

STUDY GUIDE

PROGRAM	BDS
COURSE TITLE	General Medicine
ACADEMIC YEAR	3rd Year, 2023
INTRODUCTION	<p>This course deals with common diseases faced in the Pakistani community. These conditions range from simple contagious conditions like the common flu to more serious conditions like Dengue and Covid-19 infection. Dental surgeons need to have a sound basic knowledge of non-communicable conditions like Diabetes Mellitus and Hypertension or common malignancies. Each of these has the potential to affect healing after dental procedures. Bleeding diatheses are not uncommon in this part of the world. A dental practitioner must always be aware of this risk in a patient on his/ her first visit.</p> <p>This course, hence, prepares the dental students for dealing with common medical conditions encountered in routine practice.</p>
RATIONALE	<p>Dentists manage patients who may have co-morbidities; they may have systemic diseases like Diabetes Mellitus or Hypertension etc. It becomes essential for the treating dental surgeon to know the basis of common conditions, infectious or non-infectious, acute or chronic, so that s/he may tailor the dental management plan accordingly.</p>
OUTCOMES	<p>By the end of the course, 3rd year BDS students will be able to justify management plans for common medical conditions including common medical emergencies)</p>
DEPARTMENT INVOLVED	Internal Medicine
COURSE OBJECTIVES	<p>By the end of the course, the students will be able to:</p> <p><u>INTRODUCTION TO GENERAL MEDICINE</u></p> <ul style="list-style-type: none">• Discuss scope of general medicine.• Identify goals of studying general medicine.• Discuss the importance of a doctor and patient relation.• Explain the importance of ethics when managing patients.

HISTORY, GENERAL PHYSICAL EXAMINATION, INVESTIGATIONS, AND DIAGNOSIS

- Interpret the general physical examination findings of patients presenting with medical problems

GI & LIVER DISEASES

- Discuss the etiology, clinical features, types, differential diagnosis, investigations, diagnosis, management and complications of the following GI/ Liver diseases:
 - GERD;
 - Gastritis/ Peptic Ulcer;
 - Gastroenteritis;
 - Malabsorption;
 - IBS / IBD;
 - Hepatitis (Acute / Chronic);
 - CLD and Hepatocellular Carcinoma.

CARDIOVASCULAR DISEASES

- Discuss the etiology, clinical features, types, differential diagnosis, investigations, diagnosis, management and complications of the following cardiovascular diseases:
 - Ischemic Heart Disease (Angina / Myocardial Infarction)
 - CHF
 - Rheumatic Fever
 - Infective Endocarditis
 - Hypertension
 - Valvular Heart Diseases (MS / MR / AS / AR)
 - Congenital Heart Diseases (VSD / TOF)

RESPIRATORY DISEASES

- Discuss the etiology, clinical features, types, differential diagnosis, investigations, diagnosis, management and complications of the following Respiratory diseases:
 - TB

- COPD
- Pneumonia
- Asthma
- Bronchogenic Carcinoma
- Bronchiectasis
- Pneumothorax
- Pleural effusion

NEUROLOGICAL DISEASES

- Discuss the etiology, clinical features, types, differential diagnosis, management and complications of the following neurological conditions/diseases:
 - Headache
 - Stroke
 - Epilepsy
 - Parkinson's disease
 - Meningitis
 - Movement disorders
 - Dementia

DISEASES OF KIDNEY AND URINARY TRACT

- Discuss the etiology, clinical features, types, differential diagnosis, management and complications of the following diseases of kidney and urinary tract:
 - Acute Kidney Injury (AKI)
 - Chronic Kidney Disease (CKD)
 - Nephrotic and Nephritic Syndromes
 - Electrolyte imbalances (sodium, potassium, calcium)

DISEASES OF ENDOCRINE SYSTEM

- Discuss the etiology, clinical features, types, differential diagnosis, management and complications of:
 - Pituitary Diseases
 - Thyroid Disorders

- Parathyroid Disorders
- Adrenal Disorders
- Diabetes Mellitus
- Vitamin Deficiencies

INFECTIOUS DISEASES

- Discuss the sources, etiology, clinical features, types, differential diagnosis, management and complications of the following Infectious diseases:
 - Tetanus
 - Malaria
 - Viral fever (Dengue, Congo Crimean fever, influenza, Chikungynea and Covid-19)
 - HIV
 - Mumps
 - Sepsis
 - Hospital Acquired Infections

BLOOD DISORDERS

- Discuss the sources, etiology, clinical features, types, differential diagnosis, management and complications of the following blood disorders:
 - Anemia
 - Leukemia
 - Lymphoma
 - Thrombocytopenia and ITPs
 - Bleeding disorders/anticoagulants/antithrombotic therapy
 - Shock (anaphylactic, hypovolemic)

DISEASES OF JOINTS AND BONES

- Discuss the sources, etiology, clinical features, types, differential diagnosis, management and complications of the following diseases of joints and bones:
 - Systemic Lupus Erythematosus

	<ul style="list-style-type: none"> - spondyloarthropathies - Rheumatoid Arthritis - Seronegative Arthropathies - Osteoporosis/Osteomalacia - Osteoarthritis
CLINICAL SKILLS	<p><u>INSTRUMENT IDENTIFICATION</u></p> <ul style="list-style-type: none"> • Discuss the uses of the following instruments: <ul style="list-style-type: none"> - I/V cannula - Nasogastric tube - Tracheal tube - Foley's catheter - Insulin Syringe - Oxygen masks <p><u>PROCEDURES:</u></p> <ul style="list-style-type: none"> • Administer I/M and I/V and S/C injections • Maintain I/V line via cannula • Perform cardiopulmonary resuscitation (CPR) on mannequins <p><u>X-RAY INTERPRETATIONS:</u></p> <ul style="list-style-type: none"> • Interpret X-rays of patients presenting with the following conditions: <ul style="list-style-type: none"> - Cardiomegaly - Pleural effusion - Pneumothorax - Consolidation <p><u>LAB INTERPRETATION:</u></p> <ul style="list-style-type: none"> • Interpret the reports of the following tests: <ul style="list-style-type: none"> - Blood CP - Liver Function Tests (LFTs) - Thyroid profile - Fasting and random blood sugar tests (FBS and RBS) and HbA1C - Prothrombin Time (PT) and activated Partial Thromboplastic Time (aPTT)

	<ul style="list-style-type: none"> - Urea, creatinine and electrolytes (UCE) - Urine D/R
CLINICAL SKILLS	<p><u>HISTORY, GENERAL PHYSICAL EXAMINATION, INVESTIGATIONS, AND DIAGNOSIS</u></p> <ul style="list-style-type: none"> • Obtain history of patients presenting with medical problems according to the standard protocol • Perform general physical examination of patients presenting with medical problems according to the standard protocol <p><u>GI/LIVER DISEASES</u></p> <ul style="list-style-type: none"> • Obtain comprehensive history of patients presenting to the general medicine clinics with complaints of GI/ Liver disease. • Perform clinical examinations on patients presenting to the general medicine clinics with complaints of GI/ Liver disease <p><u>CARDIOVASCULAR DISEASES</u></p> <ul style="list-style-type: none"> • Obtain comprehensive history of patients presenting to the general medicine clinics with complaints of cardiovascular disease pain and symptoms (chest pain, dyspnea, syncope) • Perform clinical examinations on patients presenting to the general medicine clinics with complaints of cardiovascular disease pain and symptoms (chest pain, dyspnea, syncope) <p><u>RESPIRATORY DISEASES</u></p> <ul style="list-style-type: none"> • Obtain comprehensive history of patients presenting to the general medicine clinics with complaints of respiratory disease pain and symptoms (cough, chest pain, wheezing, haemoptysis) • Perform clinical examination (front and back of chest) of patient presenting to the general medicine clinics with complaints of respiratory diseases <p><u>NEUROLOGICAL DISEASES</u></p> <ul style="list-style-type: none"> • Obtain comprehensive history of patients presenting to the general medicine clinics with complaints of neurological disease pain and symptoms (headache, dizziness)

	<ul style="list-style-type: none"> • Assess higher mental functions of patients presenting to the general medicine clinics: <ul style="list-style-type: none"> - Level of consciousness - Behavior - Speech - Memory • Perform examination of: <ul style="list-style-type: none"> - Cranial nerves - Motor system and reflexes - Sensory system: <ul style="list-style-type: none"> ✓ Crude touch, pain and temperature ✓ Fine touch, pressure, vibration, joint position ✓ Two-point localization and two-point discrimination ✓ Cerebellar system <p><u>COUNSELLING & PATIENT EDUCATION:</u></p> <ul style="list-style-type: none"> • Counsel the patient for the hazards of needle stick injury and its precautions following the recommended guidelines • Counsel the patient about the management of diabetes & hypertension and their complications (dietary, life style modification and pharmacological) following the recommended guidelines • Educate the patient regarding hazards of tobacco smoking and smoking cessation techniques
INTERNAL ASSESSMENT	10% (Pre-professional Examination, Midterm Examination, Assignments and Class Presentations, Clinical Logbooks)
ANNUAL EXAMINATION	90% (MCQS, OSCE)
COURSE EVALUATION	This course will be evaluated as per JSMU & HEC policies