الهيئة السعودية للتخصصات الصحية
Saudi Commission for Health Specialties

OBESITY MEDICINE FELLOWSHIP

2022


بسم الله الرحمن الرحيم

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III. FOREWORD

The Obesity Medicine Fellowship curriculum development team acknowledges the valuable contributions and feedback from the contributors in the development of this program. We extend special appreciation and gratitude to all of the members who have been pivotal in the completion of this booklet, especially the Curriculum Group, the Curriculum Specialists, and the Scientific Council. We would also like to acknowledge that the ACGME framework was used in this document, and many of the competency descriptions were acquired from their resources.

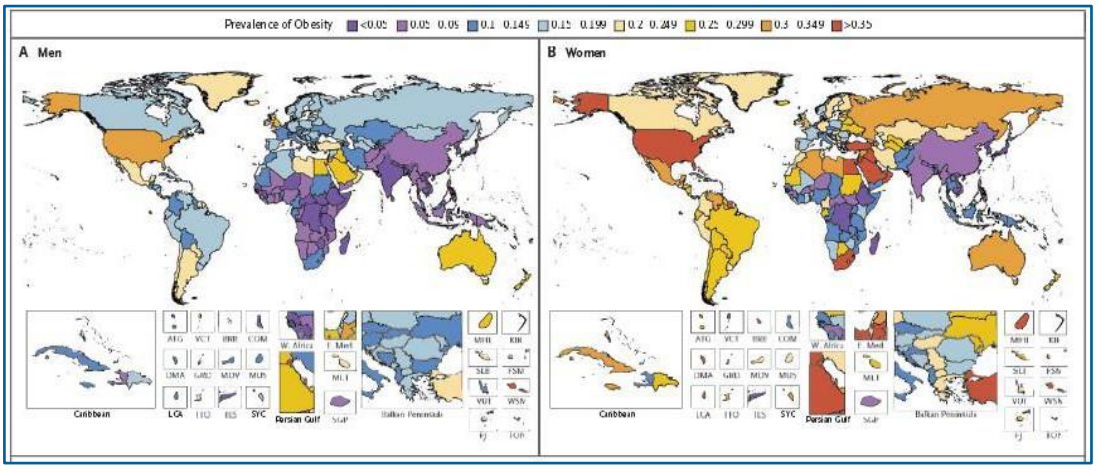
IV. TABLE OF CONTENTS

V. INTRODUCTION

1. Foreword on obesity and associated disease prevalence in Saudi Arabia

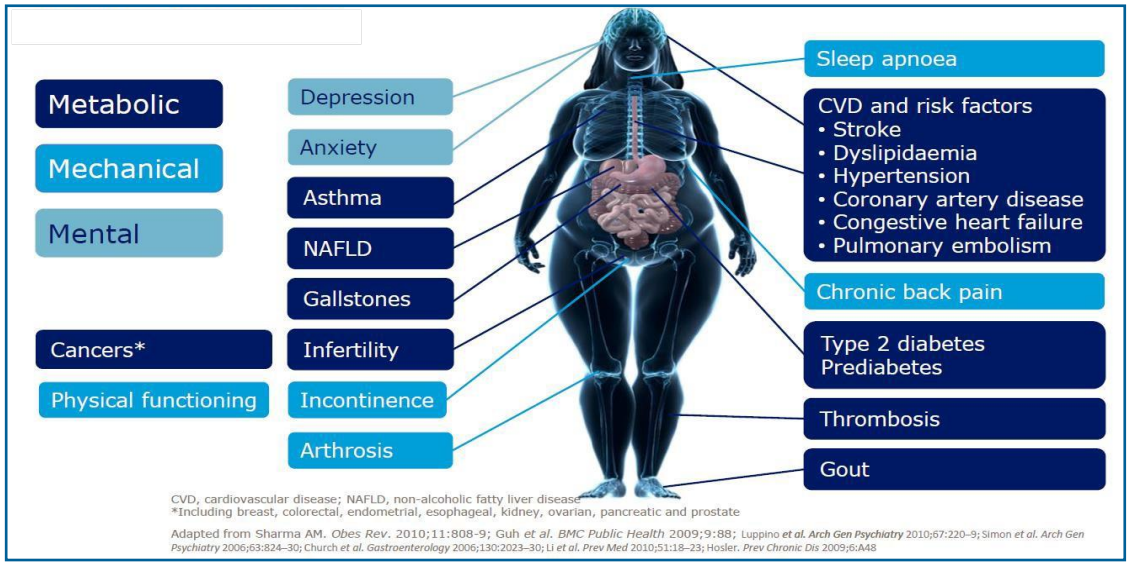
Obesity remains one of the world's most challenging pandemics. Since 1980, the prevalence of obesity has doubled in 73 countries around the world and steadily increased in others, and complications resulting from being overweight or having obesity now affect more than 2 billion people worldwide.[1] The Kingdom of Saudi Arabia carries one of the highest burdens of disease of obesity in the world, with the prevalence of obesity estimated at 35%.[2] The Kingdom has been at the forefront of battling this pandemic, and reducing the rate of obesity is the main focus of the healthcare plan of the county's VISION 2030, a strategic framework and blueprint expressing long-term goals in various sectors such as quality of life, caring for health, and a thriving economy.[3]

Map: Worldwide obesity distribution in men and women



Global Burden of Obesity. NEJM 2017.

Obesity complications



2. Obesity medicine's research, pharmacotherapy, and procedures

There has been an exponential growth in obesity pharmacotherapy with safe and effective options for the long-term sustainable management of obesity. Moreover, research in the field of obesity medicine covers basic science, genetics, community-based health factors, population studies, medicine, pharmacotherapy, surgery, endoscopic procedures and instruments, microenvironmental intervention, cognitive and behavioral sciences, and community-based interventions.

3. Obesity medicine as a subspecialty

Obesity medicine is a medical subspecialty where an obesity medicine consultant is a physician with expertise in the subspecialty of obesity medicine. This subspecialty requires competency and a thorough understanding of the pathophysiology of obesity, genetics, biology, environment, social factors, and behavioral factors that contribute to the

disease of obesity and its associated complications, disorders, and/or syndromes.

4. Obesity medicine subspecialists

An obesity medicine subspecialist physician employs therapeutic interventions including microenvironmental interventions, pharmacotherapy, and endoscopic and surgical interventions. They utilize a comprehensive approach that may include additional experts such as nutritionists, exercise physiologists, psychologists, and bariatric surgeons as needed to achieve optimal results. Additionally, each physician maintains competency in providing pre-, peri-, and post-surgical care for bariatric surgery patients. They are competent in treating both suboptimal weight loss and weight regain after bariatric surgery to promote the prevention of obesity. They also advocate for those who suffer from obesity.

5. Availability of obesity medicine fellowship programs

Despite the prevalence of obesity in Saudi Arabia and the MENA region, there is *no accredited training program* with board certification in the region. Given this situation, most patients with obesity end up in the hands of un-trained physicians who do not have the knowledge or skills necessary to offer evidence-based medical or surgical care, or nutritionists, or are subject to medical fraud. Additionally, most patients who undergo bariatric surgery procedures have no follow up and receive suboptimal care after their surgery.

6. Scope of demand for specialized obesity medical care

Saudi Arabia currently has one of the highest obesity rates in the world, with ~70% of the population having pre-obesity or obesity.[2] This has led to the implementation of government policies to combat this growing problem, including sugar taxation, food labeling, and various programs (Weqayah, Rashaqah, etc.). But despite these efforts, the rate of obesity continues to grow. Obesity also leads to multiple complications that are very costly to our healthcare system, such as type 2 diabetes mellitus, hypertension, cardiovascular disease, multiple types of cancer, osteoarthritis, obstructive sleep apnea (OSA), and non-alcoholic fatty liver disease. Shifting the current paradigm to one where obesity is treated first will enable us to prevent the occurrence of these devastating diseases. Therefore, the need for highly trained individuals specialized in obesity care is evident and is an essential factor in combating the related complications. Furthermore, offering standardized and evidence-based care to patients with obesity is crucial to avoid devastating consequences on the personal, family, community, and national levels.

7. Obesity management model of care

The current model of obesity management foundation is a multidisciplinary team (MDT) composed of a trained obesity medicine consultant, certified educators, dieticians/nutritionists, psychiatrists, psychologists, and bariatric surgeons, among others. Members of an MDT are led by an obesity medicine physician with the experience, qualifications, and skills required to organize the work and ensure the proper use of the available resources.

8. Training program structure and candidates

To achieve its goals, the Saudi Commission for Health Specialties (SCFHS) is establishing an advanced subspecialty fellowship training program in obesity medicine. Hence, the target candidates are physicians who have *completed* their training in a subspecialty such as endocrinology.The program structure is rotation-based, where candidates will rotate through the participating specialties.

9. Fellows' training

Fellows' training will be in the fields of *obesity management, patient advocacy,community service, and research*. Moreover, obesity consultants, bariatric surgeons, diabetologists, endocrinologists, psychiatrists, psychologists, geneticists, and other related specialists will provide state-of-the-art training for the fellows.

10. Program objectives

The primary purpose of this program is to provide candidates who will go on to be experts in the field of obesity medicine and provide training for other individuals in order to create a workforce in this growing specialty.

11. Rationale for competencies and ACGME principles adaptations

The framework of competencies will follow the Accreditation Council for Graduate Medical Education's (ACGME) milestones and competencies. They are applied in manypostgraduate training programs worldwide, where they offer a model for physician competencies that emphasizes not only medical expertise but also multiple additionalnonmedical expert roles that aim to serve the fellow's and society's needs competently.

12. ACGME framework

The learning outcomes of the obesity medicine fellowship are based on the ACGME framework of competency-based education developed by the Obesity Medicine Education Collaborative (OMEC).[5]

13. Options for career paths

Graduates of the obesity medicine fellowship program should be able to work as subspecialists in obesity medicine at obesity centers of excellence, endocrine departments, as a lead member of an MDT, as a standalone provider in periphery areas, and as population health strategy providers caring for patients with obesity. Further, there are many opportunities to pursue career paths in population health management, research, training, and advocacy. Other possibilities are open to discovery, innovation, and creativity.

14. Future directions

The future of obesity medicine is full of potential, opportunity, and growth. Because obesity is such a prevalent disease, there is currently a great need and demand for obesity medicine physicians in all specialties. In particular, obesity medicine will proliferate to include specialties such as gastroenterology, cardiology, OB/GYN, rehabilitation medicine, and others. The current practice of obesity medicine is evolving fast with different pharmacotherapeutic, endoscopic, and surgical options.

VI. ABBREVIATIONS USED IN THIS DOCUMENT

Abbreviation	Description
ACGME	Accreditation Council for Graduate Medical Education
KSA	Kingdom of Saudi Arabia MDT: Multidisciplinary team
SCFHS	Saudi Commission for Health Specialties
OMEC	Obesity Medicine Education Collaborative
OSA	Obstructive sleep apnea

VII. PROGRAM ENTRY REQUIREMENTS

The Obesity Medicine Clinical Fellowship is a one-year Advanced Subspecialty Fellowship available *only* to trainees who have completed a previous subspecialty fellowship (endocrinology, gastroenterology, cardiology, or diabetology).

Requirements for admission

1. Recognized medical degree certificate.
2. Subspecialty board eligible or certification in targeted subspecialties (e.g., endocrinology, gastroenterology, cardiology, or diabetology) from the SCHS or an equivalent degree.
3. Licensure to practice medicine in the KSA.
4. Passing the interview.

VIII. LEARNING AND COMPETENCIES

1. Introduction to learning outcomes and competency-based education

The learning outcomes of the obesity medicine fellowship are based on the ACGME framework of competency-based education, which is comprised of the 32 obesity-related competencies developed by the OMEC.[4]

2. Program duration

The Obesity Medicine Clinical Fellowship offers a one-year Advanced SubspecialtyFellowship program.

Vacations: Fellows are eligible for one of the Eid holidays (one week), one week ofannual professional leave, and four weeks of annual leave.

3. Program rotation

The roadmap for the rotations, depicted below, must be followed strictly. However, the sequence of rotations within each level can be manipulated according to need.

Training Year	Mandatory core rotations*		
	Rotation name	Duration	Setting
F1	Obesity Medicine	28 Weeks	Clinical
	Bariatric surgery	6 weeks	
	Sleep Medicine	2 weeks	
	Gastroenterology/Endocrinology	4 weeks	
	Research	4 weeks	
	Nutrition	4 weeks	
	Vacation	4 weeks	

During the aforementioned rotations, fellows will participate in the following:

1. Outpatient clinics entail a minimum of five clinics per week (maximum of seven).
2. Fellows should participate in outpatient clinics in the specialties to which the fellow is assigned under the supervision of consultants. Fellows are not expected to cover clinics without a consultant's supervision.
3. Participate in MDT meetings
4. Seminars in obesity.

Fellows must identify the area of research they wish to pursue and the faculty memberthey wish to work with. They should work closely with the faculty member to plan theproject and prepare a written outline. Fellows are closely supervised during their research by their faculty mentor, but there are also ample opportunities for guidance from and scientific interaction with the entire faculty through participation in lab meetings, divisional research conferences, and institutional seminars.

4. Mapping of learning objectives and competency roles to programrotations

Upon reviewing the OMEC competencies,[5] which are endorsed by the major obesity societies including the Obesity Medicine Association, the Obesity Society, and the American Society for Metabolicand Bariatric Surgery, these are the competencies that will be required for the Saudi Obesity Medicine Fellowship:

Obesity Medicine–General

1. Describe the global and national epidemiology of the disease of obesity (K).
2. Demonstrate an understanding of the economic burden (both direct and indirect) of the disease of obesity (K).
3. Demonstrate an understanding of the stigma of the disease of obesity (both internal and external stigma) and the consequences of weight bias on both thepatient's health and access to obesity care (K).
4. Demonstrate an understanding of the biological basis of obesity, mechanismsof disease development including appetite regulation, energy homeostasis, the gut-brain axis in obesity, and mechanisms of weight regulation (K).
5. Utilize anthropometric measurements (e.g., body composition) to develop appropriate obesity management plans (K, S).
6. Demonstrate an understanding of energy expenditure and its complex role inbody weight regulation (K).
7. Describe different etiologies of obesity (K).
8. Demonstrate an understanding of monogenic obesity, its types, and unique management approaches (K).

9. Demonstrate a thorough understanding of complications (comorbidities) of the disease of obesity and methods for screening for those complications (K).
10. Demonstrate an understanding of the metabolic and physical benefits of weight reduction through the different interventions for obesity (K).
11. Describe multidisciplinary intervention strategies including behavioral, nutritional, pharmacotherapy, endoscopic interventions, and surgeries (K).
12. Demonstrate an understanding of the mechanisms, potential benefits, and possible complications of pharmacotherapy (K).
13. Describe emerging therapies and potential new targets for obesity treatment (K).
14. Communicate with the patient, their family, and other members of the healthcare team while demonstrating awareness of different cultural views regarding perceptions of desired weight and preferred body shape (K, S).
15. Demonstrate an understanding of post-metabolic surgery operative care (including micro and macro nutritional care, bone care, surgical failure including suboptimal weight loss after metabolic surgery and weight regain after metabolic surgery, and post-bariatric surgery hypoglycemia) (K).
16. Create a personalized comprehensive obesity management plan for patients utilizing the principles of primary, secondary, and tertiary prevention of obesity (K, S).
17. Create a personalized comprehensive obesity management plan for patients according to the obesity treatment guidelines (S, K).
18. Apply combination therapy for the treatment of obesity, treatment for suboptimal weight loss after bariatric surgery, and treatment for weight regain after bariatric surgery (K, S).

19. Prescribe nutritional interventions for a comprehensive, personalized obesity management care plan (S).
20. Prescribe physical activity interventions to develop a comprehensive, personalized obesity management care plan (S).
21. Prescribe behavioral interventions to develop a comprehensive, personalized obesity management plan (S).
22. Outline appropriate pharmacological treatments for obesity as part of a comprehensive, personalized obesity management plan (K, S).
23. Explain to patients and other healthcare professionals the surgical treatments for obesity as part of a comprehensive, personalized obesity management care plan (S).
24. Outline appropriate treatment strategies for obesity as part of a comprehensive, personalized obesity management plan (K, S).
25. Explain and select cost-effective obesity intervention and prevention methods considering the individual, healthcare system, and community (K, S).
26. Take a comprehensive obesity-focused medical history (K, S).
27. Perform and document a comprehensive physical examination for the assessment of obesity (S).
28. Counsel patients effectively using evidence-based models of health behavior change to assess patients' readiness for applying a weight management program (S).
29. Analyze practice systems using quality improvement methods to monitor andoptimize obesity care (S).
30. Mange patients by effectively utilizing resources to locate and apply evidence-based strategies regarding obesity treatment and its complications (S).
31. Evaluate strengths and deficiencies in knowledge of obesity medicine, and setand achieve goals for improvement (K).

32. Effectively educate patients, students, residents, and other health professionals on the disease of obesity (S).
33. Work collaboratively within an interdisciplinary team dedicated to obesity prevention and treatment strategies (S, A).
34. Engage patients in their treatment through incorporating their culture, values, and beliefs to develop a shared management plan (A).
35. Demonstrate an understanding of the impact of obesity, and the role of obesity stigma, in the delay of treatment of obesity as a disease (K).
36. Demonstrate an understanding of the impact of obesity as a disease on thepatient, their family, and society (K).
37. Use appropriate language in verbal, nonverbal, and written communication that is non-biased, non-judgmental, respectful, and empathetic when communicating about patients with obesity with colleagues within one's profession and other members of the healthcare team (A, S).
38. Demonstrate empathy, compassion, respect, understanding, and ethics whentreating patients and their families who are living with pre-obesity or obesity(A).
39. Advocate for individuals living with obesity, and promote policies that are respectful and free of weight bias (A).

Endocrinology/Gastroenterology

(Depending on their subspecialty, obesitymedicine fellows will either do a gastroenterology or endocrinology rotation.)

Gastroenterology:

1. Demonstrate an understanding of the indications of endoscopic treatments and their role in the treatment of obesity (K).
2. Demonstrate an understanding of the mechanisms of endoscopic treatments,potential benefits, and possible complications (K).

3. Demonstrate a basic understanding of endoscopic interventions for bariatric surgery complications (e.g., leaks, strictures, and Barrett's esophagus) (K).

Endocrinology:

1. Demonstrate an understanding of the neuroendocrine basis of obesity as a disease (K).
2. Demonstrate understanding of and ability to screen for endocrine-related causesof obesity (K, S).
3. Identify patients requiring further diagnostic workup, and describe, select, and interpret the appropriate laboratory and radiological investigations (S, K).
4. Identify and manage endocrine complications of bariatric surgery (hypoglycemia and bone health) (K, S).

Bariatric surgery:

1. Demonstrate an understanding of the mechanisms, potential benefits, and possible complications of metabolic surgery (K).
2. Demonstrate knowledge and understanding of different bariatric surgery procedures and the indications of the different procedures (K).
3. Preform pre-operative micronutrient screening (K, S).
4. Demonstrate an understanding of perioperative management of patients undergoing bariatric procedures (K, S).
5. Demonstrate a general understanding of bariatric surgical revisional procedures and their indications (K).

Nutrition:

1. Demonstrate an understanding of nutritional interventions for the management of obesity (K).

2. Demonstrate an understanding of perioperative nutritional management of patients with obesity (K).
3. Develop personalized nutritional plans for different individuals with obesity (S).

Sleep medicine:

1. Demonstrate an understanding of the effect of sleep on body weight regulation (K).
2. Demonstrate an understanding of the sleep-related complications of obesity (e.g., OSA and obesity hypoventilation syndrome) and the different treatments for these complications (K).

IX. TEACHING METHODS

1. Program-specific activities

These are educational activities that are specifically designed and intended for trainees' teaching during their training time. The trainees are required to attend these activities and non-compliance can result in disciplinary actions.

A. Program academic half-day

These are three-hour weekly half-days with lectures, presentations, grand rounds, and journal clubs on important topics in obesity medicine.

For an example of an academic half-day, please see Appendix A.

B. Practice base learning

Clinical activities and clinical rotations. Fellows will be evaluated through a mini clinical evaluation exercise.

2. Universal topics

The fellows are expected to have completed the modules during their residency and fellowship training prior to joining the obesity medicine fellowship. If the modules were not completed, the obesity medicine fellowship requires fellows to complete Module 3: Diabetes and Metabolic disorders and Module 7: Ethics and Healthcare. Please see Appendix B for details on the modules.

Training year	Modules		Topic name	
	Number	Name	Number	Name
F1	Module-3	Diabetes and Metabolic Disorders	Topic-11	Recognition and management of diabetic emergencies
			Topic-12	Management of diabetic complications
			Topic-12	Comorbidities of obesity
			Topic-12	Abnormal ECG
	Module-7	Ethics and Healthcare	Topic-31	Occupational hazards of HCW
			Topic-32	Evidence-based approach to smoking cessation
			Topic-33	Patient advocacy
			Topic-34	Ethical issues: transplantation/organ harvesting; withdrawal of care
			Topic-35	Ethical issues: treatment refusal; patient autonomy
			Topic-36	Role of doctors in death and dying

X. ASSESSMENT AND EVALUATION

Description

Evaluation and assessment of fellows throughout the program are undertaken in accordance with the Commission's training and examination rules and regulations. This includes the following:

Continuous appraisal

This assessment is conducted toward the end of each training rotation throughout the academic year as a continuous means of both formative and summative evaluation.

1. Formative assessment:

To fulfill the ACGME competencies based on the end-of- rotation evaluation, the fellow's performance will be evaluated jointly by relevant staffmembers who will assess the required obesity medicine competencies mentioned above. (Please see the section Mapping of learning objectives and competency roles to program rotations.)

Formative assessment tools

Learning domain	Formative assessment tools	Important details (e.g., frequency, specifications related to the tool)
Knowledge	- Structured Academic Activities - Case Based Discussion (CBD)	- Fellows will be evaluated through their presentations; a minimum of 20 presentations are required by each fellow over the span of the one-year fellowship. - A case-based discussion is required on a monthly basis by the fellows.
Skills	- Mini-CEX: Mini-Clinical Evaluation Exercise - Research Activities	- Mini CEX is a direct observation of the fellow with patients. It will be performed on a monthly basis. - Each fellow is encouraged to participate in at least one research project and present their findings (through abstract submission or manuscript publication). Fellows can seek national or international mentors.
Attitude	- FITER: In-Training - Evaluation - Report	- Needs to be completed by the program director by the end of the fellowship.

2. Summative assessment

2.1 Final specialty examination

The final Saudi Obesity Medicine Board examination consists of two parts.

A. Written examination

This examination assesses the trainee's theoretical knowledge base (including recentadvances) and problem-solving capabilities in the obesity medicine subspecialty; it consists of multi-choice questions and is held once per year. The number of examination items, eligibility, and the passing score

are established in accordance with the Commission's training and examination rules and regulations. Examination details and a blueprint are published on the Commission's website, www.scfhs.org.sa.

Categories	Section	Proportion
I. Basic Concepts- 25%	Determinants of obesity	5%
	Pathophysiology	5%
	Epidemiology	5%
	Nutrition	5%
	Physical activity	5%
II. Diagnosis and evaluation- 25%	History	5%
	Microenvironmental evaluation	5%
	Physical assessment	5%
	Lab evaluation	5%
	Screening	5%
III. Treatment-40%	Behavioral	5%
	Microenvironmental	10%
	Pharmacotherapy	10%
	Endoscopic	5%
	Bariatric surgery	10%
IV. Patient care issues-10%	Stigma and bias	5%
	Multidisciplinary teams	5%
Total		100%

B. Oral structure clinical examination (OSCE)

This examination assesses a broad range of high-level clinical skills, including data collection, patient management, communication, and counseling. The examination is held at least once per year as an OSCE covering patient management problems. Eligibility and the passing score are established in accordance with the Commission's training and examination rules and regulations. Examination details and a blueprint are published on the Commission's website, www.scfhs.org.sa.

Topics	Affective domain	History taking	Clinical exam	Decisionmaking
Stigma and bias	Q1	Q2, Q3		
Diagnosis and evaluation		Q3, Q4	Q5	
Treatment				Q6, Q7
Post-operative care		Q8		Q9, Q10

2.2. Final in-training evaluation report (FITER)

In addition to the local supervising committee's approval of the completion of the clinical requirements, the program directors prepare a FITER for each fellow at the endof the fellowship.

2.3. Certification

A certificate of fellowship completion acknowledging professional training will only be issued to a fellow upon successful fulfillment of all program requirements. Candidates passing all components of the final specialty

examination are awarded the “Saudi subspecialty fellowship in obesity medicine” board certificate, through the SCFHS.

Learning Domain	Summative Assessment Tool	Requirement
Knowledge	- Final Written Examination	At least borderline pass in each tool inaccordance with the standard settingmethod used by the executive administration of assessment
Skills	- Objective Structured ClinicalExamination (OSCE)	At least borderline pass in each tool inaccordance with the standard settingmethod used by the executive administration of assessment
Attitude	- FITER: In-Training Evaluation Report	Successfully pass FITER

XI. PROGRAM AND COURSE EVALUATION

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

- Reports from trainees' evaluation of faculty members.
- Reports from trainees' evaluation of rotations.
- Reports from direct field communications with trainees and trainers.

Goal-based evaluation: the intended milestones achievement will be evaluated at the end of each stage to assess the progress of the curriculum delivery, and any deficiency will be addressed in the following stage utilizing the time devoted for trainee-selected topics and professional session.

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

XII. POLICIES AND PROCEDURES

This curriculum represents the means and materials outline of the learning objectives with which trainees and trainers will interact for the purpose of achieving the identified educational outcomes. The SCFHS has a full set of "General Bylaws" 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, continuous assessment and promotion, examination, trainees' representation and support, duty hours, and leave are examples of regulations that need to be implemented. Under this curriculum, trainees, trainers, and supervisors must comply with the most up-to-date bylaws and policies, which can be accessed online (via the official SCFHS website).

XII. APPENDICES

Appendix A. Example of an academic half-day

The following table contains example topics for an academic half-day of the obesity medicine fellowship.

Academic week	Section	Date	Time	Sessions	Presenters
1	Pathophysiologyof obesity	Oct 5	13:00–14:00	Welcome the program	Program director
			14:00–15:00	Case base study	A
			15:00–16:00	Fat mass set point and variation in zones of opportunity	B
2		Oct 12	13:00–14:00	Neurohormonal regulation of weight	C
			14:00–15:00	Brain circuit related to obesity	D
			15:00–16:00	Metabolic adaptation after weight	E
3	Role of nutrition in the management of obesity	Oct 19	13:00–14:00	Topic 6	F
			14:00–15:00	Case base study	B
			15:00–16:00	Role of macro and micronutrients	C

Academic week	Section	Date	Time	Sessions	Presenters
4		Oct 26	13:00–14:00	Journal club	K
			14:00–15:00	Case base study	B
			15:00–16:00	Chrononutrition	A

Appendix B. Universal topics

Module 3: Diabetes and Metabolic Disorders

1. Recognition and management of diabetic emergencies
2. Management of diabetic complications
3. Comorbidities of obesity
4. Abnormal ECG

Recognition and management of diabetic emergencies: At the end of the Learning Unit,you 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 the appropriate next level of care
f) Counsel patients and families to prevent such emergencies

Management of diabetic complications: At the end of the Learning Unit, you should be ableto

a) Describe the pathogenesis of important complications of type 2 diabetes mellitus
b) Screen patients for such complications

c) Provide preventive measures for such complications
d) Treat such complications
e) Counsel patients and families with special emphasis on prevention

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

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

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

a) Recognize common and important ECG abnormalities
b) Institute immediate management, if necessary

Module 7: Ethics and Healthcare

1. Occupational hazards of healthcare workers (HCW)
2. Evidence-based approach to smoking cessation
3. Patient advocacy
4. Ethical issues: transplantation/organ harvesting; withdrawal of care
5. Ethical issues: treatment refusal; patient autonomy
6. Role of doctors in death and dying

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

a) Recognize common sources and risk factors of occupational hazards among HCW
b) Describe common occupational hazards in the workplace
c) Develop familiarity with legal and regulatory frameworks governing occupationalhazards among HCW

d) Develop a proactive attitude toward promoting workplace safety
e) Protect yourself and colleagues against potential occupational hazards in theworkplace

Evidence-based approach to smoking cessation: At the end of the Learning Unit, youshould be able to

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

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

a) Define patient advocacy
b) Recognize patient advocacy as a core value governing medical practice
c) Describe the role of patient advocates in the care of patients
d) Develop a positive attitude towards patient advocacy
e) Be a patient advocate in conflicting situations
f) Be familiar with local and national patient advocacy groups

Ethical issues: Transplantation/organ harvesting; withdrawal of care: At the end of the Learning Unit, you should be able to

a) Apply key ethical and religious principles governing organ transplantation andwithdrawal of care
b) Be familiar with the legal and regulatory guidelines regarding organ transplantationand withdrawal of care
c) Counsel patients and families in the light of applicable ethical and religious principles
d) Guide patients and families to make informed decisions

Ethical issues: treatment refusal; patient autonomy: At the end of the Learning Unit, youshould be able to

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

Role of doctors in death and dying: At the end of the Learning Unit, you should be able to

a) Recognize the important role a doctor can play during the dying process
b) Provide emotional as well as physical care to a dying patient and their family
c) Provide appropriate pain management to a dying patient
d) Identify suitable patients and refer them to palliative care services

Appendix C: References

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