

الهيئة السعودية للتخصصات الصحية Saudi Commission for Health Specialties

WOMEN'S HEALTH FELLOWSHIP



Z

2023



PREFACE

The World Health Organization defines health as the completeness of physical, mental, and social well-being and not merely the absence of disease or infirmity (1). Women's health, as defined by the National Academy on Women's Health Medical Education (NAWHME), contains two facets: the preservation of wellness and the prevention of illness in women. It includes the screening, diagnosis, and management of conditions that are either unique, present increased severity, and are more common in women, as well conditions that have differing manifestations, risk factors, or interventions depending on the sex (2). The ultimate goal of women's health is to support healthy women in maintaining their physical and mental wellbeing. This encompasses far more than simply providing medical diagnoses and prescriptions Rather, it involves a comprehensive approach to disease prevention, early detection, and the promotion of preventive medicine. Additionally, it includes raising awareness among women about the criticalness of prioritizing their health and taking steps to prevent illness.

All women deserve access to high-quality and efficient comprehensive care provided by a physician specializing in women's health. These physicians play a critical role in developing and expanding holistic healthcare for women at all stages of life and thus must be both competent and comfortable in delivering such care. Many medical centers worldwide have begun offering fellowship training programs for women's health given the growing awareness of the complex health needs of women and the importance of training physicians in this field. The Saudi government has shown immense interest in supporting women's health and has made significant efforts to make this model of healthcare accessible to all women in Saudi Arabia. The Women's Health Fellowship Program in Saudi Arabia is a national initiative and the first of its kind in the Middle East. This fellowship program aims to develop a cohort of several highly trained physicians that can provide outstanding health services for women of the Saudi community.

The primary goal of this document is to enhance the training experience of postgraduate trainees by outlining clear learning objectives that are essential for becoming independent and competent practitioners in the future. This curriculum may contain sections outlining some training regulations; however, such regulations need to be sought from the "General Bylaws of



Training in Postgraduate Programs" and "Executive Policies" published by the Saudi Commission for Health Specialties (SCFHS), which can be accessed online through the official SCFHS website. In case of discrepancies in the regulation statements, the one stated in the most updated bylaws and executive policies will be the reference to apply.

As this curriculum is subject to periodic refinement, please refer to the electronic version posted online for the most updated edition at: www.scfhs.org.sa



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We also acknowledge that the CanMEDS framework is a copyright of the Royal College of Physicians and Surgeons of Canada and that many of the descriptions' competencies have been acquired from their resources.

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IV. INTRODUCTION

1.Context of Practice

With women accounting for more than half of the global population, it is vital to recognize the diverse and complex health issues that women face, which lay beyond obstetric care, even among those of childbearing age. As a result, there is a growing awareness of the importance of training physicians in this specialized field. All women deserve access to comprehensive care from physicians who are competent and comfortable in delivering such care.

Many medical centers worldwide, especially in Western countries, have started offering fellowship training programs in women's health. The Saudi government has also shown immense interest in supporting women's health and has made significant efforts to make comprehensive healthcare accessible to all women in Saudi Arabia. The Women's Health Fellowship Program in Saudi Arabia is a national initiative and the first of its kind in the Middle East. It was approved by the SCFHS in 2014 as the first women's health fellowship program in Saudi Arabia. This fellowship aims to develop a cohort of several highly trained physicians that can provide outstanding health services for women in the community.

The fellowship training experience focuses on the acquisition of skills and expertise in a specific area of medicine relevant to the health of women throughout their life course, with an emphasis on gaining a full understanding of how gender influences the prevalence, incidence, clinical manifestations, and outcomes of a particular disease through comprehensive and in-depth training in women's health and gender-based medicine. Additionally, the program emphasizes the importance of sex and age in health and disease.

The Women's Health Fellowship Program curriculum was designed to provide hands-on experience in patient care and training in medical education and research. The program is interdisciplinary and crosses traditional boundaries to comprehensively focus on a wide range of women's health concerns and issues. Furthermore, it was designed to initiate and promote preventive medicine schemes, disease screening in healthy women, and health maintenance. These complex issues require specialized expertise and knowledge as disease prevention and early diagnosis are often challenging.



The Women's Health Fellowship Program promotes research in areas specific to women's health and includes a scientific program throughout the fellowship. The primary aim of these focus areas is to give the fellows the practical experience in formulating relevant research questions and developing effective methodologies to address them. Furthermore, fellows are required to participate in all academic activities in each rotation during the fellowship program in which they play active roles in teaching residents and students.

Graduates of the fellowship program are expected to become exemplary leaders in initiating and advancing innovative research, education, and clinical care for women's health issues. Upon completion of their training, fellows will become well-rounded doctors who are comfortable in tackling various medical conditions by considering the patient's individual needs and considering multiple aspects of their disease or condition.

2.Goal and Responsibility of Curriculum Implementation

Ultimately, this curriculum seeks to guide trainees to become *competent* in their respective specialties. Accordingly, this goal requires significant effort and coordination from all stakeholders involved in postgraduate training. As *"adult-learners,"* trainees must be proactive, fully engaged, and exhibit the following: a careful understanding of learning objectives, self-directed learning, problem solving, an eagerness to apply learning by means of reflective practice from feedback and formative assessment, and self-awareness and willingness to ask for support when needed. The Program Director plays a vital role in ensuring the successful implementation of this curriculum. Moreover, training committee members, particularly program administrators and chief residents, significantly impact the program implementation. Finally, trainees should be available when called upon to share the responsibility during curriculum implementation.

The strategic direction of the Saudi Commission for Health Specialties (SCFHS) applies a recognized competency model of training governance to achieve the highest quality of training. The postgraduate program is also required to include research modules as well as evidence-based practice in its curriculum. To ensure high-quality training, academic affairs in training centers and the regional supervisory training committee play major roles in training supervision and implementation. The Specialty Scientific



(*council/committee*) will guarantee that the content of this curriculum is constantly updated to meet the highest standards in the postgraduate education of each trainee's specialty.



V. ABBREVIATIONS USED IN THIS DOCUMENT

Abbreviation	Description
SCFHS	Saudi Commission for Health Specialties
F1	(First) year of Fellowship
F2	(Second) year of Fellowship
OSCE	Objective Structured Clinical Examination
FITER	Final In-training Evaluation Report
PMPs	Patient management problems
HIV	Human immunodeficiency virus
ER	Emergency Room
HIV/AIDS	Human immunodeficiency virus /acquired immunodeficiency syndrome
US	Ultrasound
MRI	Magnetic resonance imaging
ACGME	Accreditation Council for Graduate Medical Education
RCPSC	Royal College of Physician and Surgeon of Canada
CBE	Competency-based education
CATH Lab.	Catheterization Laboratory
MCQ	Multiple Choice Question
CBD	Case-Based Discussion



VI. PROGRAM ENTRY REQUIREMENTS

The applicant must abide by the training regulations and obligations set by the SCFHS.

The applicant must fulfill all admission requirements set by the SCFHS. Please be advised that the requirements are subject to change; hence, please refer to the SCFHS website for any updates. As per the SCFHS General Bylaws of Training in Postgraduate Programs, the applicant should pay the full training, examination, and certificate fees.

- The prospective applicant must have Board certification in Internal Medicine or Family Medicine,Obstetrics and Gynaecology,Preventive Medicine.
- The applicant must support the application with **three letters of recommendations** from physicians who know them professionally and have worked with them.
- The applicant must have successfully completed a personal interview.
- Training is a **full-time** commitment. Applicants will be enrolled in continuous full-time training for the duration of the program.
- The applicant must provide **written permission** from their sponsoring institution to participate on a full-time basis in the entire program.

1. Program Duration

- Two years, full-time training program
- The Women's Health Fellowship Program is divided into two years/levels: First-year Fellow (F1)
 Second-year Fellow (F2)

VII. LEARNING AND COMPETENCIES



1. Introduction to Learning Outcomes and Competency-Based Education

Training should be guided by well-defined "*learning objectives*" that are driven by targeted "*learning outcomes*" of a particular program to serve specific specialty needs. Learning outcomes should reflect the professional "*competencies*" and tasks that are aimed to be "*entrusted*" to the trainees upon graduation. This ensures that graduates meet the expected demands of the healthcare system and patient care in relation to their specialties. *Competency-based education* (CBE) is an approach of "*adult-learning*" that is based on achieving *pre-defined*, *fine-grained*, *and well-paced* learning objectives that are driven from complex professional competencies.

Professional competencies related to healthcare are multifaceted and contain a mixture of learning domains, such as knowledge, skills, and attitude. The CBE approach aims to revolutionize traditional methods of postgraduate education. For example, the duration of training, though a precious resource, should not be considered a proxy for *competence* (e.g., time of rotation in certain hospital areas is not the primary marker of competence achievement). Furthermore, CBE emphasizes the critical role of informed judgment in learners' competency progress through a staged and formative assessment driven by multiple workplace-based observations. Several CBE models have been developed for postgraduate education in healthcare (e.g., CanMEDS by the Royal College of Physician and Surgeon of Canada (RCPSC), the CBME-Competency model by the Accreditation Council for Graduate Medical Education (ACGME), tomorrow's doctor in the UK, etc.). The following concepts augment the implementation of CBE in the curriculum.

- Competency: Competency is a cognitive construct that assesses one's potential to perform efficiently in a given situation based on the standards of any profession. Professional roles (e.g., medical experts, health advocates, communicators, leaders, scholars, collaborators, and professionals) are used to define competency roles to make the latter mendable for learning and assessment.
- Milestones: Milestones represent the stages of development throughout the competency continuum. Trainees from junior and senior levels will be assisted during their progression from (novice/supervised) to (master/unsupervised) practitioners. However, this does not undermine the role of supervisory/regulatory bodies in preventing malpractice of



independent practitioners. Milestones are expected to enhance the learning process by pacing the training/assessment to meet the developmental level of the trainees (junior vs. senior).

- Learning-Domains: Whenever possible, efforts should be directed to annotate learning outcomes with the corresponding domain (K=Knowledge, S=Skills, and A=Attitude). You may have more than one annotation for a given learning outcome.
- **Content-area Categorization:** It is advisable to categorize learning outcomes into broad content areas related to the practice of the profession. Examples include diagnostic vs. therapeutic, simple vs. complex, and urgent vs. chronic.
- Trainees are expected to progress from novice level to mastery in a certain set of professional competencies. The SCFHS has endorsed the CanMEDS to articulate professional competencies and curriculum incorporates numerous principles of the competency-based medical education approach (3).

This reference provides a general outline of CanMEDS competencies (Frank JR, Snell L, Sherbino J, editors. CanMEDS 2015 Physician Competency Framework. Ottawa: Royal College of Physicians and Surgeons of Canada; 2015)

2. Program Duration

- Two years, full-time training program
- The Women's Health Fellowship Program is divided into two years/levels:

First-year Fellow (F1)

Second-year Fellow (F2)

3. Program Rotations

Women's Health Fellowship Program rotation during <u>two years</u> includes the following:

- 1- Rotation in outpatient clinics
- 2- Inpatient ward rotation



	Jan	Fe b	Ma r	Apr	Ma y	June	July	Aug	Sept	Oct	Nov	Dec
Inpatient								I		I		
Outpatient	Interna & Ge Antico	eriatric	&	С	ardiolo	ogy	Endocr	inology	Rheuma y	itolog		Gynecolo gy Oncology
*Women's Health Clinic once weekly							E]				
*Reproducti ve Endocrine and Adolescent Clinic once weekly									LEAV E			
*Internal medicine clinic once weekly]				
Academic Day Monday 1:00-3:00 PM]				

*Schedule of Reproductive Endocrine and Adolescent Care clinic is arranged by the program director for 6 months in the first year of the fellowship and 4 months in the second year of the fellowship regardless of the rotations.



* Schedule of Internal medicine clinic is arranged by the program director regardless of the rotations.

Schedule of Women's Health Fellowship Program- Second year	Jan	Feb	Mar	Apr	Мау	June	July	Aug	Sept	Oct	Nov	Dec
Outpatient	clir Cognitiv Urogyn	hiatry nics ve clinic ecology nic	Research	HIV o Pain o Bre can clir	clinic ast cer	LEAVE	Pregi	Risk nancy nic	Radio wome image			
*Women's Health Clinic once weekly	[]		[[
*Reproductive Endocrine and Adolescent Clinic											Selec rotati	
Internal medicine clinic once weekly	E]		[[
Academic Day Monday 1:00- 3:00 PM	[]		[[
*Schedule of V	Vomen's	Health	Clinic is a	arrange	ed by	the prog	ram d	irector	during	the fe	ellows	hip

Schedule of Women's Health Fellowship Program- Second year

*Schedule of Women's Health Clinic is arranged by the program director during the fellowship program regardless of the rotations.

*Schedule of Reproductive Endocrine and Adolescent Care clinic is arranged by the program director for 6 months in first year of the fellowship and 4 months in the second year of the fellowship regardless of the rotations.

*Schedule of Internal Medicine clinic is arranged by the program director regardless of the rotations.



3. Mapping of learning objectives and competency roles to program rotations:

The Women's Health Fellowship program, supervised by the SCFHS, is committed to a competency-based curriculum that provides the highest level of clinical training, education, and research for the development of women's health physicians. This program aims to create graduates who are competent, skilled, and knowledgeable physicians capable of functioning independently in the field of women's health.

By the end of this fellowship program, the trainee will be able to:

- Possess clinical knowledge and skills applicable to women's health.
- Have an awareness of their capabilities, responsibilities, and limitations.
- Recognize the ethical dimensions in medical decision-making.
- Demonstrate compassionate and patient-centered care.
- Deliver the highest quality patient care with integrity, honesty, and compassion.
- Elicit a relevant, concise, and accurate history and perform a physical examination for accurate diagnosis and proper management.
- Select medically appropriate investigative methods in a resourceeffective and ethical manner, including imaging techniques, laboratory investigations, and other diagnostic studies.
- Initiate timely and appropriate consultations with other health professionals.
- Arrange for follow-up care.
- Demonstrate appropriate interpersonal and professional behavior.

The SCFHS endorses the CanMEDS model for articulating professional roles. The fellow will be competent in seven CanMEDS Roles: Medical Expert, Communicator, Collaborator, Manager, Health Advocate, Scholar, And Professional.

1. Medical Expert:

Definition:

As Medical Experts, physicians integrate all Can-MEDS roles, applying medical knowledge, clinical skills, and professional judgments to patient-centered care. The Medical Expert plays the central role in the Can-MEDS framework.



Key Competencies:

Upon completion of the program, fellows will be able to:

- 1. Function effectively as a medical consultant, integrating all the CanMEDS roles to provide optimal, ethical, and patient-centered care.
 - Provide high-quality, gender-specific care for women.
 - Acquire a knowledge base that will allow researchers to address the unique needs of women with multiple medical, cognitive, psychiatric, social, and/or functional impairments.
 - Provide compassionate, appropriate, and effective patient care for the treatment of various conditions and for health promotion.
- 2. Obtain and maintain clinical knowledge, skills, and attitude appropriate for practice
 - Possess an awareness of their capabilities, responsibilities, and limitations.
 - Demonstrate compassionate, patient-centered care and consider ethical dimensions in medical decision-making.
 - Perform a relevant, concise, and accurate history and physical examination for accurate diagnosis and proper disease management.
 - Demonstrate effective clinical problem-solving and judgment regarding patient medical issues.
 - Promote preventive medicine, disease screening of healthy women, and health maintenance. Women's health topics do not fall under a single sub-specialty. Thus, these complex issues require specialized expertise and knowledge, especially given the challenging nature of disease prevention and early diagnosis.
 - Demonstrate an understanding of the integrative and interdisciplinary nature of women's health management.

Internal Medicine, Geriatric and Anticoagulation rotation:

Level	F1
Duration	12 weeks



Setting	Inpatient and outpatient
Medical Expert	 By the end of this rotation, fellows will be able to obtain and maintain up-to-date clinical knowledge, skills, and perspectives in the following areas: High-quality, gender-specific care for women with multiple medical, cognitive, psychiatric, social, and/or functional impairments through accurate diagnosis and proper management to address the unique needs of women across their lifespans. Comprehensive geriatric assessment and treatment of primary geriatric syndromes. Knowledge of the issues related to palliative care in the elderly, as well as to the medico-legal aspects of advanced directives and do not resuscitate orders. Knowledge of the different methods of diagnosis and treatment of deep venous thrombosis and pulmonary embolism. Management of patients on long-term anticoagulation and understanding of the potential complications and challenges of anticoagulation management. Usage of diagnostic facilities and therapeutic modalities for optimal and effective patient care, and the ability to access and utilize relevant information in clinical practice.
On call duties	Emergency room (ER) consultations, ER admissions, and inpatient consultations. Fellows will start during the Internal Medicine rotation and continue throughout the fellowship duration.

Cardiology Rotation

Level	F1
Duration	12 weeks
Setting	Inpatient and outpatient



Medical	By the end of this rotation, fellows will be able to obtain and maintain
Expert	up-to-date clinical knowledge, skills, and perspectives in the following
	areas:
	 Proper management of coronary artery disease, heart failure, and arrhythmia in women.
	2- Gender differences in cardiovascular health and disease.
	3- Usage of diagnostic facilities and therapeutic modalities for
	optimal and effective patient care, and the ability to access and
	utilize relevant information in clinical practice.
	4- Identify patients who require referral for expert opinion.
On-call duties	During day time rotation to cover ER consultations, ER admissions,
	and inpatient consultations.
	No On call duties at night.
	Does not cover Catheterization Laboratory (Cath Lab).

Rheumatology Rotation

Level	F1
Duration	8 weeks
Setting	Inpatient and outpatient
Medical Expert	 By the end of this rotation, fellows will be able to obtain and maintain up-to-date clinical knowledge, skills, and perspectives in the following areas: 1- Usage of diagnostic facilities and therapeutic modalities for optimal and effective patient care, and the ability to access and utilize relevant information in clinical practice for the proper management of arthritis and connective tissue diseases (which are more common in women). 2- Identify patients who require referral for expert opinion.
On-call duties	No On call duties at night. During day time rotation to cover ER consultations, ER admissions, and inpatient consultations.



Endocrinology Rotation

Level	F1
Duration	8 weeks
Setting	Inpatient and outpatient
Medical Expert	 By the end of this rotation, fellows will be able to obtain and maintain up-to-date clinical knowledge, skills, and perspectives in the following areas: 1- Usage of diagnostic facilities and therapeutic modalities for optimal and effective patient care, and the ability to access and utilize relevant information in clinical practice for the proper management of common endocrine diseases such as diabetes, thyroid disease, adrenal dysfunction, and osteoporosis. 2- Identify patients who require referral for expert opinion.
On-call duties	No On call duties at night. During day time rotation to cover ER consultations, ER admissions, and inpatient consultations. No involvement in thyroid cancer clinic.

Gynecology Oncology Rotation

Level	F1
Duration	4 weeks
Setting	Inpatient and outpatient
Medical Expert	 By the end of this rotation, fellows will be able to obtain and maintain up-to-date clinical knowledge, skills, and perspectives in the following areas: 1- Initial assessment of patients newly diagnosed with cancer. 2- Patient consultation regarding available treatment options.



	 3- Knowledge of different types of cancer therapy and their common side-effects. 4- Usage of diagnostic facilities and therapeutic modalities for optimal and effective patient care, and the ability to access and utilize relevant information in clinical practice.
On-call duties	No On call duties at night. No involvement in surgical operations. During day time rotation, fellows will cover inpatient consultations.

Psychiatry (Mental health) rotation

Level	F2
Duration	8 weeks
Setting	outpatient
Medical Expert	 By the end of this rotation, fellows will be able to obtain and maintain up-to-date clinical knowledge, skills, and perspectives in the following areas: 1- Diagnosis and management of mental health conditions common to women such as depression, anxiety disorders, substance abuse, eating disorders, domestic violence, and postpartum depression. 2- Knowledge of appropriate psychiatric medications and their common side-effects. 3- Usage of therapeutic modalities for optimal and effective patient care, and the ability to access and utilize relevant information in clinical practice.

Cognitive Clinic rotation

Level	F2
Duration	8 weeks
Setting	outpatient



Medical Expert	By the end of this rotation, fellows will be able to obtain and maintain
	up-to-date clinical knowledge, skills, and perspectives in the
	following areas:
	1- Comprehensive clinical assessment and management of
	cognitive impairment and dementia in women.
	2- Usage of diagnostic facilities and therapeutic modalities for
	optimal and effective patient care, and the ability to access
	and utilize relevant information in clinical practice.

Urogynecology Clinic rotation

Level	F2
Duration	8 weeks
Setting	outpatient
Medical Expert	 By the end of this rotation, fellows will be able to obtain and maintain up-to-date clinical knowledge, skills, and perspectives in the following areas: 1- The diagnosis and management of different types of urinary incontinence in women 2- Usage of diagnostic facilities and therapeutic modalities for optimal and effective patient care, and the ability to access and utilize relevant information in clinical practice.

Breast Cancer Clinic rotation

Level	F2
Duration	8 weeks
Setting	outpatient
Medical Expert	 By the end of this rotation, fellows will be able to obtain and maintain up-to-date clinical knowledge, skills, and perspectives in the following areas: 1- Initial assessment of patients newly diagnosed with breast cancer. 2- Patient consultation regarding available treatment options.



	3- Knowledge of different types of cancer therapy and their
	common side-effects.
	4- Usage of diagnostic facilities and therapeutic modalities for
	optimal and effective patient care, and the ability to access
	and utilize relevant information in clinical practice.
Note	No involvement in chemotherapy, surgery or radiotherapy
Note	management.

HIV Clinic rotation

Level	F2
Duration	8 weeks
Setting	outpatient
Medical Expert	 By the end of this rotation, fellows will be able to obtain and maintain up-to-date clinical knowledge, skills, and perspectives in the following areas: 1- Comprehensive care for women with HIV/AIDS regarding: Menopause management Chronic medical conditions management; e.g. diabetes, hypertension, dyslipidemia, osteoporosis, ischemic heart disease, and heart failure. Screening for malignancy in HIV infected women. 2- Usage of diagnostic facilities and therapeutic modalities for optimal and effective patient care, and the ability to access and utilize relevant information in clinical practice.

Pain Clinic rotation

Level	F2	
Duration	8 weeks	
Setting	outpatient	
Medical Expert	By the end of this rotation, fellows will be able to obtain and maintain	
	up-to-date clinical knowledge, skills, and perspectives in the	
	following areas:	



1-	Diagnosis and management of chronic pain (which is very common in women).
2-	Knowledge of pain medication options and their common side-effects.
3-	Usage of therapeutic modalities for optimal and effective patient care, and the ability to access and utilize relevant information in clinical practice.

High Risk Pregnancy Clinic rotation

Level	F2
Duration	8 weeks
Setting	outpatient
Medical Expert	 By the end of this rotation, fellows will be able to obtain and maintain up-to-date clinical knowledge, skills, and perspectives in the following areas: 1- Management of medical conditions in pregnancy such as preeclampsia, eclampsia, gestational diabetes, as well as chronic medical conditions such as diabetes, hypertension, HIV, anemia, and chronic renal, liver or cardiac diseases. 2- Patient consultation prior to pregnancy for expected high-risk pregnancies. 3- Comprehensive care during the postpartum period for high-risk pregnancies. 4- Usage of diagnostic facilities and therapeutic modalities for optimal and effective patient care, and the ability to access and utilize relevant information in clinical practice.
Note	No involvement in labor room or on call or surgical operations.

Radiological Women's Images Rotation

Level	F2
Duration	8 weeks



Setting	outpatient		
Medical Expert	By the end of this rotation, fellows will be able to obtain and maintain		
	up-to-date clinical knowledge, skills, and perspectives on common		
	radiological imaging practices in women, such as mammogram,		
	breast ultrasound (US), breast magnetic resonance imaging (MRI),		
	and bone mineral density.		

Selective Rotation

Level	F2		
Duration	8 weeks		
Setting	 Inpatient or outpatient 1. Fellow is allowed to do selective rotation in one or two clinical subspecialties in a locally or internationally recognized training center. 2. Selection rotation must be approved by the program director of women's health in the training center. 		

Women's Health Clinic rotation

Level	F1 and F2		
Duration	Once weekly throughout the fellowship program regardless of the rotations		
Setting	outpatient		
Medical Expert	 By the end of this rotation, the fellow will be able to obtain and maintain up-to-date clinical knowledge, skills, and perspectives in the following areas: 1- Comprehensive menopausal symptoms assessment and management. 2- High-quality care for high-risk women due to conditions such as cardiovascular disease, cancer, or osteoporosis HIV. 3- Diagnosis and management of medical conditions during pregnancy such as diabetes, hypertension, and anemia. 		



4-	4- Consultation and disease screening of women with a strong			
	family history of breast cancer.			
5-	Evidence-based medicine in the health maintenance of			
	women in different age groups and the systematic approach			
	for preventative health care.			

Reproductive Endocrine and Adolescent Care Clinic rotation

Level	F1 and F2				
Duration	Throughout the fellowship program regardless of the rotations;				
	6 months in the first year, 4 months in the second year				
Setting	outpatient				
Medical Expert	By the end of this rotation, the fellow will be able to obtain and				
	maintain up-to-date clinical knowledge, skills, and perspectives in				
	the following areas:				
	1- Diagnosis and management of menstrual disorders and				
	sexual dysfunction in women.				
	2- Application of the current recommendations for				
	contraceptive management.				
	3- Family planning consultation in a shared decision-making				
	manner				
	4- Safe and effective contraceptive choices for women with				
	chronic medical diseases				
	5- Usage of diagnostic facilities and therapeutic modalities for				
	optimal and effective patient care, and the ability to access				
	and utilize relevant information in clinical practice.				

2. Communicator:

Definition:

Physicians must effectively facilitate the establishment of doctor-patient relationships and dynamic exchanges that occur during medical consultation.

Key Competencies:

Upon completion of the program, fellows will be able to:



- Form relationships with patients and their families to facilitate the gathering and sharing of essential information for effective healthcare.
- Communicate effectively (both verbally and in writing) with health professionals and agencies.
- Gather sufficient information from patients, family members, and/or medical personnel to identify all issues that have implications for antenatal care, delivery, and preoperative management.
- Demonstrate the ability to provide expert consultation to other physicians and health professionals.
- Maintain complete, up-to-date, and legible medical records.

3. Collaborator

Definition:

As Collaborators, fellows adeptly operate within their professional setting to achieve optimal patient care, ensuring exchange of information and collaboration with patients, their families, caregivers, and interdisciplinary health professionals.

Key Competencies:

Upon completion of the program, fellows will be able to:

- Participate collaboratively with team members and other specialties in providing optimal patient care.
- Identify concerns and risks to patients, other healthcare professionals, and administration as applicable.
- Participate effectively in interprofessional team meetings.
- Recognize the diversity of roles, responsibilities, and competencies of other professionals in relation to their own.

4. Leader

Definition:

As Leaders, fellows are integral participants in healthcare organizations. They establish and streamline sustainable practices, determine the appropriate allocation of resources, and contribute to the effective functioning of healthcare systems.



Key Competencies:

Upon completion of the program, fellows will be able to:

- Actively participate in endeavors that contribute to the effectiveness of health care organizations and systems.
- Proficiently manage their practice and careers.
- Allocate finite health care resources appropriately.
- Serve in administration and leadership capacities as necessary.

5. Health Advocate

Definition:

As Health Advocates, fellows leverage their expertise and influence to advance the health and well-being of individual patients, communities, and populations.

Key Competencies:

Upon completion of the program, fellows will be able to:

- Address individual patient health concerns to deliver patient-centered care.
- Effectively respond to the health needs of the communities they serve.
- Identify and respond to health determinants of the populations they serve to promote overall well-being.

6. Scholar.

Definition:

As Scholars, fellows demonstrate lifelong commitment to reflective learning and the creation, dissemination, application, and translation of medical knowledge.

Key Competencies:

Upon completion of the program, fellows will be able to:

- Maintain and enhance professional activities via ongoing learning.
- Critically evaluate medical information and resources and apply them while making decisions during their practice.



- Facilitate the medical education of patients and their family members, as well as students, residents, health professionals, and the public as appropriate.
- Contribute to the development, dissemination, and translation of new medical knowledge and practices.

7. Professional:

Definition:

As Professionals, fellows are committed to the health and well-being of individuals and society by following ethical practices, profession-led regulations, and high personal standards of behavior.

Key Competencies:

Upon completion of the program, fellows will be able to:

- Demonstrate commitment to patients, the profession, and society through ethical practice.
- Demonstrate commitment to patients, the profession, and society by following profession-led regulations.
- Demonstrate commitment to physician health and sustainable practice.
- Demonstrate acceptance of constructive feedback and criticism, and the ability to implement appropriate advice.

Research Rotation

Level	F2
Duration	4 weeks

Medical Expert

Goals:

- Demonstrate the basic principles of research design, methodology, data analysis, and clinical epidemiology. In addition, understand the advantages and disadvantages of a scenario from the perspective of radiology.
- Familiarize themselves with the ethical requirements of research and demonstrate an understanding of the responsible use of informed consent.



- Practice appropriate methods for data collection and writing research proposals, manuscripts, and result analysis and discussion.
- Demonstrate awareness of current research topics in radiology using available medical informatics systems.
- Skillfully present scientific presentations and participate in public discussions.

Training Methods

- Full-time rotations in research are conducted throughout the duration of the program.
- The program encourages students to attend courses and workshops that may benefit them through enhancing their research skills.
- The project is expected to extend beyond the proposed one month duration. Therefore, its completion should be parallel to subsequent rotations.
- The trainee must choose a supervisor to help them access essential resources for the appropriate utilization of research skills and to periodically discuss progress.
- The trainee must finish writing the research proposal by the end of the first 6 months and receive approval by the institutional review board.
- It is highly desirable for trainees to present research results at national and/or international meetings and publish their work in indexed journals.

COMMUNICATOR

- Demonstrate skills in conveying and discussing scientific research to scientific communities through posters, abstracts, teaching slides, manuscripts, or other scientific communication modalities.
- Communicate and collaborate effectively with their research supervisor to conduct research.

COLLABORATOR

• Identify, consult, and collaborate with appropriate experts, research institutions, and/or organizational bodies to facilitate research.



LEADER

- Identify an area of research interest and appropriate research supervisors to engage in scholarly scientific inquiry and dissemination.
- Utilize available resources and regularly meet with the selected research mentor.
- Set realistic priorities and use time effectively to optimize professional performance.
- Utilize health care resources cost-effectively.

HEALTH ADVOCATE

• Recognize the contributions of scientific research in improving individual patient and community health.

SCHOLAR

- Propose appropriate research questions, identify knowledge gaps, and formulate an appropriate study design to address them.
- Execute the research as outlined in the proposal.
- Collect and analyze data utilizing appropriate methods.
- Prepare abstracts and manuscripts suitable for publication in peerreviewed journals and/or international scientific meetings.
- Identify research limitations and areas for future investigation.

Evaluation

- During the first year of the program, fellows will select a research idea and write a proposal. Then, they will obtain approval from the research committee of the hospital, and begin data collection.
- Second-year fellows will perform the statistical analysis, which will be followed by manuscript writing and paper publication preparation.
- The fellow is encouraged to complete the evidence-based practice module and research method module by SCFHS.



VIII. CONTINUUM OF LEARNING

Specialty General Practice	F1 (Junior Level)	F2 (Senior Level)	Consultant sub specialist
Sub- specialty	Dependent/supervised	Dependent/supervised	Independent
Non-practicing	practice	practice	practice/provide supervision
Obtain basic health science and foundational level to core discipline knowledge	Obtain fundamental knowledge related to the core clinical problems of the specialty	Apply the obtained knowledge to provide appropriate clinical care	Acquire advanced and current knowledge related to the core clinical problems of the specialty
Internship to the practice of discipline	Apply clinical skills such as physical examination and practical procedures related to the core presenting problems of the specialty	Analyze and interpret findings using clinical skills to develop appropriate differential diagnoses and management plan for patients	Compare and evaluate challenging, contradictory findings and develop expanded differential diagnoses and management plan



IX. TEACHING METHODS

The teaching process in postgraduate fellowship training programs is primarily based on the principles of adult learning theory. Trainees understand the importance of learning and play active roles in the processes of their own learning. The training programs implement adult learning in each feature of the activities, and thus fellows are responsible for their own learning requirements.

Formal training time includes the following four teaching activities:

- 1. Program Specific Learning Activities
- 2. Universal Topics
- 3. General Learning Opportunities

1. Program-Specific Learning Activities:

- Teaching and learning are structured and designed to foster more responsibility.
- Fellows can use the facilities available in the hospital library, which have access to hundreds of journals through a computer system, including audiovisual teaching materials.

Activity	Attendance	Time	Details
Journal clubs of internal medicine section	Mandatory	Once weekly	 Ensuring that professional practice is evidence-based. Learning and practicing critical appraisal skills.
Ground round presentation of internal medicine	Mandatory	Once weekly	Presented by experienced senior staff members from different internal medicine specialties to increase the physicians' medical knowledge and skills, ultimately improving patient care.



Activity	Attendance	Time	Details
Case presentations of internal medicine	Mandatory	Once weekly	Diagnosis or management of unusual difficult cases to increase the physicians' medical knowledge and skills.
Morbidity and mortality reviews of internal medicine	Mandatory	Once monthly	 Focuses on the goal of improving patient care and identifying areas of improvement for clinicians involved in case management. Aims to prevent errors that lead to complications
Academic activities of each rotation like journal club or topic presentation	Optional	Once weekly	

A) Program Academic Half-Day:

- This activity occurs throughout the year, independent of the fellow's rotation.
- Time : 2 hours



Academic week	Section	Date	Time	Sessions	Presenters
1	Women's health	February 1	13:00-14:00	Program Welcoming	Program director
1			14:00-15:00	Topic 1	A
2		February 8	13:00-14:00	Topic 2	В
			14:00-15:00	Topic 3	С
3		February 15	13:00-14:00	Topic 4	D
			14:00-15:00	Topic 5	E

The example half day table is reflected in appendix B

B) Practice-Based Learning:

Training exposure during bedside and other work-related activities, including courses and workshops (e.g., standardized patients and bedside teaching), represent excellent opportunities for learning. Trainees are expected to build their capacity through self-directed learning. Fellows are encouraged to attend courses or workshops on women's health.

2. Universal Topics

Universal topics are educational activities developed by the SCFHS and intended for all specialties. Priority is given to topics related to these qualities.

- High-value
- Interdisciplinary and integrated
- Require expertise that might be beyond the availability of the local clinical training sites



Universal topics have been developed by the SCFHS and are available through e-learning via personalized access for each trainee (to access online modules). Each universal topic has a self-assessment at the end of the module. As indicated in the "executive policies of formative assessment and annual promotion," universal topics are a mandatory component of the criteria for the annual promotion of trainees from their current level of training to the subsequent level, particularly at residency level. Universal topics are distributed throughout the training period.

(Details in Appendix A)

I. ASSESSMENT AND EVALUATION

1. Purpose of Assessment

Assessments play a vital role in the success of postgraduate training. Assessments guide trainees and trainers to achieve defined standards, learning outcomes, and competencies. Furthermore, assessments provide feedback to learners and faculty regarding curriculum development and implementation, teaching methods, and the quality of the learning environment. A reliable and valid assessment is essential for evaluating curriculum alignment with respect to the objectives, learning methods, and assessment tools. Finally, the assessments ensure that health professionals can safely and competently practice.

Assessments can serve the following purposes:

- a. Assessment for learning: Trainers use information from trainees' performances to facilitate their learning for continuous improvement. This enables educators to use information about the trainees' knowledge, understanding, and skills to provide feedback about learning and ways to improve.
- b. Assessment as learning involves trainees in the learning process through enabling them to monitor their own progress. Trainees use selfassessments and educator feedback to reflect on their progress. It develops and supports the trainees' metacognitive skills. and is crucial for helping residents and fellows become lifelong learners.
- c. **Assessment of learning** is used to demonstrate the achievement of trainees' learning. This is a graded assessment that usually counts towards the trainees' end-of-training degree.



d. **Feedback and evaluation** as assessment outcomes, represent quality metrics that can improve the learning experience.

2. Formative Assessment

2.1 General Principles

Fellows should strive to seek and develop performances based on feedback throughout their fellowships. The formative assessment is a component of the assessment distributed throughout the academic year, aimed primarily at providing trainees with effective feedback.

2.2 Formative Assessment Tools

- Evaluations and assessments throughout the program are conducted in accordance with the SCFHS rules and regulations.
- The assessment is conducted toward the end of each training rotation throughout the academic year as a continuous assessment.
- The end-of-rotation evaluation form must be completed within two weeks following the end of each rotation (<u>done through One45</u>) and signed by the supervisor consultants. The program director will discuss the evaluation the fellows as necessary. The evaluation form will be submitted to the SCFHS within four weeks of the end of the rotation.
- Regular attendance is necessary for instructional and learning sessions. A minimum of 75% attendance records are necessary for promotion.
- Trainees are required to satisfactorily complete all assigned rotations for each academic year. Successful completion of rotations requires approval from the trainees' direct supervisor(s) and the Program Director.
- Trainees are required to pass the promotion exam at the end of the first academic training year and the written exam in the second academic training year.

Learning Domain		
Formative	First year Fellow F1	Second year Fellow F2
Assessment Tools		



Knowledge	 Academic Activities Case-Based Discussion (CBD) Conducted twice during each academic year. Written Promotion Test 	 Case-Based Discussion (CBD) Conducted twice during each academic year. Mini-CEX (Mini-Clinical Evaluation exercise) 			
		Once in second year			
Skills	 Research Activities Choose an idea, write the proposal, obtain approval from research committee in the hospital, and initiate data collection. Community Activities 	 Research Activities Perform the statistical analysis, write the final manuscript, and submit for publication. Community Activities To participate in women's health day alongside women in the community. 			
Attitude	In-Training Evaluation Report (ITER)	Final In-Training Evaluation Report (FITER)			

3.1 Promotion Examination

This is a written exam that permits fellows to be promoted from one level to another level of training. The examination will assess the trainees' theoretical knowledge and problem-solving capabilities in women's health and is delivered in multiple choice question (MCQ) format. Number of examination items, eligibility, and passing scores are in accordance with the General Bylaws of Training in Postgraduate Programs and General Assessment Bylaws (available online: www.scfhs.org).

Format Outlines: The content of the following table is for demonstration only (please refer to the most updated version published on the SCFHS website):

Contents						
Categories	Sections	Proportion s	Medical science	Diagnosi s	Manageme nt	Investigatio ns
Women's	Menopause	10 %	2	3	3	2
health 35%	Cancer screening	10%	3	2	2	3

Example of Written Exam Format



Contents						
Categories	Sections	Proportion S	Medical science	Diagnosi s	Manageme nt	Investigatio ns
	Menstrual disorders	10%	2	3	3	2
	Osteoporosis	5%	1	1	2	1
	Hypertension	10%	3	3	2	2
General internal 25% Medicine	Anemia	5%	1	1	2	1
	Vaccine	10%	3	2	3	2
Cardiology 10%	Heart failure	5%	1	1	2	1
	Ischemic heart disease	3%	0	1	1	1
	Arrhythmia	2%	0	0	1	1
High risk pregnancy 10%	Preeclampsia	5%	0	2	2	1
	Gestational diabetes 5% 0 2		2	2	1	
Endocrine 10%	diabetes	5%	1	1	2	1
	Thyroid disorder 5% 1 2		2	1	1	
Thromboem bolic 5%	Pulmonary embolism	3%	0	1	1	1
	Deep vein thrombosis	2%	0	0	1	1
Scholarly Activities and others 5%	Research, ethics, professionalism and patient safety	5%	1	1	2	1
	Total	100%	19	26	32	23



The final evaluation of each component will be based on the following intervals:

Percentage	< 50%	50-59.4%	60-69.4%	>70%
Description	Clear fail	Borderline fail	Borderline pass	Clear pass

- To achieve promotion without further requirements, the candidate must score a minimum of "borderline pass" in all used formative assessment tools.
- The program director can still recommend the promotion of candidates if the above is not met in certain situations: In the case the candidate scored "borderline failure" in one or two components at maximum, and these scores should not belong to the same area of assessment (for example: both borderline failures should not belong to skills). The candidate must have passed all other components and scored a minimum clear pass in at least two components.
- The candidate will repeat the first academic training year if they have a <u>clear fail</u> in the promotion-written exam.

3. Summative Assessment

The fellows' evaluation and assessment throughout the program are undertaken in accordance with the commission's training, as well as examination rules and regulations. These include the following:

3.2 General Principles

Summative assessment is a component that primarily aims to make informed decisions about the trainees' competency. For further details, please refer to the General Bylaws Of Training in Postgraduate Programs and General Assessment Bylaws (available online: <u>www.scfhs.org</u>). In order to be eligible to appear for the final exams, trainees will be granted "Certification of Training Completion" upon successful completion of all training rotations.

3.3 Final In-training Evaluation Report (FITER)

FITER is prepared by the program directors for each fellow at the end of their final year of training. This report will be the basis for obtaining a Certificate of Training Program Completion, as well as the qualification to appear for the final specialty examinations.



3.4 Certification of Training Completion

In order to be eligible to appear for the final examinations, each fellow is required to obtain

"*Certification of Training Completion*". Based on the General Bylaws of Training in Postgraduate Programs and Executive Policy (please refer to <u>www.scfhs.org</u>) trainees will be granted "Certification of Training-Completion" once the following criteria is fulfilled:

- a. Successful completion of all training rotations.
- b. Completion of training requirements (e.g., research) as approved by the scientific committee of women's health.
- c. Clearance from the SCFHS training ensures compliance with tuition payments and the completion of universal topics.
- d. Passing the promotion examination.

"Certification of Training Completion" will be issued and approved by the supervisory committee or its equivalent according to SCFHS policies.

3.5 Final women's health Examinations

The final specialty examination is a summative assessment component that grants the trainees specialty certifications. It has two elements:

a) **Final written exam:** in order to be eligible for this exam, trainees are required to have obtained "Certification of Training Completion."

This examination assesses trainees' theoretical knowledge foundation (including recent advances) and problem-solving capabilities in women's health. It is delivered in MCQ format and held at least once a year. The number of exam items, eligibility, and passing scores are in accordance with the commission's training, as well as examination rules and regulations. The examination details are published on the commission website: www.scfhs.org.sa.

b) **Final clinical /practical exam:** Trainees must pass the final written exam to be eligible for the final clinical exam.

This examination assesses a broad range of high-level clinical skills, including data gathering, patient management, communication, and counseling. The examination is conducted once a year, preferably in OSCE format in the form of patient management problems (PMPs). The exam eligibility and passing scores are in accordance with the commission's



training and examination rules and regulations. Examination details and formats have been published on the commission website: www.scfhs.org.sa.

For further details on the final exams, please refer to the General Bylaws of Training in Postgraduate Programs and general assessment (available online: www.scfhs.org).

Learning Domain Summative Assessment Tools		Passing Score	
Knowledge	Final Written Examination	At least borderline pass in each tool in accordance with the standard setting method used by the executive administration of assessment	
Skills	Objective Structured Clinical Examinations (OSCE)	At least borderline pass in each tool in accordance with the standard setting method used by the executive administration of assessment	
Attitude	In-Training Evaluation Report (FITER)	Successfully pass (FITER)	

Certificate of training completion will be issued only upon the fellow's successful completion of all program requirements. In addition, candidates passing all components of the final specialty examination are awarded the "Women's Health fellowship" certificate

II. Program and Course Evaluation

The SCFHS applies various measures to evaluate the implementation of this curriculum. The training outcomes of this program will follow the quality assurance framework endorsed by the Central Training Committee of the SCFHS. Trainee assessment (both formative and summative) results are analyzed and mapped to the curriculum content. Other indicators that will be incorporated are as follows:

- Report of the annual trainees' satisfaction survey.
- Reports from trainees' evaluation of faculty members.
- Reports from trainees' evaluation of rotations.
- Reports from the annual survey of program directors.
- Data available from program accreditations.



- Reports from direct field communications with trainees and trainers.

Goal-Based Evaluation: The achievement of intended milestones will be evaluated at the end of each stage to assess the progress of curriculum delivery, and any deficiencies will be addressed in the following stage, utilizing the time devoted to trainee-selected topics and professional sessions.

In addition to subject-matter opinions and best practices from benchmarked international programs, the SCFHS will apply a robust method to ensure that this curriculum will utilize all data available during its revision in the future.

III. Policies and Procedures

This curriculum provides the necessary resources and materials to achieve the identified educational outcomes and outlines the learning objectives with which trainees and trainers will interact. The SCFHS has a full set of "General Bylaws of Training in Postgraduate Programs" and "Executive Policies" (published on the official SCFHS website) that regulate all training-related processes. The general bylaws of training, assessment, and accreditation as well as executive policies on admission, registration, formative assessment and promotion, examination, trainees' representation and support, duty hours, and leaves are examples of regulations that need to be implemented. Under this curriculum, trainees, trainers, and supervisors must comply with the most updated bylaws and policies, which can be accessed online (via the official SCFHS website).

IV. Appendices

Appendix- A

Universal Topics Modules

Intent:

These are high-value interdisciplinary topics of the utmost importance to trainees. The reason for delivering the topics centrally was to ensure that every trainee received high-quality teaching and developed essential core knowledge. These topics are common across all specialties. The included topics met one or more of the following criteria:

• Impactful: Topics that are common or life-threatening.



- Interdisciplinary: Topics that are difficult to teach by a single discipline.
- Orphan: Topics that are poorly represented in the undergraduate curriculum.
- Practical: Topics that trainees will encounter during hospital practice.

Development and Delivery:

The core topics for the PG curriculum are centrally developed and delivered by the commission through an e-learning platform. A set of preliminary learning outcomes has been developed for each topic. In collaboration with the central team, content experts may modify the learning outcomes. These topics will be didactic in nature, with a focus on the practical aspects of care. Furthermore, they are more content-intensive than workshops or other planned face-to-face interactive sessions. The suggested duration for each topic is 1.30 hours.

Assessment:

The topics are delivered in a modular manner. At the end of each Learning Unit, an online formative assessment is conducted. After completing all the topics, there will be a combined summative assessment in the form of a context-rich MCQ. All trainees must attain a minimum competency in the summative assessment. Alternatively, these topics could be assessed in a summative manner, along with a specialty examination.

Some ideas include case studies, high-quality images, successful examples of prescribing drugs in disease states, and internet resources.

Module 1: Introduction

- 2. Hospital acquired infections
- 3. Sepsis; SIRS; DIVC

Hospital Acquired Infections (HAI):

At the end of the Learning Unit, fellows should be able to:

- a) Discuss the epidemiology of HAI with special reference to HAI in Saudi Arabia.
- b) Recognize HAI as one of the major emerging threats in healthcare.
- c) Identify the common sources and set-ups of HAI.



- d) Describe the risk factors for common HAIs such as ventilatorassociated pneumonia, MRSA, CLABSI, Vancomycin Resistant Enterococcus (VRE).
- e) Identify the role of healthcare workers in the prevention of HAI.
- f) Determine appropriate pharmacological (e.g., selected antibiotic) and non-pharmacological (e.g., removal of indwelling catheter) measures for the treatment of HAI.
- g) Propose a plan to prevent HAI in the workplace.

Sepsis, SIRS, DIVC: At the end of the Learning Unit, fellows should be able to:

- a) Explain the pathogenesis of sepsis, SIRS, and DIVC.
- b) Identify patient-related and non-patient related predisposing factors of sepsis, SIRS, and DIVC.
- c) Recognize at-risk patients for developing sepsis, SIRS, and DIVC.
- d) Describe the complications of sepsis, SIRS, and DIVC.
- e) Apply the principles of disease management to patients with sepsis, SIRS, and DIVC.
- f) Describe the prognosis of sepsis, SIRS, and DIVC.

Module 2: Cancer

9. Cancer prevention

Cancer Prevention:

At the end of Learning Unit, fellows should be able to:

- g) Conclude that many major cancers are preventable.
- Identify that smoking prevention and life-style modifications are major preventable measures
- i) Recognize cancers that are preventable.
- j) Discuss the major cancer prevention strategies at the individual and national level.
- k) Counsel patients and families in a proactive manner regarding cancer prevention, including screening.

Module 3: Diabetes and Metabolic Disorders

11. Recognition and management of diabetic emergencies



- 12. Management of diabetic complications
- 13. Comorbidities of obesity

Recognition and Management of Diabetic Emergencies:

At the end of the Learning Unit, fellows should be able to:

- a) Describe the pathogenesis of common diabetic emergencies including their complications.
- b) Identify risk factors and groups of patients vulnerable to such emergencies.
- c) Recognize a patient presenting with diabetic emergencies.
- d) Institute immediate management.
- e) Refer the patient to appropriate next level of care.
- f) Counsel patients and their families to prevent such emergencies.

Management of Diabetic Complications:

At the end of the Learning Unit, fellows should be able to:

- a) Describe the pathogenesis of important complications of type 2 diabetes mellitus.
- b) Screen patients for such complications.
- c) Develop preventative measures for identified complications associated with type 2 diabetes mellitus.
- d) Apply appropriate treatments for such complications.
- e) Counsel patients and families with special emphasis on prevention.

Comorbidities of Obesity:

At the end of the Learning Unit, fellows should be able to:

- a) Screen patients for the presence of common and significant comorbidities of obesity.
- b) Manage obesity related comorbidities.
- c) Provide dietary and life-style suggestions for the prevention and management of obesity.

Module 4: Medical and Surgical Emergencies

- 15. Management of acute chest pain
- 16. Management of acute breathlessness
- 17. Management of altered sensorium



18. Management of hypotension and hypertension

For all the above, the following learning outcomes apply.

At the end of the Learning Unit, fellows should be able to:

- a) Triage and categorize patients.
- b) Identify patients who need prompt medical and surgical attention.
- c) Generate preliminary diagnoses based on history and physical examination.
- d) Order and interpret urgent investigations.
- e) Provide appropriate immediate management to patients.
- f) Refer the patients to the next level of care, if needed.

Module 5: Acute Care

- 23. Acute pain management
- 24. Chronic pain management
- 25. Management of fluid in the hospitalized patient
- 26. Management of electrolyte imbalances

Acute Pain Management:

At the end of the Learning Unit, fellows should be able to:

- a) Review the physiological basis of pain perception.
- b) Proactively identify patients who might be in acute pain.
- c) Assess a patient with acute pain.
- d) Apply various pharmacological and non-pharmacological modalities available for acute pain management.
- e) Provide adequate pain relief for uncomplicated patients with acute pain.
- f) Identify and refer patients with acute pain who benefit from specialized pain services.

Chronic Pain Management: At end of the Learning Unit, fellows should be able to:

- a) Review bio-psychosocial and physiological basis of chronic pain perception.
- b) Discuss various pharmacological and non-pharmacological options available for chronic pain management.



- c) Provide adequate pain relief for uncomplicated patients with chronic pain.
- d) Identify and refer patients with chronic pain who can benefit from specialized pain services.

Management of Fluid in Hospitalized Patients: At the end of the Learning Unit, fellows should be able to:

- a) Review physiological basis of water balance in the body.
- b) Assess a patient for their hydration status.
- c) Recognize a patient with overhydration and dehydration.
- d) Order fluid therapy (oral and intravenous) for hospitalized patients.
- e) Monitor fluid status and response to therapy through history, physical examination, and selected laboratory investigations.

Management of Acid-Base Electrolyte Imbalances: At the end of the Learning Unit, fellows should be able to

- a) Review physiological basis of electrolyte and acid-base balance in the body.
- b) Identify diseases and conditions that are likely to cause or are associated with acid/base and electrolyte imbalances.
- c) Correct electrolyte and acid-base imbalances.
- d) Perform careful calculations, checks, and other safety measures while correcting the acid-base and electrolyte imbalances.
- e) Monitor response to therapy through history, physical examination and selected laboratory investigations

Module 6: Frail Elderly

- 23. Assessment of frail elderly
- 24. Mini-mental state examination
- 25. Prescribing drugs for the elderly
- 26. Care of the elderly

Assessment of Frail Elderly: At the of the Learning Unit, fellows should be able to:

a) Enumerate the differences and similarities between comprehensive assessment of the elderly and assessment of other patients.



- b) Perform a comprehensive assessment, in conjunction with other members of the healthcare team, of the frail elderly with special emphasis on social factors, functional status, quality of life, diet and nutrition, and medication history.
- c) Develop a problem list based on the assessment of the elderly

Mini-Mental State Examination: At the end of the Learning Unit, fellows should be able to:

- a) Review the appropriate usages, advantages, and potential pitfalls of Mini-MSE.
- b) Identify patients suitable for mini-MSE.
- c) Screen patients for cognitive impairment through mini-MSE.

Prescribing Drugs in the Elderly: At end of the Learning Unit, fellows should be able to:

- a) Discuss the principles of prescribing to the elderly.
- b) Recognizing polypharmacy, prescribing cascades, inappropriate dosages, inappropriate drugs, and deliberate drug exclusion as major causes of morbidity in the elderly.
- c) Describe the physiological and functional declines in the elderly that contribute to increased drug-related adverse events.
- d) Discuss drug-drug interactions and drug-disease interactions among the elderly.
- e) Become familiar with Beers criteria.
- f) Develop rational prescribing habit for the elderly.
- g) Counsel elderly patients and their family on safe medication usage.

Care of the Elderly: At end of the Learning Unit, fellows should be able to

- a) Describe the factors that need to be considered while planning elderly care.
- b) Recognize the needs and well-being of caregivers.
- c) Identify the local and community resources available for elderly care.
- **d)** Develop, with input from other healthcare professionals, an individualized care plan for elderly patients.

Module 7: Ethics and Healthcare

3.2 Evidence based approach to smoking cessation



3.5 Ethical issues: treatment refusal and patient autonomy

Evidence Based Approach to Smoking Cessation

At the end of the Learning Unit, fellows should be able to:

- a) Describe the epidemiology of smoking and tobacco usage in Saudi Arabia.
- b) Review the effects of smoking on smokers and their family members.
- c) Effectively use pharmacologic and non-pharmacologic measures to treat tobacco usage and dependence.
- d) Effective use of pharmacological and nonpharmacological measures to treat tobacco use and dependence among special population groups such as pregnant women, adolescents, and patients with psychiatric disorders.

Ethical Issues: Treatment Refusal and Patient Autonomy

At the end of the Learning Unit, you should be able to:

- a) Predict situations where a patient or family is likely to decline prescribed treatment.
- b) Describe the concept of 'rational adult' in the context of patient autonomy and treatment refusal.
- c) Analyze key ethical, moral, and regulatory dilemmas in treatment refusal.
- d) Recognize the importance of patient autonomy in the decisionmaking process.
- e) Counsel patients and families declining medical treatment with the best interest of the patient.

Appendix-B

Examples of an Academic Half-Day Table



Date	time	Торіс	Speaker
7 th January	1-3 pm	welcoming to the Women's health program	Program Director
14 January	1-3 pm	Ischemic heart disease in women	A
		Heart failure in women	В
		Heart disease and hormonal replacement therapy	С
		Hypertension in women	D
		Stroke in women	E
		Thrombosis and anticoagulation in women	F
		Obesity in women	G
		HIV in women	Н
		UTI in women	I
		Hypertension in pregnancy	J
		Secondary causes of hypertension	K
		Preventive medicine in women	L
		Dementia in women	Μ
		Thyroid disease in women	Ν
		Diabetes management	0
		Diabetes in pregnancy	Р
		Care of high risk pregnancy	U
		Update in medication of hypertension and Diabetes	Q
		Osteoarthritis in women	R
		Dyslipidemia	S
		Osteoporosis in women	Т



Date	time	Торіс	Speaker
		Depression in women	U
		Poly pharmacy in elderly women	V
		Fall in elderly women	W
		Sexual medicine	Х
		Understanding pelvic pain	B2
		Infertility and hormonal replacement therapy	C2
		Amenorrhea	D2
		Oral contraceptive therapy	E2
		Nutrition in elderly women	F2
		Health maintenance of elderly women	G2
		Imaging in women	H2
		Urine incontinence	12
		Chronic pain in women	L2

Appendix-C

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