symptoms and its four cardinal signs (including chest x-ray).

4. To describe management principles.

III. RESPIRATORY SYSTEM

(1). CHILDHOOD ASTHMA:

1. To understand pathogenesis of asthma.
2. To recognise common presentation and important aspects in the history

(Including atopy).
3. To recognise important features in history (including environmental factors) and examination related to chronicity.
4. To be able to assess severity of chronic asthma.
5. To recognise important clinical signs of asthma
6. To be able to assess severity of acute asthma attacks.
7. Outline management of a child with an acute asthmatic attack.
8. To describe guidelines for long term chronic asthma prophylaxis.

(2).THE CHILD WITH PNEUMONIA:

1. To itemize the common causes of fever and cough.
2. To distinguish clinical (history and examination) features suggestive of pneumonia (including risk groups, epidemiology and hydrocarbon pneumonia).
3. To describe the WHO classification of Acute Respiratory Illness.
4. To list common pathogens causing pneumonia (in relation to age).
5. To outline relevant investigations.
6. To describe principles of management of pneumonia.

(3). ACUTE BRONCHIOLITIS (AB):

1. To distinguish clinical features suggestive of AB.
2. To list the common pathogens causing AB.
3. To itemize common causes of acute cough and wheeze (differential diagnosis of AB).
4. To outline relevant investigations.
5. To describe principles of management of AB.

IV. GASTROENTEROLOGY

(1). ACUTE DIARRHOEA AND VOMITING:

1. To explain the pathogenesis of vomiting and diarrhoea.
2. To itemize the local causes of vomiting and diarrhoea.
3. To identify relevant features on history and clinical examination.
4. To be able to assess the degree of dehydration clinically.
5. To select appropriate investigations.
6. To outline an appropriate management plan**.**

(2). PROLONGED NEONATAL JAUNDICE / CHOLESTASIS:

1. To define prolonged neonatal jaundice.
2. To differentiate unconjugated from conjugated hyperbilirubinaemia.
3. To list differential diagnosis (common & important causes) for both categories.
4. To plan investigations based on the differential diagnosis and to interpret results.
5. To outline general management (including role of the hepatologist).

(3).THE CHILD WITH FOOD INTOLERANCE (ALLERGY, CMPI, LACTOSE INTOLERANCE):

1. Definition.
2. To describe relevant features in the history.
3. To outline the main systems for physical examination.
4. To outline relevant investigations required and their rationale/
5. To summarize key treatment principles.

(4). MANAGEMENT OF DEHYDRATION:

1. To review common causes of dehydration (intake / loss).
2. To be able to assess hydration status clinically (history and examination).
3. To identify the composition of the WHO oral rehydration solution.
4. To understand role of fluid therapy (oral and intravenous, maintenance, deficit and ongoing loss).
5. To describe the role of investigations in assessing and managing dehydration.
6. To describe common complications of mismanagement and how to avoid them.

(5).CHRONIC DIARRHOEA:

1. To define chronic diarrhoea.
2. To itemise common causes of chronic diarrhoea (Coliac, giardiasis, toddler's diarrhea, CMPI).
3. To itemise first line investigations for assessing chronic diarrhoea.
4. To outline principles of treatment of common causes.

V. ENDOCRINE DISORDERS

(1).CHILDHOOD DIABETES MELLITUS (DM):

1. To understand types & pathogenesis, epidemiology, inheritance and related diseases of DM.
2. To identify relevant features of history and clinical examination in DM.
3. To outline diagnostic investigations of DM.
4. To itemise complications of DM.
5. To outline plan for control and long term management of childhood DM.

(2). GROWTH AND PUBERTY (DELAYED/ PRECOCIOUS):

1.To understand normal growth stages (including pubertal stages).
2.To understand normal variants of pubertal development (e.g. thelarche).
3.To define delayed and precocious puberty.
4.To know the main causes of delayed puberty and common causes of precocious puberty.
5.To outline first line investigations plan for precocious puberty.

(3).PARATHYROID GLAND DISORDERS(with special reference to calcium disorders):

1. To review parathyroid gland function and calcium homeostasis.
2. To classify parathyroid gland disorders.
3. To itemise other causes of hypocalcaemia.
4. To identify features in history and examination relevant to hypocalcaemia (convulsions / carpopedal spasm).
5. To arrange a management plan for a child with hypocalcaemia.

(4). THYROID GLAND DISORDERS:-

1. To review the function of the thyroid hormones.
2. To recognise features of hypo- and hyperthyroidism (compare both).
3. To be able to interpret logically the thyroid function test.
4. To outline the management of congenital hypothyroidism.
5. To emphasise the importance of neonatal screening.

(5). ADRENAL GLAND DISORDERS (HYPO & HYPER):-

1. To review the function of the adrenal gland and its important hormones.
2. To list the common causes for hypoadrenalism.
3. To describe clinical features of Addison's disease.
4. To outline management of Addison's disease.
5. To list the common causes for hyperadrenalism**.**
6. To describe clinical features of hyperadrenalism.
7. To outline investigations for adrenal function.

(6). DIABETIC KETOACIDOSIS (DKA):-

1. To recognise common precipitants of DKA.
2. To describe the features of a typical case of DKA.
3. To outline management steps of DKA.
4. To recognise the complications of DKA.

VI. HAEMATOLOGY AND ONCOLOGY

(1).A CHILD WITH PALLOR (ANEMIA):-

1. To list common types (nutritional, haemolytic and aplastic) of anaemia with examples.
2. To itemise types of nutritional anaemia.
3. To recognise risk factors associated with nutritional anaemia.
4. To summarize the clinical features, diagnosis and treatment of iron deficiency anaemia.

(2).LEUKAEMIA:-

1. To understand the pathogenesis and basic classification of leukaemia.
2. To outline the modes of presentation of childhood acute leukaemia.
3. To identify relevant features on history and examination.
4. To list the differential diagnosis of leukemia.
5. To outline key investigations of a child with suspected leukaemia.
6. To describe the principles of management acute lymphoblastic leukaemia.

(3). CONGENITAL IMMUNE DEFICIENCY:-

1. To review components of the immune system.
2. To classify congenital immune diseases.
3. To recognise clinical situation where immune deficiency is suspected.
4. To itemise infections highly characteristic of immune deficiency.
5. To plan first line investigations.
6. To outline general management plan of immune deficiency.

(4). PAEDIATRIC ONCOLOGY / SOLID TUMORS:-

1. To categorize the commonest forms of cancer in childhood.
2. To itemise common solid tumors (Wilm's, neuroblastoma, lymphoma, brain tumors).
3. To outline the modes of presentation of common solid tumors.
4. To list differential diagnosis for a neck swelling and for an abdominal mass.
5. To outline key investigations.
6. To describe the principles of management.

VII. NEPHROLOGY

(1). NEPHROTIC SYNDROME (NS):-

1. To define proteinuria, heavy proteinuria and NS.
2. To list common causes of proteinuria.
3. To list first line investigations for a child with proteinuria.
4. To recognise clinical features of NS.
5. To differentiate between NS and nephritic syndromes.
6. To understand remission & relapse.
7. To understand principles of management of NS.
8. To recognise important prognostic factors and indications for nephrology referral.
9. Indication of Renal Biopsy.

(2). URINARY TRACT INFECTION (UTI):-

1. To understand UTI epidemiology and risk factors for UTI.
2. To describe key features in history and examination (age related) (& upper & lower UTI).
3. To outline relevant investigations (age groups related).
4. To understand the significance of pyuria &bacteruria.
5. To outline management of UTI.
6. To outline relevant follow up investigations for UTI.
7. To outline complications of renal scaring.
8. Significance of Pyuria.

(3).CHRONIC KIDNEY DISEASE (CKD)/CHRONIC RENAL FAILURE (CRF):-

1. To define CRF/CKD.
2. To itemise common causes of CRF in children.
3. To recognise main clinical manifestations and complications of CRF.
4. To describe an investigation plan to diagnose CRF and assess its complications.
5. To outline general management plan for CRF.

(4). ACUTE RENAL FAILURE (ARF):-

1. To define ARF.
2. To itemise common causes of ARF in children (pre-renal, renal, post-renal).
3. To recognise main clinical manifestations and complications of ARF.
4. To describe an investigation plan to diagnose ARF and assess its complications.
5. To understand principles of management of ARF (including indications for dialysis).

VIII. NEUROLOGY

(1). FITS; DIFFERENTIAL DIAGNOSIS AND MANAGEMENT:-

1. To itemize the common causes of loss of consciousness and fits.
2. To identify relevant clinical features that differentiates between fits and faints.
3. To describe the management of the convulsing child / status epilepticus.
4. To define febrile convulsion & describe its types, epidemiology and prognosis.
5. To classify the types of epilepsy generally.
6. To discuss the role of EEG and brain imaging.
7. To outline principles of long term treatment of epilepsy.

(2). CNS INFECTION (SUSPECTED MENINGITIS & ENCEPHALITIS):-

1. To recognise when to suspect meningitis (and meningitis versus encephalitis).
2. To recognise contraindications for lumbar puncture.
3. To itemise other investigations for suspected meningitis.
4. To understand principles of treatment of meningitis.
5. To list common complication of meningitis.

(3). CEREBRAL PALSY:-

1. To list the commonest conditions causing longstanding disability.
2. To explain the features in the history and examination which describe different types of CP.
3. To describe the impact of longstanding disability on the child and family.
4. To outline principles of investigation.
5. To outline the management option and support available to the child and family (including the roles of the multidisciplinary team).

(4). Behavioural , Emotional, and psychosomatic disorders of childhood :-

1. Define common behavioural difficulties [ADHD, autism, school refusal, nocturnal enuresis, encopresis, sleep disorders, recurrent pain syndrome (Abdominal pain, migraine and limbs pain).
2. To describe their characteristic classical clinical manifestations.
3. To outline approach to their diagnosis.
4. To outline general management for these disorders.

IX. RHEUMATOLOGY

(1).THE CHILD WITH CHRONIC ARTHRITIS:-

1. To define arthralgia, arthritis &chronic arthritis.
2. To describe the main types of juvenile idiopathic arthritis (JIA).
3. To describe the clinical features of different sub- types of JIA.
4. To discuss the criteria for diagnosis of different sub-types of JIA.
5. To outline principles of investigation.
6. To outline principles of treatment.
7. To recognize the long term complications.

(2).SPECTRUM OF AUTO IMMUNE DISEASES IN CHILDREN:-

1. To recognize what is auto immune disease.
2. To list the most common the auto immune diseases.
3. To describe the clinical features of juvenile systemic lupus erythematosis (SLE).
1. To discuss the criteria for the diagnosis & classification of SLE.
2. To outline the treatment of SLE.
3. To recognize the clinical features of Juvenile dermatomyositis.
4. To discuss the criteria for the diagnosis of juvenile dermatomyositis.
5. To outline the management approach in juvenile dermatomyositis.

X. METABOLIC DISORDER

(1). INBORN ERRORS OF METABOLISM I (INTRODUCTION & APPROACH):-

1. To classify IEMs with a common or important examples.
2. To describe characteristic feature of each group (clinical / laboratory).
3. To describe clinical scenarios where IEMs should be suspected.
4. To outline first line investigations and interpretation of their results.
5. To describe general management options.
6. To understand the impact of IEMs on the child and the family.

(2). INBORN ERRORS OF METABOLISM II (some examples):-

To summarise, classical clinical features, investigations, management and prognosis of:-
1-Phenylketonuria (PKU).
2-Tyrosenemia
3-Galactosemia
4- Gaucher disease
5- Mucopolysacharidosis type I
6- Glycogen storage disease

XI. EMERGENCIES

(1). THE SHOCKED CHILD:-

1. To explain the basic mechanism of shock in infants and young children.
2. To list the common causes / types of shock.
3. To identify relevant features of the clinical examination to detect early shock.
4. To outline relevant investigations to be carried out.
5. To describe the initial steps of management of shock.

(2). SEPTICEMIA (SERIOUS BACTERIAL INFECTION "SBI") IN CHILDHOOD:-

1. To recognize common causative organisms of SBI.
2. To recognise the incidence of SBI in the well looking febrile child with no apparent focus of infection.
3. To outline the management of the well looking febrile child with no apparent focus of infection.
4. To identify relevant features of the clinical examination to detect the septic child early.
5. To outline relevant investigations to be carried out.
6. To list the complications of septicaemia (multi-organ failure).
7. To describe the management steps of SBI.

XII. INFECTIOUS DISEASES

(1). VIRAL HEPATITIS:-

1. To classify types viral hepatitis.
2. To describe methods of transmission and the risk factors for different types.
3. To describe the epidemiology and clinical features of different types.
4. To outline investigations.
5. To outline general management plan for different types.
6. To list complications of viral hepatitis.

(2). HIV IN CHILDREN (other causes of acquired ID):

1. To list causes of acquired immune deficiency in children.
2. To understand epidemiology and transmission of HIV (including mother-to-child).
3. To recognise clinical situation where immune deficiency is suspected.
4. To itemise infections highly characteristic of HIV infection.
5. To outline diagnostic investigations.
6. To outline general management plan of HIV infection and neonates of HIV positive Mothers.

(3). TUBERCULOSIS (TB):

1. To understand the epidemiology of TB in children.
2. To distinguish clinical features suggestive of TB.
3. To list common forms of TB (pulmonary, miliary, meningitis).
4. To list common causes of differential diagnosis of TB.
5. To outline relevant investigations.
6. To describe principles of management of TB.

XIII. GENERAL

(1). HISTORY TAKING:-

1. To emphasis the role of a proper history.
2. To provide a method for structuring a proper history.
3. To emphasise the importance of linking different symptoms (asking relevant questions that will help in either assessing the severity or helping in the differential diagnosis).

(2).COMMUNICATION SKILLS:-

1. To emphasis the role of communication skills in our practice.
2. To aware the students with the basics of communication skills.
3. To improve the relations between doctors- colleagues &doctors- patients based on using communication skills.

XIV. Social and Preventive Paediatric

(1). THE IMMUNIZATION:-

1. To review principles of immunization (passive and active).
2. To understand the Libyan national immunization program (LNIP).
3. To recognise common side effects of immunization.
4. To understand the importance of immunization against the various infectious diseases included in the LNIP.
5. To provide an idea about some specific indications for additional vaccines.
6. To understand the cold chain.
7. To recognize contraindication.
8. To understand the route of vaccination.

XV. GENETICS

(1). GENETICS; THE ODD-LOOKING (DYSMORPHIC) CHILD / DOWN'S SYNDROME:-

1. To revise the classification of genetic diseases (chromosomal, AR, AD, X-Linked, multi-factorial) with examples.

2. To identify the contribution of the clinical geneticists (their role).
3. To demonstrate this approach using a patient with Down syndrome.
4. How to break the bad news to the family.

(2).CONGENITAL ANOMALIES:-

1. To define malformation, deformity, syndrome, association, squeal, disruption and minor and major abnormality.
2. To list common causes of congenital anomalies (infections, toxins, multi-factorial)
3. To itemise common congenital anomalies and their impact (skeletal, GIT, CNS, respiratory).
4. To outline management of common congenital anomalies.

B. Tutorial Sessions

1. NEONATOLOGY

(1). NEONATAL EXAMINATION:-

1. To assess how to use Apgar score soon after birth.
2. To screen for malformation.
3. To assess baby's clinical condition.

(2). NEONATAL RESUSCITATION:-

1. To understand normal newborn care.
2. To recognise babies who need resuscitation.
3. To itemise aims and necessary equipments and drugs.
4. To list steps of neonatal resuscitation (A, B, C, D).
5. To understand the rationale of these steps.
6. To recognise some special cases (meconium, preterm, diaphragmatic hernia, choanal atresia).

(3). APPROACH AND MANAGEMENT OF SICK NEWBORN:-

1. To recognize sick newborn (clinical picture).
2. To itemise common differential diagnosis (common causes).
3. To recognise important features in the maternal and newborn history.
4. To outline a general management plan.

(4).BIRTH TRAUMA AND COLD INJURY:-

1. To define neutral thermal environment.
2. To understand methods of heat loss in newborn.
3. To describe risk factors, clinical picture and management of hypothermia.
4. To recognize effects and complications of hypothermia.
5. To list strategies for avoiding hypothermia.
6. To recognize other common traumatic injuries and their management.

(5).NEONATAL RESPIRATORY PROBLEMS (2 TUTORIALS –TCH & TMC):-

1. To outline the clinical presentation of RD in neonates.
2. To outline differential diagnosis of causes of RD including the less common but serious causes by history & examination.

3. To recognize how to approach investigations & treatment based on the history & examination.

(6). A NEWBORN WITH BLEEDING:-

1. To identify common causes of bleeding in newborn.
2. To understand the importance of vitamin K prophylaxis.
3. To recognize common presentation of vitamin K deficiency bleeding.
4. To recognize serious complications of vitamin K deficiency bleeding.
5. To outline management of bleeding in the newborn (including investigations).
6. Route of administration of Vitamin K.

(7). PROBLEMS OF PRE-MATURITY:-

1. To understand the incidence & epidemiology of prematurity.
2. To recognize in brief the method of assessing gestations.
3. To understand the main difference between small for dates & LBW.
4. To recognize the scale of problems by highlighting the mortality & morbidity including specific problems of prematurity in short & long term.
5. To understand the prediction the neuro-developmental, handicapped in the preterm.
6. To appreciate the impact of the problem & the care for well & unwell preterm baby.

(8). NEONATAL SEIZURES:-

1. To identify common causes of neonatal seizures.
2. To recognise subtle seizures.
3. To list first line investigations.
4. To outline steps to control seizures (and treating causes).
5. To outline management of infants of diabetic mothers.

(9). INFANT OF DIABETIC MOTHER & ELECTROLYTES IMBALANCE IN NEONATES:-

1. To understand normal values of serum glucose &electrolytes (Na^+, K^+, Ca^{++}, Mg^+) and blood gases**.**

2. To understand their daily requirement of Vit. D & K.

3. To define for electrolyte disturbance of hyper & hypo (Na, K^+, Mg, Ca^{++}, glycerine, Protein), Vit.B_6def. Vit.B_6 dependent syndrome**.**

4. To itemize the common causes of electrolyte disturbance.
5. To outline the management of metabolic disturbance in newborn.
6. To understand the pathophysiology of common complication of IDM.
7. To outline principles of investigations & management. **.**

II. CARDIOVASCULAR SYSTEM

(1). HISTORY &EXAMINATION OF THE CARDIOVASCULAR SYSTEM (2 TUTORIALS –TCH & TMC):

1. To be able to take relevant history and perform a complete cardiovascular system examination**.**
2. To list important normal and abnormal positive signs at each step of the examination.
3. To understand the importance of these positive signs.
4. To be able to link the positive signs sensibly.

5. To outline the role of cardiovascular investigations (Chest x-ray, ECG, Echo).

(2). INFECTIVE ENDOCARDITIS (IE):

1. To explain the pathogenesis of IE.
2. To summarise risk factors (a complication of Rheumatic fever and CHDs).
3. To recognise its clinical features (the typical presentation).
4. To list common differential diagnoses.
5. To outline principles of management.

(3). ACUTE RHEUMATIC FEVER (RF):

1. To explain the pathogenesis of RF.
2. To recognise the clinical features (the typical presentation and the diagnostic criteria).
3. To list common differential diagnoses.
4. To outline principles of management including prophylaxis.

(4). CHILD WITH CYANOSIS:

1. To identify the meaning of cyanosis & its types.
2. To list the causes of cyanosis.
3. To outline the management (investigations, clinical tests) and reach the under cause of cyanosis.
4. To recognize the cyanotic heart diseases (types, complications & brief notes on the treatment. .

(5). ECG & ARRYTHEMIAS:

1. To review basics of ECG reading.
2. To recognize typical clinical and ECG features of supraventricular tachycardia (SVT).
3. To outline the management of SVT.

III. RESPIRATORY SYSTEM

(1). EXAMINATION OF THE RESPIRTORY SYSTEM (Upper & Lower):-

1. To be able to take relevant history and perform a complete respiratory system examination.
2. To list important normal and abnormal positive signs at each step of the examination.
3. To understand the importance of these positive signs.
4. To be able to link the positive signs sensibly.
5. To outline the basics of reading chest x-rays.

(2). THE CHILD WITH CHRONIC COUGH:-

1. To itemize causes of a chronic cough (CF, bronchiectasis, TB, postnasal drip, FB inhalation, GOR, immunodeficiency, CHD).
2. To describe differentiating features in the history and examination.
3. To select appropriate first line investigations.
4. To outline a general management plan.

(3). THE CHILD WITH BREATHING DIFFICULTY:

1. To list the common causes of breathing difficulties in infants and young children (differential diagnosis: croup, acute bronchiolitis, FB inhalation, aspiration, heart failure, bronchial asthma).

2. To identify relevant features of the history and clinical examination.
3. To outline relevant investigations.
4. To select appropriate management for different circumstances. .

(4). DIFFERENTIAL DIAGNOSIS IN A CHILD WITH NOISY BREATHING

1. To define different respiratory noisy sounds (stridor, snoring, grunting, wheeze, rattle).
2. To list common differential diagnosis for each.
3. Describe general management plan for common causes (e.g. croup, FB, asthma).

(5).ACUTE COUGH (URTI):-

1. To list common causes for acute cough.
2. To describe clinical features and management of URTI (including otitis media).
3. To describe the WHO classification of acute respiratory tract infections.
4. To understand the impact of the WHO classification on the management.

(6). CHILD WITH DYSPNEA:-

1. To outline the different causes of dyspnea in children.
2. To recognize the symptoms & signs of dyspneic child
3. To outline the management of dyspneic child.

(7). INVESTIGATIONS OF RESPIRATORY SYSTEMS:-

1. To outline the common investigations that should be done in respiratory problems.
2. To understand the interpretation of the results of these investigations.
3. To differentiate between obstructive & restrictive lung disease based on these investigations.

IV. GASTROENTEROLOGY

(1). ABDOMINAL EXAMINATION:-

1. To identify the general signs related to GIT diseases.
2. To be able to assess features of mal-absorption and mal nutrition diseases.
3. To learn how to perform complete abdominal examination.
4. To describe an approach to abdominal examination of the child.

(2). FAILURE TO THRIVE:-

1. To define the term “failure to thrive” in the context of normal patterns of growth.
2. To distinguish between organic and non-organic failure to thrive.
3. To Itemize the local cause.
4 To outline the key features in the history and physical examination.
5. To select relevant investigations required and their rationale.
6. To formulate a management plan.

(3). DIFFERENTIAL DIAGNOSIS OF VOMITING:-

1. To explain the deference between vomiting / regurgitation.
2. To itemise the common medical and surgical causes of vomiting according to age.
3. To identify relevant features on history and clinical examination.
4. To select appropriate investigations.

5. To outline an appropriate management plan (GOR and Pyloric stenosis).

(4). CONSTIPATION:-

1. To explain the pathophysiology of constipation and encopresis.
2. To explain the common causes of constipation.
3. To differentiate between organic and non-organic constipation.
4. To describe the features in the history and examination which guide diagnosis.
5. To understand the principles of management.

(5). THE CHILD WITH ABDOMINAL PAIN:-

1. To classify the common medical and surgical causes of acute abdominal pain.
2. To outline the features of history with emphasis with psychogenic causes. (Including features of pain that aid diagnosis).
3. To identify relevant features on examination.
4. To summarize key investigations.
5. To describe the principles of management of acute abdomen.

(6). MALABSORPTION:-

1. To itemize common causes of malabsorption.
2. To define Coeliac disease and its pathogenesis.
3. To recognise features of malabsorption / Coeliac disease.
4. To itemise investigations for assessing malabsorption and diagnosing Coeliac disease.
5. To outline principles of treatment of malabsorption and Coeliac disease.

(7).GASTROINTESTINAL TRACT BLEEDING (ACUTE AND CHRONIC):-

1. To classify the common causes of GIT bleeding (systemic and upper and lower GIT).
2. To outline the relevant features of history.
3. To identify relevant features on examination.
4. To summarize key investigations.
5. To describe the principles of management of GIT bleeding.

V. ENDOCRINE DISORDERS

(1). SHORT STATURE:-

1. To describe growth assessment.
2. To differentiate genetic and constitutional growth delay from pathological short stature.
3. To itemise common causes of short stature.
4. To itemise causes of growth hormone deficiency (GHD).
5. To outline diagnostic investigations for GHD (including bone age).
6. To outline management of GHD.

(2). POLYURIA & POLYDEPSIA:-

1. To define polyuria and polydepsia.
2. To itemise their causes (focus on psychogenic polydepsia and diabetes insipidus (DI).
3. To recognise relevant clinical features (especially history).
4. To outline an investigation plan.
5. To outline management of psychogenic polydepsia and diabetes insipidus (DI).

(3).HYPOGLYCEMIA:-

1. To define hypoglycaemia and describe its pathophysiology.
2. To outline the metabolic changes associated with hypoglycaemia.
3. To describe the relevant features in the history and examination of a child with hypoglycaemia.
4. To list the differential diagnosis of hypoglycaemia.
5. To outline an investigation and management plan for hypoglycaemia.

(4).Congenital Adrenal Hyperplasia (Ambiguous Genetalia):-

1. To classify main causes of ambiguous genitalia.
2. To understand pathogenesis (in simple way) and inheritance of AGS.
3. To identify features of history and clinical examination seen in AGS.
4. To outline diagnostic investigations of AGS.
5. To outline a management plan of a baby with suspected AGS.

(5). PUBERTAL ASSESSMENT & DISORDERS:-

1. To identify the first signs of true puberty.
2. To know the range of ages for normal pubertal onset.
3. To define & evaluate precoucious& delayed puberty.
4. To know what therapy is available & when treatment is warranted.
5. To know when referral to Endocrinologist is appropriate.

VI. HAEMATOLOGY AND ONCOLOGY

(1). CHILD WITH JAUNDICE AND PALLOR (HAEMOLYTIC ANEMIA)

1. To be able to define anaemia & haemolytic anaemia.
2. To recognize features differentiating the different types of pallor.
3. To classify types of haemolytic anaemia.
4. To diagnose haemolytic anaemia in general & each type of haemolytic illness.
5. To understand principles of management of common haemolytic anaemia.
6. To recognize the specific treatment of each types of haemolytic anaemia

(2). DIFFERENTIAL DIAGNOSIS IN A CHILD WITH BLEEDING/ BRUISES:-

1. To outline the common causes of easy bleeding in childhood.
2. To define the key features in history and physical examination.
3. To be able to interpret results of first line investigations (CBC & coagulation screen).
4. To recognise the features that would indicate non-accidental injury (NAI).
5. To describe the general management approach to the child with bleeding.
6. To outline indications of blood & blood products transfusion & their complications.

(3). ANEMIAS OTHER THAN HAEMOLYTIC ANEMIA:

1. To define the meaning of anemia rather than haemolytic anemia type.
2. To outline the different causes of non- haemolytic anemia (nutritional, bone marrow failure & blood loss).
3. To recognize the symptoms & signs related to each type.
4. To recognize the symptoms & signs & the management of common nutritional anemia (Iron deficiency anemia, Vit.B12 deficiency & Folic acid deficiency.

5. To recognize the symptoms & signs & the management of common bone marrow failure, anemia either congenital or acquired (Fanconi anemia, black Fan-diamond syndrome, acquired Aplastic anemia.

VII. NEPHROLOGY

(1). HYPERTENSION IN CHILDREN:-

1. To recognize hypertension in children (definition, measurement techniques).
2. To outline pathophysiology of hypertension in children.
3. To classify causes of hypertension in children (basic classification by system with examples).
4. To recognise risk factors for hypertension in children (obesity) and its prevention.
5. To understand principles of management of hypertension in children.

(2). A CHILD WITH RED URINE:-

1. To define hematuria and confirm its presence.
2. To itemise causes of red urine.
3. To define acute nephritic syndrome (ANS) and post streptococcal, acute glomerulonephritis (AGN).
4. To recognise typical presentation of ANS.
5. To understand first line investigations for ANS.
6. To understand principles of management of ANS.

(3). ACID BASE DISTURBANCE:-

1. To understand principles of acid base balance regulation.
2. To be able to recognise abnormalities of blood gas results.
3. To itemise common causes of acid base disturbance.
4. To define and classify renal tubular acidosis.
5. To outline management of metabolic acid base disturbances.

(4).URINARY INCONTINANCE (ENURESIS) (BED WETTING):-

1. To explain the pathophysiology of urinary incontinence in children.
2. To define and classify enuresis / nocturinal enuresis.
3. To outline relevant investigations.
4. To outline methods of treatment for enuresis.

(5). CONGENITAL AND HEREDITARY ANOMALIES OF THE URINARY TRACT:

1. To itemise common congenital anomalies of the urinary tract.
2. To recognise the functional impact of these common anomalies.
3. To describe the clinical manifestations of these anomalies.
4. To list diagnostic investigations.
5. To outline the management of the common anomalies.

(6).INTERPRETATION OF URINE ANALYSIS:-

1. To describe methods of urine collection.
2. To list methods of urine collection in children.
3. To list components of urine dipstick and microscopy.
4. Recognise the significance of each item.
5. To recognise typical urine examination finding seen in specific conditions (e.g. UTI, AGN).

VIII. NEUROLOGY

(1).CNS EXAMINATION (TCH & TMC):-

1. To know how to perform complete CNS examination.
2. To recognize the normal & abnormal findings at each steps of CNS examination.
3. To know the interpretation of these findings & their relations with the possible cause of CNS disease.

(2). NEUROMUSCULAR DISORDERS:-

1. To classify muscular and peripheral neuromuscular disorders.
2. To recognise clinical feature and characteristic of these disorders.
3. To understand role of investigations in differentiating these disorders.
4. To outline general management of these disorders.
5. To summarise clinical features, differential diagnosis, investigations management of Guillian-Barri syndrome.
6. To summarise clinical features, differential diagnosis, investigations and management of Duchenne muscular dystrophy and myasthenia gravis.

(3). ASSESSMENT OF NORMAL DEVELOPMENT:-

1. To revise the framework for describing normal child development.
2. To itemize the main causes for deviations in normal development.
3. To list key questions required in the history.
4. To describe an approach to the physical examination of the child.

(4). THE CHILD WITH A HEADACHE:-

1. To list the common causes of headache.
2. To identify the relevant features of history and examination.
3. To distinguish features suggestive of a sinister headache.
4. To summarize key principles of management of common headache and migraine.

(5). FLOPPY BABY:-

1. To describe clinical assessment of floppy babies(& how to differentiate central &peripheral hypotonia).
2. To itemise common causes.
3. To describe clinical manifestations of Werdnig Hoffman disease.
4. To outline the basicinvestigations.
5. To outline management of floppy baby Werdnig Hoffman disease.

(6). LARGE HEAD / SMALL HEAD / MENINGOMYELOCELE:-

1. To describe head size measurement method and define microcephaly and macrocephaly.
2. To itemise common causes of micro- and macrocephaly.
3. To understand the clinical manifestations and impact of microcephaly and hydrocephalus.
4. To classify types of hydrocephalus.
5. To recognise the relationship between hydrocephalus and Spinabifida.
6. To outline management of hydrocephalus.
7. To understand the effects of neural tube defect on other parts of the body.

(7). CHILD WITH SEIZURES (EPILEPTIC FITS) :-

1. To identify Epilepsy in children.
2. To recognize the classification of childhood epilepsy.
3. To know how to take detail neurological history.
4. To know how to assess & investigate patients suspected having epilepsy.
5. To outline the management of epileptic child.

(8).CHILD WITH A DISABILITY:

1. To define the terms: impairment, disability and handicapped.
2. To list common condition.
3. To understand how the different problems tend to present at different ages.
4. To assess a child with disability.
5. To break news to parents about disability.
6. To outline the management.

IX. RHEUMATOLOGY

(1). MUSCULOSKELETAL HISTORY & EXAMINATION IN CHILDREN:-

1. Take an appropriate musculoskeletal and rheumatology history.
2. Able to perform musculoskeletal and rheumatology examination (screening and approach to regional examination) PGALS.

(2.). THE CHILD WITH ACUTE LIMPING:-

1. To recognize normal gait cycle.
2. To define what is limping
3. To evaluate a child with acute limping.
4. To list the common causes of acute limp.
5. To differentiate causes based on clinical features (irritable hip& slipped Capital femoral epiphysis /septic arthritis).
6. To outline the relevant investigations required.
7. To outline the treatment of common causes of limping.

(3).CHILDHOOD VASCULTIS:-

1. Define what vasculitis is.
2. Recognize the common types of vaculitis in children.
3. Recognize the clinical features of Henoch – schonlein purpura (HSP).
4. Discuss the criteria for diagnosis of HSP.
5. To outline the management of HSP.
6. To recognize the Kawasaki disease (KD).
7. To discuss the criteria for diagnosis of KD.
8. To outline the treatment approach and recognize the complications of KD.
9. To list the less common types of vasculitis in children. .

X. METABOLIC

(1).INBORN ERROR OF METABOLISM IN CHILDREN & THEIR MANAGEMENT:.

1. To identify the most common metabolic disease in children.
2. To recognize the different presentation, symptoms & signs of metabolic disease in children.
3. To outline the important laboratory investigation & management approach.

XI. EMERGENCIES

(1). THE YOUNG PERSON WITH POISONING / SELF HARM:-

1. How to approach acutely poisoned child.
2. To understand self harm& accidental poisoning.
3. To identify predisposing factor.
4. To summarise incidence, classical clinical manifestations, management and prognosis of the following poisonings:-

I. Organophosphorous + Other biocides
II.Hydrocarbons
III.Snake bite and scorpion sting
IV. Iron
V. foreign body inhalation XI. Vitamin A & D
VI. carbon monoxide poisoning
VII. corrosive (alkaline and acid
VIII. Paracetamol and aspirin
IX. Anti- depressant drugs
X. Near drowning

ANAPHYLAXIS:-

1. To define anaphylaxis.
2. To itemise common causes of anaphylaxis.
3. To describe clinical presentation of anaphylaxis.
4. To outline the management of anaphylactic shock.
5. To describe measures to avoid recurrence.

3). CPR - CARDIOPULMONARY RESUSCITATION IN CHILDREN:-

1. To explain the respiratory and hemodynamic changes in the arrested child.
2. To list the common pathways leading to arrest.
3. To describe the steps of paediatric basic life support.
4. To outline the steps of paediatric advanced life support.
5. To describe the factors that may affect the success of the resuscitation.

XII. INFECTIOUS

(1.) PROTOZOAL INFECTIONS:-

To summarise epidemiology, typical clinical features, investigations management and prognosis of common protozoal infections in children

1. Amebiasis.
2. Giardiasis.
3. Malaria.
4. Leishmania.

(2). OTHER INFECTIOUS DISEASES:-

To summarise epidemiology, typical clinical features, investigations management and prognosis of:
1. Typhoid fever.
2. Brucellosis.
3. Infectious mononucleosis.
4. Mumps
5. Hepatitis A

XIII. GENERAL

(1). FOCUSED HISTORY:-

1. To be able to take history based on the problem of main system involved.
2. To strength what have been learned from the lecture of history taking.

(2). GENERAL EXAMINATION:-

1. To learn how to do general examination in systematic manner.
2. To know how to differentiate between normal & abnormal findings in the examinations.
3. To know how to take vital signs & general examinations in different ages.

(3).FORMAT FOR TUTORIALS:-

1. To know the framework of the tutorials.
2. To understand how to prepare for tutorials.

(4). NORMAL GROWTH PARAMETERS:-

1. To identify the difference between growth & development.
2. To outline the normal range of growth parameters (weight, height, head circumference) for different ages.
3. To know different types of growth charts or percentiles charts and their use practically.
4. To recognize the vital signs with normal & abnormal range.

(5) ABC TEACHING TIPS & MEDICAL RESEARCH (TCH & TMC) 3 HOURS EACH:-

(A). TEACHING LEARNING:

1. Define what we mean by teaching and learning.
2. To recognize the factors which contribute to effective teaching & learning.
3. Recall their own experience of teaching & learning.
4. To recognize the principles of adult learning.

(B). LESSON PLANNING:-

1. To describe one way of structuring a teaching session.
2. To describe three ideas for making the body of the session effective.
3. To describe four elements of the closure.
4. Use the above to plan a teaching session.

(C). LESSON OBJECTIVES:-

1. To be able to formulate objectives appropriate to your session. **.**

2. To be able to have written an objective that is understandable, measurable, and achievable.

(D). INTRODUCTION TO MEDICAL RESAERCH:-

1. Feel more comfortable with the clinical medical research process.
2. To understand the ideas of constructing a research.
3. To be able to formulate a research questions.
4. To recognize basic literature review.

(E). HOW TO READ A SCIENTIFIC PAPER:-

1. To describe an overview of how a scientific paper is be organized.
2. To mention different study design.
3. To demonstrate some statistics for the non- statistician.
4. To describe for steps in reading a scientific paper.

(F). TYPES OF EPIDEMIOLOGICAL STUDIES & DATA:-

1. To define basic epidemiological concepts.
2. To define the outcome & exposure of study.
3. To recognize different types of epidemiological studies.
4. To be familiar of types of data.
5. Examine group data using appropriate graphical presentation.
6. To recognize the principles of growth chart.

(6).CHILD WITH PUFFINESS OF FACE AND EDEMA:-

1. To describe areas and methods for examination for oedema.
2. To itemise the main causes of oedema (nutritional, renal, cardiac & hepatic).
3. To recognise clinical features and clues for each of the main causes.
4. To list first line investigations for a child with oedema.

(7). A CHILD WITH A SKIN RASH (1):-

1. Measles
2. Rubella
3. Herpes simplex
4. Chicken pox
5. Rickettsia

1. To assess different types of rashes (erythematous, vesicular, urticaria, purpura) (itchy or not).
2. To describe common characteristic rashes and their other associated features (E. Multiforme, E. Nodosum, meningococcal rash, HSP).
3. To summarise epidemiology, typical clinical features, investigations management and prognosis.

A CHILD WITH A SKIN RASH (2):-

1. Scabies
2. Candida (mouth and napkin area)
3. Eczema
4. Sebeorrheic dermatitis
5. Cafe- au-lait spots

1. To assess different types of rashes (erythematous, vesicular, urticaria, purpura) (itchy or not).
2. To describe common characteristic rashes and their other associated features (E. Multiforme, E. Nodosum, meningococcal rash, HSP).
3. To summarise epidemiology, typical clinical features, investigations management and prognosis.

(8).THE FEBRILE CHILD:-

1. To explain the mechanism of fever production and control in infants and young children.
2. To describe the proper way of temperature measurement.
3. To list the common causes of fever (including some common causes of fever without an obvious focus in Libya).
4. To identify relevant features of the clinical examination.
5. To outline relevant investigations to be carried out.
6. To describe management options.

(9). X-RAYS:-

To read and describe positive findings on:
1. Chest X-rays (various abnormalities).
2. X-ray of the wrist (Ricketes).
3. Micturating cystourethrogram (MCUG).
4. Plan abdominal X-ray (e.g. obstruction, double bubble).
5. X-rays with bone fracture.
6. Gastrograffin swallows (GOR).

XIV. SOCIAL & PREVENTIVE

(1). NAI; NON-ACCIDENTAL INJURY (Child abuse):-

1. To list types of child abuse.
2. To recognise the prevalence of NAI.
3. To list risk factors associated with NAI.
4. To describe features in the history and examination suggestive of NAI.
5. To describe injuries consistent with (very highly suggestive of) NAI.
6. To outline the investigations for a baby with NAI (and typical injuries/fractures).
7. To describe measures to prevent NAI.

(2).SIDS -SUDDEN INFANT DEATH SYNDROME (risk factors):-

1. To define SIDS and ALTE (apparent life threatening episode).
2. To list risk factors associated with SIDS.
3. To itemise common known causes of SIDS and ALTE.
4. To outline an investigation plan for a baby with ALTE (suggested by clinical feature).
5. To describe measures to avoid recurrence and to reduce incidence of SIDS.

(3). CHILD HEALTH SURVEILLANCE:-

1. To list important condition that have better outcome if diagnosed and treated early.
2. To understand the surveillance & technique at these ages.

* Neonatal period
* 6 weeks
* 6-8 months
* 18-24 months
* 36-42 months.

XV. GENETICS

(1). CONGENITAL ANOMALY & DYSMORPHIC NEWBORN:-

1. To identify dysmorphic features in a newborn baby.
2. To approach dysmorphic newborn& reach the diagnosis of common syndrome.
3. To itemize common congenital anomalies and their impact.

XVI. NUTRITION

(1). NUTRITION & NUTRITIONAL ASSESSMENT:-

1. To identify the daily water and calories requirements.
2. To identify the daily requirements of important vitamins and minerals.
3. To understand the importance of balanced diet.
4. To learn how to take proper dietary history.
5. To learn how to perform clinical nutritional assessment (including use of growth charts).

(2). INFANT FEEDING / BREAST FEEDING:-

1. To identify the daily water and calories requirements during infancy.
2. To list benefits of breast feeding.
3. To learn the current recommendations regarding breast feeding.
4. To recognize importance of exclusive breast feeding.
5. To learn the current recommendations regarding infant weaning.

(3). COMMON NUTRITIONAL DISORDERS:-

1. To define the terms “overweight”, “obesity”, “protein energy malnutrition".
2. To list the important risk factors for childhood obesity.
3. To list the common nutritional deficiencies in Libya.
4. To identify relevant features of the history and examination.
5. To outline key investigations.
6. To describe an appropriate management plan.
7. To summarize the clinical features and treatment of calcium and vitamin D deficiency.

MODULE -II

CLINICAL SESSIONS: - TOTAL HOURS ----- 1097hrs.
A. By Teaching Staffs

AT HOSPITALS: -

The total batches are two, each batch divided to 12 subgroups.

A – At Tripoli children hospital:-

A 6 week's duration, 5weeks at TCH, one week at pediatric department Tajoura hospital.

B – At Tripoli medical center:-

A 6Weeks duration, 5weeks at TMC, one week at university.

B).BY DEMONSTRATORS:-

I. EVENING SESSIONS: from 1-3pm.

The main 6 groups, the total hours- 18 hrs per student.

The afternoon sessions cover the following:-

1- General & nutritional assessment.
2- CVS examination.
3- Abdominal examination.
4- CNS examination.
5- Developmental assessment.
6- Respiratory examination.

II. CLINICAL SKILLS: AT THE FACULTY

It's divided into five parts:-

Respiratory Skills

1- Lecture: - Comprehensive Respiratory Exam.
2- Auscultation training of lung.
3- Delivery of Medications via Nebulizer and MDI.
4- Basic respiratory function tests PFM.
5- Scenario Management of Acute Asthma.

Cardiovascular Skills

1-Lecture: Cardiac history and examination (OSCE Model)

2- Auscultation training of heart sounds

3- Interpreting the 12- leads ECG By using Mannequin, Monitor and illustrations

4-Scenario SVT

Neonate Skills

1-Video demonstration Neonatal examination.

2-Newborn resuscitation.

3- NGT insertion.

4-Intradermal injection.

5-Urine collection samples.

Pediatric Emergency Skills

1-Lecture: Shock .

2-Setting up an infusion; use of infusion devices, type of IV fluids and normal fluid and electrolytes requirement.

3-Taking blood cultures .

4-Intraosseous insertion.

5-Lumber puncture.

Monitoring and Therapeutic Skills

1-Lecture: Interpret of blood gases.

2-Oxygen delivery methods.

3-Nutrition assessment.

4-Scenario DKA Scenario.

5- Hypocalcaemic Convulsion.

IV.TEACHING & LEARNING METHODS

IV –A. METHODS USED:

TOOLS	PURPOSE (ILO)- Intended Learning Outcome
LECTURES	1. Knowledge and understanding ILOs Professional and intellectual skills ILOs.
TUTORIAL CLASSES (Group discussion & Case studies)	2. Knowledge and understanding ILOs Professional and intellectual skills ILOs.
LECTURES, TUTORIAL & CLINICAL	3. General skills and behavior/ attitude ILOs
DEMONSTRATION	4. Knowledge and practical skills ILOs.

AUDIOVISUAL AIDS USE AT FACULTY OF MEDICINE SKILLS LABORATORY.	5. Professional and general skills ILOs

V. TEACHING AND LEARNING FACILITIES.

- SPACES :

1.) Lecture Hall at Faculty: (Ebnsena Theatre)

2) Three Centres:-

** Tripoli Children's Hospital (TCH)

**Tripoli Medical Center (TMC).

**Tajoura hospital.

Rooms for Tutorials with white board, TV plasma & admitting wards for each bedside teaching.

3.) Teaching Rooms at Faculty for Clinical Skills - With White Board, Data Show and Laboratory Room with Simulator.

VI. STUDENT ASSESSMENT

Allocated Marks: - 200 Marks In the Form of:-

1. Pre- Final Test: -
20 marks - (10 marks for focused history- 10 marks for clinical examination)
10 mark for attendance.

2. Final Examinations:-
- Written Examination → 70 Marks. (MCQ, Data Interpretation, Case Scenarios).
- Clinical Examination → 100 Marks.
  30 Marks for Focused History (two station), 12 Marks for Each Short Case (4 Short Cases), Emergency station (10 mark), Diagnostic station (10 marks).

No Oral Test at Final Exams.

VI. A: ATTENDANCE CRITERIA

The Faculty Of Medicine By Laws State That The Students Must Attend 75% Of The Practical And Clinical Sessions To Give Him/her The Allowance To Attend The Final Examination.

VI. B: SUMMARATIVE ASSESSMENT

TOOLS	PURPOSE (ILOs)
Students activity	Attitudes/ Behaviors and General skills ILOs.
Written (MCQ) Examination Data/ case studies	Knowledge, intellectual and professional skills ILOs.

Pre-Final test (two part :-Focused history clinical)	All ILOs
Clinical Examination	All ILOs

- The Minimum Passing Score Is 120 Marks (60%) (Should Pass Clinical Exams.)
- Passing Grades Are:-
    1- Excellent ≥85%,
    2- Very Good →75-85%,
    3- Good →65-75%,
    4- Fair → 60-65.

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