

## **Pediatric surgery syllabus : course specification**

- **Course title: pediatric surgery 5th year course of M.B.Ch.B program**
- **Allocated marks: 100**
- **Course duration : 1 term theory and 2wks clinical sessions (group based)**
- **Teaching staff: 1 lecturer .**

### **I-Aim of the course:**

- Provide the students with basic knowledge and principals of pediatric surgical diseases and problems and provide the background covering the common important pediatric surgical emergencies , congenital anomalies and diseases (causes, diagnosis and management).
- Provide appropriate ethical and professional education necessary for establishment of excellent communication with patients and colleagues and using sound ethical principles in clinical decision making .
- Provide lifelong learning competencies necessary for continuous professional development and research studies.

### **II-Intended learning outcomes:**

by the end of the course, all students should be able to:

**1-Knowledge and understanding** : principles of pediatric surgical patient management and major guide line about common congenital anomalies and emergencies related to the pediatric patient .

**2-Skills:** by the end of the course all students should be able to distinguish between the medical and surgical case , the elective and emergency case , inpatient and outpatient etc.

#### **3-Attitudes:**

- The student will be able how to read the formal pediatric Chest Xray , Abdominal Xray , the routine pediatric surgical examination .
- The student may observe common surgical intervention like surgical dressing , chest tube insertion , central IV line insertion etc.
- The student will have the opportunity to attend the pediatric surgical operative room and visualize the common surgical operations (if possible)

### III- Course contents:

#### 1-Topics:

N	Learning content	Hr
1	<p><b>Embryology/Developmental</b></p> <ul style="list-style-type: none"> <li>• Branchial apparatus remnants</li> <li>• Thyroglossal remnants</li> <li>• Dermoid cyst head and neck</li> <li>• Pre-auricular sinuses and cysts</li> <li>• <b>Body wall:</b> - Development - abnormalities</li> <li>• <b>Abdominal Wall</b> - embryology and anatomy of the abdominal cavity. - gastroschisis and exomphalos - (Prune Belly) Syndrome</li> <li>• <b>Chest wall:</b> Explain the different types of chest wall deformity</li> <li>• <b>Umbilicus :</b> umbilical hernia , umbilical discharge ,</li> <li>• <b>Spine :</b> neural tube development and defects</li> <li>• <b>Diaphragm (CDH):</b> development and defects</li> <li>• <b>Esophagus :</b> embryology of foregut formation, the types of esophageal atresia with or without tracheo-oesophageal fistula.</li> <li>• <b>Bowel :</b> the types of atresia , process of normal intestinal rotation .</li> <li>• <b>Vascular anomalies</b></li> </ul>	
2	<p><b>Neonatal</b></p> <ul style="list-style-type: none"> <li>• Neonatal intestinal obstruction</li> <li>• Neonatal anomalies</li> <li>• CDH</li> <li>• Anorectal malformation</li> <li>• Biliary atresia</li> </ul>	
3	<p><b>Fluids/Nutrition/Growth</b></p> <ul style="list-style-type: none"> <li>• Normal homeostasis</li> <li>• Trauma/Shock</li> <li>• Infantile Hypertrophic Pyloric Stenosis</li> <li>• Gastro esophageal reflux .</li> </ul>	
4	<p><b>Genito-Urinary</b></p> <ul style="list-style-type: none"> <li>• <b>Inguino-scrotal swelling :</b> the embryology of the inguinoscrotal region and why hernias and hydroceles may occur.</li> <li>• <b>Congenital renal anomalies</b> Posterior urethral valves , Hypospadias , Vesicoureteric reflux and UTI</li> </ul>	
5	<p><b>Other Acquired abdominal disorders</b></p>	

	<ul style="list-style-type: none"> <li>● GI bleeding</li> <li>● Gastrointestinal polyps</li> <li>● Abdominal cysts</li> <li>● Rectal Prolapse</li> <li>● Recurrent abdominal pain of childhood</li> </ul>	
6	<p><b>Neoplasia</b></p> <ul style="list-style-type: none"> <li>● Nephroblastoma (Wilms tumour)</li> <li>● Gonadal tumours</li> <li>● Lymphoma</li> <li>● Teratoma/ Sacrococcygeal teratoma</li> <li>● Neuroblastoma</li> </ul>	

**2- Medical skills A:** further subdivision of the students into small groups with the residents to observe them while managing the outpatient clinic, also they can watch surgical operative room and minor operation room , and interpret different.

**3-Clinical Diagnostic Studies:** The students will be trained adequately on self-learning methods and procedures. So, they can continuously update their knowledge and skills. The role of teachers in these activities is to supervise and guide the student's effort.

#### **IV. TEACHING METHODS:**

**Methods used:**

**1-lectures:** Three hours per week from 8.00 am till 11:00 am ( outpatient clinic) & from 12:00 am till 1:00pm (general topics)to cover the basic minimal knowledge required for all physicians &to utilize the available time in presenting the knowledge as simple , updated, well-illustrated, and easily understood as possible

**2-clinical attachments::** students are divided into 5-6 groups , students will have a clinical round in the morning from 8:00am -9.00am discussing a clinical case from outpatients then they are subdivided to small groups to examine the patients& in the outpatient clinic.

**3-problem based learning:** if there is no patients with particular problem in the ward, teacher has to be a "role player" and make the students take history followed by diagnosis, investigation and management:

### Teaching & learning facilities

The facilities available used for teaching in this fifth year course include :

1. Lecture hall in the college contains writing board , overhead & slide projector .
2. 4 rooms at clinical words of 2<sup>nd</sup> floor at Al Maternity and child teaching hospital.
3. Data show & computer .
4. outpatients clinical rooms .
5. Multiple learning skill labs.

### \*Clinical facilities

- At least 8-10 patients in each day available in inpatient units ( wards ) in the hospital .
- Out patients clinic
- Emergency room
- Operating rooms : 2 rooms for pediatric surgery operations .

### \*Students assessment

1. Attendance
  - a. Behavioral & ethical attendance
  - b. Logbook for clinical cases
  - c. Attendance in outpatient clinic

They whole should be fulfilled .

The minimum accepted attendance is 70 % at the end of term examination.

2. Assessment tools

- a. Written examination : for assessment of general knowledge & understanding .
- b. Oral examination by two members of teaching staff to assess how fifth year student deal with the patient problems .
- c. Clinical examination to medical students attendance in managing clinical cases in apprehensive way .

3. Assessment schedules : fifth year MBCHB program assessment schedules include :

Marks allocated	Examination	Marks	Parameters
10% M	Term exam held at the end of 14 days of clinical attachment		Attendance oral examination
30 %M	Mid Term		MCQ , most appropriate answers , matching short assay ( 2 hours )
60%M	End course		60% cases MCQ , most appropriate answers , matching 40% short assay( 3 hours )