

مقرر 421 اسر

طب الأسرة

FMED 421

FAMILY MEDICINE

DEPARTMENT of FAMILY and COMM. MEDICINE

COLLEGE OF MEDICINE

KING SAUD UNIVERSITY

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## **General information:**

Course Title	: Family Medicine
Course Code & Number	: FMED 421
Credit hours	: 6 hours
Course duration	: 4 – 5 weeks
Department Chairman	: Dr. Ali bin Mohsen AL- Hazmi

## **People You May Meet (Males):**

You will meet some of the Doctors from the Department of Family and Community Medicine, many of whom may be involved in the teaching.

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## **PEOPLE YOU MAY MEET: (Females)**

You will meet some of the Doctors from the Department of Family and Community Medicine and other sectors.

**Course Organiser (Females)**

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## **Course Description and Goals**

FMED 421 in family medicine is a fourth-year course that will introduce the principles and concepts of family medicine to medical students. In addition, the students will be oriented to the health care system and primary health care services in Saudi Arabia. We will adopt varieties of teaching and learning strategies, such as lectures, students led seminars, and case based discussion. Coupled with the newly adopted strategies; we will also use the team based learning to enhance a collaborative learning.

### **Aim**

**The aim of this course is to produce medical students who will be able to:**

- 1- Adopt a scientific approach to the practice of family medicine
- 2- Demonstrate an aptitude in patient-centered care and management
- 3- Participate in a community oriented practice activities
- 4- Communicate effectively and sympathetically with patients, colleagues, and their families
- 5- Practice within a multi-professional team
- 6- Deliver the ethical and professional behaviors in health practice
- 7- Make initiatives for personal and professional development

## **Course Objectives:**

This is an outcome based education course, and the objectives are grouped under FIVE main THEMES.

- **Principles of Family Medicine and Primary Health Care Services**
- **Skilled Physician**
- **Communication and Consultation**
- **Health Promotion**
- **Professionalism**

At the completion of the course, each student will be expected to master the core competencies related to each theme:

**(Competence-Based Framework including themes)**

### **1- Principles of Family Medicine and Primary Health Care Services**

#### **Knowledge**

- 1.1 Describe elements of family medicine and their basic concepts in delivering primary care services
- 1.2 Define concepts and historical differences of primary health care (PHC), family medicine and general practice
- 1.3 Identify roles of PHC and family medicine in health care system in Saudi Arabia and worldwide.



1.4 Recognize importance of continuous coordinated care to all individuals and their families within family medicine practice

### **Cognitive Skills**

1.5 Integrate comprehensive care to the population within their community to address physical, psychological and social factors (bio-psycho-social model).

## **2- Skilled Physician**

### **Knowledge**

2.1 Clinical guidelines for diagnosis and management of common (acute, chronic and life threatening) problems presenting in primary health care among different age groups.

2.2 Identify and describe different strategies to promote patient's compliance.

### **Cognitive Skills**

2.3 Formulate appropriate patient assessment to the clinical setting

2.4 Provide best available and comprehensive evidence-based health care for patients according to their age and gender.

2.5 Use of appropriate drugs, investigation and time.

2.6 Interpret common investigations related to the practice of family medicine.

## **Psychomotor**

2.7 Conduct a focused history, and combining appropriate level of detail with efficient use of time

2.8 Perform accurate and appropriate physical examination to the presenting problem

## **3- Communication and Consultation**

### **Knowledge**

3.1 To outline principles and importance of communication skills with patients and colleagues

3.2 To describe the role of a multidisciplinary approach in patient care

### **Cognitive Skills**

3.3 Recognize hypothetical deductive model and other diagnostic problem-solving styles regarding common presenting complaints in PHC.

### **Interpersonal Skills & Responsibility**

3.4 Demonstrate effective consultation skills according to different consultation models.

3.5 Illustrate methods of breaking bad news

3.6 Demonstrate skills of interacting with difficult patients

3.7 Explore and respect patient's agenda.

## **Psychomotor**

3.8 Demonstrate verbal and non-verbal patient-centered communication

## **4- Health Promotion**

### **Knowledge**

4.1 Describe morbidity pattern in PHC and factors leading to variations among practices.

4.2 Describe the role of screening and periodic health assessment in promoting patients and community health.

### **Cognitive Skills**

4.4 Explain basic principles in preventing and controlling communicable and non-communicable diseases in the hospital and community.

4.5 Identify impact of chronic diseases and disabilities on individual, families and society.

## **5- Professionalism**

### **Knowledge**

5.1 **Describe concepts in patient safety**

### **Cognitive Skills**

5.2 Plan appropriate directed-self learning (DSL) activities based on the best available resources.

## **Interpersonal Skills & Responsibility**

5.3 Demonstrate professional and ethical standards to patients and colleagues

5.4 Respect patient's rights and confidentiality.

5.5 Respect patient's autonomy and willingness to involve people for their own health

## **Psychomotor**

5.6 Demonstrate appropriate skills for topic presentation

## **Teaching and Learning Methods**

**The learning process will be conducted as follow:**

- Lectures
- Student Led Seminars (SLS)
- Case Based (Presentation) Discussion with Evidence Based Medicine
- Team Based Learning (TBL)
- Clinical attachment

## Lectures

The lectures will be prepared and presented by tutors, which will be mostly conducted in the first week. The time allocated for each lecture will range from **60 to 120** minutes. The lectures will include the following topics:

- Patient education and Health Promotion
- Patient Counselling
- Evidence-based Approach
- Domestic Violence
- Communication Skills
- Family Medicine: Principles and Practice
- Consultation Skills
- Healthcare for Elderly
- Approach to Difficult Patient
- Data Interpretation
- PHC Principles and Health System in Saudi Arabia
- Prescribing in Family Practice
- Home Healthcare
- Patient Safety
- Electrocardiogram (ECG) Interpretation

## **Objectives of Lectures:**

**By the end of each session, students will be able to:**

### **1. PHC Principles and Health System in Saudi Arabia**

- Identify the causes of adverse health situations in both developed and developing countries
- Explore the World Health Organization declaration of health
- Describe Saudi's Strategies for PHC and its implementation
- Compare the practice of PHC with hospital settings
- Describe the current PHC situations and challenges facing Family Medicine Specialty.

### **2. Family Medicine: Principles and Practice**

- Outline the history of Family Medicine Development
- Explain the desirable qualities of a Family Physician.
- Address the concepts of Family Medicine, including its definition

### **3. Consultation Skills**

- Demonstrate the skills necessary for patient-centered questioning
- Identify different models of consultation
- Explain how an effective consultation model can improve patient's satisfaction within their psychosocial environment
- Apply consultation skills in dealing with common health problems
- Practice integration of communication skills with consultation skills

#### **4. Data Interpretation**

- Interpret the results of the following:
  - ❖ Complete Blood Count (CBC) findings including types of anemia and Polythyaemia
  - ❖ Liver function tests
  - ❖ Thyroid disorders
  - ❖ Metabolic bone disorders including Calcium, Phosphate, and Vitamin D
  - ❖ Urine and stool analysis
  - ❖ Hepatitis B markers
- Identify the role of a family physician to patients regarding the laboratory findings

#### **5. ECG Interpretation**

- Heart rate, Arrhythmias (Tachycardia, Bradycardia, AF, Flutter, Vent. Tachycardia)
- Axis deviation
- Left Ventricular Hypertrophy
- Right Ventricular Hypertrophy
- Premature Ventricular Complexes
- Premature Atrial Complexes
- Right bundle branch block (RBBB)
- First-degree heart block
- Ischemia and myocardial infarction



## **6. Patient safety**

By end of this session the student will be able to understand:

- Elements of Quality
- The concept of accreditation
- What does it mean by policy and procedure?
- Patient safety areas
- Meaning by ROP
- Meaning by OVR

## **7. Patient Counseling**

- Understand the concept of patients' counseling
- Appreciate theories and approaches to counseling
- Recognize values in counseling
- Application of knowledge to solve patients' problems

## **8. Health care for the Elderly and Home Health Care**

- What is aging?
- What is the meaning of geriatric medicine?
- General principles of geriatric care
- Common geriatric syndromes
- Comprehensive geriatric assessment
- Common home care services
- Home care teams and their roles in medical practice.
- Home safety

## **9. Evidence Based Approach**

- Skills in searching for evidence
- How to construct a clinical question
- PICO
- Sources of Evidence:
  - ❖ Clinical evidence
  - ❖ Guidelines
  - ❖ Up-to-date
  - ❖ Cochrane

## **10. Domestic violence**

- Definitions and Terminology
- Epidemiology of domestic violence (DV)
- Types and causes of DV
- Identification of family members most vulnerable to commit or be victims of DV
- Symptoms and signs of IPV
- Consequences of DV
- Why is DV missed?
- Physician role in DV
- Methods to address DV during the consultation
- Indicators of danger (red flags) and safety plan
- Why do survivors not leave the abuser?
- How to properly document a DV case
- Epidemiology, history and exam findings that suggest child abuse
- How to report DV in KSA

## **11. Prescribing in Family Practice**

- Writing prescriptions
- Cost-effective prescribing
- Medicine Management and Concordance
- Adverse drugs reactions
- Prescribing for special groups

## **12. Communication Skills**

- Definition
- Effective communication with patients
- Effective communication with colleagues
- Effective listening, language, and non-verbal skills to be used

## **13. Patient Education and Health Promotion**

- Definition of health education
- Definition of health promotion
- Levels of health promotion
- Health promotion planning

## **14. Approach to Manage Difficult Patient**

- Who is the difficult patient?
- Identification of the patient, physician, and health system factors that can lead to difficult encounters
- Management of difficult patient

## Student Led Seminar:

Student led seminars to involve activities presented by students and supervised by tutors. The topics included in these activities are:

- Upper respiratory tract diseases
- Changes in bowel habits
- Common psychiatric problems
- Women health
- Approach to obese patients
- Sexually transmitted infections
- Adolescent health
- Osteoporosis
- Maternal and Child health
- Screening and Prevention
- Smoking and substance abuse
- Approach to patient with back pain
- Breaking bad news

## Instructions for Presentation of SLS:

- ❖ Students will be divided into groups according to number of SLS, and directed by the leader
- ❖ Each group will be supervised by a tutor according to the schedule's **distribution**
- ❖ The PowerPoint presentation will be revised by the tutor early before presentation (**at least one week**)
- ❖ The presentation will cover the objectives already listed in student guidelines
- ❖ The presentation will be updated and include evidence-based reference to the guidelines

- ❖ Every student will participate in the presentation.
- ❖ The **evaluation form** will be used to evaluate every student separately

### **How the session is to be conducted**

- ❖ **First 5 minutes, and 5 MCQs of single best answer** will be prepared by the group and presented on screen for students to give their answers
- ❖ **60 minutes** are allowed to present the content
- ❖ The presentation guidelines in student guide should be followed.
- ❖ The content will be supervised by the Tutor
- ❖ **20 minutes** for Cases discussion and Role Play.
- ❖ **5 minutes** will be used for the **5 MCQs**, and to be answered by the same method as above.
- ❖ **30 minutes** for the tutor to give his feedback, and discuss the cases that will be beneficial for students.

### **N.B:**

**The Groups to present the presentation should attend 10 minutes earlier before the tutor arrives.**

## Objectives of Student Led Seminars:

### The Students are expected to cover the following presentation objectives

#### **1. Approach to obese patient**

- ❖ To define obesity and classify the degree of obesity based on BMI, waist circumference and waist-hip-ratio
- ❖ To understand the prevalence of obesity in Saudi Arabia
- ❖ To understand methods to prevent obesity in the community
- ❖ To know the common causes of obesity in the community
- ❖ To recognize common health problems associated with obesity
- ❖ To understand the evidence based approach to reducing weight (exercise, dieting, drug treatment, and bariatric surgical intervention)
- ❖ To understand the roles of health team, medical students, and school health professionals in addressing the problems of obesity in the community

*Reference:*

*Oxford handbook of General practice*

#### **2. Common Psychiatric problems**

- ❖ To understand the prevalence of anxiety, depression, and somatic symptom disorder in Saudi Arabia
- ❖ To understand the etiology of anxiety, depression and somatic symptom disorder
- ❖ To understand the clinical features and management of anxiety in a family medicine setting
- ❖ To understand the clinical features and management of depression in a family medicine setting
- ❖ To understand the clinical features and management of psychosomatic illness in a family medicine setting
- ❖ To have knowledge of counseling and psychotherapy in the management of common psychiatric problems in family medicine
- ❖ To understand appropriate time to consult a psychiatrist

*References:*

*Oxford handbook of General practice*

### **3. Smoking and Substance Abuse**

- ❖ Epidemiology of smoking in Saudi Arabia
- ❖ Risks of smoking (Morbidity and Mortality)
- ❖ Effect of passive smoking on pregnancy, children, ....
- ❖ Helping the smoker to quit with smoking cessation aids and overcoming nicotine withdrawal symptoms
- ❖ Role of PHC physician “smoking cessation clinic”
- ❖ Update of the smoking cessation medication in pharmacological management
- ❖ Nicotine preparations, Varenicline, Bupropion, .....
- ❖ Factors that lead to substance abuse
- ❖ Highlighting types of substance abuse
- ❖ Method to approach subjects with substance abuse

*References*

*National Institute for Health and Care Excellence Guidelines*

### **4. Changes in Bowel Habits**

- ❖ Define constipation and diarrhea
- ❖ Discuss the definition, etiology and classification of irritable bowel syndrome (IBS)
- ❖ Explain how to diagnose IBS
- ❖ List the alarm symptoms and differential diagnosis
- ❖ Provide a comprehensive management plan and follow up for patients with IBS
- ❖ Recognize when to refer to specialist



- ❖ Demonstrate history taking and physical examination for patients presented with history suggestive of IBS. i.e Role play.
- ❖ **Practical: Examination of the Abdomen, how to perform the examination?**

*References*

*NICE guidelines*

## **5. Breaking Bad News**

- ❖ Reasons communicating bad news is important.
- ❖ Strategy approaches to deliver bad news
  - Getting started
  - What does the patient know?
  - How much does the patient know?
  - Sharing the information
  - Responding to patient and family feelings
  - Planning and follow-up
- ❖ Examples how to break news for reports of cancer, hepatitis C or B, newly discovered diabetes, the result of HIV positive....
- ❖ Role playing / Video

*References*

*Breaking Bad News. Retrieved August 08, 2017, from <http://www.aafp.org/afp/2001/1215/p1975.pdf>*

*Old, J. (2011). Communicating Bad News to Your Patients. Retrieved August 08, 2017, from <http://www.aafp.org/fpm/2011/1100/p31.pdf>*

## **6. Upper Respiratory Tract Diseases**

- ❖ Rhinosinusitis, Pharyngitis, and Otitis Media
  - Etiology
  - Risk factors

- Relevant microbiology & virology
  - Important of historical clues and clinical findings
  - How to differentiate between viral & bacterial etiology
  - Diagnostic tests and imaging
  - Management (symptomatic, antibiotic choice, antiviral therapy)
  - Prevention and complications
- ❖ Allergic rhinitis
    - Definition & classification
    - Assessment of severity & triggers
    - Allergy testing
    - Allergic rhinitis treatment

*References*

*Oxford GP handbook, AFP journal, IDSA guidelines, MOH MERS CoV guidelines*

**7. Approach to the patient with Back pain**

- ❖ Common causes
- ❖ Diagnosis including history, Red Flags, and Examination
- ❖ Brief comment on Mechanical, Inflammatory, Root nerve compression, and Malignancy
- ❖ Role of primary health care in management
- ❖ When to refer to a specialist
- ❖ Prevention and Education

*Practical: Approach to perform musculoskeletal examination of back and lower limbs*

*References*

*NICE guidelines*

**8. Sexually Transmitted Infections**

- 1- List of common sexually transmitted infections
- 2- Method to take a sexual history and risk factors.

3- Discussion about the differential diagnosis of:

- Vaginal and urethral discharge
- Ulcerative and non-ulcerative genitalia
- Pelvic pain and dysuria

4- List of the possible sexually transmitted infections among heterosexual and homosexual person

5- Investigation, diagnosis and management of sexually transmitted infections.

6- Methods of prevention

7- Complications of sexually transmitted disease.

8- Dermatological pictures of different sexually transmitted infection

*References*

*NICE guidelines*

*British Association of Sexual Health and HIV*

## **9. Osteoporosis**

- ❖ Definition of Osteoporosis and Osteomalacia / Rickets
- ❖ Highlight dangers of Vitamin D deficiency
- ❖ Prevalence of Osteoporosis in Saudi Arabia and worldwide
- ❖ Factors leading to Osteoporosis and Vitamin D deficiency
- ❖ Methods patients could be affected
- ❖ Common fractures with osteoporosis
- ❖ Vitamin D and Comorbidities
- ❖ Diagnosis through:
  - X- Ray
  - Role of DXA and how to interpret Normal, Osteopenia [Grades] and Osteoporosis
  - Biochemistry
- ❖ Management: (Osteopenia and Osteoporosis)
  - Prevention and advice
  - Role of Vitamin D and Calcium

- Vitamin deficiency during pregnancy
- Role of medications, such as Alendronate, ... to treat osteoporosis

*References*

*NICE guidelines*

*UpToDate*

## **10. Women's Health**

Students should focus on disease prevention, health promotion, and periodic health evaluation for women, which include:

- 1- Screening for tobacco use, alcohol misuse, intimate partner violence, dyslipidemia, diabetes, blood pressure and depression.
- 2- Use of Aspirin for primary prevention for CVD. Risks and unique presentations of CVD in women
- 3- Preconception and contraception counseling of premenopausal women
- 4- Counseling of high-risk sexually active women to reduce the risk of sexually transmitted infections. Screening of chlamydia, gonorrhea, and syphilis
- 5- Screening of cervical cancer, breast cancer, colorectal cancer, and osteoporosis
- 6- Recommended immunizations for women.
- 7- Counseling for menopause

## **11. Adolescent health**

- ❖ Define adolescent age: World health organization definition
- ❖ Understand adolescent's physiological and behavioral characteristics
- ❖ Recognize the importance of adolescent health
- ❖ Determine adolescent health problems: physical, psychological and social problems
- ❖ Recognize common adolescent health problems in Saudi Arabia:  
Retrieved from available evidence-based studies

- ❖ Understand the comprehensive approach to common adolescent health problems in primary health care
- ❖ Understand the role of family, school and community in adolescent health care

### *References*

*Adolescents: health risks and solutions: WHO Retrieved May 08, 2017, from <http://www.who.int/mediacentre/factsheets/fs345/en/#>*  
*-Oxford handbook of General practice*

## **12. Maternal and Child health**

- ❖ Health behaviors and health systems indicators that affect the health, wellness, and quality of life of women, children, and families.
- ❖ Factors affecting pregnancy and childbirth, including preconception health status, Age, access to appropriate preconception and interconnection health care, and poverty
- ❖ Health risks that include hypertension and heart disease, diabetes, depression, genetic conditions, sexually transmitted diseases (STDs), inadequate nutrition, unhealthy weight, tobacco use and alcohol abuse
- ❖ Social and physical determinants of maternal health
- ❖ Social and physical determinants of infant and child health
- ❖ How to improve the health and well-being of women, infants, children, and families

### *References*

*Centers for Disease Control and Prevention (CDC)*  
*World Health Organization*

## **13. Screening and Prevention**

- ❖ To define screening/prevention and its uses in family practice
- ❖ To understand the criteria for screening tests

- ❖ To identify screening types and examples of targeted people for each type
- ❖ To identify appropriate approaches for prevention and screening of the common problems in primary care
- ❖ To explain pros and cons of screening
- ❖ To justify the rationale for selection of a screening test with practical case /condition. Examples include Ca. breast, Ca. colon, Ca. prostate cancer,.....

*References: NICE Guidelines*

*Oxford Hand Book of General Practice 4<sup>TH</sup> Edition.*

## Team Based Learning

A method of learning aiming to encourage students to participate in the teaching sessions focusing on more than one group contrary to student-led-seminar that focuses on only one group. Students should be accountable for pre-class preparation. The topics included in these activities are:

- Diabetes Mellitus
- Hypertension
- IHD, Dyslipidemia and CV Risk Assessment
- Bronchial Asthma
- Approach to a Patient with Headache

Four components of TBL are:

- ❖ Permanent student teams
- ❖ Readiness assurance test
- ❖ Application activities
- ❖ Timely feedback

### **How is a typical TBL session conducted?**

#### **A. Pre-session preparation**

Students will study the assigned materials and prepare before the TBL's session

#### **B. First step {Readiness Assurance} (45 minutes)**

1. The students are divided into groups.
2. ***The instructor will start the session by distributing the Pre-Test of MCQ, short answers, fill the gap, ... as a quiz.*** (Readiness

Assurance Process (**RAP**) will be answered by individual students and collected by the instructor. Name and Computer No. are recorded, and will be marked 1 out of 2.

3. Then students take the same the test again as a team, and come to a consensus on the answers.
4. The answers will be discussed by students' **team** member
5. Students receive **immediate feedback** on the team test.

### **C. Second step (45 minutes)**

6. The instructor will distribute the **clinical cases** relating to the objectives of the session. All groups will be responsible for the same case.
7. A time will be given to the groups to answer the questions relating to cases.
8. Each group will start to **discuss the case** and **comments** will be raised from the groups (During the discussion, the case is presented on screen). The tutor may add comments after exhaustion of all teams' discussion.

### **D. Third step (30 minutes)**

9. **The rest of the 30 minutes could be used by the tutor for a presentation to highlight the important points discussed in this session and especially those the students do not understand.**



## Objectives of Team Based Learning:

### 1. Diabetes Mellitus

- ❖ Epidemiology of Diabetes in Saudi Arabia and worldwide
- ❖ Diagnosis of diabetes, recent guidelines for diagnosis and classification
- ❖ Screening for diabetes
- ❖ Highlight on pre-diabetes and prevention of diabetes complications
- ❖ Approach to a diabetic patient in a clinic
  
- ☐ Role of diabetes team in management of diabetes and **Goals** to be achieved in managing HbA1C, LDL, HDL, Trig. and for Blood Glucose
  
- ☐ Important aspects of the clinical examination, focusing on LL examination, Eye, ...
  
- ☐ Essential Investigations (regular visits and annual medical checkup)
  
- ☐ Update in Management of type 2 diabetes that includes education, life style modification, role of diet and exercise
  
- ☐ Highlights for oral medications like Biguanides, Sulphonylurea, Glitazones, Incretins, DPP 4 inhibitors, Meglitinides, Liraglutide, Insulin types
  
- ☐ Annual medical check up
  
- ☐ **Practical: Examination of the lower limbs in a diabetic patient.**  
**Method of Examination**  
*References*  
*American Diabetes Association (ADA), are issued and updated every year. January 2017*

### 2. Hypertension

- ❖ Epidemiology in Saudi Arabia
- ❖ Diagnosis of hypertension, and recent guidelines

- ❖ Describe the epidemiology of hypertension in Saudi Arabia.
- ❖ Discuss the reasons to control hypertension and the measures of prevention.
- ❖ Outline the diagnosis of hypertension based on recent guidelines.
- ❖ Distinguish the different methods for diagnosis of hypertension such as measurement, role of “Ambulatory BP Monitoring” ABPM, Home monitoring).
- ❖ Provide a comprehensive approach for hypertensive patient in clinic
- ❖ List the risk factors of hypertension.
- ❖ List the essential Investigations (Routine and Optional, especially for young)
- ❖ Recognize the target organs damage (TOD)
- ❖ Discuss the management of hypertension, non-pharmacological and pharmacological and focus on certain chronic illnesses like Diabetes, IHD, Stroke, heart failure,
- ❖ Compare the choices of antihypertensive medication and its indications.

▣ **Practical: Examination of CV system, and how to do BP measurement?**

*References: JNC 8, NICE guidelines*

**3. CVD, Dyslipidemia and Risk Assessment of cardiovascular diseases**

- ▣ Describe the pathogenesis and etiology of coronary artery disease
- ▣ Discuss the primary prevention of cardiovascular disease (CVD)
- ▣ List the CVD risk factors
- ▣ Compare various CVD risk assessment tools
- ▣ Provide a comprehensive management for patients with acute coronary syndrome (ACS)
- ▣ Define the goals of LDL, HDL and triglycerides to be achieved.
- ▣ Discuss the AHA/ACC 2013 guidelines for management of dyslipidemia

- ❑ Recognize the medications for high cholesterol e.g., statins and ezetimibe
- ❑ Recognize the medication for high triglyceride e.g. fibrates, nicotinic Acid and omega-3

*References:*

*American Heart Association (AHA)*

*American College of Cardiology (ACC) 2013*

#### **4. Headache**

- ❖ Common types of a headache “A migraine, Tension headache, Cluster headache”
- ❖ Clinical approach to patient with a headache
- ❖ Red Flags and indications for further investigations, like CT brain, and MRI
- ❖ A brief comment on migraine, tension headache, cluster headache, benign intracranial tension, temporal arteritis, space-occupying headaches.
- ❖ Roles of primary health care physician in the management of “Drug treatment and Prophylaxis,” like propranolol, topiramate, amitriptyline, ....
- ❖ Types of investigations to be requested if needed
- ❖ When to refer to a specialist

*References*

*Canadian Guideline for primary care management of a headache In adults (Canadian Family Physician) Retrieved August 8, 2017 from*

*<http://m.cfp.ca/content/61/8/670.full.pdf>*

#### **5. Bronchial asthma**

- ❖ Diagnosis of Asthma in children and adults
  - ❑ History
  - ❑ Clinical
  - ❑ Use of Peak Expiratory Flow Rate (PEFR) for diagnosis

- ☐ Investigations “PFT; Spirometry”
- ❖ Trigger factors of Asthma
- ❖ Highlight on COPD “Diagnosis by PFT and Treatment”
- ❖ Assessing the severity of Asthma
- ❖ Exercise induced asthma (triggers and management)
- ❖ Management of Asthma
  - ☐ Rescue management
  - ☐ Prophylaxis
  - ☐ How to use different types of inhalers
  - ☐ Asthma education for patient about method to use inhalers properly

**☐ Practical: Examination of the Respiratory system (chest). Process of Examination**

*References*

*GINA guidelines*

*Downloads/GINA\_Pocket\_2015- 1%20(1).pdf*

*(Pocket Guide for Asthma Management and Prevention)*

## Case Based Discussion (CBD) and EBM

**CBD** is actively encouraged during the **Log Diary Tutorials**.

- First, all students will be divided into two main groups (A and B)
- The students will be divided into groups and into 6 sessions.
- Each group will be in a separate room under the guidance of a tutor.
- Every student will present the case from his/her log diary **for 15 minutes** as seen in the clinics
- For each case presented, student will formulate and answer PICO/EBM question related to the case and present it for 5 -10 minutes
- Every student will be evaluated based on the evaluation form

**The “CBD” selected cases will be presented through**

**PowerPoint as follow:**

1. Problem (Scenario) selected from the PHC Clinics, followed by Differential Diagnosis / most and least likely
2. **History taking** “Appropriate questions to be raised to make differential diagnosis more or less likely”
3. Problem Reformulation, according to available history, **then proceed to**
4. **Examinations including vital signs** “physical signs of the positive findings and negative findings related to the problem to be mentioned”
5. Refinement of differential diagnosis “most likely” **then proceed to**
6. **Investigations** “all investigations have to be presented (Do not say normal, present all available investigations done for the patient) and if

- there are still appropriate investigations not requested, it should be mentioned.”
7. Refinement of differential diagnosis “most likely” and mostly the final diagnosis is reached. **then proceed to**
  8. **Management plan** “which diagnosis that has already have been done in the clinic and what is the proper evidence based management to be applied to the patient?” (education, **treatment**, **further investigations**, **referral**, and **follow up**)
  9. **EBM presentation** based on formulated clinical question (PICO)
  10. The time allocated for each presentation is **20 minutes**.

**The Tutor** is expected to:

- Guide the students to select clinical cases commonly encountered in general practice.
- Contribute when appropriately to the discussion.
- Provide a constructive feedback to the student after the presentation
- Give a five-minute brief regarding what has been done and presented by students.
- Use 10-mark grade to evaluate every student based on the evaluation form

### **List of Suggested Health Problems to be encountered in Case Based Discussion (CBD)**

1. URTI "A sore throat, Allergic rhinitis, Sinusitis and Otitis Media
2. Bronchial Asthma, and COPD
3. Patient with a cough
4. Dyspepsia, PUD, GERD, and Cholecystitis
5. Irritable Bowel Syndrome

6. Abdominal pain for investigation
7. Diarrhea for investigation
8. Bleeding per rectum; Hemorrhoids, Anal fissure, CA Colon, Polyps, and Ulcerative colitis
9. Liver problems, Fatty liver, HBV, HCV, and Raised liver enzymes
- 10.UTI, Cystitis, pyelonephritis, and Urethral discharge
- 11.Benign Prostatic Hyperplasia
- 12.Renal Stones
- 13.Chest pain, SOB for investigation
- 14.Joint pains, Sports injury, OA, RA, and SLE
- 15.Skin Rash, Acne, Eczema, Warts, Hypo and Hyperpigmentation
- 16.Hair fall
- 17.Thyroid disorders, Hyperthyroidism, Hypothyroidism, and Thyroid nodule
- 18.Breast lump
- 19.Headache
- 20.Diabetes, Nephropathy, and Neuropathy
- 21.Hypertension
- 22.Oedema / Swelling of lower limbs
- 23.Anemia, IDA, SCA, Normocytic, and Macrocytic
- 24.Polycythemia; Primary and Secondary
- 25.Back pain, Mechanical, and Root nerve compression
- 26.Patient with low mood, and anxiety,
- 27.Short stature
- 28.Osteoporosis, Vitamin D deficiency, Rickets, and Osteomalacia
- 29.Vaginal discharge, Bleeding
- 30.Menstrual cycle irregularities, Dysmenorrhea, and Menopause
- 31.Dizziness, and Tinnitus for investigation
- 32.CVA, TIA, and peripheral vascular disease
- 33.Obesity
- 34.Others related to Family Medicine Practice

## Directed Self-Learning (DSL)

The students will choose **5 topics**, other than listed in the schedule.

The objectives of each topic will be presented by students, which will be revised by the tutor. Three topics will be chosen by the organizer to be included in the MCQs' examination.

## Clinical Attachment

Every student is assigned to a PHC center (Ministry of Health) under the supervision of the assigned primary care supervisor and preferred centers from **Board Certified Physicians**.

The student will spend **TEN** clinical sessions morning/afternoon in King Saudi Medical City.

Every student will spend **FOUR** clinical sessions' morning/afternoon in PHC Centers of Ministry of Health.

### **The student in the clinical attachment is expected to:**

- Attend the clinic and encounter patient plan for investigation, management, skills of taking BP, technique of inhalers, PEFR for asthmatic, glucose level checked by glucometer
- Learn to perform general and specific examination under supervision
- Observing the planning for care and follow-up in the clinic
- Be involved in communicating information to patients
  - Observe the different services provided to patients in PHC Centers like:



- ❖ **Pharmacy:** read the prescription, and assist the pharmacist to bring the appropriate medicines
- ❖ **Lab.** Observe the blood extraction, and safety measures
  
- ❖ **Well baby clinic:** vital signs for babies and children and record them in files "Growth Chart", schedule of vaccination and types of vaccines
  
- ❖ **Antenatal clinic:** follow up of pregnant, weight, blood pressure, fundal height, fetal sounds, and required investigations

- Attend and participate in clinical unit meetings and case presentations. Attend CME meetings especially in PHC clinics of KKUH held on Tuesday from 1:00 to 4:00 pm.

- Participate in Activities of PHC center e.g., Health education, Immunization in the Kingdom, Antenatal Care, Mini-clinics (chronic diseases like DM, HTN ...), Health Sanitarian ...

## Assessment

### **I. Continuous Assessment: (40 marks)**

1. Student Led Seminars ..... (6 marks)
2. Case Presentation Discussion +EBM... (10 marks as 5+5)
3. Team Based Learning..... (10 marks, Each 2 marks)
4. Data Interpretation (Written Exam) ..... (10 marks)
5. ECG interpretation ..... (4 marks)

### **II. Final Assessment/Summative: (60 marks)**

1. Multiple Choice Questions (60 MCQ) ..... (30 marks)
2. Objective Simulated Clinical Examination (OSCE) (25 marks)
3. Clinical attendance and Log book ..... (5 marks)

**Total: 100 marks**

## **Learning Resources**

### **Prescribed:**

#### **1. Oxford Handbook of General Practice**

Chantal Simon, Hazel Everitt, Françoise van Dorp

Fourth Edition

### **Recommended:**

#### **1. Clinical methods: A General Practice Approach – Robin Fraser.**

Third Edition

#### **2. Practical General Practice**

#### **Guidelines for Effective Clinical Management**

[Alex Khot MA MB BChir DCH](#) (Author), [Andrew Polmear MA MSC](#)

[FRCP FRCGP](#) Sixth Edition, ISBN 978 0 7020 3053 6

### **Recommended Scientific Websites:**

- NICE organization for guidelines ([www.nice.com](http://www.nice.com))
- Bandolier ([www.medicine.ox.ac.uk/bandolier](http://www.medicine.ox.ac.uk/bandolier))
- Cochrane Database ([www.cochrane.org](http://www.cochrane.org))  
([www.cochranelibrary.com](http://www.cochranelibrary.com))
- Clinical Evidence ([www.clinicalevidence.bmj.com](http://www.clinicalevidence.bmj.com))
- American Family Physician ([www.aafp.org](http://www.aafp.org).)
- Australian Family Physician ([www.racgp.org.au/afp](http://www.racgp.org.au/afp))
- British Medical Journal ([www.bmj.com](http://www.bmj.com))
- American Diabetes Association ([ADA](#))

- **Canadian** Hypertension Society
- **GINA** guidelines for Bronchial Asthma
- **UpToDate**

## **Guidelines for Presentation**

### **SPEAKER**

- ❖ Be relaxed and confident with clear voice and language
- ❖ Good eye contact and do not speak to the screen
- ❖ Sense of humor
- ❖ Changing style, bodily actions and gestures will help
- ❖ Stick to your time and break in between if longer
- ❖ Know your audience, their level of knowledge and keep them attentive.
- ❖ Rehearse your presentation in advance, well-prepared and updated with the topic.

### **I. TECHNIQUE and FACILITIES**

- ❖ Choosing appropriate facilities according to time and presentations
- ❖ Arrange before the time and check audio-visual aids
- ❖ Correct the spelling and avoid unknown abbreviations
- ❖ Slides of PowerPoint presentation must be clear and not dull.
- ❖ Allow animations in your presentation if appropriate and will help your presentation.
- ❖ The presentation must be legible and avoid the crowd slide if possible except for diagrams or pictures with labels.

### **II. CONTENT of PRESENTATION**

- ❖ Title is brief and clear
- ❖ Introduction, what are you going to do, give an overview of whole subject.

- ❖ Objectives of presentation
- ❖ Well and systematically arranged.
- ❖ Allow questions or interruption and make it clear at the end of the presentation.
- ❖ Your last words must be best remembered
- ❖ Summarize important ideas to stimulate the audience

Messages to be taken home if possible

## **Important Remarks:**

### **1. Attendance:**

**All Tutors must take the attendance by calling names of students and tick in front of the name**

According to the University regulations and instructions, we would like to inform you that, each student must cover at least 75% of the attendance in lectures. Those who do not achieve this percentage level will not be allowed to attend the FINAL EXAMINATION. The first warning letter will be issued to any student who does not attend 20% of lectures (about 7 lectures). If the student continues not to attend the lectures and his/her absence reaches 25%, the second letter will be directed to Vice Dean, Academic Affairs to disallow the student from attending the final examination.

### **2. Warning:**

As it is not a sign of courtesy and keenness to be non-punctual because this can add to bad effect on the teaching course plan, please try to enter the class before the teacher starts his lecture. You should know that if you arrived 15 minutes late after the lecture starts, the teacher might allow you to attend, however, your name will be taken, and your signature will be canceled making you considered being absent for the lecture.

### **3. Courtesy:**

If you have problems with getting to a session, please discuss it with your tutor in advance or with the organizer.

#### 4. Final Written Examinations

Every student should have **Calculator**, **2 Pencils**, **Ball Pen**, **Sharpener** and **Eraser**.

**Cell Phones** are **NOT Allowed** during the Exam



## Appendices

### Lecture Evaluation Form

Please rate the session on the scale indicated. Your comments are most appreciated.

Presenter : Date : Title :	Unacceptable	Needs work	Good	Excellent	Outstanding
	1	2	3	4	5
<b>The Topic</b>					
The choice of topic was relevant to me					
<b>The Presenter</b>					
Enthusiasm					
Interaction with the audience					
<b>The Presentation</b>					
Information was presented in an organized manner					
Used case-based methods; related information to practical problems					
Quality of audiovisual aids					
<b>The Content</b>					
Volume and complexity of the information was appropriate					
Related content to current evidence in the literature					

What were the two best things about the session?

What two things about the session would you like to see improved?

Other comments:

Overall, how would you rate this event?

1- unacceptable	2- needs work	3- Fair	4- Good	5- Very Good	6- Excellent	7- Outstanding

**Patient Log**

Name: \_\_\_\_\_

Comp. Number: \_\_\_\_\_

Day: .....

Date: / /

Morning ( ) / Afternoon ( )

Sr. No	Sex	Age	Chief Complaint	Diagnosis	<u>MANAGEMENT</u>		
					Treatment	Investigation	Referral
			Med. Record:				
			Med. Record:				
			Med. Record:				
			Med. Record:				
			Med. Record:				
			Med. Record:				
			Med. Record:				
			Med. Record:				

Name of the Supervisor: Dr. ....

Signature: .....

**Student Led Seminar “Evaluation Form”**

**Tutor:** .....

**Date:**.....

**Title:** .....

<b>Ser.</b>	<b>NAME of STUDENT</b>	<b>COMPUTER No.</b>	<b>Content 2 Marks</b>	<b>Presentation 2 Marks</b>	<b>Clinical Part 2 Mark</b>	<b>Total 6 Marks</b>
<b>1</b>						
<b>2</b>						
<b>3</b>						
<b>4</b>						

**Evaluation is based on:**

**Content:** updated, evidence based with reference to guidelines, covered the objectives with appropriate References.

**Presentation:** well organized, time was well managed, clear, stimulating and confident with good eye contact.

**Clinical Consultation Part:** Cases for discussion, Role play, video, ... ” Well organized, relevant, patient centered and stimulating.

**Note:** If any student came late for presentation or power point is not ready e.g. on desktop or not on flash, **1 Mark will be cut.**

**Case Based Discussion “Evaluation Form”**

**GROUP:**

Ser.	Name of Student	Comp. No.	CONTENT (Clear, Legible, organized and relevant actual data)  <b>2 MARKS</b>	Related to Family Practice/ Primary care  <b>1MARK</b>	PRESENTATION (Confident, Clear Voice, Good eye contact, Stimulating and Patient centered)  <b>2 MARKS</b>	TOTAL <b>5</b> MARKS
1.						
2.						
3.						
4						

**TUTOR:** .....

**DATE:**     /     /14

**EBM Presentation**

**Tutor:** .....

**Date:** / / 14

No	Name	Comp. No	Quality of Question 1			Why chosen? 1			What did student do to answer it? 2			What are the findings and Conclusion? 1			Total 5 Marks
			Done 1	Partially Done 1/2	Not Done 0	Done 1	Partially Done 1/2	Not Done 0	Done 2	Partially Done 1	Not Done 0	Done 1	Partially Done 1/2	Not Done 0	
1															
2															
3															
4															

If any student came late for presentation or power point is not ready e.g. on desktop or not on flash, **1 Mark will be cut.**

**Department of Community and Family Medicine / Comm-421**

**(Clinical setting / SUPERVISOR ASSESSMENT)**

**Hospital / Health Centre:** \_\_\_\_\_

**Student's Name:** \_\_\_\_\_

**Computer No.**

\_\_\_\_\_

		<b>Excellent 9 - 10</b>	<b>V. Good 8 - 8.5</b>	<b>Good 6.5 - 7.5</b>	<b>Fair ≤ 6</b>
1.	Attendance				
2.	Professionalism				
3.	Skills of History /Communication				
4.	Management plans				
5.	Fund of knowledge				
6.	Overall Assessment	<b>/ 50</b>			

**Supervisor Name: Dr.** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date**    /    /