

BDS Third Year General Medicine Study Guide

Introduction:

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. This course, hence, prepares the dental students for dealing with common medical conditions encountered in routine practice. 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.

Outcome:

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

<u>Teaching and learning:</u> General medicine classes have been conducted at Altamash General Hospital (Wednesday and Saturday).

- Flipped Classroom (FC)
- Interactive lectures (IL)
- Clinical demonstration(Clinical demo)
- Role play(RP)
- Tutorials
 - a. Cased Based Learning (CBL)
 - b. Small group discussion (SGD)

Assessment tools:

- 1. Multiple Choice Questions: (MCQs)
 - One Correct Type
 - One Best Type
- 2. Mini Clinical Examination (MiniCEx)
- 3. Observed Structured Clinical Examination (OSCE)



s.n o.	Topic	Course Objectives: By the end of the course, 3rd year students will be able to:	Teaching method	Assessment Tool
1.	Introduction to General Medicine	 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. 	IL	MCQ (1C)
2.	History, General Physical Examination, Investigations, and Diagnosis	Interpret the general physical examination findings of patients presenting with medical problems	IL	MCQ(1B)
3.	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.	IL CBL	MCQ(1B)
4.	Cardiovascular Diseases	Discuss the etiology, clinical features, types, differential diagnosis, investigations, diagnosis, management and complications of the following cardiovascular diseases: a) Ischemic Heart Disease (Angina / Myocardial Infarction)	IL CBL	MCQ(1B)



		b) CHF		
		c) Rheumatic Fever		
		d) Infective Endocarditis		
		e) Hypertension		
		f) Valvular Heart Diseases		
		(MS / MR / AS / AR)		
		g) Congenital Heart		
		Diseases (VSD / TOF)		
5.	Respiratory	Discuss the etiology, clinical		
	Diseases	features, types, differential		
		diagnosis, investigations,		
		diagnosis, management and		
		complications of the following		
		Respiratory diseases:		
		a) TB	IL	MCQ(1B)
		b) COPD	CBL	
		c) Pneumonia		
		d) Asthma		
		e) Bronchogenic Carcinoma		
		f) Bronchiectasis		
		g) Pneumothorax		
		h) Pleural effusion		
6.	Neurological	Discuss the etiology, clinical		
	Diseases	features, types, differential	IL	MCQ(1B)
		diagnosis, management and	CBL	
		complications of the following		
		neurological conditions/diseases:		
		a) Headache		
		b) Stroke		
		c) Epilepsy		
		d) Parkinson's disease		
		e) Meningitis		
		f) Movement disorders		
		g) Dementia		
7.	Diseases of	Discuss the etiology, clinical		
'.	Kidney and	features, types, differential	IL	
	Urinary Tract	diagnosis, management and		MCQ(1B)
		complications of the following		
		diseases of kidney and urinary		



		tract:		
		a) Acute Kidney Injury		
		(AKI)		
		b) Chronic Kidney Disease		
		(CKD)		
		c) Nephrotic and Nephritic Syndromes		
		d) Electrolyte imbalances		
		(sodium, potassium,		
		calcium)		
8.	Endocrine	Discuss the etiology, clinical		
		features, types, differential	11	MCO(1D)
	System	diagnosis, management and	IL	MCQ(1B)
		complications of:		
		a) Pituitary Diseases		
		b) Thyroid Disorders		
		c) Parathyroid Disorders		
		d) Adrenal Disorders		
		e) Diabetes Mellitus		
		f) Vitamin Deficiencies		
9.	Infectious	Discuss the sources, etiology,		
	Diseases	clinical features, types,	FC	MCQ(1B)
		differential diagnosis,	FC	
		management and complications		
		of the following Infectious		
		diseases:		
		a) Tetanus		
		b) Malaria		
		c) Viral fever (Dengue,		
		Congo Crimean fever,		
		influenza, Chikungynea		
		and Covid-19)		
		d) HIV		
		e) Mumps		
		f) Sepsis		
		g) Hospital Acquired		
		Infections		
10.	Blood Disorders	Discuss the sources, etiology,		
		clinical features, types,	11	MCQ(1B)
		differential diagnosis,	IL	



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		management and complications		
		of the following blood disorders:		
		a) Anemia		
		b) Leukemia		
		c) Lymphoma		
		d) Thrombocytopenia and		
		ITPs		
		e) Bleeding		
		disorders/anticoagulants/a		
		ntithrombotic therapy		
		f) Shock (anaphylactic,		
		hypovolemic)		
11.	Diseases of	Discuss the sources, etiology,		
	Joints and	clinical features, types,		MCQ(1B)
	Bones	differential diagnosis,		
		management and complications	IL	
		of the following diseases of joints and bones:		
		a) Systemic Lupus		
		Erythematosus		
		b) Spondyloarthropathies		
		c) Rheumatoid Arthritis		
		d) Seronegative		
		Arthropathies e) Osteoporosis/Osteomalaci		
		a		
		f) Osteoarthritis		
		PRACTICALS		
1.	Instrument	Discuss the uses of the following		
	Identification	instruments:	IL	OSCE
		a) I/V cannula	SGD	
		b) Nasogastric tube		
		c) Tracheal tube		
		d) Foley's catheter		
		e) Insulin Syringe		
		f) Oxygen masks		
2.	Procedures	Administer I/M and I/V and S/C		
		injections	FC	0.0.00
		• Maintain I/V line via cannula		OSCE
L		Perform cardiopulmonary		



		resuscitation (CPR) on		
		mannequins		
3.	X-Ray Interpretations	Interpret X-rays of patients presenting with the following conditions: a) Cardiomegaly	IL CBL	OSCE MCQ(1B)
		b) Pleural effusion c) Pneumothorax d) Consolidation		
4.	Lab	Interpret the reports of the		
	Interpretation	following tests: a) Blood CP b) Liver Function Tests (LFTs) c) Thyroid profile d) Fasting and random blood sugar tests (FBS and RBS) and HbA1C e) Prothrombin Time (PT) and activated Partial thromboplastic Time (aPTT) f) Urea, creatinine and	FC	MCQ(1B) OSCE
		electrolytes (UCE)		
	C	electrolytes (UCE) g) Urine D/R	Teaching	Assessment
		electrolytes (UCE)	Teaching method	Assessment Tool
1.		electrolytes (UCE) g) Urine D/R LINICAL SKILLS	_	
1.	By the end of t	electrolytes (UCE) g) Urine D/R LINICAL SKILLS the year students will be able to:	method	
1.	By the end of the History, General	electrolytes (UCE) g) Urine D/R LINICAL SKILLS the year students will be able to: • Obtain history of patients	method	Tool
1.	By the end of t History, General Physical	electrolytes (UCE) g) Urine D/R LINICAL SKILLS the year students will be able to: • Obtain history of patients presenting with medical problems	method	Tool
1.	By the end of the History, General Physical Examination,	electrolytes (UCE) g) Urine D/R LINICAL SKILLS the year students will be able to: • Obtain history of patients presenting with medical problems according to the standard	method	Tool
1.	By the end of the History, General Physical Examination, Invesitgations,	electrolytes (UCE) g) Urine D/R LINICAL SKILLS the year students will be able to: • Obtain history of patients presenting with medical problems according to the standard protocol	method	Tool
1.	By the end of the History, General Physical Examination, Invesitgations,	electrolytes (UCE) g) Urine D/R LINICAL SKILLS the year students will be able to: • Obtain history of patients presenting with medical problems according to the standard protocol • Perform general physical	method	Tool
1.	By the end of the History, General Physical Examination, Invesitgations,	electrolytes (UCE) g) Urine D/R LINICAL SKILLS he year students will be able to: • Obtain history of patients presenting with medical problems according to the standard protocol • Perform general physical examination of patients	method	Tool
1.	By the end of the History, General Physical Examination, Invesitgations,	electrolytes (UCE) g) Urine D/R LINICAL SKILLS the year students will be able to: • Obtain history of patients presenting with medical problems according to the standard protocol • Perform general physical examination of patients presenting with medical problems	method	Tool
1.	By the end of the History, General Physical Examination, Invesitgations,	electrolytes (UCE) g) Urine D/R LINICAL SKILLS the year students will be able to: • 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	method	Tool
	By the end of the History, General Physical Examination, Invesitgations, and Diagnosis	electrolytes (UCE) g) Urine D/R LINICAL SKILLS he year students will be able to: • 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	method Clinical Demo	OSCE
	By the end of the History, General Physical Examination, Invesitgations, and Diagnosis	electrolytes (UCE) g) Urine D/R LINICAL SKILLS he year students will be able to: • 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 • Obtain comprehensive history	method Clinical Demo	OSCE
	By the end of the History, General Physical Examination, Invesitgations, and Diagnosis	electrolytes (UCE) g) Urine D/R LINICAL SKILLS he year students will be able to: • 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 • Obtain comprehensive history of patients presenting to the general medicine clinics with complaints of GI/ Liver disease.	method Clinical Demo	OSCE
	By the end of the History, General Physical Examination, Invesitgations, and Diagnosis	electrolytes (UCE) g) Urine D/R LINICAL SKILLS he year students will be able to: • 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 • Obtain comprehensive history of patients presenting to the general medicine clinics with	method Clinical Demo	OSCE



		general medicine clinics with		
		complaints of GI/ Liver disease		
3.	Cardiovascular	Obtain comprehensive history	Clinical Demo	
	Diseases	of patients presenting to the		OSCE
		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)		
4.	Respiratory	Obtain comprehensive history	Clinical Demo	
	Diseases	of patients presenting to the		
		general medicine clinics with		OSCE
		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		
5.	Neurological	Obtain comprehensive history	Clinical Demo	
	Diseases	of patients presenting to the		
		general medicine clinics with		OSCE
		complaints of neurological		OSCL
		disease pain and symptoms		
		(headache, dizziness)		
		• Assess higher mental functions		
		of patients presenting to the		
		general medicine clinics:		
		a) Level of consciousness		
		b) Behavior		
		c) Speech		
		d) Memory		



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		• Perform examination of:		
		a) Cranial nerves		
		b) Motor system and		
		reflexes		
		c) Sensory system:		
		· Crude touch, pain and		
		temperature		
		· Fine touch, pressure,		
		vibration, joint position		
		· Two-point localization		
		and two-point		
		discrimination		
		· Cerebellar system		
6.	Counselling &	Counsel the patient for the	Role Play	
	Patient	hazards of needle stick injury and		
	Education	its precautions following the		
		its precuations ionowing the		
		recommended guidelines		OSCE
		1 -		OSCE
		recommended guidelines		OSCE
		recommended guidelines • Counsel the patient about the		OSCE
		recommended guidelines • Counsel the patient about the management of diabetes &		OSCE
		recommended guidelines • Counsel the patient about the management of diabetes & hypertension and their		OSCE
		recommended guidelines • Counsel the patient about the management of diabetes & hypertension and their complications (dietary, life style		OSCE
		recommended guidelines • Counsel the patient about the management of diabetes & hypertension and their complications (dietary, life style modification and		OSCE
		recommended guidelines • Counsel the patient about the management of diabetes & hypertension and their complications (dietary, life style modification and pharmacological) following the		OSCE
		recommended guidelines • Counsel the patient about the management of diabetes & hypertension and their complications (dietary, life style modification and pharmacological) following the recommended guidelines		OSCE

Reading Sources:

Books:

- Harrison's Principles of Internal Medicine (Vol.1 & Vol.2) latest edition
- Davidson's Principles and Practice of Medicine ((latest edition)

Internet resources: With easy excess to digital library students will use internet resources with added time flexibility to enrich and update their knowledge and its application.

Library: It provides wealth of resources, space to study alone or in a group. It also provide world of books to discover and borrow.



Assessment Criteria:

10% marks from internal assessment will be added to the final marks, inclusive of:

- Mid-term examination
- Mock examination
- Assignments and Class presentations
- Clinical Logbooks

Annual Examination:

University Annual examination carries 90% marks and Theory exam will be based on MCQs and Clinical / Professional /communication skills will be assessed by OSCE. .

Course Evaluation:

- Pass/fail ratio of continuous and summative assessments will be evaluated
- 75% attendance is mandatory to be eligible for annual professional examination
- Feedback will be taken
 - Regarding course from students and faculty
 - > Student feedback regarding faculty
 - > Faculty feedback of students

Teaching Faculty:

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For queries:

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