

# قــرار وزاري رقم (۱۷۲ /۱۷۲) بتاريخ ۱۰۲۱/ ۱۰۲۱ بتاريخ ۱۰۲۱/ بتاريخ ۱۰۲۱/ بيان تعديل اللائحة الداخلية لكلية الطب جامعة المنصورة (مرحلة الدراسات العليا) بنظام الساعات المعتمدة

وزير التعليم العالى والبحث العلمى ورئيس المجلس الأعلى للجامعات

\*\* بعد الاطلاع على القانون رقم ٤٩ لسنة ١٩٧٢ في شأن تنظيم الجامعات والقوانين المعدلة له.

\*\* وعلى قرار رئيس الجمهورية رقم ٨٠٩ لسنة ١٩٧٥ بإصدار اللائحة التنفيذية لقانون تنظيم الجامعات والقرارات المعدلة له.

- \*\* وعلى القرار الوزاري (٢٩٤) بتاريخ ٢٠١١/٤/٣ بشأن إصدار اللائحة الداخلية لكلية الطب جامعة المنصورة (مرحلة الدراسات العليا) بنظام الساعات المعتمدة ، والقرارات المعدلة له.
  - \*\* وعلى مو افقة مجلس جامعة المنصورة بجلسته بتاريخ ٢٠٢٠/٧/٢٧
- \*\* وعلى موافقة لجنة قطاع الدراسات الطبية بجلستيها بتاريخ ٣٠٠/١٢/٢٠، ٢٠٢/١٢/٠٠ بالتفويض
  - \*\* وعلى موافقة المجلس الأعلى للجامعات بجلسته بتاريخ ٣٠٢١/١/٢٣

# قرر (المادة الأولي)

يضاف بند جديد تحت رقم (٢) إلي المادة (٣ مكرر) باللائحة الداخلية لكلية الطب جامعة المنصورة (مرحلة الدراسات العليا) بنظام الساعات المعتمدة الصادرة بالقرار الوزاري رقم (١٩٤) بتاريخ ٣/٤/١ على النحو التالي:

مادة (٣ مكرر) الدبلومات المهنية

تمنح جامعة المنصورة بناء على طلب كلية الطب البشري الدبلومات المهنية الأتية:-

٢- الدبلومة المهنية في الكبد والجهاز الهضمي للأطفال (برنامج نوعي)

# (المادة الثانية)

يلحق باللائحة الداخلية المشار إليها بعالية الخطة الدراسية والإمتحانية المرفقة والخاصة بالدبلومة المهنية في الكبد والجهاز الهضمي للأطفال بنظام الساعات المعتمدة بقسم طب الأطفال.

(المادة الثالثة)

على جميع الجهات الجنصة تنهيد هذا القرار.

وزير التعليم العالي والبحث العلمي ورئيس المجلس الأعلى للجامعات

(أ.د/ خالد عيد الغفار)

# النسك الجهاز الهضمى وكبد الأطفال Pediatric Gastroenterology, Hepatology professional diploma النسك المحافر PEDIATRICS : التخصص: PEDIATRICS

المقررات الدراسية وتوزيع الساعات المعتمدة

				Or some	الساعات المعتمدة	
	النسرر	Course	الكسود	المقرر	الفتره الزمنيه (شهر)	الإجمالي (الساعات المعتمده)
	تشريح وتطور جنيني تطبيقي (الكبد والجهاز الهضمي)	Applied anatomy and embryology of liver and gastrointestinal tract	PGI 409 AN PGI 401AN	1	1.5	
صل راسي	فسيولوجي تطبيقي تطبيقي (الكبد والجهاز الهضمى)	Applied physiology of liver and gastrointestinal tract	PGI 409 PH PGI 403 PH	1	1.5	6
ران <i>سني</i> اول	باثولوجي تطبيقي لأمراض الكبد والجهاز الهضمي الأطفال	Applied pathology of pediatric liver/GI diseases	PGI 409 PA PGI 405 PA	1.5	1.5	
	أساسيات تشخيص وعلاج الكبد والجهاز الهضمى الأطفال	Basic principles of diagnosis and treatment of pediatric liver/GI diseases	PGI 409 DT	2.5	1.5	
	أمراض الكبد والجهاز الهضمى الأطفال الوحده الأولي	Pediatric liver/GI diseases module I	PGI 409 PN	8	4	
فصل راسي لتاني	أمراض الكبد والجهاز الهضمى الأطفال الوحده الثانيه	Pediatric liver/GI diseases module II	PGI 409 PN	8	4	24
الثالث الرابع	أمراض الكبد والجهاز الهضمى الأطفال الوحده الثالثه	Pediatric liver/GI diseases module III	PGI 409 PN	8	4	
	أنشطة علمية متعلقة امراض الكبد والجهاز الهضمى تشمل التدريب الإكلينيكي والميداني وورش العمل	Logbook activities including clinical and field training, assignments and workshops		10	6	10
الي الساع	نات المعتمدة					40

نظام الامتحان وتوزيع الدرجات (الدبلومة المهنيه في أمراض الجهاز الهضمى وكبد الأطفال) المراف المرافق المرافق

امتحان الجزء الأول

إجمالي		السدرجة		الاختبار	- 211
	عملي	شفهي	تحريري		المقرر
١			١	امتحان تحريري مدته ساعه ونصف	شریح وتطور جنینی طبیقی لأمراض کبد لجهاز الهضمی
١			١	امتحان تحريري مدته ساعه ونصف	سيولوجي تطبيقي لأمراض كبد الجهاز لهضمى
١			1	امتحان تحريري مدته ساعه ونصف	اثولوجي تطبيقي لأمراض كبد الجهاز لهضمى الأطفال
١٠.			١	اختبار تحريري مدته ساعتين ورقة اولي	أساسيات تشخيص وعلاج أمراض الكبد والجهاز الهضمى الأطفال

### الامتحان النهائي الشامل

إجمالي	السدرجة		الاختبار	201		
	عملي	شفهي	мсо	تحريري	العجاز	المقرر
١	٣٠.	۲	١		<ul> <li>۲ اختبار تحریری مده کل منهم ۳ ساعات</li> <li>اختبار عملی.</li> <li>اختبار شفوی.</li> </ul>	مراض الكبد الجهاز الهضمي لأطفال الوحده لأولي والثانيه والثالثه

الماد الماد

# **DIPLOMA CURRICULUM**

1. CURRICULUM CONTENT

اسم المقرر: الدبلومه المهنيه في تخصص الكبد والجهاز الهضمي للاطفال

Pediatric Gastroenterology, Hepatology professional diploma

التخصص: PEDIATRICS

الرمز الكودى: (PGI 409)

#### 2. Entry requirements

Entry to pediatric gastroenterology/hepatology training requires the following qualifications: Post-graduate master degree in Pediatrics or an Egyptian Fellowship of Pediatrics or Egyptian Board of Pediatrics or what's equal.

# 3. PROGRAM SPECIFICATION:

# Administrative information

- 1. Program offering the course: Pediatric Gastroenterology/ Hepatology Fellowship
- 2. Department offering the program: Pediatrics
- 3. Department responsible for teaching the Program: Pediatric Gastroenterology/ Hepatology Unit
- 4. Date of approval by the Department's council: /3/2020
- 5. Date of last approval of program specification by Faculty council: /3/2020
- 6. Program title: Applied anatomy and embryology of liver and GI tract
- 7. Program code: PGI 409
- 8. Total teaching hours: hours
- 9. Program coordinator: Prof. Mohammed Ezz El Regal

#### 4. PROGRAM AIMS

- 4.1 To provide competencies, knowledge and skills needed to understand the anatomy and the embryology of the liver and GI tract
- 4.2 To provide competencies, knowledge and skills needed to understand the pathology of the liver and GI tract
- 4.3 To provide competencies, knowledge and skills needed to understand the physiology of the liver and GI tract
- 4.4 To provide competencies, knowledge and skills needed to understand the different tools used in the diagnosis and management of the liver and GI tract diseases
- 4.5 To provide competencies, knowledge and skills needed to practice Pediatric Gastroenterology/ Hepatology Fellowship of high quality in the community.
- 4.6 To demonstrate the ability for self-learning and evaluate the clinical practice and educational needs

# 5. Intended Learning Outcomes (ILOs) for program

# A. Knowledge ILOS

- A1.Know the basic science of the GI tract
- A2. Identify common GI diseases among pediatrics
- A3. Define nutritional basics and nutritional disorders among pediatrics
- A4. Know the basic science of the liver
- A5. Identify common liver diseases among pediatrics

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#### B. Intellectual ILOS

- B1.Design management of different GI diseases
- B2.Construct nutritional assessment among pediatrics
- B3.Design nutritional management
- B4. Design management of different liver diseases

#### C. Practical ILOs

- C1.Demonstrate upper and lower GI procedures
- C2. Apply non invasive GI investigations
- C3.Interpret different GI scores
- C4. Demonstrate different liver procedures

## 6-Academic standards

Academic Reference Standards for Pediatric Gastroenterology, Hepatology specialized diploma degree of Mansoura Faculty of Medicine were compiled according to National Academic Reference Standards

C-C- INC/10

# **Program Aims ILOs Matrix**

Program ILOs are enlisted in the first row of the table (By their code number A1, A2.....etc), then the program aims are enlisted in the first column and an

✓ "mark is inserted where the respective course contributes to the achievement
of the program ILOs in question

Program	Program ILOs												
Aims	<b>A</b> 1	A2	A3	A4	A5	B1	B2	В3	B4	C1	C2	C3	C4
1	<b>✓</b>			1						<b>√</b>			
2		<b>✓</b>								<b>✓</b>			
3	<b>✓</b>		<b>✓</b>	1							<b>✓</b>		
4					1	<b>✓</b>	<b>✓</b>	<b>√</b>	1	<b>✓</b>	<b>✓</b>	<b>✓</b>	V
5	<b>✓</b>									<b>√</b>			
6										<b>✓</b>	<b>✓</b>	<b>✓</b>	



# Courses contributing to the program

# Gastroenterology model

#### A. Knowledge ILOS

- A.1. Recognize the development of the GI tract.
- A.2.Identify congenital anomalies of the GI tract
- A.3. Describe the anatomy of the GI tract.
- A.4. Know the physiology of normal defecation and acquisition of bowel control
- A.5. Explain the physiology of water, electrolyte and acid base metabolism
- A.6.Discuss the clinical importance of fluid, electrolytes and acid base abnormalities
- A.7. Recognize the histology of the GI tract.
- A.8. Identify the histopathologic features of different pediatric GI diseases.
- A.9. Know the Pharmacotherapy of GI diseases
- A.10.Know the causes of growth failure/failure to thrive
- A.11.Discuss the causes of malnutrition
- A.12.Explain the causes of chronic diarrhea
- A.13.Identify coeliac disease
- A.14.Recognise cystic fibrosis
- A.15.Discuss pancreatic insufficiency
- A.16.Classify immune deficiencies
- A.17.Recognize the causes of intractable diarrhea syndrome

(c.c. /10/10

- A.18.Describe the chronic inflammatory bowel diseases (IBDs)
- A.19.Know the composition of different diets/feeds used to treat IBD
- A.20.Discuss GI food allergy
- A.20.Identify Helicobacter pylori gastritis
- A.21.Explain peptic ulcer disease
- A.22.Review gastro-oesophageal reflux disease and oesophagitis in preterm and term infants
- A.23.Recognize gastro-oesophageal reflux disease and oesophagitis in children with neurodevelopmental disabilities
- A.24. Identify intestinal failure such as short bowel syndrome
- A.25.Know how to assess dehydration
- A.26. Recognize GI motility disorders
- A.27.Identify the causes of intestinal obstruction
- A.28. Define when a surgical opinion is required
- A.29. Identify how to differentiate between primary and secondary chronic constipation
- A.30. Review pancreatitis
- A.31. Recognize functional bowel disorders in infant younger than two years as

infant colic

- A.32. Describe functional bowel disorders in infant younger than two years as gastro-esophageal reflux disease
- A.33. Know functional bowel disorders in infant younger than two years as functional constipation
- A.34. Identify functional bowel disorders in infant older than two years as irritable bowel syndrome
- A.35. Discuss functional bowel disorders in infant older than two years as functional dyspepsia
- A.36. Recognize functional bowel disorders in infant older than two years as cyclic vomiting
- A.37. Describe functional bowel disorders in infant older than two years as chronic abdominal pain syndrome
- A.38.Identify cow's milk protein allergy

#### A.39. Nutrition:

- A.39.1. Recognize the basis of normal infant/childhood growth and feeding
- A.39.2. Discuss assessment of feeding ability and nutritional status
- A.39.3. Identify the physiology of nutrient digestion, absorption, metabolism and elimination
  - A.39.4. Describe feeding disorders including anorexia nervosa and bulimia

A.39.5. Explain the mechanisms of malnutrition in GI and liver disease

- A.39.6. List methods of nutritional support and their use
- A.39.7. Know the dietary requirements of children
- A.39.8. Recognize the short- and long-term effects of malnutrition in the infant, child and adolescent
- A.39.9.Summarize the role of nutritional support teams in hospital and community settings, and the roles of individual team members
  - A.39.10.List the different types of growth charts available and how to use them
- A.39.11.Explain indications and contraindications for commencing enteral and parenteral nutritional support
- A.39.12.Discuss the composition of different enteral feeds and of parenteral nutrition

# **B. Intellectual ILOS**

- B.1.Determine differential diagnosis and how to resuscitate a patient in the acute phase of GI bleeding
- B.2.Construct assessment of nutritional status of infants and children, including anthropometric measurements (height, weight, head circumference, skin-fold thickness, mid-arm circumference)
- B.3.Design management of enteral and parenteral nutrition

B.4. Formulate prescription of elimination diets

- B.5.Determine prescription of medication to diagnose and/or treat diseases of the GI tract
- B.6.Construct a feeding management plan in conjunction with other team members for patients requiring home enteral tube feeding or parenteral nutrition
- B.7. Formulate a management plan for a parenterally fed patient with pyrexia
- B.8.Determine management of GI food allergy
- B.9.Construct management of Helicobacter pylori gastritis
- B.10.Plan management of peptic ulcer disease
- B.11.Formulate management of gastro-oesophageal reflux disease and oesophagitis in preterm and term infants
- B.12.Set-up management of gastro-oesophageal reflux disease and oesophagitis in children with neurodevelopmental disabilities
- B.13.Design the differential diagnosis of a patient with acute abdominal pain
- B.14. Analyze the differential diagnosis of bilious vomiting
- B.15.Construct the differential diagnosis of abdominal masses
- B.16.Plan the postoperative management, especially in cases in which rehabilitation with enteral or parenteral nutrition support is required
- B.17.Determine management of feeding disorders, including anorexia nervosa and bulimia

B.18.Formulate management of iron deficiency anemia

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- B.19.Differentiate between functional and organic GI disorders
- B.20. Analyze COMISS score for cases with CMPA
- B.21. Plan management of acute gastroenteritis

#### C. Practical ILOs

- C.1.Excute data from history taking, general examination and abdominal examination
- C.2. prepare patients for upper GI endoscopy (diagnostic/therapeutic) and biopsy
- C.3.implement international guidelines for pneumodilatation and bougie-dilatation
- C.4. Interpret COMISS score for cases with CMPA
- C.5. interpret results for esophageal pH and motility studies such as transit studies, manometry, and intraluminal impedance
- C.6. Choose suitable patients for sclerotherapy and banding of esophageal varices and endoscopic management of other causes of bleeding
- C.7.determine patients indicated for placement of endoscopic gastrostomy
- C.8. interview patients with foreign bodies in GIT as magnet, coin, battery and sharp objects.
- C.9. Demonstrate a small bowel biopsy taken by upper endoscopy
- C.10.Interpret a dual-energy x-ray absorptiometry bone densitometry result
- C.11.Practice breath tests
- C.12.Apply a pH-impedance study

- C.13.Illustrate assessment of obesity and its complications
- C.14.Demonstrate assessment of dehydration and planning fluid therapy
- C.15.Interpret plain x-ray films, contrast and other imaging studies such as ultrasound, endoscopic ultrasound, computed tomography, magnetic resonance imaging, small bowel biopsy, video capsule endoscopy
- C.16. Illustrate the basis of tests for maldigestion and malabsorption, liver dysfunction, oesophageal pH/luminal impedance monitoring, and manometric studies
- C.17.Practice the indications and usefulness of relevant imaging and endoscopic techniques
- C.18.Illustrate how to investigate a parenterally fed patient with pyrexia
- C.19. Investigate a patient with acute abdominal pain
- C.20.Describe how to investigate pyloric stenosis, Hirschsprung disease, and intussusception
- C.21.Discuss how to investigate abdominal masses
- C.22.Illustrate the techniques for measuring dynamic nutritional parameters (eg, resting energy expenditure)

# **Hepatology model**

#### A. Knowledge ILOS

- A.1. Recognize the development of the liver tract.
- A.2. Identify the anatomy of the liver tract.
- A.3. Know the physiology of normal bile secretion
- A.4. Review the histology of the liver.
- A.5. Describe the histopathologic features of pediatric liver diseases.
- A.6. Discuss the pharmacotherapy of liver diseases:
- A.7.Recognize biliary atresia and know its clinical features and outcome
- A.8.Know about the metabolic and toxic liver disorders
- A.9. Discuss complications of end-stage liver disease
- A.10.Identify the correct timing to refer for liver transplantation
- A.11. Recognize the presentation of portal hypertension
- A.12. List the differences between prehepatic and hepatic portal hypertension
- A.13. Describe when to liaise with intensivists, liver transplant surgeons, and transplant coordinators regarding management of liver failure and its complications



#### B. Intellectual ILOS

- B.1.Formulate the differential diagnosis of conjugated hyperbilirubinemia of infancy
- B.2. Categorize the differential diagnosis of prolonged neonatal jaundice
- B.3.Design the differential diagnosis of chronic liver disease
- B.4. Differentiate the infectious causes of liver disease
- B.5.Determine the differential diagnosis of acute liver failure
- B.6. Perform management of acute liver failure
- B.7.Plan management of complications of end-stage liver disease
- B.8. Construct medical, endoscopic, and surgical management of portal hypertension

#### C. Practical ILOs

- C.1. History taking, general examination and abdominal examination of hepatic cases
- C.2. Demonstrate assessment of liver function tests
- C.3. Plan management of neonatal cholestasis cases
- C.4. choose proper patient for liver biopsy
- C.5. prepare patients for liver biopsy
- C.6.Illustrate a liver biopsy pathology slides.
- C.7. Apply proper plant for management of hepatitis A,B and C
- C.8. determine management plan of autoimmune hepatitis
- C.9. examine patients with metabolic liver diseases as guacher, Neiman pick

- C.10. execute information for diagnosis of Wilson's disease
- C.11. prepare patient with gaucher disease for enzyme replacement therapy
- C.12. Interpret cholangiography

#### Transferable ILOs

# By the end of this course, students should be able to:

- 1. Work efficiently with others.
- 2. Practice independent learning by using information technology tools.
- 3. Express freely and adequately themselves by improving descriptive capabilities & communication skills.
- 4. Demonstrate ethical relationship with staff members.
- 5. Develop attitudes that will maximize their educational experiences.
- 6. Think and respond properly when solving health problems.

# **Behavior and Attitude**

- Demonstrate respect to all patients irrespective of their socio-cultural or religious status.
- 2. Respect for the dignity, privacy and rights of patients (aware of medical ethics and informed consent).
- 3. Conduct patient interview with patience, attentive listening and respect.



- 4. Awareness of the need to communicate with patients and their families, and to involve them fully in planning management
- 5. Adequately and clearly explaining to the patient and/or his/her relatives the nature of the illness, diagnostic and therapeutic plans, possible complications and outcomes.
- 6. Efficiently and clearly document patient records.
- 7. Appropriate handling during difficult situations such as conveying bad news or dealing with patients' anger.
- 8. Discuss the progression of the patient's condition, therapeutic outcomes and professional mistakes if any openly in a way that promotes patient trust and confidence.
- 9. Able to achieve optimal patient care and the same time appreciating the cost effectiveness to allow maximum benefit from available resources.
- Show appropriate professional attitudes with the patient including empathy,
   trust worthiness.

11. Understand and utilize appropriate health care quality concepts

#### 7. Program Structure:

The pediatric Gastroenterology, Hepatology diploma requires two years of supervised training program that must be conducted in Mansoura University Hospital, pediatric gastroenterology and hepatology unit before sitting for the final examination.

#### Total credit hours: 150 hours.

The program has 5 courses:

- First course: Applied anatomy and embryology of liver & GI tract
- Second course: Applied physiology of the liver/GI tract
- Third course: Applied pathology of pediatric liver/GI diseases
- Fourth course: Pediatric Gastrointestinal and liver diseases: It has 3 modules:

#### Module 1:

- Upper gastrointestinal disorders
- Motility disorders

#### Module II:

- Lower gastrointestinal disorders
- Malabsorption disorders

#### **Module III:**

Neonatal cholestasis



- Metabolic liver disease
- Chronic liver disease (CLD) and its Complications
- Acute liver failure
- Liver Transplantation

# The program is divided into 4 semesters (each semester is 6 months):

- Semester I: It includes the first 4 courses:
- Semester II, III, IV: They include the fifth course:

### The program is delivered in 4 phases:

• Phase 1: It include semester 1

• Phase 2: It includes semester II, III, IV

# 8. Departments contributing in teaching

Course	Department
Applied anatomy and embryology of liver & GI tract	Anatomy department
Applied physiology of the liver/GI tract	Physiology department
Applied pathology of pediatric liver/GI diseases	Pathology department
Pediatric Gastrointestinal and liver diseases and clinical nutrition	Pediatric department (GI/Hepatology unit

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#### 9. Program Regulation

During the entire training program, the candidate must be dedicated full time and must be fully responsible for patient care under supervision of fellowship trainers.

Trainees Duties and obligations

- 1. The trainees should attend and participate. Attendance and participation should not be less than 75% of the total number of activities within any training rotation / period including:
  - 1. Daily morning patients' rounds and meetings.
  - 2. Clinical round presentation, at least once weekly to cover various topics, problems or research.
  - 3. Journal club meeting.
  - 4. Interdepartmental meetings/ morbidity and mortality meetings.
  - 5. Grand staff rounds.
- Trainees should be actively involved and fully responsible for patient care including sharing in making decisions about diagnosis and management under supervision of the consultants.
- 3. Trainees should be responsible (under supervision) for outpatient and in patients' routine work.

4. Trainees must take supervised shifts according to the hospitals requirements and regulations.

Cocholic

- 5. Trainees should be responsible for supervised admission of the patients from the OPD or the ER.
- 6. Trainees should share in the completion of the following documents under supervision.
  - 6. Complete history and physical examination form.
  - 7. Investigation requests, (laboratory, radiology, pathology, etc.).
  - 8. Reporting results of the investigations
  - 9. The plan of management after consultation and approval from supervisors
  - 10. Daily progress notes.
  - 11. Order medication sheets
  - 12. Order the necessary diagnostic procedures
  - 13. Discussion of the case with the trainer and consultants
  - 14. Discharge summaries.
  - 15. Sick leaves and medical reports
- 7. Trainees should inform the senior staff of any high-risk patient admission.
- 8. The trainees should attend the nephrology outpatient clinics & clinics related to the rotation in different subspecialties as requested by trainers & supervisory staff. They should participate in different patients' interviews and share in management under supervision.

#### 10. Teaching methods:

- 1. Lectures and scientific seminar
- 2. Ward rounds
- 3. Case scenarios
- 4. Tutorials
- 5. Self learning
- 6. Multi-disciplinary meetings
- 7. E-learning

#### 11. Assessment methods:

- 1. Written exam (Knowledge, Intellectual skills, Communication & Transferable skills)
- 2. Clinical exam WPBAs (Workplace Based Assessments) (Knowledge, Intellectual skills, Practical skills, Communication & Transferable skills)
  - Mini CEX (Mini-Clinical Évaluation exercice)
  - DOPS (Direct Observation of Practical Skill)
  - CbD (Case-based Discussion)
- 3. Structural oral exam
- 4. Ongoing assessment (Knowledge, Intellectual skills, Practical skills, Communication &

Transferable skills)

#### 12. References of the course

#### **Essential textbooks:**

- 1.Pediatric Gastrointestinal and Liver Disease by Wyllie MD, Robert, Hyams MD, Jeffrey S., et al. 2015
- 2. Diseases of the Liver and Biliary System in Children by Deirdre A. Kelly | Mar 20, 2017
- 3. Liver Disease in Children 4th Edition, Kindle Edition by Frederick J. Suchy (Editor), Ronald J. Sokol (Editor), William F. Balistreri (Editor)
- Walker's Pediatric Gastrointestinal Disease: Pathology, Diagnosis,
   Management, 2 Volume Set 6th Edition by Ronald E. Kleinman (Author,
   Editor), Olivier-Jean Goulet (Editor), GiorginaMieli-Vergani (Editor), Ian R.
   Sanderson (Editor), Philip M. Sherman (Editor)
- 5. Nelson Textbook of Pediatrics; Behrman RE, Kliegman RM, Jenon, HB; Elsevier Science

# Recommended books for further readings:

- 6. Pathology of Pediatric Gastrointestinal and Liver Disease 2nd ed. 2014
  Edition by Pierre Russo (Editor), Eduardo D. Ruchelli (Editor), David A.
  Piccoli (Editor)
- 7. Textbook of Pediatric Gastroenterology, Hepatology and Nutrition: A

Comprehensive Guide to Practice 1st ed. 2016 Edition,

#### Periodicals:

8. JPGN Journal (Official journal of North American Society for Pediatric

Gastroenterology,

Hepatology

and

Nutrition)

(https://journals.lww.com/jpgn/pages/default.aspx )

Special emphasis on up-to-date Guidelines.

- 9. The continuum of the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition: http://www.naspghan.org/
- 10. Selected articles from international gastro/hepatology and nutrition journals will be provided to the candidates during the course.

#### 13. Facilities and resources mandatory for course completion:

- 1. LECTURE HALLS
- 2. LIBRARY
- 3. FACILITIES FOR TUTORS:
  - 3.1 Computers and high speed internet connection..
  - 3.2 International databases.
- 4. INPATIENTS WORD
- 5. OUTPATIENTS CLINIC
- 6. PICU
- 7. ENDOSCOPY/MOTILITY UNIT (in some hospitals)
- 8. WELL EQUIPED LAB
- 9. WELL EQUIPED RADIOLOGY DEPARTMENT
- 10. WELL EQUIPED PATHOLOGY LAB

الدخم ليكونم

(c.c.)1c/10

# الملخص العربي

ملخص لتوصيف المقررات الدراسية للدبلومة المهنية:

ستكون الدبلومة المهنية لامراض الكبد والجهاز الهضمى للاطفال على مدار ٢٤ شهرا. في اول سته اشهر سيتم تدريس العلوم الأساسيه للجهاز الهضمى والكبد وتشمل التشريح والفسيولوجي والباثولوجي كذلك الاساسيات الإكلينكيه للكبد والجهاز الهضمي في الأطفال.

# أهداف البرنامج:

- ١- توفير المعرفة والمهارات اللازمة لفهم علم التشريح والتطور الجنيني للكبد والجهاز الهضمي
  - ٢- توفير المعرفة والمهارات اللازمة لفهم علم الامراض الخاص بالكبد والجهاز الهضمي
- ٣- توفير المعرفة والمهارات اللازمة لفهم علم وظائف الاعضاء الخاص بالكبد والجهاز الهضمي
- ٤- توفير المعرفة والمهارات اللازمة لفهم الطرق المختلفة لتشخيص وعلاج الامراض الخاصة بالكبد والجهاز الهضمي
  - ٥- توفير المعرفة والمهارات اللازمة لممارسة تخصص الكبد والجهاز الهضمى بجودة عالية في المجتمع

# معايير القبول بالبرنامج:

المتدربين الذين سيتم قبولهم في الدبلومة المهنية لامراض الكبد والجهاز الهضمي للاطفال هم الحاصلين على :

- ١- ماجستير طب الاطفال
- ٢- أو الزمالة المصرية في الاطفال
- ٣- أو البورد المصرى في الاطفال
  - ٤- أو مايعادل هذه الشهادات

# المستخرجات التعليمية للبرنامج:

١- المعرفة:



- معرفة العلوم الاساسية للجهاز الهضمي
  - معرفة العلوم الاساسية للكبد
- معرفة الامراض المختلفة للجهاز الهضمي
  - معرفة الامراض المختلفة للكبد
    - معرفة اساسيات التغذية
  - معرفة امراض سوء التغذية في الاطفال

#### ٢- القدر ات الذهنية:

- معرفة كيفية التعامل مع امراض الجهاز الهضمي في الاطفال
  - معرفة كيفية التعامل مع امراض الكبد في الاطفال
- تقييم مستوى التغذية في الاطفال وتصميم بروتوكول غذائي سليم

#### ٣- المهارات المهنية والعملية:

- مناظير الجهاز الهضمي
- فحوصات الجهاز الهضمي اللااختراقية
- مهار ات خاصة بالكبد مثل العينات الكبدية

# أسماء المقررات بالبرنامج:

في كل مقرر سيتم دراسة العلوم الاساسية مثل التشريح وعلم وظائف الاعضاء والباثولوجي وكذلك دراسة العلوم المتقدمة

# ١- مقرر الجهاز الهضمى:

المعرفة:

- معرفة تشريح الجهاز الهضمى
- معرفة العيوب الخلقية للجهاز الهضمى
- معرفة بعض الامراض مثل الاسهال المزمن-حساسية القمح-التليف التكيسي-خلل وظائف البنكرياس-التهابات القولون-مشاكل حركية الامعاء-ارتجاع المرىء -المشاكل الوظيفية للجهاز الهضمي

الامعاء-اربجاع اسرى.

تغذية الاطفال: معرفة الاحتياجات الاساسة من التغذية

عمليات الهضم والامتصاص امراض سوء التغذية وعواقبها كيفية الدعم الغذائي للاطفال معرفة المكونات المختلفة للتغذية الوريدية

# القدرات الذهنية:

- التعامل مع حالات النزف من الجهاز الهضمى
  - تقييم مستوى التغذية في الاطفال
- وضع خطة علاجية لامراض سوء التغذية وعمل روتوكول غذائي مناسب
  - وضع العلاج المناسب لامراض الجهاز الهضمي مثل علاج جرثومةالمعدة وارتجاع المرىء وقرح المعدة

# المهارات العملية والمهنية:

- مناظير الجهاز الهضمي
- ربط دوالي المرىء وحقنها
- تشخیص ارتجاع المریء بالمنظار
  - ازالة جسم غريب بالمنظار
- قراءة افلام الاشعة الخاصة بالجهاز الهضمي

# ٢- مقرر الكبد: المعرفة:

- معرفة تشريح الكبد
  - معرفة نسيج الكبد
- معرفة فسيولوجيا الكبد
- معرفة امراض التمثيل الغذائي

■ معرفة الادوية الخاصة بامراض الكبد

- معرفة التوقيت الامثل لزراعة الكبد
- معرفة ارتفاع ضغط الوريد البابي الكبدى بعواقبه
  - معرفة مرض انسداد القنوات المرارية

# القدرات الذهنية:

- معرفة التفريق التشخيصي لحالات الصفراء المباشرة
  - معرفة التفريق التشخيصي لامراض الكبد المزمنة
  - معرفة التفريق التشخيصي للالتهاب الكبدى الحاد
    - معرفة مضاعفات الفشل الكبدى
- وضع خطة علاجية لحالات ارتفاع ضغط الوريد البابي الكبدي

# المهارات العملية والمهنية:

■ العينات الكبدية

■ قراءة اشعة الصبغة على القنوات المرارية

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