University of Benghazi
Faculty of Medicine
Department of Pediatric
Syllabus of Pediatric Master

جامعة بنغازي كلية الطب قسم طب الأطفال منهج ماجستير طب الأطفال

First part of pediatric MSc (first year)

Basic Lectures and Tutorials program

20) Cardiovascular system (CVS)

CVS physiology I and II

Anti-arrhythmic drugs

Anti-hypertensive drugs

21) Respiratory System

Respiratory system physiology I and II

Drugs used in management of bronchial asthma

22) Gastrointestinal tract (GIT) and Hepatic

G I T physiology I and II

Mechanism of action of G I T drugs

Hepatic physiology

23) Central nervous system (CNS)

CNS physiology I and II

Basic EEG

Anti-epileptic drugs

24) Renal

Renal physiology I and II

Acid base balance

Fluid and electrolyte

Drugs used in renal disease

25) Hematology - Oncology

Hemostasis

Hematopoiesis

Malignant disorder

Principals of malignant disorder management

Principles of chemotherapy

26) Immunology & Rheumatology

Basic immunology

Congenital immune disease

Acquired immune diseases

Rheumatological diseases

Rheumatological drugs

27) Endocrine

Endocrine physiology I, II, and III

Principles of hormonal management

28) Infectious

General Principals of infectious diseases prevention

Vaccination program in Libya.

Anti-microbial treatment.

Anti-viral treatment.

29) Metabolic and Genetic Diseases

Basic of genetic and chromosomal disorder I and II

Basic of metabolic diseases I and II

30) Neonate

Intra uterine growth

Fetal and neonatal circulation

Principals of drug use in neonatal period

Bilirubin metabolism and neonatal jaundice

BP and temperature regulation in neonatal period

31) Growth and Development I, II, and III

32) Nutrition

Child nutrition I and II

Calcium and vitamin D metabolism.

Fat soluble vitamins

Water soluble vitamins.

33) Research Methodology I and II

Second part of Pediatric MSc (second year)

Clinical Pediatric Lectures and Tutorials

1) Growth and Development

Normal growth and development

Abnormal growth and development

2) Nutrition

Normal nutritional requirement and obesity

Marasmus Kwashiorkor and vitamin deficiency

3) Immunization

Vaccination, cold chain, immunization program and special vaccines.

4) Infectious Diseases

Parasitic infection

Childhood TB

HIV infection

Malaria and Kala-Azar

Viral Hepatitis

Salmonellosis

Exanthemas and fever

PUO

Hospital acquired infection and its prevention

5) Hematology - Oncology

Anemia of childhood

Chronic hemolytic anemia

Leukemia

Acute hemolytic anemia

Lymphadenopathy and hepatosplenomegaly

Child with bleeding

Solid tumor

6) Genetics and metabolism

Principles of inheritance and diagnosis of genetic disorders

Dysmorphology, Down's syndrome, Trisomy 13, Trisomy 18

Inborn errors of metabolism

7) Respiratory system

Lower respiratory tract infection

Asthma

Upper respiratory tract infection, tonsillitis, otitis media, and croup

Respiratory distress and acute severe asthma

Stridor and pertussis

Unresolving and recurrent pneumonia

8) Gastrointestinal tract

Chronic diarrhea and malabsorption syndrome

Chronic liver disease and neonatal cholestasis

Acute diarrhea and dehydration

Chronic constipation

Clinical approach to a child with vomiting

9) Nervous system

Seizure disorders

Meningitis and encephalitis

Cerebral palsy and upper motor neuron diseases

Acute flaccid paralysis and lower motor neuron diseases

Microcephaly, hydrocephalus, mental retardation

10) Cardiovascular system

Congenital heart diseases I and II

Acute rheumatic fever and other inflammatory conditions of the heart

Pediatric ECG and arrthymia

Congestive heart failure in children and childhood hypertension

11) Genitourinary system

Nephrotic-nephritic syndrome

Urinary system infection

Acute renal failure and chronic renal failure

Hematuria and obstructive uropathy in children

12) Pediatric immunology

Congenital immunodeficiency

13) Neonatology

Normal newborn

Birth asphyxia and resuscitation

Congenital anomalies

Neonatal infections (superficial infection and sepsis)

Neonatal seizures, necrotizing enterocolitis, and hemorrhage

High risk newborn (small for gestational age and premature newborns)

Neonatal jaundice

Respiratory distress in newborn

Neonatal hypoglycemia, infant of diabetic mother, and birth injuries

14) Pediatric emergency

Status epilepticus, comatose child

Diabetic ketoacidosis

Fluid therapy, electrolytes and acid base disturbance

Shock, anaphylaxis, and cyanotic spells

15) Pediatric therapeutics

16) Endocrinology

Diabetes mellitus type 1

Thyroid disorders

Adrenal disorders and ambiguous genitalia

Abnormal growth pattern (failure to thrive, short stature, delayed and precocious puberty)

17) Pediatric toxicology

Evaluation and management of poisoning

Some common childhood poisoning

18) Behavioral problems

Breath holding spells, nocturnal enuresis, pica

Child abuses

19) Connective tissue diseases

Chronic idiopathic arthritis, SLE

Kawasaki disease and H S purpura

Prof. Nourz Ali Gheriani

Coordinator of Pediatric MSc

Prof. Nouri Mohamed Shembesh

Head of Pediatric Department