

**Module 1.2:
Indigestion****INDICATIVE LEARNING OBJECTIVES****STRUCTURE & FUNCTION**

- Describe the macroscopic and microscopic structure (including nerve and blood supply) of the upper gastrointestinal tract from the lip to the caecum (including the teeth, salivary glands, exocrine pancreas, liver, gall bladder, bile duct, portal vein)
- Outline the main functions of the liver related to synthesis, storage, and detoxification
- Review the digestive and associated processes that convert food into nutrition and energy for the body, including for example: relevant transport mechanisms, bile production and secretion, and pancreatic exocrine function
- Examine the role of gastric acid secretion and gastric motility
- Define acute inflammation and outline the process in relation to the gastrointestinal tract and its immune response

POPULATION PERSPECTIVE

- Define health (care) need (e.g. taxonomy of need) and outline the 'iceberg of disease' concept (with reference to unmet health care need and to estimated disease prevalence)
- Outline the key features/principles of the organization of the National Health Service in the United Kingdom (compared with health services elsewhere in the world), and pressures to change given resource constraints
- Interpret summary measures for categorical and continuous data (and be aware of practical uses of the Normal and other frequency distributions such as Poisson and binomial)

INDIVIDUALS, GROUPS & SOCIETY

- Examine the theoretical model of behaviour changes required to adopt a healthy lifestyle
- Outline illness behaviour, the psychology of physical symptoms, and the 'triggers' to seeking professional advice (e.g. Zola), in the context of illness behaviour and experiences and the issues relevant to medication and self-medication
- Describe how the sick role model (Talcott Parsons) relates to this scenario
- Outline classical (Pavlovian) conditioning related to salivation

PROFESSIONAL & PERSONAL DEVELOPMENT

- Outline the role of the general practitioner in a changing health service, providing health care, making best use of resources, and advocating for health, the role of the practice nurse (e.g. advisory), and the role of the pharmacist in over-the-counter (OTC) medication and advice
- Define the concept of 'autonomy'
- Discuss how, historically, the general practitioner became the first point of contact for medical advice and how and why that has changed
- Outline key historical features in the state establishing the National Health Service

SCENARIO – Module 2: Indigestion

Mr Ken Bridge, aged 56, rubs his chest. His wife, Alice Bridge, asks, “*Is it that indigestion again, like Auntie Mary with her ‘stomach acid and digestive juices’? Did you get something for the vomiting from the pharmacist? See the doctor! Try my ‘over-the-counter’ ulcer tablets.*” Mr Bridge says, “*No, I’m not sick! It was the beer and curry – mouth-watering, but always take ages to go down. Dr Crossing has enough ill people who really need him. Last time, he advised me to stop smoking and lose weight, and even get my teeth sorted... so I’m not going yet!*”

Mrs Bridge’s cousin Mrs Grace Weir says, “*You must get Ken to the GP. He should ask for the ‘telescope camera’ you swallow that looks at your stomach.*” Mrs Bridge laughs. “*He won’t – he’s stubborn... puts on a front - so typical! I’ll try, but Dr Crossing’s said before, it’s Ken’s decision.*” [Indeed, Dr Crossing respects Mr Bridge’s autonomy.]

Ten weeks later, Mr Bridge sees Dr John Crossing, who refers him to the gastroenterologist in secondary care (NHS hospital trust). Back in primary care, Dr Crossing reads the clinic letter: “*no suggestion of gall bladder problems. Liver function results are within normal limits. Endoscopic biopsy reported, ‘...normal gastric mucosa and normal duodenal mucosa... but mild acute inflammation of the oesophageal mucosa...’*”. Discussing him with the practice team, Dr Crossing notes that they only see a small proportion of the number of patients with indigestion symptoms - “*...clinical iceberg...*”. Mrs Elsa Beam (the practice manager) agrees about the unmet health care need versus the expressed need (demand), and they review some of the recognized ‘triggers to consultation’. Dr Crossing uses Mechanic’s concept of ‘illness behaviour’ to explain Mr Bridge’s actions.

At Mr Bridge’s follow-up, Dr Crossing says, “*You have some irritation in the gullet from reflux. Your gullet ‘defences’ are just about OK, but this is my advice to reduce the symptoms...*”. Considering the ‘sick role’ model, Dr Crossing realizes from Mr Bridge’s glazed expression that he does not seem ready to accept a lifestyle change. He refers Mr Bridge to the practice nurse for advice. Dr Crossing is aware that, even with all the changes in NHS organization (ever since more state involvement in 1948), “*some things never change. Smoking and weight reduction priorities remain. The Normal distribution of weight has shifted to the right!*”. Tired of all the reorganizations, and pressures to make best use of resources and ‘advocate’ for health, he wonders how it was before historical changes in patients’ first point of contact.