## منهاج الدورة التدريبية للصحة والسلامة المهنية والأمن البايولوجي لطلبة الدبلوم العالي في اختصاص طب الاسرة للعام الدراسي 2020-2021

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أ.م.د. لجين انور الخزرجي مقرر الدراسات في فرع طب الأسرة والمجتمع

## First Course: Family Medicine Basic Knowledge and Skills: Duration 16 weeks (6 Credits)

#### • Introduction:

Many factors in the community affect the health status of the patients. The family physician should be equipped with the knowledge and skills concerning the measuring and identifying diseases & health problems of the individuals and community.

#### • Objectives: At the end of this course student should be able to:

- 1) Identify the common public health problems, their distribution, trends, and measures for their prevention and control.
- 2) Diagnose and investigate health problems and health hazards in the community.
- 3) Monitor health status to identify and solve community and family health problems.
- 4) Recognize the importance of prevention, health promotion and community health.
- 5) Inform, educate, and empower people about health issues.
- 6) Mobilize community partnerships and action to identify and solve health problems.
- 7) Demonstrate empathy and humane approach towards client and exhibit interpersonal behavior in accordance with the societal norms and expectations.
- 8) Identify the role of social & environmental factors in health.
- 9) Recognize the importance of good nutrition in maintaining community & individual health.
- 10) Identify the social factors in health & disease with a special emphasis on lifestyle factors.
- 11) Define the role of the family physician, abilities and challenges in community work.
- 12) Function as an effective leader of a health team engaged in health care, and training to find new insights and innovative solutions to health problems
- 13) Understand the steps in writing and reading research paper and develop the ability to find and extract the evidence.
- 14) Know the principles and clinical implications of epidemiology and evidence-based medicine

## Course Description:

Courses	Credits
1- General Epidemiology& Research Methodology	1.5
2- Biostatistics + Computer	1
3- Infectious Diseases	1
4- Nutrition & Non Communicable disease	0.5
5- Primary Health Care and Communication Skills	0.5
6- Introduction to Family Medicine + Communication skills	0.5
7- Health management & Social Medicine	0.25
8- Occupational and Environmental Health	0.25
Total	6

## Course Details:

#### I- General Epidemiology + Research Methodology & Ethics

#### A. Lectures

- 1- Introduction to Preventive Medicine & Epidemiology
- 2- Concept of Health, Disease & prevention
- 3- Measures of Morbidity
- 4- Measures of Mortality
- 5-Screening
- 6-Principles of Association & Causation
- 7- Investigation of Outbreak & Epidemic
- 8- Surveillance
- 9- Introduction to Research + Writing Manuscript
- 10- Descriptive Design Studies
- 11- Analytic Design studies (Case control & cohort)
- 12-Interventional Design Studies
- 13- Ethics & Errors in Medical Research
- 14- Evidence Based Medicine (Diagnosis)
- 15- Evidence Based Medicine (Treatment)
- <u>B. Practical sections:</u> Practical training with scenarios in Health statistics and disease trends in Iraq, MoH annual reports 2013

#### II- Biostatistics & Computer

#### A. Lectures

- 1- Introduction to Biostatistics
- 2- Variables: Identification & Measurements
- 3- Sample & Population
- 4- Tables & Graphs Constriction
- 5- Measures of Central Location & Dispersion
- 6- Normal Distribution
- 7- Z distribution & tests
- 8- T distribution & tests
- 9- Chi squire test
- 10- Non Parametric tests
- 11- Hypothesis testing I
- 12- Hypothesis testing II
- 13- Estimation of Confidence Interval

- 14- Correlation
- 15-Regression
- B. <u>Practical sections:</u> Practical training with Health scenarios and data analysis using computer software MINI TAB version 16

#### III-Infectious (Communicable) Diseases:

- 1- Introduction to communicable diseases
- 2- Diseases controlled primarily by vaccination: Measles, mumps, rubella
- 3- Diseases controlled primarily by vaccination: Pertussis, tetanus, diphtheria
- 4- Diseases controlled primarily by vaccination: influenza, Varicella & herpes zoster
- 5- Diseases controlled primarily by vaccination: polio, pneumococcal infection
- 6- Epidemiology and trends in sexually transmitted diseases
- 7- HIV and AIDS
- 8- Infections spread by close personal contact: Viral hepatitis,
- 9- Infections spread by close personal contact: meningitis, tuberculosis
- 10-Diseases spread by food and water: Typhoid fever, paratyphoid, shigellosis,
- 11- Diseases spread by food and water: cholera, Giardia, Amebiasis
- 12- Viral diseases transmitted primarily by arthropod: Hemorrhagic fever, leishmaniases, malaria,
- 13- Diseases transmitted primarily from animals to humans: Rabies, Anthrax, Brucellosis, Toxoplasmosis .....
- 14- Worms infestations: Nematodes (ascaris, anchylestoma), Cestode infection (Hydatid disease), Trematodes (Schistosomiasis).
- 15- Nosocomial infection + Health advice to international travelers.

#### IV-Chronic (Non-Communicable) Diseases:

- 1- Introduction to Non communicable diseases + Risk factors
- 2- Epidemiology of Hypertension
- 3- Epidemiology of cardiovascular disease
- 4- Rheumatic Fever
- 5- Epidemiology of diabetes mellitus
- 6- Epidemiology of tumors
- 7- Chronic obstructive pulmonary disease (COPD) caused by smoking tobacco
- 8- Trauma
- 9- Obesity
- 10- Alcoholism + addiction

#### V- Primary Health Care, and Communication Skills

- 1) Introduction to Primary Health: Concepts &b Elements
- 2) Maternal Health Care
- 3) Safe Motherhood
- 4) Child Health Care
- 5) Vaccination
- 6) Breast Feeding
- 7) Family Planning
- 8) Health Education
- 9) School Health
- 10) Integrated Management of childhood illness IMCI: including CDD & ARI
- 11) District Team Problem Solving
- 12) Mental Health
- 13) Geriatric Medicine
- 14) Adolescence Health
- 15) Relation between disease, family, individual, community
- 16) Audit
- 17) Screening Programs at Primary Health Care Level
- 18) Communication skills: Introduction, Types of communication
- 19) Communication skills: Active listening, Counseling
- 20) Medical Ethics: Introduction, International code of ethics
- 21) Medical Ethics: Ethical dilemma in medical practice, End of life & Euthanasia
- 22) Medical Ethics: Patient centered approach, Sick leave
- 23) New programs in PHC

#### VI- Nutrition in public Health

- 1) Nutrition: Introduction
- 2) Nutrition: Nutritional Assessment
- 3) Nutrition: Types & components of Food
- 4) Nutrition: Nutritional Deficiency Diseases
- 5) Nutrition: Nutrition of Vulnerable Group
- 6) Nutrition of Specific Disease
- 7) Nutritional Surveys in Iraq

## VII- Occupational and Environment Health

- 1- Introduction to occupational Health & Safety
- 2-Occupational Physical Hazards
- 3- Occupational Chemical Hazards
- 4- Occupational Biological Hazards
- 5- Ergonomics & Work-related stress

- 6- Introduction to environmental Health
- 7- Air pollution
- 8-Water pollution
- 9- Food Sanitation
- 10-Global environmental Pollution

#### VIII- Social Health & Health Management

- 1) Introduction to Social Medicine
- 2) Social Determinants of Health
- 3) Health-seeking behaviour
- 4) Violence
- 5) Social Rehabilitation
- 6) Introduction to Health management
- 7) Leadership & Team Building
- 8) Planning in Health
- 9) Program Evaluation
- 10) Disaster Management

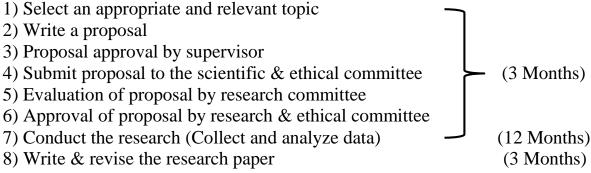
#### IX-Introduction to Family medicine

- 1) Introduction to Family Medicine
- 2) Five Star Doctors
- 3) Referral System
- 4) Doctor Patient Relationship
- 5) Communication Skills in Primary Health Care
- 6) Breaking Bad News
- 7) Medical Ethics
- 8) Patient Compliance
- 9) Hospital Care Versus Primary Care
- 10) Management in Family Practice
- 11) Somatization
- 12) Filing System in Family Practice
- 13) Screening Tests and Follow up in Family Practice
- 14) Future of Family Medicine
- 15) Social and Psychological Care in Family Practice

#### Learning Methods:

- 1) Interactive lectures
- 2) Group work
- 3) Field visits
- 4) Seminars
- 5) Computer Lab

## General guidelines for conducting research



- 9) Research approval by supervisor
- 10) Submit research to the Community & family medicine Department.
- 11) The research would be revised by a scientific evaluator (1Month)
- 12) Do the corrections and recommendations of the scientific evaluator
- 13) Submit three physical and one electronic copies of the paper to the research committee
- 13) Presentation and defense to a panel of three evaluators (internal and external)
- 14) Evaluation of the research (Final Degree)

#### The supervisor is responsible the following:

- 1) Guiding residents in selection of research topics
- 2) Reviewing and approving the research proposal at timeline schaduale
- 3) Regularly supervising residents according to timeline (once per month/resident)
- 4) Documenting all supervision sessions in the Research Progress Form
- 5) Reporting all supervisory sessions with residents to research committee by using the supervision form in this document
- 6) Reviewing and approving the final copy of the proposal and manuscript
- 7) Signing the research submission letter stating that the research was conducted under his/her supervision and guidance
- 8) Attending the presentation and defense of his/her trainee
- 9) Participating in evaluation of proposals and research papers submitted to research committee

# Common Surgical Conditions: Course II Duration 18 weeks (6 Credits)

## • Introduction:

Family Medicine provides initial, continuing comprehensive and coordinated care for individuals, families and communities in the Primary Health care centers. A significant proportion of presenting problems in primary care setting are related to the discipline of surgery (General surgery & other subspecialties). Primary care doctors are required to be competent in initial assessment and management of common surgical problems in clinical setting.

## • <u>Objectives:</u> At the end of this course (rotation) student should acquire knowledge, skills, and demonstrate competence in:

- 1) Demonstrate a thorough understanding of relevant basic sciences, including path physiology and the microbial basis of common surgical conditions & problems
- 2) Perform a complete clinical patient assessment including history and relevant physical examination
- 3) Formulate appropriate provisional diagnoses and alternative diagnoses of key presenting problems and underlying conditions
- 4) Order appropriate and selective investigations and interpret the findings in the context of patient problems
- 5) Be able to perform minor surgical & orthopedics procedures and interventions
- 6) Demonstrate competence in identifying the normal wound healing process, measures to prevent wound dehiscence or infection, and wound management
- 7) Demonstrate knowledge of common complications of surgical interventions such as fever, hemorrhage, atelectasis, pulmonary embolism, or deep vein thrombosis
- 8) Recognize and manage common orthopedic problems and emergencies including management of common fractures management as well as prompt referral to the specialist of advanced cases
- 9) Recognize and manage common ENT problems and emergencies, including the use of auroscpe in ear examination.
- 10) Recognize and manage common ophlamological problems and emergencies, including the use of opthalmoscope in examining fundi
- 11) Recognize the role of radiological investigation in the diagnosis of common surgical & orthopedic problems
- 12) Demonstrate evidence-based healthcare in patient management
- 13) Identifying serious medical problems which need referral and arranging a proper referral to the most appropriate department and perform appropriate and timely referrals.

## • Process of Training:

- Solution Working on a full time basis as a member of the surgical team, participate in the services and educational activities.
- Priorities to work in outpatient clinics.
- Mastering the common minor surgical procedures and interventions
- Observing the theatre of common surgical conditions intervention
- Procedure Rooms (Endoscopy, Ultrasound, CT Scan, etc.)
- Attending all educational meetings and activities.

## • Learning situation:

- 1) Out-patient clinics of general surgery, Orthopedics, ENT, Ophthalmology & Radiology (most of rotation)
- 2) In-patient (Internal surgical wards)
- 3) Procedure Rooms (Endoscopy, minor surgery theater, etc.)
- 4) Operation Theater
- 5) CME activities

## Course Description:

Courses	Weeks	Credits
1- General Surgery	8	4
2- Orthopedic	4	0.5
3- ENT	2	0.5
4- Ophthalmology	2	0.5
5- Radiology +CVS surgery, Plastic Surgery	2	0.5
Total	18	6

## Common Surgical conditions:

Acute abdomen, Appendicitis, cholelithiasis/ cholecystitis, breast lump/pain, Skin lump/ulcer, Deep vein thrombosis/varicose veins, burns, hemorrhoid, hernia, injuries (wounds, lacerations, etc.), neck pain/mass, thyroid disease, urinary stone, peptic ulcer disease/chronic gastritis, rectal bleeding, Anal fissure/fistula/abscess, benign prostatic hyperplasia, Urinary retention (acute, chronic), Orchitis, Hydrocele

#### • Common Orthopedic conditions:

Fractures in different body parts, Neck pain & Cervical disc disease, Back pain & Sciatica, Osteoarthritis, Synovitis, Septic Arthritis, Tendonitis, Carpal tunnel syndrome, Ankle and knee pain Hip dislocation, Club foot,

## • Common ENT conditions:

Epistaxis, allergic rhino-sinusitis (runny nose, nasal congestion), Neck pain/mass, Vertigo, Dizziness, Tonsillitis, Acute pharyngitis, acute upper respiratory tract infection, Earache, otitis media, otitis externa, ear wax, Deafness/Presbycusis

## • Common Ophthalmological conditions:

Red eye, Refractive errors, strabismus, impaired vision, conjunctivitis, Blepharitis, corneal abrasions, eye injuries, cataract, glaucoma, Keratitis/iritis, Chalazion, Pterygium, Eye Health

## Lists of Skills to be learned:

- 1) Wound management
- 2) Suturing
- 3) Venipuncture
- 4) Arterial puncture
- 5) Injections: ID/SC/IM
- 6) excision of cysts, naevi, lipoma, and other lesions
- 7) Incision & Drainage of abscess
- 8) Foot care
- 9) wedge/partial/total resection of ingrown toe nail
- 10) Insertion of Foley catheters
- 11) Use of Auroscope in drum examination
- 12) Removal of ear wax
- 13) nasal packing
- 14) Use of Opthalmoscope in examining fundi
- 15) Visual Acuity
- 16) Chest x-ray interpretation
- 17) Abdominal US interpretation

#### Educational Notes:

- Residents should not be on call during rotation in the OPD.
- Residents should be released on **Thursday** to complete his/her research work.

## End course Exam:

- Should be done at the end of training course
- Practical Exam (50%): In outpatient ward.
- Theory Exam (50%): 60MCQs questions + 8 case scenarios

# Common Medical Conditions: Course II A Duration 18 weeks (6 Credits)

## • Introduction:

Family Medicine provides initial, continuing comprehensive and coordinated care for individuals, families and communities in the Primary Health care centers. A significant proportion of medical problems which are encountered in primary care practice are related to the discipline of internal medicine. Primary care doctors are required to be competent in initial assessment and management of common medical problems in clinical setting.

## • <u>Objectives:</u> At the end of this course (rotation) student should acquire knowledge, skills, and demonstrate competence in:

- 1) Taking and recording a proper medical history.
- 2) Performing a comprehensive physical examination
- 3) Recognizing the rationale and interpretation of common investigations
- 4) Making accurate diagnosis, and appropriate management of the common medical conditions encountered in Internal Medicine.
- 5) Recognizing the condition, initiate appropriate diagnostic and therapeutic measures for the other less common conditions.
- 6) Identifying serious medical problems which need referral and arranging a proper referral to the most appropriate department and perform appropriate and timely referrals.
- 7) Identifying hazards of drug treatment, drug interactions, and new advances in therapeutics relevant to Internal Medicine.
- 8) Applying the patient-centered model in caring for patients and incorporate lifestyle issues, palliative care, ethical decision-making, and family counseling.
- 9) Demonstrate evidence-based healthcare in patient management

#### Process of Training:

- The residents must work on a full time basis as a member of the internal medicine team, participate in the services and educational activities.
- Residents should rotate in all major medical subspecialties (cardiology, pulmonary, neurology, Rheumatology, etc) available in the teaching hospital.
- Opportunities to work in <u>outpatient clinics</u> should be provided with multidisciplinary approach to caring for illness.

#### • Learning situation:

- 1) Out-patient clinics of Internal Medicine, Dermatology, Rheumatology, Neurology & Endocrinology (most of rotation)
- 2) In-patient (Internal Medicine wards)
- 3) CCU & ICU

- 4) Procedure Rooms (Endoscopy, echo, etc.)
- 5) CME activities

## • Course Description:

Courses	Weeks	Credits
1- General Medicine	10	4
2- Dermatology	2	0.5
3- Rheumatology	2	0.5
4- Neurology	2	0.5
5- Endocrine	2	0.5
Total	18	6

## Content of Training:

The student should demonstrate diagnose and manage the following common signs and symptoms:

- 1) <u>Constitutional and non-differentiated symptoms</u>: Headache, Weakness and Fatigue, Weight loss, Fever, Syncope, Dizziness.
- 2) As related to <u>Cardiovascular System</u>: Chest pain, High or low blood pressure, heart murmur, Leg edema, orthopnea, Irregular rhythm, Palpitation.
- 3) As related to **Respiratory System**: Dyspnea, Cough, hemoptysis, Pleural effusion, pulmonary nodule, wheezing.
- 4) As related to **GIT System**: Heartburn, Epigastric pain, Nausea and vomiting, Dysphagia, Diarrhea, Constipation, Melena, Hematemesis, Abdominal distention, Ascites, Jaundice.
- 5) As related to <u>Genitourinary System</u>: Pyuria, Hematuria, Microalbuminuria, Protienuria, Dysuria, frequency. Urgency, Scrotal Pain, Masses, and swelling, genital lesions.
- 6) As related to <u>Musculoskeletal System</u>: Neck pain, Shoulder pain, Back pain, Hip pain, Knee pain, Foot pain, Arthralgia (s), Arthritis (monoarticular, polyarticular)
- 7) As related to <u>Nervous System</u>: Dizziness and vertigo, Tremor, Seizures, Dementia, Coma, numbness, paresthesia, neuralgia, Migraines.
- 8) As related to **Endocrine System**: Thyroid nodule, Enlarged thyroid, Polyuria, polydypsia, Hypoglycemia, Hyperglycemia, Polyphagia, Weight problem, Hirsutism.
- 9) As related to <u>Hematopoietic System</u>: Anemia, Bruising, Polycythemia, lymphadenopathy, hepatospleenomegaly.
- 10) As related to **Psychiatry**: Hallucination, Delusion, and Flight of ideas.
- ➤ Common and/ or important, or less common medical condition according to the human body:

## **I- Cardiovascular:**

- 1) Coronary Artery Disease

- 2) Congestive Heart Failure
- 3) Essential Hypertension
- 4) Supraventricular tachyarrhythmias
- 5) Valvular Heart Disease
- 6) Peripheral Vascular Disease
- 7) Dyslipidemia

#### Other Less Common conditions:

- 1) Pericardial Disease
- 2) Ventricular arrhythmias
- 3) Cardiomyopathies
- 4) Heart Block

#### II- Respiratory:

- 1) Upper Respiratory Tract Infections
- 2) Tuberculosis
- 3) Pneumonia and Bronchitis
- 4) Bronchial Asthma
- Other less Common conditions:
- 1) Pneumothorax
- 2) Pulmonary Embolism
- 3) Respiratory Failure
- 4) Interstitial Lung Disease
- 5) Lung Cancer

#### III- Central Nervous System:

- ☞ Common and/or Important Conditions:
  - 1) Headache
- 2) Seizure Disorders
- 3) Stroke syndromes
- 4) Bell's Palsy
- 5) Meningitis and Encephalitis
- 6) Parkinson Disease
- Other less Common conditions:
- 1) Dementia
- 2) Multiple Sclerosis
- 3) Trigeminal neuralgia
- 4) Delirium

#### IV- Gastrointestinal Tract.

- © Common and/or Important Conditions:
- 1) Gastroenteritis & other GIT infections
- 2) Peptic Ulcer Disease and H-Pylori
- 3) Irritable Bowel Syndrome
- 4) Gastroesophageal Reflux Disease
- 5) Malabsorption
- 6) Constipation
- 7) Hepatitis
- Other less Common conditions:
  - 1) GI malignancies
- 2) Pancreatitis
- 3) Inflammatory Bowel Disease

#### V- Endocrinology

- © Common and/or Important Conditions:
- 1) Diabetes Mellitus Type 1 and 2
- 2) Obesity
- 3) Thyroid Disease
- Other less Common conditions:
- 1) Pituitary Disease
- 2) Adrenal Disease
- 3) Cushing syndrome

#### VI- Rheumatology

- Common and/or Important Conditions:
- 1) Osteoarthritis
- 2) Acute arthropathies
- 3) Rheumatoid Arthritis
- 4) Chronic inflammatory arthropathies
- Other less Common conditions:
- 5) Polymyalgia rheumatica
- 6) Vasculitis
- 7) Systemic Lupus Erythematosus

#### VII- Renal:

- 1) Cystitis, Urethritis
- 2) Glomerulonephritis
- 3) Pyelonephritis

- 4) Hematuria
- 5) Proteinuria
- 6) Renal failure
- Other less Common conditions:
  - 1) Renal cell tumors
- 2) Nephrotic syndrome

#### VIII- Hematology

- ☞ Common and/or Important Conditions:
  - 1) Anemia
- 2) Bleeding disorders
- Other less Common conditions:
- 1) Myeloproliferative disorders
- 2) Leukemia
- 3) Lymphoma

## IV- Integumentary system (Dermatology)

- - 1) Acne
  - 2) Urticaria, Eczema & Dermatitis
  - 3) Boils, Impetigo, Cellulites
  - 4) Herpes simplex
  - 5) Herpes zoster
  - 6) Ulcers
  - 7) Scabies
  - 8) Drug eruptions
  - 9) Fungal infections

#### Other less Common conditions:

- 1) Varicella
- 2) Hyperpigmentation
- 3) Melanoma
- 4) Lichen planus
- 5) Vitiligo
- 6) Alopecia
- 7) Basal & Squamous cell carcinoma

## • Lists of Skills to be learned:

- 1) Venipuncture
- 2) Arterial puncture
- 3) Interpretation of arterial blood gases
- 4) Serial Peak Flow measurement.

- 5) Spirometry
- 6) Chest x-ray interpretation
- 7) Inhaler technique
- 8) H. pylori testing breath test
- 9) ECG interpretation
- 10) Stress test interpretation
- 11) Insertion of nasogastric tubes
- 12) Paracentesis
- 13) Insertion of Foley catheters
- 14) Joint injection and aspiration

## • Educational Notes:

- Residents should not be on call during rotation in the OPD.
- Residents should be released on **Thursday** to complete his/her research work.

#### • End course Exam:

- Should be done at the end of training course
- Practical Exam (50%): In outpatient ward.
- Theory Exam (50%): 60MCQs questions + 8 case scenarios

# Family Physician in Primary Health Care Center: Course VI: Duration 18 weeks (7 Credits)

#### • Introduction:

Family Medicine provides initial, continuing comprehensive and coordinated care for individuals, families and communities in the Primary Health care centers. It integrates all branches of medicine in caring the common conditions in community using a holistic approach with a great attention to prevention. He/she also needs to develop a person-centered approach oriented to the individual, his/her family and their community.

#### • Objectives:

At the end of this course (rotation) student should acquire knowledge, skills, and demonstrate competence in:

- 1) Perform a complete clinical patient (all ages) assessment including history and relevant physical examinations
- 2) Formulate appropriate provisional diagnoses and alternative diagnoses of key presenting problems and underlying conditions
- 3) Order appropriate and selective investigations and interpret the findings in the context of patient problems
- 4) Apply knowledge of common problems, wellness, and prevention within the framework of the family medicine approach to patient care.
- 5) Apply the family medicine approach to healthcare programs implemented in PHC center
- 6) Understand and effectively use therapeutics appropriate in a primary care setting and describe actions, interactions and side effects of the commonly used drugs.

- 7) Conduct a consultation with patients in a primary health care setting, establishes a patient's reason for consulting, the nature of his problem, how it affects lifestyle and family, and to explore the management options available.
- 8) Establish good relationships with patients, families and the community and as far as possible meet their needs and fulfill their expectations.
- 9) Provide effective, comprehensive, and continuing care for individuals, families and the community being served focusing on health promotion and prevention.
- 10) Participate effectively in preventive and screening programs in PHC center
- 11) Apply the principle of 5 star doctor in leading, organizing and providing preventive care for individuals, families and a designated population in Team work spirit.
- 12) Apply the principle of evidence based medicine and follow guidelines in applying healthcare services

## • Process of Training:

- The residents must work on a full time basis as a member of the Primary Health Care center team, participate in the preventive & curative and educational activities.
- Residents should rotate in all the Units and involved in all programs available in the Primary Health Care.

## • Learning situation:

- 1) Out-patient clinics,
- 2) Program Units: Preventive & screening programs (Immunization, School health, Breast cancer screening, HT & DM screening ...etc.)
- 3) Health promotion & Counselling Unit
- 4) Procedure Rooms (Minor surgeries, nebulizer etc.)
- 5) CME activities

#### • Content of Training:

- The student should be able to deal with following:
- 1) Common conditions in different specialties
- 2) Urgent but minor or common health problems focusing on Initial management and stabilization of emergency problems and referral timeline.
- 3) Mental & Psychosocial care
- 4) Maternity and child care
- 5) Health promotion and disease prevention
- 6) Nutrition counselling
- 7) Geriatric health care

#### The common medical conditions (preventive & curative care):

- 1) Adult Care: Adult respiratory & GIT infections, Hypertension, Chest pain, Angina/Ischemic heart disease, Heart failure, Diabetes, Urinary tract infections, Fatigue, Anemia, Asthma/COPD, Acute low back pain, simple trauma, eye health, Mental health program.
- 2) Pediatric Care: Acute tonsillitis, Pharyngitis, Bronchiolitis, Lower respiratory tract infections, Otitis media, Diarrhea, Dehydration, Febrile convulsions & Temperature management, Childhood Growth and Development Monitoring, and immunization, IMNCI, school health
- 3) Women's Health and Reproductive Health Care: Antenatal Care, Labor & Intrapartum, Postnatal Care, Normal pregnancy, Normal delivery & Clinical diagnosis and treatment of common problems during pregnancy and delivery, & Family planning
- 4) Health education, promotion & counselling.
- 5) Geriatric health care

6) Screening: Hypertension, Diabetes mellitus, Post-menopausal screening, Neonatal screening program,

#### • Lists of Skills to be learned:

- 1) Communication skills
- 2) Documentation skills
- 3) Presentation skills
- 4) Health Information System skills
- 5) Professional Development skills

#### • Educational Notes:

- Residents should practice all preventive and curative activities in PHC center.
- Residents should be released on **Thursday** to complete his/her research work.

#### • End course Exam:

• OSCE done at the end of training course

## • Course Description:

Courses	Weeks	Credits
Outpatient unit (Comprehensive care)	4	1.5
Maternal Health care	4	1.5
Child health care	4	1.5
Counselling & Health promotion unit	2	1
PHCs programs & Screening activities	2	1
Geriatric care	2	0.5
Total	18	7

## Training schedule at PHCC

weeks	Date	Topic	Clinical skills		
	Adult Care				
W1	18/5/2021	Breaking a bad news,	Medical Records /filing system		
		Communication skills	/family health record		
W2	23/5/2021	IHD, Heart failure, DM,	Cardio vascular risks assessment		
		Hypertension	,ECG Interpretation		
W3	30/5 -3/ 6/2021	Respiratory system, COPD	Peak flue meter, spirometer		
W4	6/6/2021	UTI, GIT	GUE interpretation , GSE		
	Women's Health	& reproductive health			
W5	13 / 6/ 2021	Antenatal Care, Labor &	Clinical diagnosis and treatment of		
		Intrapartum, Postnatal Care,	common problems during pregnancy		
			and delivery,		
W6	20/6/2021	High risk pregnancy	u/s of pregnant women		
W7	27/6-1/7/2021	Home Vs hospital delivery	Immunization schedule,		
W8	6/7/2021	Family planning	Methods of family planning		
Child health					
W9	4/7/2021	Diarrhea , lower respiratory	Examination of newborn		
		tract infection			
W10	11/7/2021	IMNCI	Growth monitoring		
W11	18/7/2021	Neonatal screening program	Immunization schedule		
w12	25/7/2021	Screening of hearing	milestone		
	Counselling and	health promotion			
W13	1/8/2021	COVID-19	Home care		
W14	8/8/2021		Immunization		
	PHC Prog				
W16	15/8/2021	Geriatric health	Screening		
W 17	22/8/2021	HT&DM screening	Screening		
W18	29/8/2021	Eye health	Screening		

# Family Physician in Primary Health Care Center: Course VI: Duration 18 weeks (7 Credits)

#### • Introduction:

Family Medicine provides initial, continuing comprehensive and coordinated care for individuals, families and communities in the Primary Health care centers. It integrates all branches of medicine in caring the common conditions in community using a holistic approach with a great attention to prevention. He/she also needs to develop a person-centered approach oriented to the individual, his/her family and their community.

#### • Objectives:

At the end of this course (rotation) student should acquire knowledge, skills, and demonstrate competence in:

- 1) Perform a complete clinical patient (all ages) assessment including history and relevant physical examinations
- 2) Formulate appropriate provisional diagnoses and alternative diagnoses of key presenting problems and underlying conditions
- 3) Order appropriate and selective investigations and interpret the findings in the context of patient problems
- 4) Apply knowledge of common problems, wellness, and prevention within the framework of the family medicine approach to patient care.
- 5) Apply the family medicine approach to healthcare programs implemented in PHC center
- 6) Understand and effectively use therapeutics appropriate in a primary care setting and describe actions, interactions and side effects of the commonly used drugs.

- 7) Conduct a consultation with patients in a primary health care setting, establishes a patient's reason for consulting, the nature of his problem, how it affects lifestyle and family, and to explore the management options available.
- 8) Establish good relationships with patients, families and the community and as far as possible meet their needs and fulfill their expectations.
- 9) Provide effective, comprehensive, and continuing care for individuals, families and the community being served focusing on health promotion and prevention.
- 10) Participate effectively in preventive and screening programs in PHC center
- 11) Apply the principle of 5 star doctor in leading, organizing and providing preventive care for individuals, families and a designated population in Team work spirit.
- 12) Apply the principle of evidence based medicine and follow guidelines in applying healthcare services

## • Process of Training:

- The residents must work on a full time basis as a member of the Primary Health Care center team, participate in the preventive & curative and educational activities.
- Residents should rotate in all the Units and involved in all programs available in the Primary Health Care.

## • Learning situation:

- 1) Out-patient clinics,
- 2) Program Units: Preventive & screening programs (Immunization, School health, Breast cancer screening, HT & DM screening ...etc.)
- 3) Health promotion & Counselling Unit
- 4) Procedure Rooms (Minor surgeries, nebulizer etc.)
- 5) CME activities

#### • Content of Training:

- The student should be able to deal with following:
- 1) Common conditions in different specialties
- 2) Urgent but minor or common health problems focusing on Initial management and stabilization of emergency problems and referral timeline.
- 3) Mental & Psychosocial care
- 4) Maternity and child care
- 5) Health promotion and disease prevention
- 6) Nutrition counselling
- 7) Geriatric health care

#### The common medical conditions (preventive & curative care):

- 1) Adult Care: Adult respiratory & GIT infections, Hypertension, Chest pain, Angina/Ischemic heart disease, Heart failure, Diabetes, Urinary tract infections, Fatigue, Anemia, Asthma/COPD, Acute low back pain, simple trauma, eye health, Mental health program.
- 2) Pediatric Care: Acute tonsillitis, Pharyngitis, Bronchiolitis, Lower respiratory tract infections, Otitis media, Diarrhea, Dehydration, Febrile convulsions & Temperature management, Childhood Growth and Development Monitoring, and immunization, IMNCI, school health
- 3) Women's Health and Reproductive Health Care: Antenatal Care, Labor & Intrapartum, Postnatal Care, Normal pregnancy, Normal delivery & Clinical diagnosis and treatment of common problems during pregnancy and delivery, & Family planning
- 4) Health education, promotion & counselling.
- 5) Geriatric health care

6) Screening: Hypertension, Diabetes mellitus, Post-menopausal screening, Neonatal screening program,

#### • Lists of Skills to be learned:

- 1) Communication skills
- 2) Documentation skills
- 3) Presentation skills
- 4) Health Information System skills
- 5) Professional Development skills

#### • Educational Notes:

- Residents should practice all preventive and curative activities in PHC center.
- Residents should be released on **Thursday** to complete his/her research work.

#### • End course Exam:

• OSCE done at the end of training course

## • Course Description:

Courses	Weeks	Credits
Outpatient unit (Comprehensive care)	4	1.5
Maternal Health care	4	1.5
Child health care	4	1.5
Counselling & Health promotion unit	2	1
PHCs programs & Screening activities	2	1
Geriatric care	2	0.5
Total	18	7

## Training schedule at PHCC

weeks	Date	Topic	Clinical skills		
	Adult Care				
W1	18/5/2021	Breaking a bad news,	Medical Records /filing system		
		Communication skills	/family health record		
W2	23/5/2021	IHD, Heart failure, DM,	Cardio vascular risks assessment		
		Hypertension	,ECG Interpretation		
W3	30/5 -3/ 6/2021	Respiratory system, COPD	Peak flue meter, spirometer		
W4	6/6/2021	UTI, GIT	GUE interpretation , GSE		
	Women's Health	& reproductive health			
W5	13 / 6/ 2021	Antenatal Care, Labor &	Clinical diagnosis and treatment of		
		Intrapartum, Postnatal Care,	common problems during pregnancy		
			and delivery,		
W6	20/6/2021	High risk pregnancy	u/s of pregnant women		
W7	27/6-1/7/2021	Home Vs hospital delivery	Immunization schedule,		
W8	6/7/2021	Family planning	Methods of family planning		
Child health					
W9	4/7/2021	Diarrhea , lower respiratory	Examination of newborn		
		tract infection			
W10	11/7/2021	IMNCI	Growth monitoring		
W11	18/7/2021	Neonatal screening program	Immunization schedule		
w12	25/7/2021	Screening of hearing	milestone		
	Counselling and	health promotion			
W13	1/8/2021	COVID-19	Home care		
W14	8/8/2021		Immunization		
	PHC Prog				
W16	15/8/2021	Geriatric health	Screening		
W 17	22/8/2021	HT&DM screening	Screening		
W18	29/8/2021	Eye health	Screening		

## **Pediatrics: Course V: Duration 16 weeks (5 Credits)**

#### • Introduction:

Family Medicine provides initial, continuing comprehensive and coordinated care for individuals, families and communities in the Primary Health care centers. A significant proportion of problems dealt within a primary care practice are related to the discipline of pediatrics. The family physician should be competent in providing comprehensive care in dealing with all childhood illnesses seen in primary health care practice

#### Objectives:

At the end of this course (rotation) student should acquire knowledge, skills, and demonstrate competence in:

- 1) Recognize national health structures, policy and guidelines in child health care.
- 2) Perform a complete clinical patient assessment including history and relevant physical examination and detect any abnormalities
- 3) Formulate appropriate provisional diagnoses and alternative diagnoses of key presenting problems and underlying conditions
- **4)** Order appropriate and selective investigations and interpret the findings in the context of patient problems
- 5) Formulate differential diagnosis and plan of management, taking into consideration the available resources.
- 6) Demonstrate how to provide comprehensive integrated care to the infants.
- 7) Practice good baby follow-up: Assess feeding, growth and development, immunizations, screening...etc.
- 8) Interpret common laboratory results, and read simple x-rays (i.e. chest, abdomen, etc).
- **9**) Recognize serious cases that need referral to the hospital or to the specialist and perform appropriate and timely referrals.
- **10**) Diagnose and primarily manage common medical emergencies in pediatrics, such as diabetic ketoacidosis, severe acute asthma attack, and meningitis
- 11) Identify the important norms of physical, intellectual, emotional, and social development of children at different ages
- 12) Be able to train mothers on how to establish and maintain breastfeeding

## Process of Training:

- The resident must work on a full time basis as a member of the pediatric team; participate fully in both the service and educational activities.
- Opportunities to work in <u>outpatient clinics</u> should be provided with multidisciplinary approach to caring for most common illnesses.

## • Learning situation:

- 1) Out-patient clinics (most of rotation)
- 2) In-patient wards
- 3) Neonatology Department
- 4) Emergency Room
- 5) CME activities

## • Course Description:

Courses	Weeks	Credits
1- Common childhood illnesses	10	3
2- Neonatal department (care of newborn baby)	2	2
3- Premature care	2	0.5
4- Pediatric nutrition & growth assessment	1	0.5
5- Genetic counseling & Family communication	1	0.25
Total	16	5

## Content of Training:

- 1) Pediatric Emergencies: The resident should recognize the following life threatening conditions and be able to stabilize the patient before transferring to the hospital.
  - Severe respiratory infections
  - Status asthmaticus
  - *□* Epiglottitis
  - ← Dehydration & Hypovolemic shock

  - ☞ Anaphylaxis
  - *□* Convulsion
  - Poisoning and drug overdose
- 2) Care of the newborn babies:
  - Resuscitation of newborn babies
  - Assessing APGAR score
  - Performing routine newborn examination and detect any abnormalities
  - Managing neonatal jaundice
  - Managing Prematurity
- 3) Genetics and Congenital Anomalies:
  - Genetic counseling & Genetic disorders, e.g. Down Syndrome
  - Consanguinity and its impact on health

#### 4) Pediatric nutrition:

- Breast feeding and its advantages
- Modified cow's milk formula, its advantages and disadvantages
- Recommended children's daily requirements for proteins, carbohydrates, fat, vitamins and minerals
- Weaning food and time of its use
- Protein energy malnutrition, causes, manifestation and management
- Firon deficiency anemia, diagnosis, and management
- Various diseases related to nutritional deficiencies, e.g. Vitamin A deficiency, Vitamin B Deficiency, Ricketts, etc.

#### 5) Systemic Infections:

- Upper & lower Respiratory tract infections including Pneumonias & Tuberculosis
- Gastroenteritis
- Urinary tract infection
- *™* Meningitis

#### 6) Cardiovascular System:

- Congenital heart disease
- Rheumatic heart disease

#### 7) Gastrointestinal System:

- Acute & Chronic diarrhea
- Acute and chronic constipation
- Malnutrition including Nutritional anemias
- Chronic malabsorption
- ☞ Intestinal infestations
- © Common and congenital GI disorder

## 8) Central Nervous System:

- Headache in children
- Febrile convulsions
- Raised intracranial pressure Cerebral palsy and its complications
- Seizure disorder

## 9) Hematological system:

- Iron deficiency anemia
- Sickle cell disease, Thalassemia and other hemoglobinopathies

- G6PD deficiency, and hemolytic crises
- Acute and chronic Leukemias
- Hemophilia and other bleeding disorders

#### 10) Endocrinal conditions:

- Diabetes mellitus and diabetic ketoacidosis
- Hypothyroidism and hyperthyroidism and interpret the TSH in a newborn
- The other hormonal disorder, e.g. growth hormone and adrenal hormone

#### 11) Musculoskeletal system:

- ☞ Arthralgia
- Septic arthritis and/or osteomyelitis
- Rheumatoid arthritis
- Rheumatic arthritis •

## **Lists of Skills to be learned:**

- a. Venipuncture
- b. Starting IV line
- c. Bladder tap
- d. Resuscitation of the newborn and older

#### Educational Notes:

- Residents should not be on call during rotation in the OPD.
- Residents should be released on **Thursday** to complete his/her research work.

#### • End course Exam:

- Should be done at the end of training course
- Practical Exam (50%): In outpatient ward.
- Theory Exam (50%): 60MCQs questions + 8 case scenarios (Common conditions)

## Family Physician in Primary Health Care Center: Course VI: Duration 18 weeks (7 Credits)

#### • Introduction:

Family Medicine provides initial, continuing comprehensive and coordinated care for individuals, families and communities in the Primary Health care centers. It integrates all branches of medicine in caring the common conditions in community using a holistic approach with a great attention to prevention. He/she also needs to develop a personcentered approach oriented to the individual, his/her family and their community.

#### • Objectives:

At the end of this course (rotation) student should acquire knowledge, skills, and demonstrate competence in:

- 1) Perform a complete clinical patient (all ages) assessment including history and relevant physical examinations
- 2) Formulate appropriate provisional diagnoses and alternative diagnoses of key presenting problems and underlying conditions
- 3) Order appropriate and selective investigations and interpret the findings in the context of patient problems
- 4) Apply knowledge of common problems, wellness, and prevention within the framework of the family medicine approach to patient care.
- 5) Apply the family medicine approach to healthcare programs implemented in PHC center
- 6) Understand and effectively use therapeutics appropriate in a primary care setting and describe actions, interactions and side effects of the commonly used drugs.
- 7) Conduct a consultation with patients in a primary health care setting, establishes a patient's reason for consulting, the nature of his problem, how it affects lifestyle and family, and to explore the management options available.
- 8) Establish good relationships with patients, families and the community and as far as possible meet their needs and fulfill their expectations.
- 9) Provide effective, comprehensive, and continuing care for individuals, families and the community being served focusing on health promotion and prevention.
- 10) Participate effectively in preventive and screening programs in PHC center
- 11) Apply the principle of 5 star doctor in leading, organizing and providing preventive care for individuals, families and a designated population in Team work spirit.
- 12) Apply the principle of evidence based medicine and follow guidelines in applying healthcare services
- 13) Record and analyze details of morbidity encountered in a primary health care setting.

## • Process of Training:

- The residents must work on a full time basis as a member of the Primary Health Care center team, participate in the preventive & curative and educational activities.
- Residents should rotate in all the Units and involved in all programs available in the Primary Health Care.

## • Learning situation:

- 1) Out-patient clinics,
- 2) Program Units: Preventive & screening programs (Immunization, School health, Breast cancer screening, HT & DM screening ...etc.)
- 3) Health promotion & Counselling Unit
- 4) Procedure Rooms (Minor surgeries, nebulizer etc.)
- 5) CME activities

## Course Description:

Courses	Weeks	Credits
1- Outpatient unit (Comprehensive care)	4	1.5
2- Maternal Health care	4	1.5
3- Child health care	4	1.5
4- Counselling & Health promotion unit	2	1
5- PHCs programs & Screening activities	2	1
6- Vital statistics Unit	2	0.5
Total	18	7

## • Content of Training:

- The student should be able to deal with following:
- 1) Common conditions in different specialties
- 2) Urgent but minor or common health problems focusing on Initial management and stabilization of emergency problems and referral timeline.
- 3) Mental & Psychosocial care
- 4) Maternity and child care
- 5) Health promotion and disease prevention
- 6) Nutrition counselling
- The common medical conditions (preventive & curative care):
- 1) Adult Care: Adult respiratory & GIT infections, Hypertension, Chest pain, Angina/Ischemic heart disease, Heart failure, Diabetes, Urinary tract infections, Fatigue, Anemia, Asthma/COPD, Acute low back pain, simple trauma, Anxiety & Depression.

- 2) Pediatric Care: Acute tonsillitis, Pharyngitis, Bronchiolitis, Lower respiratory tract infections, Otitis media, Diarrhea, Dehydration, Febrile convulsions & Temperature management, Childhood Growth and Development Monitoring, and immunization
- 3) Women's Health and Reproductive Health Care: Antenatal Care, Labor & Intrapartum, Postnatal Care, Normal pregnancy, Normal delivery & Clinical diagnosis and treatment of common problems during pregnancy and delivery, & Family planning
- 4) Health education, promotion & counselling.

## • Lists of Skills to be learned:

- 1) Communication skills
- 2) Documentation skills
- 3) Presentation skills
- 4) Health Information System skills
- 5) Professional Development skills

#### • Educational Notes:

- Residents should practice all preventive and curative activities in PHC center.
- Residents should be released on **Thursday** to complete his/her research work.

## • End course Exam:

• OSCE done at the end of training course