Unit 81: Introduction to Gastrointestinal Physiology

Level:	**4**
Unit type:	**Optional (Gastrointestinal Physiology)**
Credit value:	**5**
Guided learning hours:	**42**

Unit summary

In this unit, you will gain the knowledge needed to be able to work as a Healthcare Science Associate in gastrointestinal physiology. You will be expected to build your patient-centred professional practice and practise safely in the workplace.

Unit assessment requirements

There are no specific assessment requirements for this unit, however **learners completing any of the gastrointestinal physiology Units 82-88, must complete this unit**. Please refer to the assessment strategy in *Annexe B*.

Additional information

All procedures must be undertaken in accordance with the Standard Operating Procedure (SOP) in own area of practice.

AC1.1 includes:

- coeliac and non-coeliac gluten enteropathy
- detection of small intestinal bacterial overgrowth, fructose or lactose malabsorption
- dyspepsia
- dysphagia
- erosive and non-erosive gastro-oesophageal reflux disease
- faecal incontinence
- inflammatory bowel disease
- irritable bowel syndrome
- obstetric trauma
- pelvic floor dyssynergia
- rapid orocaecal transit
- sepsis
- slow transit constipation.

AC1.2 includes medication/non-surgical treatments used in the treatment of:

- fructose or lactose malabsorption (dietary advice, i.e., FODMAP diet)
- small intestinal bacterial overgrowth:
    - antibiotics, including rifaximin
- rapid orocaecal transit:
    - treatment of underlying conditions (thyrotoxicosis, loperamide)
- slow transit constipation:
    - prokinetics
    - diet
    - fluids
    - lifestyle modification
    - bulking agents
    - stool softeners
    - osmotic and stimulant laxatives
    - prucalopride
    - linaclotide
    - probiotics
- coeliac and non-coeliac gluten enteropathy
- gastro-oesophageal reflux disease:
    - antacids
    - H2 receptor antagonists
    - proton pump inhibitors
    - prokinetics
- dysphagia; specific motility disorders – Botox and dilatation
- faecal incontinence:
    - loperamide
    - codeine phosphate
- pelvic floor dyssynergia:
    - diet and lifestyle modification
    - Botox
    - rectal self-irrigation

upper GI:

- H2 receptor antagonists, e.g.:
    - ranitidine
    - cimetidine
- antacids
- proton pump inhibitors, e.g.:

    - Omeprazole
    - Lansoprazole
    - Pantoprazole
- motility disorders:
    - amitriptyline
    - prokinetcs
    - Botox
- small bowel overgrowth:
    - antibiotics, including Rifaximin
- H.pylori eradication
- triple therapy regimen, e.g.:
    - proton pump inhibitor plus clarithromycin and amoxicillin or metronidazole

lower GI:

- constipation:
    - prokinetics
    - prucalopride
    - linaclotide
    - domperidone
- laxatives:
    - bulk forming
    - dietary fibre
    - lubricatin
    - stimulant
    - osmolitic
    - stool softeners
- antidiarrhoeals:
    - loperamide
    - codeine phosphate.

AC1.3 includes medication and surgical treatment used in the treatment of:

- fructose or lactose malabsorption (dietary advice, i.e. FODMAP diet)
- slow transit constipation:
    - pelvic floor retraining/biofeedback
    - sacral nerve stimulation
    - antegrade continence enema (ACE) procedure
    - stoma
- gastro-oesophageal reflux disease:
    - lifestyle measures:

        - weight loss
        - cessation of smoking
        - moderation of alcohol, caffeine and spicy foods
    - antireflux surgery
- dysphagia:
    - balloon dilatation
    - cricopharyngeal and Heller's myotomy
    - Botox
- faecal incontinence:
    - pelvic floor retraining/biofeedback
    - percutaneous tibial nerve stimulation (PTNS)
    - sacral nerve stimulation (SNS)
    - fenix – continence restoration system
    - injectable sphincter bulking agents
- proctalgia (anal pain):
    - sphincterotomy
    - fissurectomy

upper GI:

- reflux disease:
    - lifestyle measures
    - weight loss
    - moderation of:
        - fatty foods
        - alcohol
        - spicy food
        - caffeine
        - exercise
    - smoking cessation
    - raising the bed head
    - smaller meals
    - antireflux surgery
    - oesophageal dilation.

lower GI:

- low FODMAP diet
- biofeedback/pelvic floor retraining
- moderation of dietary fibre
- percutaneous tibial nerve stimulation (neuromodulation).

AC2.4 includes:

- patient first
- respect
- privacy
- dignity
- rights to have or not to have a chaperone present
- risks
- documentation of individual's request
- children and transitional adult consent for chaperone
- confidentiality
- safe lone worker practice.

AC4.1 includes:

- audit aim
- objectives and standards
- developing standards using SMART (Specific, Measurable, Achievable, Realistic, Timely)
- target setting
- individual, public and staff involvement
- sample size
- literature review
- audit cycle
- dissemination of results
- identify and promote good practice
- improve patient care
- provide evidence about the effectiveness of a service
- highlight problems and help with solutions
- improve team working and communication
- aims and objectives
- setting standards
- audit cycle.

AC4.2 includes:

- Improving Quality in Physiological Services **(**IQIPS**)** programme
- Infection Control Accreditation Programme (ICAP).

Learning outcomes and assessment criteria

To pass this unit, learners need to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements that the learner is expected to meet **in own area of work and in accordance with Standard Operating Procedures (SOPs)** to achieve the learning outcomes and the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the common disorders of the gastrointestinal tract and the underlying physiology	1.1	Know the common disorders of the gastrointestinal tract			
		1.2	Know the common medications prescribed for common disorders of the gastrointestinal tract			
		1.3	Explain the non-pharmacological measures that are recommended for common disorders of the gastrointestinal tract			
		1.4	Explain the underpinning physiology for **one** disorder of the gastrointestinal tract			
		1.5	Discuss the potential impact of **one** disorder of the gastrointestinal tract on the patient and their family			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Understand the range of procedures available to investigate common disorders of the gastrointestinal tract	2.1	Explain the purpose of investigations undertaken in people with disorders of the gastrointestinal tract			
		2.2	Know a range of common disorders of the gastrointestinal tract and the procedures used to investigate them			
		2.3	Explain what is meant by the term intimate examination in the context of gastrointestinal physiology			
		2.4	Evaluate the role and requirements of the chaperone in the context of gastrointestinal physiology			
		2.5	Explain the Datix system and how to access and report an incident			
3	Be able to work within policy guidelines to support a patient during intimate examination	3.1	Explain the policy guidelines for supporting a patient during intimate examination			
		3.2	Demonstrate the ability to support a patient during intimate examination			
		3.3	Demonstrate the ability to record accounts of presence of chaperone			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Be able to assist senior staff to undertake departmental audits and accreditation programmes	4.1	Demonstrate the ability to assist in the departmental audit programme			
		4.2	Demonstrate the ability to assist in departmental accreditation programmes			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)