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Saudi Commission for Health Specialties

Palliative Medicine



سَبَّحَ لِلَّهِ مَا فِي السَّمَاوَاتِ وَالْأَرْضِ

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I. INTRODUCTION

Palliative care is a specialty that entails comprehensive multidisciplinary healthcare delivery to patients with a wide range of life-threatening and life-shortening diseases, including cancer. The major goal is to relieve symptoms of suffering such as physical pain, and psychosocial and spiritual problems affecting the quality-of-life for patients as well as family.

According to the definition of World Health Organization (WHO), palliative care is an approach that improves the quality of life of patients and their families who face problems associated with life-threatening illnesses, through the prevention and relief of suffering by means of early identification; impeccable assessment; and treatment of pain and other physical, psychosocial, and spiritual problems.

II. FEATURES OF PALLIATIVE CARE

- 1) Provides relief from pain and other distressing symptoms;
- 2) Affirms life and makes dying a normal process;
- 3) Intends neither to hasten or postpone death;
- 4) Integrates the psychological and spiritual aspects of patient care;
- 5) Offers a support system to help patients live as actively as possible until death;
- 6) Offers a support system to help the family cope during the patient's illness and bereavement;
- 7) Uses a team approach to address the needs of patients and their families, including bereavement counseling, if necessary;
- 8) Enhances quality of life, and may also positively influence the course of illness;
- 9) Applicable early in the course of illness, in conjunction with other therapies that are intended to prolong life, such as chemotherapy or radiation therapy, and includes the needed investigations

The palliative care service in Saudi Arabia was started over two decades ago by at King Faisal Specialist Hospital and Research Centre (KFSH&RC) in Riyadh. Since then, the field has expanded gradually. Currently, the service is available in many hospitals. It comprises a tertiary palliative care unit, consultation service throughout the hospital, outpatient clinics, home healthcare program, and both an outreach and fellowship programs. One of the difficulties facing cancer care in the Kingdom is that most cancer cases are diagnosed at an advanced stage when the disease is incurable. In these cases, the only available quality care is palliative care. For this sole reason, the need to strengthen the underdeveloped palliative care system is even higher. An effective palliative care system significantly benefits cancer patients in terminal stages, and those suffering from considerable pain and other symptoms.

The other major challenge facing cancer care in the Kingdom is that palliative care service is provided mainly to cancer patients because of the huge need and demand for oncology centers. Unfortunately, the current palliative care service does not have the capacity to accommodate the needs and demands of non-oncological specialties. Therefore, a greater number of training programs are required to develop more qualified physicians to serve cancer and non-cancer patients at the end of their life. The palliative care fellowship program accredited by the Saudi Commission for Health care specialties since 2013 comprises of multidisciplinary clinical training, a palliative care seminar series, mentored teaching, strong relationships with other disciplines within the concerned center, and long-standing collaboration with community partners as home health care facilities. The trainee will be responsible for the care of inpatients and outpatients in varied settings, including a large academic teaching hospital with acute inpatient and ambulatory care, consultation services, inpatient and involvement in home health care facilities. The recognized hospital for the fellowship program must include a Palliative Care Inpatient Unit with a dedicated specialized palliative care team including at least two palliative care consultants and the rest of the multidisciplinary team should include a social worker, trained palliative care nurses, and provide other related services and specialties.

An individualized learning plan for the fellowship provides varied opportunities within a curriculum comprising tutorials, seminars, teaching, and formal courses. The fellowship includes protected time to pursue and encourage research projects. The proposed fellowship program follows the CanMEDS framework. It will focus on oncology and non-oncology palliative care. Therefore, the duration of the fellowship will be two years divided into 8 mandatory rotations, 2 elective rotations, 3 out of 12 rotations, and annual leave. The table below presents the duration and distribution of each rotation.

FEATURES OF PALLIATIVE CARE

Type	Rotation	Total Duration	Year 1 (F1)	Year 2 (F2)
Mandatory				
1.	Palliative Care Unit (basic Palliative Care and advanced Palliative Care)	28 weeks	12 weeks (basic Palliative Care)	16 weeks (advanced)
2.	Palliative Care Consultation Care	20 weeks	8 weeks	12 weeks
3.	Palliative Care in Community/Home Palliative Care	8 weeks	4 weeks	4 weeks
4.	Ambulatory Palliative Care	Longitudinal		
5.	Radiation Oncology	4 weeks	4 weeks	
6.	Oncology	4 weeks	4 weeks	
7.	Pediatric Oncology/Pediatric Palliative Care	4 weeks	4 weeks	
8.	Research	8 weeks	4 weeks	4 weeks
Elective candidates can choose any medical specialty				
1.	Any medical specialty	8 weeks	4 weeks	4 weeks
Selective total F1 & F2(Only 3 rotations for a total of 12 weeks)				
1.	Cardiology	4 weeks	Either F1 or F2	
2.	ICU	4 weeks	Either F1 or F2	
3.	GI	4 weeks	Either F1 or F2	
4.	Geriatrics	4 weeks	Either F1 or F2	
5.	ID-HIV	4 weeks	Either F1 or F2	
6.	Nephrology	4 weeks	Either F1 or F2	
7.	Neurology	4 weeks	Either F1 or F2	
8.	Pulmonology	4 weeks	Either F1 or F2	
9.	Anesthesia	4 weeks	Either F1 or F2	
10.	Chronic Pain Management	4 weeks	Either F1 or F2	
11.	Psychiatry and Psychosocial Care	4 weeks	Either F1 or F2	
12.	Spiritual Care	4 weeks	Either F1 or F2	
Annual leave (8 weeks in addition.to Eid vacation will be merged with rotations according to policy)				
1.	Annual leave	8 weeks	4 weeks	4weeks
Total		104	40 weeks mandatory,4 weeks selective,4 weeks elective and 4 weeks leave with a total of 52 weeks	36 weeks mandatory, 4 weeks elective, 8 weeks selective and 4 weeks of annual leave with a total of 52 weeks

The fellow will expend a total of 104 weeks during his/her two-year fellowship. The fellowship is divided into two years, year one and year two. The fellow will be at level one in the first year and will be called F1. He/she will be at level two during the second year and will be called F2. During F1, the fellow must complete 40 weeks of mandatory rotation, 4 weeks of elective, 4 weeks of selective, and 4 weeks of annual leave. During F2, the fellow must complete 36 weeks of mandatory rotation, 4 weeks of elective, 8 weeks of selective, and 4 weeks of annual leave.

III. DEFINITION OF TERMS

- 1) Palliative Care Fellowship Program: It is a two-year structured training program for physicians who successfully passed a Saudi board in Family Medicine, Internal Medicine, and Anaesthesia or its equivalent to become competent subspecialized palliative care physicians. Admission criteria are with the accordance of the SCFHS
- 2) Spiritual care: It is an aspect of health care that addresses spiritual and religious needs brought on by an illness or injury.
- 3) Rotation: It is the overall time that the fellow will spend in a specific specialty to acquire specific competencies.
- 4) Block: It is a four-week duration from any rotation.
- 5) F1: A fellow in the first year of training
- 6) F2: A fellow in the second year of training
- 7) Mandatory Rotation: Compulsory rotation for the fellow, without completing which he/she cannot be promoted to the next level or graduate from the program.
- 8) Selective Rotation: A set of 12 rotations out of which the fellow must choose at least 3.
- 9) Elective Rotation: The rotations that the fellow may choose from any medical specialty.
- 10) DNR/AND: Do Not Resuscitate/Allow Natural Death
- 11) ICU: Intensive Care Unit

Admission Requirements

To be accepted into the training program, the candidate must fulfill the following requirements as per SCFHS Admission Requirements for Postgraduate Training Programs (scfhs.org.sa):

- 1) A medical degree (e.g. M.B.B.S) or equivalent from a recognized university
- 2) "Saudi Board of Family Medicine, Internal Medicine, and Anesthesia or equivalent from a recognized institute. However, other board certifications can be approved for application after the approval of the Palliative Medicine Scientific Committee.
- 3) The provision of a letter from a sponsoring organization giving approval for the candidate to undertake full-time training for the entire duration of the program (two years)
- 4)
- 5) The registration as a senior registrar in Family Medicine, Internal Medicine, and Anesthesia at the Saudi Commission for Health Specialties.

IV. OUTCOMES AND COMPETENCIES

Rationale

- The palliative care physician is a skilled clinician.
- The doctor-patient relationship is central to the role of the palliative care physician.
- The palliative care physician is a resource to a defined practice population.
- Palliative Medicine is both hospital and community based.
- The palliative care physician must be a medical expert in palliative care and a competent communicator, collaborator, manager, health advocate, scholar, and professional.

Overall goal

To train specialists who can competently practice palliative care independently and apply the palliative care principles, core knowledge, skills, and attitudes to their patients.

Overall program goals

- To train physicians to function with added competency in the area of palliative medicine. These physicians will provide primary and consultant palliative care services
- To provide clinical and initial basic academic education for physicians who intend to pursue academic careers in palliative medicine.

Generic competencies

Medical Expert

- Define palliative care and describe its basic principles
- Describe the physical, psychological, social, and spiritual issues faced by dying patients and their families
- Formulate a systematic approach to symptom assessment and handling all aspects of psychosocial needs
- Demonstrate the ability to develop a management plan that appropriately balances disease-specific treatment and symptom management according to the individual needs of the patient and the family
- Demonstrate the ability to monitor the efficacy of symptom management plans
- Demonstrate skills in the assessment of pain and other symptoms via appropriate history, physical examination, and relevant investigations
- Demonstrate advanced knowledge of the assessment and classification of pain including nociceptive, somatic, visceral, and neuropathic pain syndromes
- Demonstrate knowledge of the neurophysiology of pain
- Demonstrate knowledge of the pharmacology of drugs used in pain and symptom management
- Demonstrate understanding of the pathophysiology of other symptoms
- Demonstrate effective use of analgesic approaches for pain management (including non-opioid and opioid) as they pertain to different pain syndromes.
- Demonstrate appropriate pharmacologic management of pain, including understanding of opioid dose equivalency, initiating dosage, dose titration, breakthrough dosing, use of adjuvant modalities and medications, drug monitoring, and prevention and management of drug side effects
- Demonstrate appropriate management of other physical symptoms, particularly dyspnea, constipation, skin care, mouth care, terminal agitation, delirium, nausea, and vomiting

- Demonstrate adequate knowledge of cancer, its pathophysiology, and current principles and management.
- Demonstrate an understanding of the identification, investigations, and management of oncologic emergencies.
- Identify psychological issues associated with life-threatening illnesses and strategies that may be useful in addressing them, particularly anxiety and depression
- Identify the social and existential needs confronting the patient and families and strategies that may be useful in addressing them
- Describe the process of normal grief and distinguish the features of atypical grief
- Describe an approach for the last hours of care at home and the responsibilities of the physician at the time of death
- Demonstrate knowledge of the field of biomedical ethics and its principles
- Outline a general framework for ethical decision-making
- Describe an approach to managing specific ethical issues at the end of life including withdrawing or withholding therapy, advance directives, euthanasia, and assisted suicide
- Address end-of-life decision-making and planning using basic bioethical and legal frameworks.
- Develop a proactive approach to managing patient and family expectations and needs
- Demonstrate consultant level diagnostic and therapeutic skills for ethical and effective patient care.
- Demonstrate the ability to define the elements of suffering in end-of-life care for patients, families, and caregivers.
- Describe and implement a supportive approach to suffering
- Demonstrate knowledge and skill in providing home visits to dying patients;
- Describe the physician's role in managing patients in their homes;
- Demonstrate a holistic approach to caring for dying patients and their families

Communicator

- Assist in the rehabilitation/grieving process of persons suffering from the loss of a loved one
- Provide supportive counselling and connection to community resources for those coping with loss
- Demonstrate effective communication skills in dealing with terminally-ill patients and their families, including skills in delivering bad news
- Appropriately document a holistic management plan.
- Demonstrate a systematic approach to working with the families of dying patients including bereavement counselling
- Demonstrate skills in working with the families of dying patients, including conducting effective family meetings
- Demonstrate skills in providing educational counselling to dying patients and their families;
- Demonstrate an ability to work with the patient and family to establish common, patient-centered care goals

Collaborator

- Describe the roles of other disciplines in providing palliative care
- Participate in the interdisciplinary care of patients, including family conferences
- Communicate effectively with other team members;
- Demonstrate adequate skills in educating and learning from members of the interdisciplinary team
- Describe the role of family physicians and specialists in the care of the terminally ill

- Describe the role of palliative care consultants
- Demonstrate effective consultation and communication skills in working with referring physicians

Manager

- Describe the community resources available to support patients in their homes.
- Demonstrate the ability to work effectively in institutional and community-based palliative care programs.
- Assist institutional and community palliative care programs to develop standards of care consistent with accepted standards
- Articulate the philosophical basis of effective palliative/hospice care
- Describe current barriers in providing better care for the dying
- Outline the basic standards of palliative care as identified by the Canadian Hospice Palliative Care Association
- Incorporate accepted standards of palliative care and evidence-based decision-making into the practice of caring for dying patients and their families
- Utilize the specific available resources to assist with the care of terminally ill patients

Health Advocate

- Describe current societal attitudes about death and dying;
- Describe the societal and environmental factors relevant to the care of the dying;
- Describe different models of palliative care delivery and their utilization;
- Describe current barriers to providing effective care to the dying across settings;
- Describe the elements comprising good palliative home care;
- Identify issues in death and dying relevant to different cultures, spiritual beliefs, and traditions
- Advocate for the needs of palliative and home care patients
- Ensure that patients' privacy and dignity are maintained
- Act as an effective advocate for the rights of patients and their families in clinical situations involving serious ethical considerations

Scholar

- Act as a role model for other residents and physicians
- Become a role model by demonstrating skilful care for the dying
- Access and use the relevant literature to help solve clinical problems
- Apply critical appraisal skills to literature in palliative medicine

Professional

- Demonstrate an ongoing commitment to a patient and family from the time of palliative medicine consultation for a terminal illness until the patient dies and to the family around the time of death
- Demonstrate integrity, honesty, and compassion in the care of patients
- Describe one's own concerns about dealing with dying patients and their families
- Demonstrate an awareness of how one's own personal experiences of death and dying have influenced attitudes
- Demonstrate self-awareness and self-care in caring for terminally ill patients
- Describe strategies for managing one's own stress in dealing with the dying

Rotation specific learning outcomes and competencies

Rotation1: (Palliative Care Unit F1) Basic palliative care

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Describe current societal attitudes about death and dying
- Define palliative care and describe its basic principles
- Demonstrate competency in taking a palliative history and performing a complete and appropriate physical examination;
- Identify issues in death and dying relevant to different cultures, spiritual beliefs, and traditions.
- Describe the physical, psychological, and social issues of dying patients and their families
- Demonstrate basic knowledge of the assessment and classification of pain, the neurophysiology of pain, the pharmacology of drugs used in pain and symptom management, and the pathophysiology of other symptoms
- Demonstrate appropriate management of other physical symptoms, particularly dyspnea, constipation, skin care, mouth care, terminal agitation, delirium, nausea, vomiting and other common symptom.
- Identify psychological issues associated with life-threatening illness and strategies that may be useful in addressing them
- Demonstrate an ability to assess, manage issues related to cachexia, nutrition and feeding at end of life.
- Describe the process of normal grief and the features of atypical grief;
- Seek appropriate consultations from other health care professionals, recognizing the limits of their expertise in areas outside their special interest.

Role #2 Communicator

- Demonstrate an ability to work with the patient and the family to establish common, patient-centered care goals;
- Produce clear and concise clinical notes, documenting patient assessments and interactions.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care and communicate effectively with other team members;
- Participate in the interdisciplinary care of patients, including family conferences;
- Demonstrate skills in learning from members of the interdisciplinary team;
- Recognize the role of the neurosurgeon, anesthetist, and other multidisciplinary team members in intractable pain management.

Role #4 Manager

- Describe the models of palliative care delivery and their utilization;
- Assist the Palliative Care Unit staff in educating a greater number of junior medical trainees and members of other professional disciplines on the care team.

Role #5 Health Advocate

- Describe current barriers to providing better care for the dying across different settings.
- Identify the special needs of people living with AIDS, and those suffering from addictions.

Role #6 Scholar

- Attend and participate actively in all academic sessions including academic half-day, journal club, and rounds.
- Access and use the relevant literature to help solve clinical problems in palliative care;
- Apply critical appraisal skills to relevant literature.
- Assist in the supervision of junior residents and students during electives or rotations through the Palliative Care Unit.

Role #7 Professional

- Describe one's own concerns about dealing with dying patients and their families;
- Demonstrate an awareness of how one's own personal experiences of death and dying have influenced attitudes;
- Describe strategies for managing one's own stress in dealing with the dying;
- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 2: (Palliative Care Unit F2) Advanced palliative care

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Identify issues in death and dying relevant to different cultures, spiritual beliefs, and traditions.
- Demonstrate consultant level diagnostic and therapeutic skills for ethical and effective patient care.
- Demonstrate advanced knowledge of the assessment and classification of pain, the neurophysiology of pain, the pharmacology of drugs used in pain and symptom management, and the pathophysiology of other symptoms.
- Demonstrate competence in advanced pain management, including an understanding for the role of interventional techniques such as neuroaxial infusion, neurolytic blocks, and cementoplasty.
- Manage other physical symptoms including but not limited to dyspnea, cough, skin care, mouth care, terminal agitation, delirium, fatigue, anorexia, nausea and vomiting, constipation, depression, anxiety, and syndrome of imminent death.
- Describe the process of normal and atypical grief and a systematic approach to working with the families of dying patients including bereavement counselling;
- Identify the social and existential needs confronting patients and families and strategies that may be useful in addressing them.

Role #2 Communicator

- Demonstrate an ability to work with the patient and the family to establish common, patient-centered care goals.
- Communicate effectively with other palliative care team members.
- Communicate effectively with referring physicians and care teams on the hospital wards.
- Demonstrate ability to write clear and concise consultation notes.

Role #3 Collaborator

- Demonstrate the ability to work effectively in an institutional multidisciplinary palliative care program;
- Demonstrate an understanding of the different perspectives of various medical specialties, and propose methods to resolve inter-disciplinary conflict around care goals;

- Describe the roles of other disciplines in providing palliative care;
- Participate in the interdisciplinary care of patients, including family conferences.

Role #4 Manager

- Teach junior trainees on palliative care rotations and electives;
- Assist institutional and community palliative care programs to develop standards of care consistent with accepted standards.

Role #5 Health Advocate

- Describe the barriers to providing effective care across different settings;
- Advocate for the needs of dying patients who are in a hospital but not in a palliative care bed.
- Act as an effective advocate for the rights of the patient and their families in clinical situations involving serious ethical considerations.
- Recognize the issues related to the provision of adequate bed availability in a general hospital, propose methods to integrate with home care services, and recognize the role of free-standing hospices in resource management.

Role #6 Scholar

- Demonstrate skills in providing educational counselling to dying patients and their families.
- Demonstrate skills in educating and in learning from members of the interdisciplinary team.
- Demonstrate skills in educating and teaching junior staff about palliative care.
- Access relevant literature and other resources to guide the development of a research project and develop skills for the critical appraisal of literature relevant to the research project
- Develop an understanding of and foundational skills for preparing applications to research ethics boards.

Role #7 Professional

- Describe one's own concerns about dealing with dying patients and their families;
- Demonstrate an awareness of how one's own personal experiences of death and dying have influenced attitudes;
- Describe strategies for managing one's own stress in dealing with the dying;
- Demonstrate integrity, honesty, and compassion in the care of patients;
- Act as a role model for other residents and physicians.

Rotation 3: Palliative care consultation service

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Demonstrate competency in taking a palliative history and performing a complete and appropriate physical examination.
- Describe the elements of a comprehensive and practical palliative care consultation, including approaches to dealing with pain and other symptoms, psychosocial factors, and spiritual/ existential concerns.
- Identify issues in death and dying relevant to different cultures, spiritual beliefs, and traditions.
- Describe the physical, psychological, and social issues of dying patients and their families;

- Demonstrate basic knowledge of the assessment and classification of pain, the neurophysiology of pain, the pharmacology of drugs used in pain and symptom management, and the pathophysiology of other symptoms;
- Describe an approach to management of other physical symptoms and disorders, including but not limited to dyspnea, cough, skin care, mouth care, terminal agitation, delirium, fatigue, anorexia, nausea and vomiting, constipation, depression, anxiety, and syndrome of imminent death.
- Identify psychological issues associated with life-threatening illness and strategies that may be useful in addressing them;
- Describe the process of normal grief and the features of atypical grief;
- Seek appropriate consultations from other health care professionals, recognizing the limits of their expertise in areas outside their special interest.

Role #2 Communicator

- Demonstrate an ability to work with the patient and the family to establish common, patient-centered care goals.
- Produce clear and concise clinical notes, documenting patient assessments and interactions.
- Communicate effectively with the primary team to coordinate the patient's plan of care.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care and communicate effectively with other team members;
- Participate in the interdisciplinary care of patients, including family conferences;
- Demonstrate skills in learning from members of the interdisciplinary team;
- Understand the role for the neurosurgeon and anesthetist in intractable pain management.

Role #4 Manager

- Describe the models of palliative care delivery and their utilization;
- Assist the Palliative Care Unit staff in educating a greater number of junior medical trainees and members of other professional disciplines on the care team.

Role #5 Health Advocate

- Describe current barriers to providing better care for the dying across different settings;
- Identify the special needs of people living with cancer, AIDS, and other life-threatening illnesses.

Role #6 Scholar

- Attend and participate actively in all academic sessions including academic half-day, journal club, and rounds;
- Access and use the relevant literature to help solve clinical problems in palliative care;
- Apply critical appraisal skills to relevant literature;

Role #7 Professional

- Describe one's own concerns about dealing with dying patients and their families;
- Demonstrate an awareness of how one's own personal experiences of death and dying have influenced attitudes;
- Describe strategies for managing one's own stress in dealing with the dying;
- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 4: Palliative care ambulatory service

On completion of this rotation, the fellow should be able to perform the following roles:

Role # 1 Medical expert

- Demonstrate competency in taking a palliative history and performing a complete and appropriate physical examination in ambulatory care settings.
- Identify issues in death and dying relevant to different cultures, spiritual beliefs, and traditions.
- Describe the physical, psychological, and social issues of dying patients and their families.
- Demonstrate basic knowledge and skills for the assessment and management of pain in ambulatory settings.
- Describe an approach to management of other physical symptoms and disorders in ambulatory settings, including but not limited to dyspnea, cough, skin care, mouth care, delirium, fatigue, anorexia, nausea and vomiting, constipation, depression, anxiety, and syndrome of imminent death.
- Identify psychological issues associated with life-threatening illness and strategies that may be useful in addressing them;
- Describe the process of normal grief and the features of atypical grief;
- Seek appropriate consultations from other health care professionals, recognizing the limits of their expertise in areas outside their special interest.
- Identify the indications for admission through the clinic to inpatient palliative care service when the management of patient's symptoms and/or family is unable to provide the care as outpatient.

Role #2 Communicator

- Demonstrate an ability to work with the patient and the family to establish common, patient-centered care goals.
- Communicate effectively with other palliative care team members.
- Communicate effectively with referring physicians and care teams on the hospital wards.
- Demonstrate ability to write clear and concise consultation notes.

Role #3 Collaborator

- Demonstrate the ability to work effectively in an institutional multidisciplinary palliative care program;
- Demonstrate an understanding of the different perspectives of various medical specialties, and propose methods to resolve inter-disciplinary conflict around care goals;
- Describe the roles of other disciplines in providing palliative care;
- Participate in interdisciplinary care of patients, including family conferences.

Role #4 Manager

- Teach junior trainees on palliative care rotations and electives;
- Assist institutional and community palliative care programs to develop standards of care consistent with accepted standards.

Role #5 Health Advocate

- Describe the barriers to providing effective care across different settings;
- Advocate for the needs of dying patients who are in hospital but not in a palliative care bed;
- Act as an effective advocate for the rights of the patient and their families in clinical situations involving serious ethical considerations;

- Recognize the issues related to the provision of adequate bed availability in a general hospital, propose methods to integrate with home care services, and recognize the role of free-standing hospices in resource management.

Role #6 Scholar

- Demonstrate skills in providing educational counselling to dying patients and their families.
- Demonstrate skills in educating and in learning from members of the interdisciplinary team.
- Access relevant literature and other resources to guide the development of a research project and develop skills for the critical appraisal of literature relevant to the research project
- Develop an understanding of and foundational skills for preparing applications to research ethics boards.

Role #7 Professional

- Describe one's own concerns about dealing with dying patients and their families.
- Demonstrate an awareness of how one's own personal experiences of death and dying have influenced attitudes.
- Describe strategies for managing one's own stress in dealing with the dying.
- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 5: Palliative care in community

Community Rotation Learning Objectives

The general goal of the Community Rotation is to gain experience and expertise in the assessment, investigation, and appropriate management of palliative care patients at home or in other settings outside the Hospice Palliative Care Unit.

Specific goals include the following:

- Become experienced with accessing community resources and working with the full range of team members.
- Become familiar with decision-making and family caregiver support at home.
- Develop independent skills in home assessment and interventions, which are practical, effective, and appropriate to the patient's wishes.
- Develop communication skills with families, community team members, and family practitioners regarding on-going patient management at home.
- Become experienced in planning and anticipating medical needs for death at home.

Rotation Objectives

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Identify issues in death and dying at home, relevant to different cultures, spiritual beliefs, and traditions
- Demonstrate skills in working with the families of dying patients and understand the elements comprising good home care.
- Be knowledgeable about and capable of providing home visits to dying patients.
- Describe the community resources available to support patients in their homes;
- Describe an approach for the last hours of care at home and the responsibilities of the physician at the time of death.

- Describe the role of family physicians and specialists in the care of the terminally ill at their homes.
- Describe the role of palliative care consultants in supporting the home care team.
- Describe an approach to management of pain and other physical symptoms and disorders at home, including but not limited to dyspnea, cough, skin care, mouth care, terminal agitation, delirium, fatigue, anorexia, nausea and vomiting, constipation, depression, anxiety, and syndrome of imminent death.

Role #2 Communicator

- Demonstrate effective consultation and communication skills in working with general practitioners and other team members, particularly in understanding the role of a patient-held record.
- Demonstrate skills in communicating with the families of dying patients at home and recognize the elements comprising good home care.

Role #3 Collaborator

- Demonstrate an ability to work with the patient and the family to establish common, patient-centered care goals.
- Describe the roles of other disciplines in providing palliative care.
- Demonstrate adequate skills in educating and in learning from members of the interdisciplinary team.

Role #4 Manager

- Understand how the home care program is funded and organized for the most effective delivery of care.
- Recognize the role of free-standing hospices and the need for a close working relationship between them and other health care settings, such as the patient's home and the Palliative Care Unit.

Role #5 Health Advocate

- Advocate for the needs of home care patients.
- Demonstrate an ongoing commitment to a patient and family from the time of palliative medicine consultation for a terminal illness until (and after) the patient dies.
- Describe the barriers to providing effective care across different care settings, and suggest various ways to overcome them.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems in home hospice;
- Apply critical appraisal skills to literature in home palliative care;
- Assist with the education of family doctors and home care nurses related to the care issues of individual patients.

Role #7 Professional

- Demonstrate integrity, honesty, and compassion in the care of patients;
- Demonstrate an ability to manage boundary issues with patients;
- Describe the need to maintain a safe working environment, particularly in terms of vulnerability when working alone, outside a health care setting.

Rotation 6: Research

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Recognize the principles and clinical implications of evidence-based medicine.
- Extrapolate results from research and apply them to clinical practice in palliative care
- Formulate a research question and write the appropriate objectives for research.
- Recognize and discuss the fundamentals of research types and research methodology
- During F1 rotation, write a research proposal for medical research
- Plan and execute medical research
- Critically evaluate research

Role #2 Communicator

- Demonstrate effective communication skills in working with the research team, other stakeholders, and research participants.
- Demonstrate skills in communicating with the families of dying patients at home and recognize the elements comprising good home care.

Role #3 Collaborator

- Describe the roles of other disciplines in conducting research in palliative care.
- Demonstrate ability to form a collaboration agreement with other groups or institutions to conduct research in palliative care

Role #4 Manager

- Recognize how research is funded and organized.
- Assist the Palliative Care Unit staff in educating a greater number of junior medical trainees and members of the research team about research and how to conduct the research.
- Demonstrate capability to submit the necessary paper work to the Institutional Review Board (IRB) and research center for approval of research and funding if necessary.

Role #5 Health Advocate

- Contribute effectively to improved patients' and communities' health through the conducting clinical research that strictly follow research ethical principles.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems;
- Apply critical appraisal skills to literature in palliative medicine;
- Participate in Palliative Care Research course and activities.
- Recognize the inadequacy of literature for addressing palliative care issues.
- Develop a research question and write a research proposal including but not limited to, research objectives, methods, choosing relevant statistical tests for applying to research methods, and discussing the result.
- By the end of the fellowship, gain the ability to write a research paper publishable in a local or international journal.

Role #7 Professional

- Describe one's own concerns about dealing with dying patients and their families.
- Demonstrate an awareness of how one's own personal experiences of death and dying have influenced attitudes;

- Describe strategies for managing one's own stress in dealing with the dying.

Rotation 7: Adult medical oncology

The overall goal of this rotation is to develop an understanding of the modern practice of oncology, and learn how to provide appropriate supportive and palliative care consultation support to oncologists, patients, and families dealing with cancer.

Learning Objectives

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Demonstrate a good knowledge of the current principles of cancer, its pathophysiology, and management.
- Demonstrate an ability to work with the patient and family to establish common, patient-centered care goals, particularly in transition from a curative to palliative situation;
- Identify psychological issues associated with life-threatening illnesses and strategies that may be useful in addressing them;
- Identify sexuality issues related to surgery, cancer itself, and cancer treatments;
- Manage cancer pain effectively and demonstrate advanced knowledge of the assessment and classification of pain, the pharmacology of drugs used in pain, and symptom management including methadone;
- Demonstrate advanced knowledge of the principles of pharmacological cancer treatment, its side effects, and its management.

Role #2 Communicator

- Demonstrate effective communications skills in dealing with terminally-ill patients and their families, including skills in delivering bad news;
- Communicate effectively with other care team members;
- Produce clear, concise, and useful dictated consultation notes.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care in an oncology setting.

Role #4 Manager

- Demonstrate adequate skills in educating and in learning from members of the interdisciplinary team.

Role #5 Health Advocate

- Describe the barriers to providing effective care across different settings.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems in oncology;
- Apply critical appraisal skills to literature in oncology and palliative medicine/supportive care;
- Attend and participate actively in all academic activities, including academic half-day, journal club, rounds, and tumor board.

Role #7 Professional

- Demonstrate effective consultation and communication skills in working with referring physicians;

- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 8: Radiation oncology

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Demonstrate a good knowledge of the current principles of radiation oncology.
- Demonstrate an ability to work with the patient and family to establish common, patient-centered care goals.
- Describe the role of radiation oncology in palliative treatment.
- Demonstrate the ability to manage the common side effects of radiation therapy.

Role #2 Communicator

- Demonstrate effective communications skills in dealing with terminally-ill patients and their families, including skills in delivering bad news;
- Communicate effectively with other care team members;
- Produce clear, concise, and useful dictated consultation notes.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care in oncology settings.

Role #4 Manager

- Demonstrate adequate skills in educating and in learning from members of the interdisciplinary team.

Role #5 Health Advocate

- Describe the barriers to providing effective care across different settings.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems in radiation oncology;
- Apply critical appraisal skills to literature in oncology and palliative medicine/supportive care;
- Attend and participate actively in all academic activities, including academic half-day, journal club, rounds, and tumour board.

Role #7 Professional

- Demonstrate effective consultation and communication skills in working with referring physicians;
- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 9: Pediatric hematology oncology

On completion of this rotation, the fellow should be able to perform the following roles:

Role # 1 Medical Expert

- Assess pediatric patients and recognize both common illnesses that can be managed at home and patients with critical illnesses who require in-patient care;
- Demonstrate ability to conduct a focused, accurate and complete history and physical exam;
- Develop a palliative approach to the pediatric patient with multiple disabilities or multi-system problems;

- Demonstrate an ability to work with the patient and family to establish common, patient-centered care goals of care, particularly in transition from a curative to palliative situation;
- Manage cancer pain effectively, and demonstrate advanced knowledge of the assessment and classification of pain, the pharmacology of drugs used in pain, and symptom management including methadone;
- Demonstrate advanced knowledge of the assessment and management of other symptoms and disorders, including but not limited to dyspnea, constipation, skin care, mouth care, terminal agitation, delirium, and nausea and vomiting;
- Provide counseling and psychosocial support to the patient and family.

Role # 2 Communicator

- Obtain a focused history from patients and/or family members;
- Communicate effectively and empathetically with parents and children and involve families in decision-making;
- Effectively communicate with other physicians as well as members of the multidisciplinary team in a pediatric setting;
- Effectively communicate and collaborate with community health care providers.

Role # 3 Collaborator

- Develop an attitude of cooperative and collaborative teamwork and the ability to work with and share responsibilities with other medical and health care professionals including nurses, social workers, dietitians, physiotherapists, occupational therapists, and respiratory therapists.

Role # 4 Manager

- Develop an appropriate and cost-effective use of diagnostic and consulting services;
- Develop an understanding of the principles of quality improvement by attending morbidity and mortality rounds and tumor boards.

Role # 5 Health Advocate

- Demonstrate and promote the active involvement of the child's family in medical decision making and provision of comprehensive care;
- Identify the psychosocial, economic, and societal factors that may affect a child's health and ability to receive care;
- Recognize and respond appropriately to advocacy situations.

Role # 6 Scholar

- Access relevant literature and other resources to guide assessment and management of pediatric patients;
- Develop skills for the critical appraisal of literature regarding the diagnosis and treatment of issues in pediatric oncology and pediatric palliative care.

Role # 7 Professional

- Demonstrate professional attitudes in interactions with patients, families, and other healthcare professionals;
- Recognize and appropriately respond to ethical challenges in the pediatric setting;
- Obtain a focused history from patients and/or family members;
- Communicate effectively and empathetically with parents and children and involve families in decision-making;

- Effectively communicate with other physicians as well as members of the multidisciplinary team in the pediatric setting;
- Effectively communicate and collaborate with community health care providers.

Selective Rotations (Minimum 3 out of 12)

Rotation 10: Intensive care unit

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Demonstrate a good knowledge of the basic principles of care and management in the ICU;
- Demonstrate an ability to work with the patient and family to establish common, patient-centered care goals, particularly in transition from a curative to palliative situation in ICU settings;
- Identify psychological issues associated with life-threatening illnesses and strategies that may be useful in addressing them;
- Manage pain effectively, and demonstrate advanced knowledge of the assessment and classification of pain, the pharmacology of drugs used in pain and symptom management including methadone;
- Demonstrate advanced knowledge of the assessment and management of other symptoms and disorders, particularly dyspnea, constipation, skin care, mouth care, terminal agitation, delirium, and nausea and vomiting;
- Demonstrate skills in discussion about treatment withdrawal or withholding and end-of-life care in ICU.

Role #2 Communicator

- Demonstrate effective communications skills in dealing with terminally-ill patients and their families, including skills in delivering bad news;
- Communicate effectively with other care team members;
- Produce clear, concise, and useful dictated consultation notes.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care in ICU settings.

Role #4 Manager

- Demonstrate adequate skills in educating and in learning from members of the interdisciplinary team;
- Participate in discharge planning and transition of care from curative to palliative.

Role #5 Health Advocate

- Describe the barriers to providing effective care across different settings;
- Describe the ethical dilemmas that could be faced in an ICU.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems in palliative care in ICU;
- Apply critical appraisal skills to literature in ICU and palliative medicine/supportive care;
- Attend and participate actively in all academic activities, including academic half-day, journal club, rounds, and multidisciplinary meetings.

Role #7 Professional

- Demonstrate effective consultation and communication skills in working with referring physicians;
- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 11: Cardiology

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Discuss the epidemiology, natural history, pathophysiology, complications, and symptom burden for common progressive cardiovascular conditions and the only option left is palliative support.
- Recognize the cardiac conditions that require palliative care, including but not limited to advanced cardiovascular disease, end stage heart failure, intractable angina, and defibrillator deactivation.
- Demonstrate an ability to work with the patient and family to establish common, patient-centered care goals, particularly in transition from a curative to palliative situation.
- Identify the common palliative care needs for patients with heart disease.
- Identify psychological, social, and spiritual issues associated with end stage cardiovascular diseases and strategies that may be useful in addressing them.

Role #2 Communicator

- Demonstrate effective communications skills in dealing with terminally-ill patients and their families, including skills in delivering bad news;
- Communicate effectively with other care team members;
- Produce clear, concise, and useful dictated consultation notes.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care in cardiology settings.

Role #4 Manager

- Demonstrate adequate skills in educating and in learning from members of the interdisciplinary team.

Role #5 Health Advocate

- Describe the barriers to providing effective care across different settings.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems in palliative care related to cardiology patients;
- Apply critical appraisal skills to literature in cardiology and palliative medicine/supportive care;
- Attend and participate actively in all academic activities, including academic half day, journal club, rounds, and multidisciplinary meetings.

Role #7 Professional

- Demonstrate effective consultation and communication skills in working with referring physicians.
- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 12: Gastrointestinal

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Recognize the GI conditions that require palliative care, including but not limited to advanced liver disease, liver failure, and decompensated cirrhosis.
- Discuss the epidemiology, natural history, pathophysiology, complications, and symptom burden for common progressive GI and hepatobiliary conditions and the only option left is palliative support.
- Identify the common palliative care needs for patients with GI disease.
- Identify psychological, social, and spiritual issues associated with end-stage GI diseases and strategies that may be useful in addressing them.

Role #2 Communicator

- Demonstrate effective communications skills in dealing with terminally-ill patients and their families, including skills in delivering bad news;
- Communicate effectively with other care team members;
- Produce clear, concise, and useful dictated consultation notes.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care in GI settings.

Role #4 Manager

- Demonstrate adequate skills in educating and in learning from members of the interdisciplinary team.

Role #5 Health Advocate

- Describe the barriers to providing effective care across different settings.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems in palliative care related to GI patients;
- Apply critical appraisal skills to literature in GI and palliative medicine/supportive care;
- Attend and participate actively in all academic activities, including academic half day, journal club, rounds, and multidisciplinary meetings.

Role #7 Professional

- Demonstrate effective consultation and communication skills in working with referring physicians;
- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 13: Geriatrics

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Assess and identify the specific health issues that need palliative care support in geriatric populations.
- Manage the conditions that need palliative care interventions in geriatric populations, including but not limited to dementia, Alzheimer's disease, and frailty.

- Discuss the epidemiology, natural history, pathophysiology, complications, and symptom burden for common geriatric conditions when the only remaining option is palliative support.
- Recognize the physiological, social, and spiritual issues that are unique characteristics to geriatric population and its effects on pharmacological and non-pharmacological treatment options.

Role #2 Communicator

- Demonstrate effective communications skills in dealing with terminally-ill patients and their families, including skills in delivering bad news;
- Communicate effectively with other care team members;
- Produce clear, concise, and useful dictated consultation notes.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care in a geriatric setting.

Role #4 Manager

- Demonstrate adequate skills in educating and in learning from members of the interdisciplinary team.

Role #5 Health Advocate

- Describe the barriers to providing effective care across different settings.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems in palliative care related to geriatric patients;
- Apply critical appraisal skills to literature in geriatric and palliative medicine/supportive care;
- Attend and participate actively in all academic activities, including academic half-day, journal club, rounds, and multidisciplinary meetings.

Role #7 Professional

- Demonstrate effective consultation and communication skills in working with referring physicians.
- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 14: Infectious Diseases - HIV

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Recognize the ID conditions that require palliative care, including but not limited to HIV.
- Discuss the epidemiology, natural history, pathophysiology, complications, and symptom burden for common life-threatening non-treatable Infectious Diseases/HIV/AIDS.
- Identify the common palliative care needs for patient with ID disease.
- Identify psychological, social, and spiritual issues associated with end-stage ID diseases and strategies that may be useful in addressing them.

Role #2 Communicator

- Demonstrate effective communications skills in dealing with terminally-ill patients and their families, including skills in delivering bad news;

- Communicate effectively with other care team members;
- Produce clear, concise, and useful dictated consultation notes.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care for infectious Diseases/HIV/AIDS patients.

Role #4 Manager

- Demonstrate adequate skills in educating and in learning from members of the interdisciplinary team.

Role #5 Health Advocate

Describe the barriers to providing effective care across different settings.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems in palliative care related to Infectious Diseases/HIV/AIDS patients.
- Apply critical appraisal skills to literature in infectious diseases/HIV/AIDS and palliative medicine/supportive care.
- Attend and participate actively in all academic activities, including academic half-day, journal club, rounds, and multidisciplinary meetings.

Role #7 Professional

- Demonstrate effective consultation and communication skills in working with referring physicians.
- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 15: Nephrology

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Recognize the renal conditions that require palliative care, including but not limited to End Stage Renal Disease (ESRD) on Kidney replacement therapy or ESRD without dialysis.
- Discuss the epidemiology, natural history, pathophysiology, complications, and symptom burden for ESRD.
- Recognize the effect of ESRD on the use of medication that is commonly used in palliative care such as opioids and Benzodiazepine.
- Identify the common palliative care needs for patient with renal disease.
- Identify psychological, social, and spiritual issues associated with end-stage renal diseases and strategies that may be useful in addressing them

Role #2 Communicator

- Demonstrate effective communications skills in dealing with terminally-ill patients and their families, including skills in delivering bad news;
- Communicate effectively with other care team members;
- Produce clear, concise, and useful dictated consultation notes.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care in an ESRD setting.

Role #4 Manager

- Demonstrate adequate skills in educating and in learning from members of the interdisciplinary team.

Role #5 Health Advocate

- Describe the barriers to providing effective care across different settings.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems in palliative care related to ESRD patients;
- Apply critical appraisal skills to literature in ESRD and palliative medicine/supportive care;
- Attend and participate actively in all academic activities, including academic half day, journal club, rounds, and multidisciplinary meetings.

Role #7 Professional

- Demonstrate effective consultation and communication skills in working with referring physicians.
- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 16: Neurology

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Recognize the neurological conditions that require palliative care, including but not limited to Amyotrophic lateral sclerosis, Huntington's disease, Multiple sclerosis (MS), Muscular dystrophies, Parkinson's disease, and Stroke.
- Discuss the epidemiology, natural history, pathophysiology, complications, and symptom burden for neurological and neuromuscular diseases that require palliative care support.
- Identify the common palliative care needs for patients with neurological diseases.
- Identify psychological social, and spiritual issues associated with end-stage neurological diseases and strategies that may be useful in addressing them.

Role #2 Communicator

- Demonstrate effective communications skills in dealing with terminally ill patients and their families, including skills in delivering bad news.
- Communicate effectively with other care team members.
- Produce clear, concise, and useful dictated consultation notes.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care in neurological settings.

Role #4 Manager

- Demonstrate adequate skills in educating and in learning from members of the interdisciplinary team.

Role #5 Health Advocate

- Describe the barriers to providing effective care across different settings.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems in palliative care related to neurology patients.
- Apply critical appraisal skills to literature in neurology and palliative medicine/supportive care.
- Attend and participate actively in all academic activities, including academic half day, journal club, rounds, and multidisciplinary meetings.

Role #7 Professional

- Demonstrate effective consultation and communication skills in working with referring physicians.
- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 17: Pulmonology

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Recognize the respiratory conditions that require palliative care, including but not limited to COPD, other obstructive airway diseases, and restrictive airway diseases.
- Discuss the epidemiology, natural history, pathophysiology, complications, and symptom burden for obstructive and restrictive airway diseases that require palliative care support.
- Identify the common palliative care needs for patient with pulmonology disease.
- Identify psychological, social, and spiritual issues associated with end-stage pulmonology diseases and strategies that may be useful in addressing them

Role #2 Communicator

- Demonstrate effective communications skills in dealing with terminally ill patients and their families, including skills in delivering bad news.
- Communicate effectively with other care team members.
- Produce clear, concise, and useful dictated consultation notes.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care in pulmonology settings.

Role #4 Manager

- Demonstrate adequate skills in educating and in learning from members of the interdisciplinary team.

Role #5 Health Advocate

- Describe the barriers to providing effective care across different settings.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems in palliative care related to pulmonology patients.
- Apply critical appraisal skills to literature in pulmonology and palliative medicine/supportive care.
- Attend and participate actively in all academic activities, including academic half-day, journal club, rounds, and multidisciplinary meetings.

Role #7 Professional

- Demonstrate effective consultation and communication skills in working with referring physicians.
- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 18: Anesthesia

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Comprehend the epidemiology, pathophysiology, complications, and pharmacology of anesthetic medication.
- Master the process, technique used, indications, assessment, and complications for conscious sedation.
- Master the use of Patient Controlled Analgesia (PSA) including but not limited to the following:
 - o Indications and contraindications
 - o Programing
 - o Drug pharmacology, titration, conversion, and equianalgesic dose to oral morphine
 - o Complications and side-effects.
 - o Working multidisciplinary team
- Master the use of epidural and intrathecal analgesia including but not limited to
 - o Indications and contraindication
 - o Drug pharmacology, titration, conversion, and equianalgesic dose to oral morphine.
 - o Complications and side-effects
 - o Working multidisciplinary team

Role #2 Communicator

- Demonstrate effective communications skills in dealing with terminally ill patients undergoing anesthesia intervention and their families, including skills in delivering bad news.
- Communicate effectively with other care team members.
- Produce clear, concise, and useful dictated consultation notes.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care in anesthesia settings.

Role #4 Manager

- Demonstrate adequate skills in educating and in learning from members of the interdisciplinary team.

Role #5 Health Advocate

- Describe the barriers to providing effective care across different settings.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems in palliative care related to anesthesia.
- Apply critical appraisal skills to literature in anesthesia and palliative medicine/supportive care.
- Attend and participate actively in all academic activities, including academic half-day, journal club, rounds, and multidisciplinary meetings.

Role #7 Professional

- Demonstrate effective consultation and communication skills in working with referring physicians.
- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 19: Chronic pain management

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Discuss the epidemiology, natural history, pathophysiology, complications, and psychological, social, and spiritual burden of chronic pain.
- Master the comprehensive chronic pain assessment and its management.
- Recognize the deferent techniques of pain interventions including but not limited to the following:
 - o Indications and contraindications
 - o Drug pharmacology, titration, conversion, and equianalgesic dose to oral morphine.
 - o Pathophysiology
 - o Complication and side effects.
 - o Working multidisciplinary team
- Recognize the common pain syndromes such as peripheral neuropathy, complex regional pain syndrome, chronic back pain, etc.
- Recognize the importance of working with a multidisciplinary team for treating chronic pain.

Role #2 Communicator

- Demonstrate effective communications skills in dealing with terminally ill patients suffering from chronic pain and their families, including skills in delivering bad news.
- Communicate effectively with other care team members.
- Produce clear, concise, and useful dictated consultation notes.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care for patients with chronic pain.

Role #4 Manager

- Demonstrate adequate skills in educating and in learning from members of the interdisciplinary team.

Role #5 Health Advocate

- Describe the barriers to providing effective care across different settings.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems in palliative care related to chronic pain.
- Apply critical appraisal skills to literature in chronic pain and palliative medicine/supportive care.
- Attend and participate actively in all academic activities, including academic half-day, journal club, rounds, and multidisciplinary meetings.

Role #7 Professional

- Demonstrate effective consultation and communication skills in working with referring physicians.
- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 20: Psychiatry and psychosocial care

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Recognize the issues common to adult palliative medicine and strategies to address them, including but not limited to anxiety and depression.
- Recognize the role and application of therapeutic interventions used in the management of psychological issues, including but not limited to behavioral therapy, cognitive therapy, counseling, hypnotherapy, imagery, and visualization.
- Handle the responses and emotions expressed by patients and their families, including but not limited to fear, guilt, anger, sadness and despair, and formulate strategies to address them.
 - o Recognize the impact of psychological issues and strong affective responses on decision-making, management of pain and other physical symptoms, and outcomes.
 - o Discuss the role of patients' and their families' coping styles on decision-making and outcomes.
 - o Recognize the impact of pain and intractable symptoms on psychological wellbeing and quality of life.
 - o Export the impact of illness on interpersonal relationships, body image, sexuality, and role.
 - o Identify the common issues that affect adult and pediatric palliative patients, including but not limited to relational and financial issues, and strategies to address them that change family dynamics and factors contributing to distress.
 - o Identify and discuss the caregiver distress and to develop strategies with the patient and family to provide support.
 - o For grief and bereavement, the fellow will be able to do the following:
 - Assess and recognize the normal, anticipatory, atypical, and complicated grief, including identification of risk factor, and strategies for supporting patients and their families.
 - Develop strategies to support patients' families during bereavement.

Role #2 Communicator

- Demonstrate effective communications skills in dealing with terminally ill patients having psychological issues and their families, including skills in delivering bad news.
- Communicate effectively with other care team members.
- Produce clear, concise, and useful dictated consultation notes.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care for patients with psychosocial issues.

Role #4 Manager

- Demonstrate adequate skills in educating and in learning from members of the interdisciplinary team.

Role #5 Health Advocate

- Describe the barriers to providing effective care across different settings.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems in palliative care related to psychosocial conditions.
- Apply critical appraisal skills to literature in psychiatry, psychology, sociology, and palliative medicine/supportive care.
- Attend and participate actively in all academic activities, including academic half-day, journal club, rounds, and multidisciplinary meetings.

Role #7 Professional

- Demonstrate effective consultation and communication skills in working with referring physicians.
- Demonstrate integrity, honesty, and compassion in the care of patients.

Rotation 21: Spiritual Care

On completion of this rotation, the fellow should be able to perform the following roles:

Role #1 Medical Expert

- Recognize and identify the issues of spirituality related to death and dying, and the role of spiritual care.
- Differentiate between patients' spiritual and religious needs.
- Recognize the importance of hope and nurturing hope.
- Recognize the issues specific to Islamic culture and the minority of variety groups of Muslim and non-Muslims at the end of their life.
- Identify and discuss the major cultural and religious practices related to medical practice.

Role #2 Communicator

- Demonstrate effective communications skills in dealing with terminally ill patients having spiritual issues and their families, including skills in delivering bad news.
- Communicate effectively with other care team members.
- Produce clear, concise, and useful dictated consultation notes.

Role #3 Collaborator

- Describe the roles of other disciplines in providing palliative care for patients with spiritual issues.

Role #4 Manager

- Demonstrate adequate skills in educating and in learning from members of the interdisciplinary team.

Role #5 Health Advocate

- Describe the barriers to delivery of effective care across settings.

Role #6 Scholar

- Access the relevant literature to help solve clinical problems in palliative care related to spiritual care.
- Apply critical appraisal skills to literature in spirituality and palliative medicine/supportive care.

- Attend and participate actively in all academic activities, including academic half day, journal club, rounds, and multidisciplinary meetings.

Role #7 Professional

- Demonstrate effective consultation and communication skills in working with referring physicians.
- Demonstrate integrity, honesty, and compassion in the care of patients.

Electives (2 rotations)

The fellow will choose a specialty of his/her interest and set an objective.

Core conditions

- Pain management
- Other symptom management
- End-of-life care and imminent death
- Psychological and emotional care
- Social care
- Spiritual care
- Communication issues

Generic competence list

- Common infections (pneumonia, UTI, sepsis, wound infection)
- Anemia
- Ascites
- Electrolyte disturbances
- Dehydration
- Acute renal failure
- Heart failure
- Uncontrolled DM
- Uncontrolled hypertension
- Thromboembolism (prophylactic and therapeutic)
- COPD exacerbation
- Peptic ulcer
- Dealing with obstructive jaundice and PTC drainage
- DIC
- CVA
- Dealing with feeding tubes
- Obstructive nephropathy and nephrostomy tubes

Core clinical problem list and representative diseases

- Pain
- Dyspnea
- Nausea and vomiting
- Constipation
- Cough
- Diarrhea
- Delirium
- Agitation
- Insomnia

- Fatigue
- Itching
- Pressure ulcer and malignant wounds
- Seizures
- Bleeding
- Respiratory secretions
- Opioid induced neurotoxicity
- Respiratory depression
- Spinal cord compression
- SVC syndrome
- Hypercalcemia
- Depression
- Anxiety
- Grief management

Procedure list

- Ascetic tapping
- Pleural tapping
- Pleurix catheter insertion
- NG tube insertion
- Folly' catheter insertion
- Drainage of minor abscess
- Dealing with minor wounds
- Hypodermoclysis / reverse hypodermoclysis
- PCA management
- Opioid infusion
- IV cannula insertion

List of behavioral/communication skills

- Conveying bad news
- Discussion of code status
- Discussion of prognosis and prognostication
- Discussion of end-of-life issues
- Discussion of imminent death
- Advanced care planning and decision making
- Transition of care from curative to palliative
- Conducting and leading family meetings
- Discussion of treatment withholding/withdrawal
- Interdisciplinary team coordination and support
- Grief and bereavement
- Dealing with emotional reactions including but not limited to anger, denial, conflict and refusal of treatment

Suggested reading resources for Palliative Care rotations

- 1) Hospice and Palliative Care Symptom Guidelines. Fraser Health. <http://www.fraserhealth.ca/health-professionals/professional-resources/hospice-palliative-care/>. Accessed on April 30,2017.
- 2) Oxford Textbook of Palliative Medicine. Fifth edition. Nathan Cherny, Marie Fallon, Stein Kaasa, Russell K. Portenoy, and David C. Currow
- 3) Palliative Medicine A CASE-BASED MANUAL. Third Edition. Doreen Oneschuk, Neil Hagen, Neil Macdonald .
- 4) Pallium Palliative Pocketbook, 2nd Edition.
- 5) Journal of Pain & Symptom Management.
- 6) Journal of Palliative Medicine.
- 7) American Journal of Hospice and Palliative Medicine.

V. LEARNING OPPORTUNITIES

General principles

- 1) Teaching and learning will be structured and programmatic with more responsibility for self-directed learning
- 2) At least 4-6 hours of formal training time should be reserved every week. Formal teaching time is an activity that is planned in advanced with an assigned tutor, time slots, and venue. Formal teaching time excludes bedside teaching, clinic postings etc.
- 3) Core Education Programme (CEP) would include the following three formal teaching and learning activities:
 - o Universal topics: 20-30%
 - o Core specialty topics: 40-50%
 - o Trainee selected topics: 20-30%
- 4) At least 3 hours per week should be allocated to CEP
- 5) CEP will be supplemented by other practice-based learning (PBL) such as the following:
 - o Morning report or case presentations
 - o Morbidity and mortality reviews
 - o Journal clubs
 - o Systematic reviews etc.
 - o Hospital grand rounds and other CMEs
- 6) At least 1 hour should be assigned every two weeks to meeting with mentors, review of portfolio, mini-CEX, etc.

VI. UNIVERSAL TOPICS

Objective

Universal topics are high value, interdisciplinary topics of utmost importance to the trainee. The topics are delivered centrally to ensure that every trainee receives high quality teaching and develops essential core knowledge. These topics are common to all specialties.

Topics included here meet one or more of the following criteria:

- Impactful: Common or life-threatening topics
- Interdisciplinary: Topics that are difficult to teach using only one discipline
- Orphan: Poorly represented topics in the undergraduate curriculum
- Practical: Topics that trainees will encounter in hospital practice

Development and delivery

Core topics for PG curriculum will be developed and delivered centrally by the Commission through an e-learning platform. A set of preliminary learning outcomes for each topic will be developed. Content experts, in collaboration with the central team, may modify the learning outcomes. These topics will be didactic in nature with focus on practical aspects of care. These topics will be more content-heavy than workshops and other planned face-to-face interactive sessions. The suggested duration of each topic is 1.30 hours.

Assessment

The topics will be delivered in a modular fashion. At the end of each Learning Unit, an on-line formative assessment will be performed. After all the topics are completed, a combined summative assessment will be performed in the form of context-rich MCQs. All trainees must attain minimum competency in the summative assessment. Alternatively, these topics can be assessed in a summative manner along with specialty examination.

Some ideas: case studies, high quality images, worked examples of prescribing drugs in disease states, and internet resources.

Module 1: Introduction

- 1) Safe drug prescribing
- 2) Hospital acquired infections
- 3) Sepsis; SIRS; DIVC
- 4) Antibiotic stewardship
- 5) Blood transfusion

Details of the Learning Units are described below.

Safe drug prescribing

On completion of the Learning Unit, you should be able to do the following:

- 1) Recognize the importance of safe drug prescribing in healthcare
- 2) Describe various Adverse Drug Reactions with examples of commonly prescribed drugs that can cause such reactions
- 3) Apply principles of drug-drug interactions, drug-disease interactions, and drug-food interactions to common situations
- 4) Apply principles of prescribing drugs in special situations such as renal failure and liver failure

- 5) Apply principles of prescribing drugs for elderly, pediatric age-group patients, and pregnant and lactating patients
- 6) Promote evidence-based cost effective prescribing
- 7) Discuss ethical and legal frameworks governing safe-drug prescribing in Saudi Arabia

Hospital-acquired infections (HAI)

On completion of the Learning Unit, you should be able to do the following:

- 1) Discuss the epidemiology of HAI with special reference to HAI in Saudi Arabia
- 2) Recognize HAI as one of the major emerging threats in healthcare
- 3) Identify the common sources and set-ups of HAI
- 4) Describe the risk factors of common HAIs such as ventilator associated pneumonia, MRSA, CLABSI, and Vancomycin Resistant Enterococcus (VRE)
- 5) Identify the role of healthcare workers in the prevention of HAI
- 6) Determine appropriate pharmacological (e.g., selected antibiotic) and non-pharmacological (e.g., removal of indwelling catheter) measures for the treatment of HAI
- 7) Propose a plan to prevent HAI in the workplace

Sepsis, SIRS, DIVC

On completion of the Learning Unit, you should be able to do the following:

- 1) Explain the pathogenesis of sepsis, SIRS, and DIVC
- 2) Identify patient-related and non-patient related predisposing factors of sepsis, SIRS, and DIVC
- 3) Recognize a patient at risk of developing sepsis, SIRS, and DIVC
- 4) Describe the complications of sepsis, SIRS, and DIVC
- 5) Apply the principles of management of patients with sepsis, SIRS, and DIVC
- 6) Describe the prognosis of sepsis, SIRS, and DIVC

Antibiotic stewardship

On completion of the Learning Unit, you should be able to do the following:

- 1) Recognize antibiotic resistance as one of the most pressing global public health threats
- 2) Describe the mechanism of antibiotic resistance
- 3) Determine the appropriate and inappropriate use of antibiotics
- 4) Develop a plan for safe and appropriate antibiotic usage plan including right indications, duration, types of antibiotic, and discontinuation.
- 5) Learn the local guidelines for the prevention of antibiotic resistance

Blood transfusion

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

- 1) Review the different components of blood products available for transfusion
- 2) Recognize the indications and contraindications of blood product transfusion
- 3) Discuss the benefits, risks, and alternatives to transfusion
- 4) Undertake consent for specific blood product transfusion
- 5) Perform steps necessary for safe transfusion
- 6) Develop understanding of special precautions and procedures necessary during massive transfusions
- 7) Recognize transfusion-associated reactions and provide immediate management

Module 2: Cancer

- 1) Principles of cancer management
- 2) Side effects of chemotherapy and radiation therapy

- 3) Oncologic emergencies
- 4) Cancer prevention
- 5) Surveillance follow-up of cancer patients

Principles of management of cancer

On completion of the Learning Unit, you should be able to do the following:

- 1) Discuss the basic principles of staging and grading of cancers
- 2) Enumerate the basic principles, (e.g., indications, mechanism, types) of the following:
 - o Cancer surgery
 - o Chemotherapy
 - o Radiotherapy
 - o Immunotherapy
 - o Hormone therapy

Side effects of chemotherapy and radiation therapy

On completion of the Learning Unit, you should be able to do the following:

- 1) Describe important side effects (e.g., frequent or life or organ threatening) of common chemotherapy drugs
- 2) Explain the principles of monitoring side-effects for a patient undergoing chemotherapy
- 3) Describe measures (pharmacological and non-pharmacological) available to ameliorate the side-effects of commonly prescribed chemotherapy drugs
- 4) Describe important (e.g., common and life-threatening) side effects of radiation therapy
- 5) Describe measures (pharmacological and non-pharmacological) available to ameliorate the side-effects of radiotherapy

Oncologic emergencies

On completion of the Learning Unit, you should be able to do the following:

- 1) Enumerate important oncologic emergencies encountered both in hospital and ambulatory settings
- 2) Discuss the pathogenesis of important oncologic emergencies
- 3) Recognize the oncologic emergencies
- 4) Institute immediate measures when treating a patient with oncologic emergencies
- 5) Counsel the patients in an anticipatory manner to recognize and prevent oncologic emergencies

Cancer prevention

On completion of the Learning Unit, you should be able to do the following:

- 1) Conclude that many major cancers are preventable
- 2) Identify that smoking prevention and life-style modifications are major preventable measures
- 3) Recognize preventable cancers
- 4) Discuss major cancer prevention strategies at the individual as well as national level
- 5) Counsel patients and families in a proactive manner regarding cancer prevention including screening

Surveillance and follow-up of cancer patients

On completion of the Learning Unit, you should be able to do the following:

- 1) Describe the principles of surveillance and follow-up of cancer patients
- 2) Enumerate the surveillance and follow-up plan for common forms of cancer

- 3) Describe the role of primary care physicians, family physicians, and similar others in the surveillance and follow-up of cancer patients
- 4) Liaise with oncologists to provide surveillance and follow-up for cancer patients

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

Details of the Learning Units are described below.

Recognition and management of diabetic emergencies

On completion of the Learning Unit, you should be able to do the following:

- 1) Describe the pathogenesis of common diabetic emergencies including their complications
- 2) Identify risk factors and groups of patients vulnerable to such emergencies
- 3) Recognize a patient presenting with diabetic emergencies
- 4) Institute immediate management
- 5) Refer the patient to the appropriate next care level
- 6) Counsel patient and families to prevent such emergencies

Management of diabetic complications

On completion of the Learning Unit, you should be able to do the following:

- 1) Describe the pathogenesis of important complications of Type 2 diabetes mellitus
- 2) Screen patients for such complications
- 3) Provide preventive measures for such complications
- 4) Treat such complications
- 5) Counsel patients and families with special emphasis on prevention

Comorbidities of obesity

On completion of the Learning Unit, you should be able to do the following:

- 1) Screen patients for presence of common and important comorbidities of obesity
- 2) Manage obesity related comorbidities
- 3) Provide dietary and life-style advice for prevention and management of obesity

Abnormal ECG

On completion of the Learning Unit, you should be able to do the following:

- 1) Recognize common and important ECG abnormalities
- 2) Institute immediate management, if necessary

Module 4: Medical and surgical emergencies

- 1) Management of acute chest pain
- 2) Management of acute breathlessness
- 3) Management of altered sensorium
- 4) Management of hypotension and hypertension
- 5) Management of upper GI bleeding
- 6) Management of lower GI bleeding

For all of the above, the following learning outcomes shall apply.

On completion of the Learning Unit, you should be able to do the following:

- 1) Triage and categorize patients
- 2) Identify patients who need prompt medical and surgical attention
- 3) Generate preliminary diagnoses based on history and physical examination
- 4) Order and interpret urgent investigations
- 5) Provide appropriate immediate management to patients
- 6) Refer the patients to next level of care, if needed

Module 5: Acute care

- 1) Pre-operative assessment
- 2) Post-operative care
- 3) Acute pain management
- 4) Chronic pain management
- 5) Management of fluids in hospitalized patients
- 6) Management of electrolyte imbalance

Details of the Learning Units are described below.

Preoperative assessment

On completion of the Learning Unit, you should be able to do the following:

- 1) Describe the basic principles of pre-operative assessment
- 2) Perform pre-operative assessment in uncomplicated patients with special emphasis on the following
 - o General health assessment
 - o Cardiorespiratory assessment
 - o Medications and medical device assessment
 - o Drug allergy
 - o Pain relief needs
- 3) Categorize patients according to risks

Postoperative care

On completion of the Learning Unit, you should be able to do the following:

- 1) Devise a post-operative care plan including monitoring of vitals, pain management, fluid management, medications, and laboratory investigations
- 2) Hand-over the patients properly to appropriate facilities
- 3) Describe the process of post-operative recovery for a patient
- 4) Identify common post-operative complications
- 5) Monitor patients for possible post-operative complications
- 6) Institute immediate management for post-operative complications

Acute pain management

On completion of the Learning Unit, you should be able to do the following:

- 1) Review the physiological basis of pain perception
- 2) Proactively identify patients who might be in acute pain
- 3) Assess a patient with acute pain
- 4) Apply various pharmacological and non-pharmacological modalities available for acute pain management
- 5) Provide adequate pain relief for uncomplicated patients with acute pain
- 6) Identify and refer patients with acute pain who can benefit from specialized pain services

Chronic pain management

On completion of the Learning Unit, you should be able to do the following:

- 1) Review the bio-psychosocial and physiological basis of chronic pain perception
- 2) Discuss various pharmacological and non-pharmacological options available for chronic pain management
- 3) Provide adequate pain relief for uncomplicated patients with chronic pain
- 4) Identify and refer patients with chronic pain who can benefit from specialized pain services

Management of fluids in hospitalized patients

On completion of the Learning Unit, you should be able to do the following:

- 1) Review the physiological basis of water balance in the body
- 2) Assess a patient for his/her hydration status
- 3) Recognize a patient with over and under hydration
- 4) Order fluid therapy (oral as well as intravenous) for a hospitalized patient
- 5) Monitor fluid status and response to therapy through history, physical examination, and selected laboratory investigations

Management of acid-base electrolyte imbalances

On completion of the Learning Unit, you should be able to do the following:

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

Module 6: Frail elderly

- 1) Assessment of the frail elderly
- 2) Mini-mental state examination
- 3) Prescribing drugs for the elderly
- 4) Providing care for the elderly

Details of the Learning Units are described below.

Assessment of the frail elderly

On completion of the Learning Unit, you should be able to do the following:

- 1) Enumerate the differences and similarities between comprehensive assessment of the frail elderly and that of other patients
- 2) Perform comprehensive assessment, in conjunction with other members of health care team, of a frail elderly patient with special emphasis on social factors, functional status, quality of life, diet and nutrition, and medication history
- 3) Develop a problem list based on the assessment of the frail elderly

Mini-Mental State Examination

On completion of the Learning Unit, you should be able to do the following:

- 1) Review the appropriate usages, advantages, and potential pitfalls of Mini-MSE
- 2) Identify patients suitable for mini-MSE
- 3) Screen patients for cognitive impairment through mini-MSE

Prescribing drugs for the elderly

On completion of the Learning Unit, you should be able to do the following:

- 1) Discuss the principles of prescribing drugs for the elderly
- 2) Recognize poly-pharmacy, prescribing cascade, inappropriate dosages, inappropriate drugs, and deliberate drug exclusion as major causes of morbidity in the elderly
- 3) Describe the physiological and functional declines in the elderly that contribute to increased drug related adverse events
- 4) Discuss drug-drug interactions and drug-disease interactions among the elderly
- 5) Become familiar with Beers criteria
- 6) Develop rational prescribing habits for the elderly
- 7) Counsel elderly patients and family on safe medication usage

Providing care for the elderly

On completion of the Learning Unit, you should be able to do the following:

- 1) Describe the factors that need to be considered while planning care for the elderly
- 2) Recognize the needs and well-being of care-givers
- 3) Identify the local and community resources available for the care of the elderly
- 4) Develop, with inputs from other health care professionals, an individualized care plan for an elderly patient

Module 7: Ethics and healthcare

- 1) Occupational hazards of 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

Details of the Learning Units are described below

Occupation hazards of health care workers (HCW)

On completion of the Learning Unit, you should be able to do the following:

- 1) Recognize common sources and risk factors of occupational hazards among the HCW
- 2) Describe common occupational hazards in the workplace
- 3) Develop familiarity with legal and regulatory frameworks governing occupational hazards among the HCW
- 4) Develop a proactive attitude to promoting workplace safety
- 5) Protect yourself and colleagues against potential occupational hazards in the workplace

Evidence-based approach to smoking cessation

On completion of the Learning Unit, you should be able to do the following:

- 1) Describe the epidemiology of smoking and tobacco usage in Saudi Arabia
- 2) Review the effects of smoking on the smoker and family members
- 3) Effectively use pharmacologic and non-pharmacologic measures to treat tobacco usage and dependency
- 4) Effectively use pharmacologic and non-pharmacologic measures to treat tobacco usage and dependence among special population groups such as pregnant ladies, adolescents, and patients with psychiatric disorders

Patient advocacy

On completion of the Learning Unit, you should be able to do the following:

- 1) Define patient advocacy
- 2) Recognize patient advocacy as a core value governing medical practice
- 3) Describe the role of patient advocates in the care of the patients
- 4) Develop a positive attitude towards patient advocacy
- 5) Be a patient advocate in conflicting situations
- 6) Be familiar with local and national patient advocacy groups

Ethical issues: transplantation/organ harvesting; withdrawal of care

On completion of the Learning Unit, you should be able to do the following:

- 1) Apply key ethical and religious principles governing organ transplantation and withdrawal of care
- 2) Be familiar with the legal and regulatory guidelines regarding organ transplantation and care withdrawal
- 3) Counsel patients and families taking relevant ethical and religious principles into account
- 4) Guide patients and families to make informed decisions

Ethical issues: treatment refusal; patient autonomy

On completion of the Learning Unit, you should be able to do the following:

- 1) Predict situations where a patient or family is likely to decline prescribed treatment
- 2) Describe the concept of “rational adult” in the context of patient autonomy and treatment refusal
- 3) Analyze key ethical, moral, and regulatory dilemmas in treatment refusal
- 4) Recognize the importance of patient autonomy in the decision-making process
- 5) Counsel patients and families declining medical treatment in the best interest of patients

Role of doctors in death and dying

On completion of the Learning Unit, you should be able to do the following:

- 1) Recognize the important role a doctor can play during a dying process
- 2) Provide emotional as well as physical care to a dying patient and family
- 3) Provide appropriate pain management to a dying patient
- 4) Identify suitable patients and refer patient to palliative care services

Guidelines for implementation for universal topics

Background

The Universal Topics were developed as learning resources for the residents and fellows. These are important topics for residents and fellows because they are either very common and deal with important clinical conditions or they are not effectively taught in many medical schools. The pre- and post-test MCQs are provided to aid learning and to ensure that the trainees have learned the materials. These are not meant to be assessment tools in a more conventional sense. Certainly, conditions described in universal topics can be assessed in various forms of examinations.

Minimum number of universal topics required

Residency and Fellowship programs are varied in their learning needs. For some programs, such as internal medicine, many of the topics are of high relevance; however, for other sub-speciality topics, the topics might not be that relevant. It is up to the discretion of the Curriculum Committee to decide the prescribed minimum number of the universal topics for the speciality.

Passing score

As stated earlier, these topics are meant to be learning resources. Pre- and post-test MCQs should be viewed as learning aid rather than examination. However, to ensure that the trainees actually have reviewed the online lecture, 60%-80% correct answers in the post-test MCQs will be necessary as a proof of learning. Trainees may review the lectures as many times as needed and take the post-test.

Completion of the universal topics

The assigned topics should be completed within the allocated year. Trainees and mentor should take personal initiatives to complete the universal topics on time. If owing to any extraneous circumstances, the trainee fails to complete the assigned universal topics within a given year, he/she may be allowed to carry forward the universal topics to the following years. Trainees, however, must complete all the topics before appearing for the final exit exam.

Universal Topics

F1	F2
Module	Module
Safe drug prescribing	Assessment of frail elderly
Hospital acquired infections	Mini-mental state examination
Sepsis; SIRS; DIVC	Prescribing drugs for the elderly
Principles of cancer management	Providing care for the elderly
Side effects of chemotherapy and radiation therapy	Occupational hazards of HCW
Oncologic emergencies	Patient advocacy
Cancer prevention	Ethical issues: transplantation/organ harvesting; withdrawal of care
Surveillance follow-up of cancer patients	Ethical issues: treatment refusal; patient autonomy
Management of acute breathlessness	Role of doctors in death and dying
Management of upper GI bleeding	
Management of lower GI bleeding	
Acute pain management	
Chronic pain management	
Management of fluids in hospitalized patients	
Management of electrolyte imbalances	

VII. CORE SPECIALTY TOPICS

Introduction to palliative care

Background

Palliative Medicine is a specialized medical care for people with serious illnesses. It provides patients with relief from symptoms, pain, and the stress of serious illness. Palliative Medicine practice, unlike other specialized medical fields, is not limited by boundaries of organ systems, location, mode of action, and age group. Palliative care is not only about being comfortable when dying but also about living life to the fullest for the time that one is alive.

According to the U.S. Department of Health and Human Services (HHS), Centers for Medicare & Medicaid Services (CMS), and the National Quality Forum (NQF), palliative care is defined as patient and family-centered care that optimizes quality of life by anticipating, preventing, and treating suffering. Palliative care throughout the continuum of illness involves addressing physical, intellectual, emotional, social, and spiritual needs and facilitates patient autonomy, access to information, and choice.

The palliative philosophy and key features of palliative practice:

- 1) Care is provided and services are coordinated by an interdisciplinary team.
- 2) Patients, families, and palliative and non-palliative health care providers collaborate and communicate about care needs.
- 3) Services are available concurrently with or independent of curative or life-prolonging care.
- 4) Patient and family hopes for peace and dignity and are supported throughout the course of illness, during the dying process, and after death.

Domains of palliative care (from national consensus project's clinical practice guidelines)

- 1) Structure and process of care: palliative care is provided across the health care spectrum necessitating the involvement of an interdisciplinary team to support the physical, psychological, social, and spiritual needs of the patient and family; best practices include quality assessment and performance improvement processes and respect for the patient and family values and preferences.
- 2) Physical aspects of care: physical comfort, including pain and symptom management is a central feature of palliative care; physical comfort enables the promotion of psychological, spiritual, and social quality of life.
- 3) Psychological and psychiatric aspects of care: psychological and psychiatric screening and assessments are provided; services offered are appropriate to patient and family needs, goals, and culture; grief and bereavement are fundamental to palliative care service.
- 4) Social aspects of care: interventions support the unique social structure of each family unit; specialists in social aspects of care and pediatric populations are made available.
- 5) Spiritual, religious, and existential aspects of care: recognition that spiritual, religious, and existential care is fundamental to quality of life for patients and families and provision of inclusive spiritual healing environment.
- 6) Cultural aspects of care: beliefs and values of the patient and family are supported according to individual cultural identification including race, ethnicity, socioeconomic class, and gender expression or sexual orientation; respects cultural practices and rituals.
- 7) Care of the patient at end of life: interdisciplinary team provides care that supports the patient, and family wishes for peaceful, dignified, and respectful death.

- 8) Ethical and legal aspects of care: central ethical principles are understood by the interdisciplinary team within the context of each discipline's professional practice; care is provided in accordance with professional, state and federal laws, regulations, and current standards of care.

Learning objectives

- 1) Define palliative care and describe the key terms and scope of palliative care services.
- 2) Understand and articulate the philosophy of palliative care.
- 3) Identify patients who are eligible for palliative services.
- 4) Recognize interdisciplinary team members for providing palliative care and collaborates with them consistently.

Method

Interactive lecture and simulation

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Palliative care for Muslim patients

Background

Spiritual care is an essential domain of palliative care, and spirituality is an important element of human experience. It guides the individual's search for meaning and purpose in life and makes the experience of the transcendent possible. Spirituality also encompasses the connections one makes with others, oneself, nature, and to the sacred realms, inside as well as outside of traditional religion. Viewed thus, spirituality can be a key factor in how people cope with illness, experience healing, and achieve a sense of coherence.

Islam has specific principles that guide the life and death of Muslims. In this topic, we will try to explore Islamic views of illness and death. This topic also involves learning about challenges that may face a Muslim patient and the Muslim team that takes care of them and how to overcome these challenges through the guidance of Islam from Quran and Sunah.

Objectives

- 1) Define Islamic views of illness and death
- 2) Discuss Islamic principles guiding medical care
- 3) Recognize Islamic bio and medical ethics and palliative care principles
- 4) List challenges in providing appropriate Muslim palliative care
- 5) Discuss communication issues and strategies relevant to Muslim palliative care.

Mode of delivery

Interactive lecture

Ethics in palliative care

Background

Health professionals face a lot of ethical issues in palliative and end-of-life care. Usually, ethical issues or "dilemmas" arise due to disagreement regarding how to proceed in a given clinical situation. In clinical work, ethical issues are mostly resolved through a case-based approach. In more complex situations, it is crucial to identify the real nature of the issue, which may not always be obvious, rather than attempt to refer to one core set of beliefs or ethical principles.

Objectives

- 1) Define ethics.
- 2) Recognize and become familiar with ethics principles.
- 3) Describe the role of ethics and application in palliative care setting.
- 4) Discuss ethics application in daily practice of palliative care.

Mode of delivery

Interactive lecture

Advance care planning and goals of care

Background

Advance care planning (ACP) is a process of communication between individuals and their healthcare agents to understand, reflect on, discuss, and plan for future healthcare decisions for a time when individuals are not able to make their own healthcare decisions. Usually, ACP can describe patients' wishes for care in the event of a specific medical scenario ("living will"), and assign another party to express patients' wishes in the event they are unable to do so ("power of attorney"). The process of obtaining patient approval for a medical procedure is known as "informed consent." This process arises from the first principle of medical ethics, the "respect for autonomy," which entails respect and acknowledgement that a person's right to make choices and take actions is based solely on that person's own values and belief system.

Objectives

- 1) Define advance care planning and explain its importance.
- 2) Describe the steps of the advance care planning process.
- 3) Describe the role of patient, proxy, physician, and others.
- 4) Distinguish between statutory and advisory documents.
- 5) Identify pitfalls and limitations in advance care planning.

Mode of delivery

Interactive lecture

Introduction to evidence-based medicine practice in palliative care

Background

Evidence-based medicine (EBM) is "the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients." EBM has rapidly developed over the past 20 years. A recent quantification of research output reported that the medical research community publishes approximately 75 trials and 11 systematic reviews daily, and this volume continues to increase each year. The central role of this ever-expanding bank of evidence in clinical decision-making has changed practice. Initiation of a treatment on the basis that our colleagues deem it effective or we ourselves believe that such treatment will work is no longer acceptable. We must carefully scrutinize the available evidence, appraise its quality, and estimate its applicability to a specific patient before discussing available treatment options.

Objectives

- 1) Describe the steps to EBM.
- 2) Formulate a clinical question in PICO format from a patient scenario.
- 3) Recognize types of clinical questions.
- 4) Locate clinical evidence using PubMed clinical query database.
- 5) Describe common study designs. Identify the major strengths and limitations of each.

- 6) Identify which study designs are most suitable for answering clinical questions related to therapy/prevention.
- 7) Discuss EBM application in palliative care.

Mode of delivery

Interactive lecture

Guidelines for estimating prognosis

Background

Prognosis is the science of estimating the likelihood of an outcome (e.g., death, disability) due to a medical condition (e.g., cancer, heart failure, late-life disability). Prognosis may address many outcomes that patients care deeply about, such as the likelihood of losing the ability to care for oneself independently, of treatment leading to a cure, or of developing a debilitating condition such as dementia.

The growing palliative care movement is refocusing attention on the importance of prognosis in decision making for seriously ill patients. Prognosis reaches paramount importance at the end of life, when the risks and burdens of treatments and their alternatives must clearly be weighed in view of the patient's life expectancy and personal goals.

Objectives

- 1) Define prognosis.
- 2) Understand how prognosis is estimated.
- 3) Recognize and become familiar with prognostic scales.
- 4) Discuss prognostication in common diseases related to palliative care.

Mode of delivery

Interactive lecture

Cancer pain classification and assessment

Background

Cancer pain is a common presentation in cancer patients. The estimated prevalence for chronic pain in patients undergoing cancer treatment is 33 to 59%, and in patients with advanced cancer, it reach up to 64 to 74%. The chronic pain that accompanies cancer can affect the patients and the life of their caregivers including physical functioning, the performance of activities of daily living, psychological and emotional status, and social interactions.

Given the high prevalence of cancer pain and its profound adverse effects, all patients with active cancer should be screened routinely for pain. Patients who report pain require a more thorough assessment and treatment.

Objectives

- 1) Define cancer pain.
- 2) List the neurophysiology of different types of cancer pain.
- 3) Recognize and become familiar with the common pain syndromes, presentations, and classification.
- 4) Perform cancer pain assessment and utilize different pain assessment tools.
- 5) Employ a symptom-oriented approach to cancer pain.

Mode of delivery

Simulation and interactive lecture

Cancer pain management**Background**

The management of cancer pain is an essential element in the comprehensive care delivered to cancer patients. Given the high prevalence of cancer pain and its profound adverse effects, all patients with active cancer should be screened routinely for pain.

Patients who report pain require a more thorough assessment and treatment. Recent literatures showed that different types of pain or pain syndromes were present in all phases of cancer (early and metastatic) and were not adequately treated in a significant percentage of patients, ranging from 56% to 82.3%. Even in more specialized cancer treatment centers where the care is more integrated between different disciplines, patients were nevertheless classified as potentially under-treated in 9.8%–55.3% of the cases.

Objectives

- 1) Highlight the importance of recognizing cancer-related pain and optimize management.
- 2) Describe the outlines of cancer pain management.
- 3) Recognize and become familiar with the WHO pain relief ladder.
- 4) Acknowledge the importance of a multidisciplinary team approach in cancer pain treatments.
- 5) Emphasize pain management for the cancer population with evidence-based multimodal and mechanism-based treatments.
- 6) Discuss different types of pain and the best approach to each type.

Mode of delivery

Simulation and interactive lecture

Neuropathic pain in cancer patients**Background**

Neuropathic pain in cancer patients is common; it can be disease-related or related to the acute or chronic effects of cancer treatment. The estimated prevalence of neuropathic pain in cancer patients is 15-28%. Neuropathic pain consequences can be more devastating to the patients and the caregiver than other pain types. Performing a comprehensive assessment is the key step in the management of neuropathic pain in cancer patients.

Given that most cancer patients are either elderly or have comorbidities, the treatment options have to be chosen carefully and reviewed appropriately.

Objectives

- 1) Define Neuropathic pain.
- 2) List the pathophysiology of neuropathic pain.
- 3) Understand the different causes of neuropathic pain in cancer patients.
- 4) Recognize and become familiar with medications used in neuropathic pain.
- 5) Discuss the prognosis and outcome of neuropathic pain in cancer patients.

Mode of delivery

Simulation and interactive lecture

Principles of opioid management in cancer pain

Background

Opioids are the corner stone in treating cancer pain due of their safety, multiple routes of administration, ease of titration, reliability, and effectiveness for all types of pain.

However, appropriate teaching and training is required to reach the desired result using opioids. Referring to the WHO pain relief ladder, one needs to use the appropriate opioid according to patient pain severity and titrate the dose accordingly.

Objectives

- 1) Review cancer pain management guidelines.
- 2) Recognize and become familiar with the different types of opioids, route of administration, side effects, and dosing.
- 3) Describe the opioids conversion table.
- 4) Discuss opioids' titration and rotation.

Mode of delivery

Simulation and Interactive lecture

Pain crisis in cancer patients

Background

Pain crisis is one of the main emergencies in cancer patients. It is an event in which the patient reports severe, uncontrollable pain that causes severe distress to the patient, family, or both. The pain may progress gradually or become acute in onset and reach an intolerable threshold. It requires immediate and urgent intervention. The assessment and management of an acute pain crisis in the setting of advanced illness are challenging. The best approach is to perform a holistic and comprehensive assessment and manage the pain.

Objectives

- 1) Define a pain crisis.
- 2) Gain an understanding of what a cancer patients experiences with pain crisis.
- 3) Recognize and become familiar with medications used in pain crisis.
- 4) Discuss the emergency treatment of pain crisis and medication titration.

Mode of delivery

Simulation and interactive lecture

Adjuvant analgesics for cancer pain

Background

Opioid therapy is the first-line in the treatment for moderate or severe pain in patients with active cancer. However, the comprehensive management of pain in patients with cancer also requires expertise in the use of non-opioid analgesics, such as acetaminophen (paracetamol), non-steroidal anti-inflammatory agents (NSAIDs), and a group of drugs referred to as "adjuvant" analgesics or co-analgesics. Adjuvant analgesics are drugs that are marketed for indications other than pain, but are potentially useful as analgesics when added to opioid therapy in patients with chronic pain syndromes.

Objectives

- 1) List the adjuvant analgesics used with palliative care patients.
- 2) Describe the pharmacology of each of action of each adjuvant analgesic group.

- 3) Discuss the indications and contraindications for adjuvant analgesics usage in palliative care patients.
- 4) Recognize and become familiar with medications used as adjuvant analgesics in cancer patients regarding dosing, side effects, and limitations.

Mode of delivery

Simulation and interactive lecture

The concept of total pain

Background

The management of cancer pain is an essential element in the comprehensive care delivered to cancer patients. Given the high prevalence of cancer pain and its profound adverse effects, all patients with active cancer should be screened routinely for pain. Patients who report pain require a more thorough assessment and treatment. Recent studies reveal that a significant percentage of patients, ranging from 56% to 82.3%, are under treated. Part of the failure to treat emerges from the lack of understanding the complex nature of the pain in such patients. Dame Cicely Saunders used the term “total pain” to describe the multidimensional nature of the palliative patient’s pain experience to include the physical, psychological, social, and spiritual domains.

Objectives

- 1) Define the concept of Total pain.
- 2) List the causes and prevalence of total pain in palliative care patients.
- 3) Gain an understanding of the multidimensional nature of pain in palliative care patients.
- 4) Recognize and become familiar with multimodalities used in total pain cases.
- 5) Discuss multidisciplinary approach in cases of total pain.

Mode of delivery

Simulation and interactive lecture

Nausea and vomiting in palliative care

Background

Nausea and vomiting are common symptoms in palliative care patients and can cause substantial physical and psychological distress for patients and their families, and can significantly impact quality of life. Nausea, the unpleasant sensation of being about to vomit, can occur alone or can accompany vomiting, dyspepsia, or other gastrointestinal symptoms. Vomiting is the expulsion of gastric contents through the mouth caused by forceful and sustained contraction of the abdominal muscles and diaphragm.

There are many potential causes of nausea and vomiting in palliative care patients, and the etiology is often multifactorial, particularly in patients with cancer. In such patients, nausea and vomiting might be caused by anti-tumor treatment (radiation therapy or chemotherapy), represent an acute complication of malignancy (hypercalcemia, malignant bowel obstruction), might be due to gastroparesis (e.g., from autonomic dysfunction), or be caused from drug-induced constipation (opioids, type 3 serotonin receptor [5HT3] antagonists). These various causes of nausea and vomiting may occur simultaneously or sequentially in any individual patient.

Objectives

- 1) Define nausea and vomiting.
- 2) List the causes and prevalence of nausea and vomiting in palliative care patients.

- 3) Describe the pathophysiology of nausea and vomiting in palliative care patients.
- 4) Discuss the assessment and management of palliative care patients with nausea and vomiting.
- 5) Recognize and become familiar with medications used in nausea and vomiting in palliative care patients.
- 6) Discuss the indications and contraindications for antiemetic agents usage in palliative care patients.

Mode of delivery

Simulation and interactive lecture

Constipation in palliative care

Background

Constipation is one of the most common problems experienced by patients in palliative care, particularly those with advanced cancer, and can cause extreme suffering and discomfort to the patient. Despite this, there can be a lack of awareness among medical and nursing staff looking after patients with palliative care needs, in terms of the prevalence, causes, and impact of constipation. In some cases, constipation may even be considered a low priority in the overall management of these patients.

Objectives

- 1) Define constipation.
- 2) List the causes and prevalence of constipation in palliative care patients.
- 3) Describe the pathophysiology of constipation in palliative care patients
- 4) Discuss the assessment and management of palliative care patients with constipation.
- 5) Recognize and become familiar with medications used in constipation in palliative care patients.
- 6) Discuss the indications and contraindications for laxative agent usage in palliative care patients.

Mode of delivery

Simulation and interactive lecture

Malignant bowel obstruction

Background

Malignant bowel obstruction is a common and distressing outcome, particularly in patients suffering from bowel and gynecological cancer. The estimated prevalence of this outcome in all cancer patients ranges from 3% to 42%. In ovarian cancer, bowel obstruction occurs in 42% of the patients, while it can reach up to 24% in colorectal cancer patients. Obstructions may be partial or complete, acute or insidious, and reversible or irreversible. Obstruction usually causes local inflammation with luminal accumulation of intestinal fluids, gases, and solids producing symptoms and creating a vicious cycle of distension and secretion. The small bowel is more commonly involved than the large bowel (61% versus 33%).

Objectives

- 1) Define malignant bowel obstruction.
- 2) List the causes and prevalence of malignant bowel obstruction.
- 3) Describe the pathophysiology of malignant bowel obstruction in palliative care patients.

- 4) Discuss the assessment and management of palliative care patients with malignant bowel obstruction.
- 5) Discuss the treatment plan for palliative care patients with malignant bowel obstruction.

Mode of delivery

Simulation and interactive lecture

Dyspnea in palliative care

Background

Dyspnea is a term used to characterize a subjective experience of breathing discomfort that is comprised of qualitatively distinct sensations that vary in intensity. The experience derives from interactions among multiple physiological, psychological, social, and environmental factors that may induce secondary physiological and behavioral responses.

Dyspnea is a common and distressing symptom experienced by 19-51% of palliative care patients. Of those with symptoms, 60 to 80% rate it as being clinically important. The prevalence is more common in patients with advanced lung (46%) and breast cancers (24%). Symptomatic treatment of dyspnea is particularly important for patients in whom the underlying cause is not specifically treatable.

Objectives

- 1) Define dyspnea.
- 2) List the causes and prevalence of dyspnea in palliative care patients.
- 3) Describe the pathophysiology of dyspnea in palliative care patients.
- 4) Discuss the assessment and management of palliative care patients with dyspnea.
- 5) Recognize and become familiar with medications used in dyspnea in palliative care patients.
- 6) Discuss the indications and contraindications for medications used for palliative care patients with dyspnea.

Mode of delivery

Simulation and interactive lecture

Common non-pain symptoms in palliative care

Background

Most patients in the terminal phase of a serious and/or life-threatening illness such as cancer develop potentially devastating physical and psychosocial symptoms in the weeks to months prior to death. Patients admitted to tertiary palliative care units are likely to present with more frequent and severe symptoms compared to those admitted to community hospices or acute care hospital beds, although the frequency of symptoms is high in all groups.

Effective treatment will successfully alleviate and may even eliminate the majority of symptoms (pain, dyspnea, nausea/vomiting, fatigue, etc.) in terminally ill patients.

Objectives

- 1) List common non-pain symptoms in palliative care patients.
- 2) Identify causes and prevalence of common non-pain symptoms in palliative care patients.
- 3) Describe the pathophysiology of each common non-pain symptom in palliative care patients.
- 4) Discuss the assessment and management of palliative care patients with common non-pain symptoms.

- 5) Recognize and become familiar with medications used to treat the common non-pain symptoms in palliative care patients.
- 6) Discuss the indications and contraindications for medications used for palliative care patients with common non-pain symptoms.

Mode of delivery

Simulation and interactive lecture

Nutrition for palliative care patients

Background

Good nutrition is important in caring for patients with life-limiting illnesses, not only for meeting the body's physical requirements but also because of its associated social, cultural, and psychological benefits. A palliative care patient has numerous symptoms that may limit their intake, and a good nutritional plan may help overcome some of it. For some patients, nutrition can improve their quality of life, as they can enjoy the food and bring some inner satisfaction even if the amount was limited.

Objectives

- 1) Define nutritional needs for palliative patients.
- 2) Recognize and become familiar with the key elements in nutrition in palliative care elements.
- 3) List the obstacles in the nutrition of palliative care patients.
- 4) Discuss the nutritional needs and requirements of palliative care patients.

Mode of delivery

Simulation and interactive lecture

Feeding and hydration at the end of life

Background

Feeding and hydration at the end of life is one of the common issues with palliative care patients. The decision usually can be affected by religious beliefs and social and cultural background. A multidisciplinary approach and early discussion with the family and the patient can help the palliative team overcome such an obstacle.

Medically assisted nutrition and hydration should be considered medical interventions rather than a basic provision of comfort. Promoting early discussions with the patient and family about care goals and treatment choices, including the expected benefits and burdens of artificial nutrition and hydration based upon the best available evidence, is ethically appropriate, respects family and patient autonomy, and facilitates informed decision making.

Objectives

- 1) Define the feeding and hydration needs at the end-of-life care.
- 2) Recognize and become familiar with feeding and hydration methods.
- 3) List indication and contraindications for feeding and hydration methods.
- 4) Discuss prognostication and quality of life of palliative care patients with different options for feeding and hydration at the end of life.
- 5) Explain the ethical, legal, and religious background of feeding and hydration at the end of life.

Mode of delivery

Interactive lecture and workshop

Psychological symptoms in palliative care

Background

Providing optimal symptom relief and alleviating patient suffering requires that palliative care clinicians attend to the issue of psychological distress. Psychological distress has been conceptually defined as a “unique, discomforting, emotional state experienced by an individual in response to a specific stressor or demand that results in harm, either temporary, or permanent, to the person.” The nature of the experience may be psychological (cognitive, behavior, emotion), social, and/or spiritual, affecting an individual’s ability to cope with the illness, its physical symptoms, and treatment.

Objectives

- 1) List psychological symptoms in palliative care patients.
- 2) Identify the causes and prevalence of psychological symptoms in palliative care patients.
- 3) Describe the pathophysiology of psychological symptoms in palliative care patients.
- 4) Discuss the assessment and management of palliative care patients with psychological symptoms.
- 5) Recognize and become familiar with the therapeutic interventions used to treat psychological symptoms in palliative care patients.
- 6) Discuss the indications and contraindications for medications used for palliative care patients with psychological symptoms.
- 7) Predict the impact of the psychological symptoms on the patients and their families.

Mode of delivery

Simulation and interactive lecture

Care of the dying

Background

End-of-life care is an important part of palliative medicine. Most of the patients in the last hours of their life continue to experience significant unrelieved physical, psychological, and spiritual symptoms. The ability to recognize that a patient is in the last days or hours of his/her life is an important step in delivering the appropriate care for the patient and his/her family.

Objectives

- 1) Recognize the dying phase of illness.
- 2) List the specific issues associated with dying.
- 3) Discuss the concept of a good death and factors that contribute to a good death across care settings.

Mode of delivery

Interactive lecture

Interventional procedures for cancer pain

Background

Cancer pain is complex and multifactorial. Most cancer pain can be effectively controlled using analgesics in accordance with the WHO analgesic ladder. However, in a small but significant percentage of cancer patients, systemic analgesics fail to provide adequate control of cancer pain.

These cancer patients can also suffer from intolerable adverse effects of drug therapy or intractable cancer pain in advance diseases. Although the prognosis of these cancer patients is often very limited, the pain relief reduces medical costs, and the improvement in function and quality of life as an outcome of the use of a wide variety of available interventional procedures is extremely invaluable. These interventions can be used as sole agents or as useful adjuncts to supplement analgesics.

Objectives

- 1) List the interventional procedures for cancer pain.
- 2) Recognize the indications and contraindications for the interventional procedures for cancer pain.
- 3) Describe the complications of the interventional procedures for cancer pain.

Mode of delivery

Interactive lecture

Grief and bereavement

Background

Losing a loved one can lead to different reactions and emotions. It is important to support the patient and his/her family through the journey of advanced disease. Recognizing the signs of abnormal grief process is critical to help the family pass through the difficult time in a healthy and safe manner. Implementing a process to help identify and manage at the earliest is required.

Objectives

- 1) Define normal grief and bereavement.
- 2) Recognize atypical and complicated grief.
- 3) List the models of grief.
- 4) Identify the risk factors and causes.
- 5) Discuss the strategies for supporting patients and their families.
- 6) Describe a practical approach to grief management.

Mode of delivery

Interactive lecture

Ascites and pleural effusion in palliative care

Background

Ascites and pleura effusion are common presentations for different types of malignancy and can cause very distressing symptoms in such patients. The estimated prevalence of both conditions is 10% to 15%. The ability of the treating team to identify and treat both conditions can improve the patient's physical, psychological, and social symptoms. The presence of ascites and pleural effusion can be a sign of poor prognosis.

Objectives

- 1) List the causes of ascites and pleural effusion.
- 2) Describe the pathophysiology of ascites and pleural effusion in palliative care patients.
- 3) Recognize the assessment and management approach of palliative care patients with ascites and pleural effusion.
- 4) Discuss indications, contraindications, and complications for the therapeutic interventions in treating ascites and pleural effusion.

Mode of delivery

Interactive lecture and workshop

Edema in palliative care

Background

Edema is a common symptom in palliative care patients. It can be caused by different causes related to diseases or treatments. The effect of edema in general can be devastating for the patient in terms of the physical and psychological aspects and can certainly affect his/her quality of life. The best approach is a multidisciplinary team approach to address all related issues and ensure that the patient and the family understand the realistic goals of care.

Objectives

- 1) Define edema.
- 2) List the causes of edema.
- 3) Describe the pathophysiology of edema in palliative care patients.
- 4) Recognize the assessment and management approach of palliative care patients with edema.
- 5) Discuss indications, contraindications, and complications for the therapeutic interventions in treating edema.

Mode of delivery

Interactive lecture and workshop

Nurse role in palliative care

Background

Nursing role in palliative care medicine is critical to help the patient and the team. Palliative care nurses work in collaboration with other health providers (such as physicians, social workers, or chaplains) within the context of an interdisciplinary team. Composed of highly qualified, specially trained professionals and volunteers, the team blends their strengths together to anticipate and meet the needs of the patient and the family facing terminal illness and bereavement. Palliative care nursing practice is closely tied to nursing values in a more general sense. All nurses value the right to life and the importance of a person's choices, dignity, and respectful treatment. Access to pain relief and other symptom management practices reflected in the care plan are inherent to providing quality care and dignity in life until death

Objectives

- 1) Define nurse role in palliative care.
- 2) Gain an understanding of nursing holistic assessment of palliative care patients.
- 3) List communication issues related to nursing role in palliative medicine.
- 4) Discuss the contribution of the nurse to the interdisciplinary team, the patient, and the family.

Mode of delivery

Interactive lecture

Rehabilitation in palliative care

Background

Terminally ill patients have a high prevalence of weakness, pain, fatigue, and dyspnea in addition to other symptoms.

Rehabilitation and palliative care have emerged as two important parts of comprehensive medical care for patients with advanced disease. Palliative care and rehabilitation share common goals and therapeutic approaches. Both disciplines use a multidisciplinary model of care, which aims to improve patients' levels of function and comfort. There is little evidence that rehabilitation interventions can impact function and symptom management in terminally ill patients. However, clinical experience suggests that the application of the fundamental principles of rehabilitation medicine is likely to improve their care. Physical function and independence should be maintained as long as possible to improve patients' quality of life and reduce the burden of care for the caregivers.

Objectives

- 1) Define the rehabilitation needs common to adult palliative medicine.
- 2) Describe common exercise and therapy for the maintenance of function throughout the disease trajectory to improve quality of life.
- 3) Discuss strategies and services to address rehabilitation needs.

Mode of delivery

Interactive lecture

The palliation of end-stage heart disease

Background

End-stage heart disease is a common and frequently life-limiting illness with increasing prevalence. Hospitalization rates for decompensate heart failure (HF) are high, and one-third or more of HF patients die within a year of a hospitalization for HF. The average life expectancy following the diagnosis of HF is under six years. Options for the treatment of end-stage heart disease now make it possible to survive longer with better quality of life for some persons. Decisions about interventions in end-stage heart disease are complex and require an organized approach.

Objectives

- 1) Define end-stage heart disease.
- 2) Gain an understanding of nursing standards of care.
- 3) Recognize and become familiar with medications used in end-stage heart disease.
- 4) Employ a symptom-oriented approach to end-stage heart disease.
- 5) Discuss prognostication in end-stage heart disease.

Mode of delivery

Simulation and interactive lecture

End-of-life care in dementia

Background

Dementia is a collective term that describes multiple diseases such as Alzheimer's dementia, vascular dementia, and others. The usual prognosis for most types of dementia from the time of diagnosis is 7-11 years. During the period of the disease, the patient's will needs a multidisciplinary approach. However, in the advanced dementia stage where most dementias are alike, the patients and caregivers are faced with a range of physical and psychosocial needs requiring a more experienced team in the field of end-of-life care and palliation. Effective palliative care of patients with advanced dementia can improve patients' symptoms, lessen caregiver burden, and help ensure that treatment decisions are well informed and weighed in the context of patient and family goals and needs.

Objectives

- 1) Define dementia.
- 2) Gain an understanding of what a dementia patient experiences at the end of life.
- 3) Recognize and become familiar with the medications used in dementia.
- 4) Employ a symptom-oriented approach to advanced dementia.
- 5) Assess and help managing care giver burden.
- 6) Discuss prognostication in dementia.

Mode of delivery

Simulation and interactive lecture

Palliative care in end-stage renal disease

Background

The prevalence of end-stage renal disease continues to increase, and dialysis is offered to older and more medically complex patients. Pain is problematic for up to one-half of patients receiving dialysis and may result from renal and non-renal etiologies. Opioids can be prescribed safely, but the patient's renal function must be considered when selecting a drug and determining the dosage. Non-pain symptoms are common and affect the quality of life. Non-dialytic management may be preferable to dialysis initiation in older patients and in those with additional life-limiting illnesses, and may not significantly decrease life expectancy. Delaying dialysis initiation is also an option. Patients with end-stage renal disease should have advance directives, including documentation of situations in which they would no longer want dialysis.

Objectives

- 1) Define end-stage renal disease.
- 2) Gain an understanding of what an end-stage renal disease patient experiences at the end of life.
- 3) Recognize and become familiar with medications used in end-stage renal disease.
- 4) Employ a symptom-oriented approach to end-stage renal disease.
- 5) Assess and help managing care giver burden.
- 6) Discuss prognostication in end-stage renal disease.

Mode of delivery

Simulation and interactive lecture

Palliative radiation

Background

Radiation oncology is the medical use of ionizing radiation (IR) as a part of cancer treatment to control malignant cells. IR damages the DNA of cells either directly or indirectly, through the formation of free radicals and reactive oxygen species. Radiation therapy is one of the modalities to treat malignancies. It is used as curative treatment in radiation-sensitive malignancies. Additionally, it can also be used to treat advance malignancies in palliative patients. Approximately 34–50% of patients receiving radiotherapy express palliative intent.

Objectives

- 1) Understand the fundamentals of radiation therapy.
- 2) List indications for palliative radiation therapy.
- 3) Note Emergency Indications for palliative radiation therapy.
- 4) Describe patient assessment for radiation therapy.

- 5) Manage commonly expected side effects of radiation therapy.

Mode of delivery

Interactive lecture

Palliative chemotherapy

Background

Chemotherapy was once commonly regarded as an often futile and inevitably dangerous type of therapy by both the public and palliative physicians and nurses. In the last two decades, there has been a gradual but important change in the perceived role of chemotherapy in the treatment of advanced cancers. In the past, most studies reported the efficiency of palliative chemotherapy in terms of tumor response rate, duration of response and survival benefit. Nowadays, the issue of symptom control and quality of life are usually addressed in clinical studies on palliative chemotherapy. The practice of palliative chemotherapy is always guided by basic ethical principles and available clinical evidence.

Objectives

- 1) Understand the fundamentals of palliative chemotherapy.
- 2) List indications for palliative chemotherapy.
- 3) Describe the patient assessment for chemotherapy.
- 4) Manage the commonly expected side effects of chemotherapy.

Mode of delivery

Interactive lecture

Palliative care at home

Background

Home healthcare is one of the most important ways of delivering palliative care services to the patients while they stay at home. Its importance in our community emerges from the strong family values and customs based on which most Saudi families like to take care of their loved ones by themselves. Additionally, the lack of hospice facility is one of the factors that support the home health care in our kingdom.

Objectives

- 1) Define home health care.
- 2) List the goals of providing home health care to palliative patients.
- 3) Describe the team assigned to deliver the service.
- 4) Assess and manage palliative care patients at home.

Mode of delivery

Simulation and interactive lecture

Palliative care for pediatrics

Background

Palliative care for children represents a special and emotional subject for families and for the palliative care team. WHO's definition of palliative care appropriate for children and their families is as follows: the principles apply to other pediatric chronic disorders (WHO; 1998a):

- 1) Palliative care for children is the active total care of the child's body, mind, and spirit, and also involves providing support to the family.

- 2) It begins when an illness is diagnosed, and continues regardless of whether or not a child receives treatment directed at the disease.
- 3) Health providers must evaluate and alleviate a child's physical, psychological, and social distress.
- 4) Effective palliative care requires a broad multidisciplinary approach that includes the family and makes use of available community resources; it can be successfully implemented even if resources are limited.
- 5) It can be provided in tertiary care facilities, in community health centers, and even in children's homes.

Objectives

- 1) Understand the spectrum of conditions and circumstances that might fall within the scope of pediatric palliative care.
- 2) Obtain appropriate history and assessment for pediatrics palliative care patients.
- 3) Demonstrate knowledge of the pharmacology of palliative medicine.
- 4) Understand the important role of communication in caring for children with life limiting conditions and in supporting their families and involved health care teams.
- 5) Develop an approach to communicating with patients/families about goals and care expectations.

Mode of delivery

Interactive lecture

Palliative care emergencies

Background

Palliative care emergencies represent a group of conditions that threaten the life of the patient, mainly its quality. The aim is not prolongation of life but maintaining a good quality of life. The concept of rapid assessment, diagnosis, and management apply in such emergencies.

Objectives

- 1) Define palliative care emergencies.
- 2) Apply the concept of rapid assessment, diagnosis, and management in palliative care emergencies.
- 3) Know where to get help and advice in palliative care emergencies.
- 4) Plan ahead, be prepared, and anticipate.
- 5) Understand the importance of communication in palliative care emergencies.

Mode of delivery

Simulation and interactive lecture

Wound care, pressure ulcers, and stoma in palliative care

Background

In palliative care patients, wound care, stoma care, and pressure ulcers are common issues. As different malignancies can present with malignant wounds either due to the disease itself or due to distal metastasis, wound care can improve the quality of life in such a patient. A significant number of patients have stomas or feeding tubes and part of care provision is to teach the patient and the family how to care for it and maintain it well. A variety of risk factors exist that place the palliative care individual at increased risk for both the development of pressure ulcers and non-healing.

Objectives

- 1) Define wound, pressure ulcer, and stoma.
- 2) Apply the principles of wound and pressure ulcer assessment and diagnosis.
- 3) Manage wounds and pressure ulcers.
- 4) Teach the patient and the caregiver to maintain and manage stomas and feeding tubes.

Mode of delivery

Interactive lecture and workshop

Breast cancer

Background

Breast cancer is the most common cancer among women worldwide and the second-most common cancer overall. Breast cancer (BC) is the second foremost cause of cancer deaths in Saudi Arabia. The incidence of BC in Saudi Arabia is 1%. The overall survival rate is lower compared to the United States and the U.K. In addition, breast cancer is the leading cause of death in women aged between 40 and 49.

Breast cancer is treated with a multidisciplinary approach involving surgical oncology, radiation oncology, and medical oncology, which has been associated with a reduction in breast cancer mortality.

Objectives

- 1) List types of breast cancer.
- 2) Identify the risk factors for breast cancer.
- 3) Note presentations of breast cancer.
- 4) Recognize assessment and diagnosis methods for breast cancer.
- 5) Identify treatment options for breast cancer.
- 6) List complications arising from breast cancer or its treatments.
- 7) Discuss prognostication in breast cancer.

Mode of delivery

Interactive lecture

Lung cancer

Background

Lung cancer accounts for 4% of all diagnosed cancer cases in Saudi Arabia during 2010. Lung cancer ranked fifth among male population and thirteenth among female population. Worldwide, lung cancer occurred in approximately 1.8 million patients in 2012 and caused an estimated 1.6 million deaths.

Both the absolute and relative frequency of lung cancer has increased dramatically. Around 1953, lung cancer became the most common cause of cancer deaths in men. In 1985, it became the leading cause of cancer deaths in women, and now causes approximately twice as many deaths as breast cancer.

Lung cancer deaths are declining in men, and the death rate in women has plateau secondary to decreases in smoking. Presently, however, almost one-half of all lung cancer deaths occur in women.

The term lung cancer, or bronchogenic carcinoma, refers to malignancies that originate in the airways or pulmonary parenchyma. Approximately 95 percent of all lung cancers are classified as either small cell lung cancer (SCLC) or non-small cell lung cancer (NSCLC). This distinction is required for appropriate staging, treatment, and prognosis. Other cell types comprise about five percent of the malignancies arising in the lung.

Objectives

- 1) List the types of lung cancer.
- 2) Identify the risk factors for lung cancer.
- 3) Note presentations of lung cancer.
- 4) Recognize assessment and diagnosis methods of lung cancer.
- 5) Identify treatment options for lung cancer.
- 6) List complications and side effects arising from lung cancer or its treatments.
- 7) Discuss prognostication in lung cancer.

Mode of delivery

Interactive lecture

Genitourinary cancers

Background

Genitourinary cancers are malignancies of kidney, bladder, prostate, penis, and testes. In Saudi Arabia, kidney cancer accounted for 2.8% of all newly diagnosed cases in 2010. Prostate cancer accounted for 6.1% of all newly diagnosed cases among males in 2010, and bladder cancer accounted for 2.4% of all newly diagnosed cases.

Genitourinary cancers are treated with a multidisciplinary approach involving surgical urology oncology, radiation oncology, and medical oncology, which has been associated with a reduction in mortality.

Objectives

- 1) List types of genitourinary cancer.
- 2) Identify risk factors for genitourinary cancer.
- 3) Note presentations of genitourinary cancer.
- 4) Recognize the assessment and diagnosis methods of genitourinary cancer.
- 5) Identify treatment options for genitourinary cancer.
- 6) List complications arising from genitourinary cancer or its treatments.
- 7) Discuss prognostication in genitourinary cancer.

Mode of delivery

Interactive lecture

Gynecological cancers

Background

Gynecological cancers are malignancies of the uterus, ovaries, and cervix. In Saudi Arabia, corpus uteri cancer among females accounted for 4.1% of all newly diagnosed cases in 2010, and it is ranked sixth among female population. Ovarian cancer among females accounted for 3.3% of all newly diagnosed cases in 2010 and is ranked seventh among the female population.

Gynecological cancer is treated with a multidisciplinary approach involving gynecologic oncology, radiation oncology, and medical oncology, which has been associated with a reduction in gynecological cancers mortality.

Objectives

- 1) List types of gynecological cancer.
- 2) Identify risk factors for gynecological cancer.
- 3) Note presentations of gynecological cancer.

- 4) Recognize assessment and diagnosis methods of gynecological cancer.
- 5) Identify treatment options for gynecological cancer.
- 6) List complications arising from gynecological cancer or its treatments.
- 7) Discuss prognostication in gynecological cancer.

Mode of delivery

Interactive lecture

Gastrointestinal cancers

Background

Gastrointestinal cancers are malignancies of the gastrointestinal tract that includes the esophagus, stomach, intestine, liver, and pancreas. In Saudi Arabia, colo-rectal cancer accounted for 10.4% of all newly diagnosed cases in 2010 and is the most common cancer among males and the third most common among females. Liver cancer accounted for 4.8% of all newly diagnosed cases in 2010 and was the fourth most common cancer among males and eighth among females.

Gastrointestinal cancers are treated with a multidisciplinary approach involving gynecologic oncology, radiation oncology, medical oncology, and gastroenterologist that have been associated with a reduction in gastrointestinal cancers mortality.

Objectives

- 1) List types of gastrointestinal cancers.
- 2) Identify risk factors for gastrointestinal cancers.
- 3) Note presentations of gastrointestinal cancers.
- 4) Recognize assessment and diagnosis methods of gastrointestinal cancers.
- 5) Identify treatment options for gastrointestinal cancers.
- 6) List complications arising from gastrointestinal cancers or its treatments.
- 7) Discuss prognostication in gastrointestinal cancers.

Mode of delivery

Interactive lecture

Thyroid cancer

Background

A total of 697 cases of thyroid cancer accounting for 7.0% of all newly diagnosed cases were found in Saudi Arabia in 2010. This cancer ranked second among female population and twelfth among male population. Females are more likely to have thyroid cancer than men by a ratio of 3:1, and it is more common in people who have been treated with radiation to the head, neck, or chest, most often for benign conditions (although radiation treatment for benign conditions is no longer carried out). Thyroid cancer can occur in any age group, although it is most common after the age of 30, and its aggressiveness increases significantly in older patients.

There are four types of thyroid cancer including papillary and mixed papillary/follicular (~ 75%), follicular and Hurthle cell (~ 15%), medullary (~ 7%), and anaplastic (~ 3%). Most thyroid cancers are curable. In fact, the most common types of thyroid cancer (papillary and follicular) are the most curable. In younger patients, both papillary and follicular cancers can be expected to have a cure rate better than 95% if treated appropriately. Both papillary and follicular cancers are typically treated with complete removal of the lobe of the thyroid that harbors the cancer in addition to removal of most or all of the other side.

Objectives

- 1) List types of thyroid cancer.
- 2) Identify risk factors for thyroid cancer.
- 3) Note presentations of thyroid cancer.
- 4) Recognize assessment and diagnosis methods of thyroid cancer.
- 5) Identify treatment options for thyroid cancer.
- 6) List complications arising from thyroid cancer or its treatments.
- 7) Discuss prognostication thyroid cancer.

Mode of delivery

Interactive lecture

Bony and soft tissue cancers

Background

Bony and soft tissue cancers are malignancies arising from bone and other connective tissues, such as muscle, tendon, ligament, fat, and cartilage. In Saudi Arabia, bony and soft tissue cancers accounted for 1.6% of all cancers in 2010.

Bony and soft tissue cancers are treated with a multidisciplinary approach involving surgical oncology, radiation oncology, and medical oncology that have been associated with a reduction in bony and soft tissue cancers mortality.

Objectives

- 1) List types of soft tissue cancers.
- 2) Identify risk factors for soft tissue cancers.
- 3) Note presentations of soft tissue cancers.
- 4) Recognize assessment and diagnosis methods of soft tissue cancers.
- 5) Identify treatment options for soft tissue cancers.
- 6) List complications arising from soft tissue cancers or its treatments.
- 7) Discuss prognostication in soft tissue cancers.

Mode of delivery

Interactive lecture

Hematological cancers

Background

Hematological malignancies are malignancies that affect the blood, bone marrow, lymph, and lymphatic system. In Saudi Arabia, hematological malignancies accounted for 11.1% of all cancers in 2010.

Objectives

- 1) List types of hematological cancers.
- 2) Identify risk factors for Hematological cancers.
- 3) Note presentations of Hematological cancers.
- 4) Recognize assessment and diagnosis methods of Hematological cancers.
- 5) Identify treatment options for Hematological cancers.
- 6) List complications arising from Hematological cancers or its treatments.
- 7) Discuss prognostication in Hematological cancers.

Mode of delivery

Interactive lecture

Palliative care for HIV patients

Background

With advances in HIV-specific therapy and care, HIV infection is no longer a rapidly fatal illness. Instead, patients who are able to tolerate antiretroviral therapy (ART) usually experience a manageable, chronic illness.

The death rate from AIDS, however, continues to be significant. However, as patients live longer, new challenges have emerged, including treatment toxicities and drug resistance; increased rates of comorbid diseases such as chronic liver and kidney disease; atherosclerosis, cancers, depression, and dementia; and issues of adherence to complex treatment regimens. Integrating palliative care and disease-specific care is important for treating patients with HIV in order to promote quality of life and relieve suffering.

Objectives

- 1) Define HIV infection and stages.
- 2) Gain an understanding of what an HIV/AIDS patient experiences at the end of life.
- 3) Recognize and become familiar with medications used in HIV/AIDS patients.
- 4) Employ a symptom-oriented approach to HIV/AIDS patients.
- 5) Assess and help manage care giver burden.
- 6) Discuss prognostication in HIV/AIDS patients.

Mode of delivery

Simulation and interactive lecture

Research in palliative care

Background

The evidence base for palliative care is very weak in Saudi Arabia than in most countries. Worldwide, the progress of research in palliative care has been relatively slow in comparison to other specialties (Hanks et al, 2010). There are many ethical challenges in the area of palliative care research as well. Collaborating with other discipline within the same institute or with other centers can help overcome the current deficiency. It is through this cycle of research, implementation, and evaluation that practice improves and patient care becomes enhanced.

Objectives

- 1) Define research.
- 2) Gain an understanding of the research process.
- 3) Recognize and become familiar with research design and study types.
- 4) Write a research proposal.
- 5) Recognize study analysis, conclusion, and recommendations.
- 6) Gain an understanding of research ethics.

Mode of delivery

Interactive lecture and workshop

Social worker role in palliative care

Background

The social worker part in palliative medicine is crucial and important. As discussed before, the social aspects of palliative care need to be taken into consideration. The social worker studies the social background of the patients and their families and recommends an intervention based on his/her knowledge of the community resources. In most settings, the social worker's role is extended to cover several aspects of patient care and care giver care.

Objectives

- 1) Define the social worker's role in palliative care.
- 2) List common social issues relevant to palliative care patients.
- 3) Describe caregiver distress and strategies to provide support.

Mode of delivery

Interactive lecture

Religious advisor role in palliative care

Background

The religious advisor plays an essential and crucial role in palliative medicine. As we discussed before that palliative medicine is taking care of the patient and the caregiver from different angles and one of the essential parts is the religious and spiritual part. The religious advisor's role is to explore, discuss, and explain the religious thoughts and beliefs of the patients and their families to help them cope and provide them the best religious/spiritual support. In most settings, the religious advisor part is extended to cover several aspects of patient and care giver care.

Objectives

- 1) Define the role of a religious advisor in palliative medicine.
- 2) Explain the issues of spirituality related to death and dying, and the role of spiritual care.
- 3) Review the difference between patients' spiritual and religious needs.
- 4) Recognize the importance of hope and nurturing hope.
- 5) Discuss the major cultural and religious practices related to medical practice, dying, and bereavement.

Mode of delivery

Interactive lecture

Palliative approach to advanced neurological diseases

Background

The care of people with progressive neurological diseases poses considerable challenges for clinicians in neurology and palliative care. Neurological disease may present and progress in many different ways, depending on the disease and the individual. It represents a challenge for care throughout the disease progression and particularly at the end of life. These issues include the variability of disease progression, associated cognitive change, complex treatments, and the concerns and problems encountered with inherited diseases. The early involvement of palliative care physicians in such complex patient care will ensure that the most appropriate care is provided, enabling the patient and family to maintain their quality of life.

Objectives

- 1) Define advance neurological diseases.
- 2) Gain an understanding of the advanced neurological diseases that patients experience at the end of their life.
- 3) Recognize and become familiar with medications used in advance neurological diseases.
- 4) Employ a symptom-oriented approach to advance neurological diseases.
- 5) Discuss prognostication in advance neurological diseases.

Mode of delivery

Interactive lecture

Palliative approach to geriatric population

Background

Caring for an elderly person is different from other age groups in many aspects. The elderly population in Saudi Arabia is around 3-4% according to the last census. Older people have multiple comorbidities (such as dementia, osteoporosis, and arthritis) that can affect their health and quality of life as well. They may therefore have palliative care needs at any point in the illness trajectory and not merely at the terminal phase. As such, palliative care should be integrated into chronic disease management. The fact that elderly patients have metabolic and physiological changes that can change their disease presentation and may require adjustment for the medications and preferences needs to be taken into account as well.

Objectives

- 1) Define geriatrics and geriatric population.
- 2) Recognize the physiological and psychological differences in the geriatric population. and their implications for therapeutic choices.
- 3) Discuss frailty and its contribution to morbidity and mortality.
- 4) Perform a comprehensive geriatric assessment.

Mode of delivery

Simulation and interactive lecture

Anorexia and cachexia in advanced cancer

Background

Anorexia in advanced cancer can result from reduced food intake due to nausea, vomiting, pain, and dysphagia. Cancer also induces metabolic changes in body leading to cachexia, which is considered to be a complex and multifactorial phenomenon. Cachexia is characterized by severe loss of body weight, muscle loss, and increased protein catabolism due to an underlying disease such as advanced cancer.

Prevalence of cachexia in cancer patients is as high as about 80% in some advanced cancers such as pancreas, lung, stomach, colorectal, and esophagus, and less frequent in cancer of the breast, prostate, and hematological malignancies. Cachexia is associated with high morbidity and mortality.

Pathophysiology: Cancer cells produce cytokines such as TNF (tumor necrosis factor), interleukins I and VI, lipolytic hormones and PIF (proteolysis-inducing factor) that cause metabolic abnormalities such as lipolysis and protein catabolism. Prominent symptoms in cachexia are fatigue, reduced physical activity, and decreased tolerance to anticancer therapy.

Weight loss associated with cancer is particularly distressing to the family members of patients, and they often request medications to improve the patient's appetite. However, the medications are of limited benefit in advanced cachexia, and they are often associated with adverse effects. The weight gain from orexigenic medications is often due to increase in the adipose tissue rather than increased muscle mass.

Non-pharmacological such as family education is necessary regarding Cachexia as a normal part of the end-of-life, and that patients are not starving. Families should be guided that they should avoid forcing patient to eat as this can cause dyspepsia, nausea, vomiting. Patient should be encouraged in planning meal and to take as much food as they desire. Additionally, any anxiety, depression, or spiritual distress should be addressed with the help of a social worker and spiritual counselor.

Corticosteroids (such as Dexamethasone) can be used to increase appetite. Mirtazapine has been tried as appetite stimulant and may help some patients, especially if they have underlying depression or insomnia. American Geriatrics Society recommends against megestrol acetate in elderly patients due to its association with thromboembolic events and death. Efficacy of cannabinoids and anabolic has not been proven as of yet.

Learning objectives

- 1) List the characteristics of cancer cachexia.
- 2) Understands the pathophysiology of cancer related anorexia- cachexia
- 3) Identify patients who might benefit from pharmacologic treatment.
- 4) Recognizes the value of non-pharmacologic interventions and family education to help mitigate the suffering in cachectic patients.

Method

Interactive lecture

Prepared by Dr. Tayyaba Irshad, MD, MPH, Consultant Palliative Medicine, Department of Oncology, King Abdul Aziz Medical City, Jeddah, KSA

Communication skills and conveying bad news

Background

Communicating serious news and discussing transitions in goals of care are common communication tasks in palliative care. Effective therapeutic communication is one of the quality measures of good medical care. Future emotional adjustment of patients with their disease is affected by the following:1) Manner in which bad news is conveyed, and 2) Clinician response to emotions. High-quality communication is necessary for a therapeutic doctor patient relationship.

Unfortunately, doctors frequently focus their attention on the technical disease aspects and ignore patients' values. Research has shown that communication between physicians and patients needs to be improved. Poor doctor patient communication is also correlated with higher rates of malpractice claims. Shared decision-making is the communication strategy that guides decision making to match individual patient and family goals and preferences. Research has shown that the majority of patients and families prefer clear, honest information about the disease and treatment.

Road maps have been created to effect an effective communication such as SPIKES protocol for breaking bad news by Baille & colleagues: 1) Setup, 2) Perception, 3) Invitation (permission), 4) Knowledge sharing, E) Empathize, and Summarize and Strategize.

Another holistic approach for communication is the BUILD model by Collier and colleagues.

Learning objectives

- 1) Recognize the importance of effective communication
- 2) Conducts bad news breaking exercises under attending supervision
- 3) Identify patients and family goals and preferences

Method

Interactive lecture and simulation

Delirium

Background

Delirium is characterized primarily by cognitive deficit and disturbances of behavior and affect. It is not a symptom but a syndrome that has multifactorial etiology. Disturbances in neurotransmitters (acetylcholine, dopamine, and gamma aminobutyric acid) can result in delirium. Memorial Delirium Assessment Scale (MDAS) and the Confusion Assessment Method (CAM) can be used to screen patients with delirium.

Delirium is common at the end of life; however, the etiology of delirium can be ascertained in fewer than 50% of terminally ill patients. Delirium is a source of significant distress to the patients and family. Delirium itself is associated with high mortality.

It is important to distinguish delirium from dementia or depression. A thorough medical history and examination is vital for the assessment of delirium and for identifying whether it is reversible or not.

Delirium can manifest in one of the three states: 1) Hypoactive, 2) Hyperactive, 3) Mixed. The exact pathophysiology of delirium has not been established.

The management of delirium is guided by patient and family goals. A dopamine blocker agent such as haloperidol is commonly used for hyperactive delirium. Benzodiazepines can also be used if neuroleptics are insufficient to control delirium. In irreversible terminal delirium, the goal sometimes becomes sedation. Educating the caregiver is necessary to address their distress

Learning objectives

- 1) Define Delirium and list the diagnostic criteria of delirium
- 2) Perform a comprehensive evaluation with history and physical examination for patients with delirium.
- 3) Understand the management of patients with delirium.
- 4) Recognize the importance of caregiver education

Method

Interactive lecture and simulation

Fatigue

Background

Fatigue is the most common symptom in advanced cancer in up to 90% of patients reporting it. Major features of fatigue are a generalized feeling of tiredness, feeling weak, having difficulty concentrating, impaired mental concentration, loss of memory, and emotional lability. Fatigue can be caused by cancer as well as from anti-cancer therapies. Sedating medications, such as opioids, could also contribute to fatigue, and at times, opioid-sparing analgesics may be used to decrease opioid requirements particularly if concordant with patient and family goals. Sometimes, it is difficult to differentiate fatigue from depression.

Fatigue can be assessed on a simple self-reported scale. Cultural issues can help in understanding the significance of fatigue for a person.

Palliative interventions for fatigue management include the following: 1) Treatment of potentially reversible cause of fatigue, such as dehydration and anemia. 2) Prioritizing energy expenditure as deemed important to the patient. 3) Improving sleep hygiene. 4) Physical exercise, if possible. 5) Psychosocial and spiritual support as accepted by the patient. 6) Corticosteroids to improve energy if indicated. 7) Methylphenidate can be used on as-needed basis to allow the patient to participate in any meaningful activity for the patient. 8) Bupropion for 2-4 weeks can be tried based on disease prognosis.

It is worth remembering that at the end of life, fatigue is natural and might protect against suffering; hence, treatment for fatigue should be avoided if there is risk of worsening of physical or existential distress.

Learning objectives

- 1) Understand the components of fatigue in patients with terminal illnesses.
- 2) Describe the management of fatigue as guided by patient and family goals.
- 3) Discuss the role and limitations of medications and non-pharmacologic interventions for managing fatigue.

Method

Interactive lecture and simulation

How to conduct a family meeting

Background

Communicating serious news and discussing transitions in care goals are common communication tasks in palliative care. Future emotional adjustment of patients with their disease is affected by the following: 1) Manner in which bad news is conveyed, and 2) Clinician response to emotions.

Unfortunately, doctors frequently focus their attention on technical disease aspects and often ignore patients' values. Research has shown that communication between physicians and patients needs to be improved. Shared decision-making is the communication strategy that guides decision making to match individual patient and family goals and preferences. Research has shown that the majority of the patients and families prefer clear, honest information about disease and treatment.

Road maps have been created for effective communication such as SPIKES protocol for breaking bad news by Baile & colleagues: 1) Setup, 2) Perception, 3) Invitation (permission), 4) Knowledge sharing, 5) Empathize, and Summarize and Strategize.

Stepwise guide to Family Meeting in Text (Goldstein, Nathan E; Morrison, R. Sean. 2012-11-06. Evidence-Based Practice of Palliative Medicine), is described below:

- 1) Before the Meeting
 - o Planning (setting time, location, and privacy for the meeting, determining who would be attending the family meeting- such as patient's spoke person, members of disciplines, etc.)
 - o Pre-meeting (negotiating roles, prognostic information, treatment options to be presented to patients/ family)
- 2) During the Meeting
 - o Effective introductions (name & role)

- o Patient's/ family perception, concerns, and readiness
- o Delivering serious news
- o Responding to the "Emotions"
- o Discussing transition in care goals if patients and family are deemed ready for going forward
- 3) Closing the Meeting
 - o Summarize the conversation
 - o Plan the next step- goals of care in light of serious news (Patient/ Family- centered approach)
 - o Endorse continued support
 - o Can ask patient/ family to summarize
- 4) After the Meeting/ Debriefing:
 - o Discuss the process, content of the meeting, and clinicians' reflections on their own emotions related to meeting
 - o Identify areas of improvement in communication

Learning objectives

- 1) Recognize the importance of effective communication
- 2) Conducts bad news breaking exercises under attending supervision
- 3) Identify patients and family goals and preferences

Method

Interactive lecture and simulation

Interdisciplinary team (IDT) palliative care meetings

Background

The multi-dimensional suffering of patients with serious illnesses requires holistic care that is beyond the scope of a single professional. Hence, palliative care is usually delivered by members from different disciplines who share the goal of patient-centered care and collaborate as an Interdisciplinary Team.

An interdisciplinary health-care team has been defined as an identified collective in which members share common team goals and work interdependently toward planning, problem solving, decision-making, and implementing and evaluating team-related tasks.

Members of Palliative Interdisciplinary Team are usually divided into: 1) Core members such as physician, nurse, social worker, or religious/ spiritual counselor, and 2) Extended members such as psychologist, pharmacists, physical therapist, volunteers, etc.

An Interdisciplinary team should be tailored to suit the needs of the individual patients and families served by the Palliative Care Program. Individual team members share the individual assessment of patients to form a comprehensive assessment that guides a comprehensive care plan for the patients. The IDT plan of care must, however, respect the goals, beliefs, and values of individual patients and families, and it should rapidly adapt to the changing needs of patients in the course of their illness.

As an example, in our Palliative Care IDT meetings, the Physician (Consultant) is assigned as the "facilitator" for the IDT meeting and is responsible for managing time. The facilitator is responsible for documentation of the IDT meeting which serves as part of medical record of patients in the palliative care unit. Meetings are scheduled weekly. The staff physician/ fellow on the team is responsible for a brief overview of the patient's medical history. Critical issues regarding the patient's plan of care that would benefit from contributions from the team are identified by members of IDT. Issues and questions are framed in one of the palliative care domains that include physical, psychological, social, cultural, spiritual, and ethical/ legal aspects of care.

Learning objectives

- 1) Understand the definition of Palliative Interdisciplinary Team
- 2) Identify the structure of IDT and the role played by individual members of interdisciplinary team towards providing holistic care to patients.
- 3) Effectively participate in care goals during the Interdisciplinary Palliative Care Team meetings.

Method

Interactive lecture and simulation

Massive bleeding in palliative care

Background

Massive bleeding at the end of life could be uncontrollable. A common source of an uncontrollable hemorrhage is arterial in nature and it results in death within a short time. There are no good estimates about the prevalence of uncontrollable bleeding at the end of life. In advanced cancer, approximately 6 to 14% of patients face substantial bleeding episodes.

Identifying the etiology of massive hemorrhage and patients at risk for massive bleeding is the first step to management.

According to a systematic review performed by Harris and Noble on the evidence available on terminal bleeding, only case reports and expert opinions are available for guiding management during end-of-life care. Management options described in "Resource section (1)" below include the following:

- 1) Resuscitative measures, including volume replacement and cardiopulmonary resuscitation if possible to resuscitate the patient.
- 2) Specific measures to slow or halt bleeding, such as endovascular embolization or administration of anti-fibrinolytic medications.
- 3) Entirely supportive measures with a priority on preventing patient and family distress and providing patient comfort.

Supportive measures for uncontrollable bleeding in the home or hospital as described in text below are the following:

- 1) Having equipment at the bedside in case of a bleeding event.
- 2) Ensuring that a nurse has been called or is present.
- 3) Placing the patient in a lateral position.
- 4) Consider the use of crisis medications.
- 5) Applying pressure using non-adherent dressings.
- 6) Using suction, if available and appropriate.
- 7) Using multiple dark (or red colored) towels to mask the blood.

Sedation with Midazolam 2.5 mg to 10 mg intravenous can be effected to alleviate the patient's distress in case of an uncontrollable bleeding event. The supportive plan of care by the interdisciplinary palliative care team for massive bleeding should be based on patients and family goals and values.

Learning objectives

- 1) Define massive bleeding in palliative care.
- 2) Understands the paucity of evidence-based data for management of terminal hemorrhage.
- 3) Identify the need to elicit family goals and preferences during an event of terminal hemorrhage.

- 4) Recognize the role of education and support during the distressful event of massive bleeding in palliative care patients

Method

Interactive lecture and simulation

Palliative sedation

Background

Palliative sedation is defined as controlled induction of sedation, sometimes to the point of unconsciousness, to relieve the severe refractory suffering of a terminally ill patient (Oxford Textbook of Palliative Medicine).

The aim of palliative sedation is controlling the distressing refractory symptoms and not hastening death. Palliative sedation is NOT Euthanasia. Palliative sedation is different from ordinary sedation that occurs in palliative care patients as a sequel of disease progression or secondary to symptomatic treatments with opioids, anticholinergics, benzodiazepines, or neuroleptics. Ordinary sedation is not aimed at inducing unconsciousness that is opted in palliative sedation when severe distress is refractory to all aggressive palliative measures including ordinary sedation.

Palliative sedation should not be termed “terminal sedation” as this term can easily be misinterpreted. When palliative sedation is considered, patient’s goals regarding hydration and artificial nutrition are sought, and decisions are guided by patient’s preferences and medical condition.

Palliative sedation may be administered briefly as respite sedation or it can be continuous until death. Opioids are not recommended for palliative sedation but opioids are used if there are signs of pain. Before selecting a sedative for palliative sedation, careful consideration should be given regarding the patient’s prior and current medications and a history of intolerances is taken. Palliative specialists and members of the interdisciplinary palliative team along with the ethics committee of the medical institution should be consulted before the initiation of palliative sedation.

Midazolam is the drug of choice for palliative sedation.

Learning objectives

- 1) Define palliative sedation and list its goals.
- 2) Recognize the difference between palliative sedation and ordinary sedation.
- 3) Understand the pre-requisites for considering palliative sedation.

Method

Interactive lecture and simulation

Trainee selected topics

- 1) Trainees will be provided the choice to develop a list of topics on their own.
- 2) They can choose any topic relevant to their needs
- 3) All these topics must be planned and cannot be random
- 4) All the topics need to be approved by the local education committee
- 5) Delivery will be local.
- 6) The Institution might work with trainees to determine the topics as well.

VIII. TEACHING AND LEARNING

Subjects for case discussion and interactive lectures

Subject	Comment
Introduction to Palliative Care	
Palliative Care for Muslim Patients	
Ethics in Palliative Care	
Advance Care Planning and Goals of Care	
Introduction to Evidence-Based Medicine Practice in Palliative care	
The Concept of Total Pain	
Nausea and Vomiting in Palliative Care	
Constipation in Palliative Care	
Malignant Bowel Obstruction	
Dyspnea in Palliative Care	
Common Non-Pain Symptoms in Palliative Care	
Nutrition for Palliative Care Patients	
Psychological Symptoms in Palliative Care	
Care of the Dying	
Interventional Procedures for Cancer pain	
Grief and Bereavement	
Nurse Role in Palliative Care	
Rehabilitation in Palliative care	
The Palliation Of End-Stage Heart Disease	
End-Of-Life Care in Dementia	
Palliative Care in End-Stage Renal Disease	
Palliative Radiation	
Palliative Chemotherapy	
Palliative Care at Home	
Palliative Care for Pediatrics	
Palliative Care Emergencies	
Breast Cancer	
Lung Cancer	
Genitourinary Cancers	
Gynecological Cancers	

Subject	Comment
Gastrointestinal Cancers	
Thyroid Cancer	
Bony and Soft tissue Cancers	
Hematological Cancers	
Palliative Care for HIV Patients	
Social Worker Role in Palliative Care	
Religious Advisor Role in Palliative Care	
A Palliative Approach to Advance Neurological Diseases	
Guidelines for Estimating Prognosis	
Anorexia- Cachexia	
Communication Skills and Breaking Bad News	
Delirium	
Fatigue	
How to Conduct a Family Meeting	
Interdisciplinary Team	
Massive Bleeding in Palliative Care	
Palliative Sedation	

Subjects for simulations and workshops

Subjects	Comment
Cancer Pain Classification & Assessment	
Cancer Pain Management	
Neuropathic Pain in Cancer Patients	
Principles of Opioid Management in Cancer Pain	
Pain crisis in Cancer Patients	
Adjuvant Analgesics for Cancer Pain	
Feeding and Hydration At End of Life	
Ascites and Pleural Effusion in Palliative Care	
Edema in Palliative Care	
Wound care, Pressure Ulcers, and Stoma in Palliative Care	
Research in Palliative Care	

Weekly scheduled educational activities

Timings	Sunday	Monday	Tuesday	Wednesday	Thursday
8 – 9am	Morning report/case discussion	Morning report/case discussion	Morning report/case discussion	Morning report/case discussion	Morning report/case discussion
11am-12pm		Core topic lecture	Inter-disciplinary team meeting		Meeting with mentor/Mini-cexetc.
1-3 pm	Palliative Outpatients			Core topic workshop	Weekend Handover

Schedule of rotations and requirements

Core Rotations (Mandatory)

- 1) 7 months palliative medicine inpatient unit (28 weeks)
- 2) 5 months palliative medicine consultation (20 weeks)
- 3) 1 month pediatric oncology/palliative medicine (4 weeks)
- 4) 2 months community/home health care (8 weeks)
- 5) 1 month medical oncology (4 weeks)
- 6) 1 month radiation oncology (4 weeks)
- 7) Palliative ambulatory Half day weekly longitudinal
- 8) Research (4 weeks f1 and 4weeks f2 with total 8 weeks)
- 9) Annual leave (8 weeks)

(Total 84 weeks)

Electives

- 1) 2 months (8)

Selective: Total of 3 months (12 weeks), 5 deferent rotations.

- 1) Cardiology (4)
- 2) ICU (4)
- 3) GI (4)
- 4) Geriatrics (4)
- 5) ID-HIV (4)
- 6) Nephrology (4)
- 7) Neurology (4)
- 8) Pulmonology (4)
- 9) Anesthesia (4)
- 10) Chronic Pain Management (4)
- 11) Psychiatry and Psychosocial Care (4)
- 12) Spiritual Care (4)

IX. ASSESSMENT OF TRAINEES

Purpose of assessment

- 1) To Enhance learning by providing formative assessment, which will enable trainees to receive immediate feedback, measure their own performance, and identify areas for development.
- 2) Drive the learning process and enhance training by clarifying expectations from trainees and motivating them to ensure that they receive suitable training and experience.
- 3) Ensure that trainees are acquiring competencies within the domains of good medical practice.
- 4) Assess trainees' actual performance in the workplace
- 5) Ensure that trainees have acquired the essential underlying knowledge required for their specialty.
- 6) Provide robust, summative evidence that trainees are meeting the curriculum standards during the training program.

General rules

The Palliative Care fellowship consists of formative and summative assessment process. The formative assessment includes the portfolio, mini-CEX, CbD, and attendance. The summative assessment is the end of year (written and clinical) exam.

The trainee and faculty must meet to review portfolios and logbooks once every two months. The trainee should be provided feedback in formal sessions throughout the rotation to explore strengths and weakness and suggested improvement plans and assessment that will be revealed in the ongoing learning contract.

Guidance and training for Trainer/Evaluator should be conducted for better use of work place based assessment (WPBA): Mini clinical evaluation exercise (Mini-CEX), case-based discussion (CBD) and direct observation of procedural skill (DOPS) tools for each trainee according to his/her level.

The portfolio is a pre-requisite for the summative assessment and will not be included in the final score. Candidate must score 70% or more in Portfolio for being eligible for the summative assessment

Formative assessment

Workplace-based assessments (WPBAs)

Which will be composed of the following:

- 1) Mini-Clinical Evaluation Exercise (mini-CEX): 3 every 6months
- 2) Case-Based Discussion (CBD):4 every 6months
- 3) Direct Observation of Procedural Skills (DOPS) per rotation:

Mini-Clinical Evaluation Exercise (mini-CEX)

This tool is used to assess a clinical encounter with a patient to provide an indication of competence in skills essential for good clinical care such as history taking, examination, and clinical reasoning. Further, the trainee receives immediate constructive feedback about his performance. The mini-CEX can be used at any time and in any setting.

Top 10 topics for mini-CEX:

- 1) Communication with patients and families
- 2) Clinical evaluation/examination for symptom management
- 3) Clinical evaluation of concurrent clinical problems
- 4) Clinical evaluation of emergencies

- 5) Managing family conflict in relation to unrealistic goals
- 6) Assessing the dying patient
- 7) Clinical evaluation and ongoing care of the dying patient
- 8) Prescribing in case of organ failure
- 9) Evaluation of the psychological responses of the patient and relatives and to illness
- 10) Evaluating spiritual and religious needs

Case-Based Discussion (4 per year)

The CBD assesses the performance of a trainee in his/her management of a patient to provide an indication of competence in areas such as clinical reasoning, decision-making and application of medical knowledge in relation to patient care. It also serves as a method to document conversations about, and presentations of, cases by trainees. The (CBD) should include discussion about a written record (such as written case notes, out-patient letter, and discharge summary). A typical encounter might occur when presenting newly referred patients in the out-patient department.

Top 20 topics for CBD

- 1) Communication with colleagues and between services
- 2) Recognition, assessment, and management of critical change in patient pathway
- 3) Shared care in different settings
- 4) Management of concurrent clinical problems
- 5) Management of symptoms/clinical problems (including intractable symptoms)
- 6) Symptoms as sensory, psychological, and social experiences for patients and impact on caregivers
- 7) Therapeutic options and appropriate choice of treatment/non-treatment
- 8) Opioid use (including opioid switching)
- 9) Other interventions in pain management
- 10) Management of emergencies
- 11) Pharmacology/therapeutics
- 12) Psychosocial care
- 13) Psychological responses of patients and caregivers to life-threatening illness and loss
- 14) Self-awareness and insight
- 15) Grief and bereavement
- 16) Patient and family finances
- 17) Culture, ethnicity, religion, spirituality
- 18) Ethics
- 19) Doctor/patient relationship
- 20) Teamwork & leadership

Direct Observation of Procedural Skills (DOPS) (minimum 2 every year)

A DOPS is an assessment tool designed to assess the performance of a trainee in undertaking a practical procedure against a structured checklist. The trainee receives immediate feedback to identify strengths and areas for development.

List of required DOPS until independence in these procedures is demonstrated

- 1) Management of epidural/intra-thecal spinal lines
- 2) Urethral catheterization - male
- 3) Urethral catheterization – female
- 4) Pleural aspiration
- 5) Nebulizer set up
- 6) Passing a nasogastric tube
- 7) Paracentesis
- 8) Death certification and form procedures

The reflective record contains a series of questions to guide completion and to encourage the breadth and depth of reflection. Feedback will be provided by at least two different supervisors.

Logbook

Academic and clinical assignments should be documented on an electronic tracking system (e-Logbook when applicable) on an annual basis. Evaluations are based on accomplishment of the minimum requirements for the procedures and clinical skills, as determined by the program.

In Training Evaluation form (ITER) and Final in Training Evaluation Form (FITER)

At the end of each rotation, an evaluation (ITER) should be completed, and the fellow should receive rotation feedback. In addition to the local supervising committee's approval of the completion of the clinical requirements (via the fellow's logbook), the program directors prepare an FITER for each fellow at the end of the final year of residency (F2). This could also involve clinical or oral examinations or completion of other academic assignments.

Research (scholarly project)

- All the fellows are required to conduct a research project during training.
- In each academic year, two research days is held, mid-year research day and end-year research day where the research project for each fellow is evaluated.
- The components and scores as per SCFHS Pediatric Hematology-Oncology Fellowship Research Manual (appendix 7).

Requirements for each year

- 1) By the end of the first year, the Trainees should have gained experience in the initial assessment and management of patients presenting common palliative care problems and common palliative care emergencies.
 - o By the end of Year 1, competence must be demonstrated by:
 - MiniCEX
 - Case based Discussion Cbd
- 2) By the end of Year 2, the Trainees should be autonomously competent in the assessment and management of patients presenting all palliative care problems/emergencies.
 - o By the end of Year 2, competence must be demonstrated by:
 - MiniCEX.
 - Cbd.

ASSESSMENT OF TRAINEES

Assessment	Year 1	Year 2
Palliative Medicine Specialty Certificate Exam(SCE)		Passed SCE
DOPS	Demonstrated competence in 2 DOPS completed	Demonstrated competence in 2 DOPS completed
Mini-CEX	6 mini-CEX satisfactorily completed	6 mini-CEX satisfactorily completed
CbD	8 CbDs satisfactorily completed	8 CbDs satisfactorily completed
Research	Select the research project, write the proposal, apply for IRB, and start initial data collection.	Complete data collection & data analysis , write the manuscript and prepare it for submission and publication .

Summative assessment

Total = (100%)

At the end of each academic year, trainee will be assessed using the following:

Assessment	Method	Weight (%)	Total
Written	100MCQ	40%	100%
OSCE (F2 level Final exam)	8 stations	60%	

References

- 1) Specialty training curriculum for palliative medicine 2010 (amendments 2014) approved on October 28, 2014 Joint Royal Colleges of Physicians Training Board. Accessed on April 1,2016.
<http://www.jrcptb.org.uk/sites/default/files/2010%20Palliative%20medicine%20%28amendments%202014%29.pdf>
- 2) Saudi board of Family Medicine Curriculum Second Edition January 2014. Accessed on February24, 2016.

X. POLICIES AND PROCEDURES

Evaluations

"The Saudi Commission of the Health Specialties and Scientific Committee of Palliative Medicine are currently reviewing policies and procedures regarding evaluation of fellows that might undergo modifications in the future. Policy and procedures stated here reflect existing ones that may be updated in the future."

End of rotation evaluation

To fulfill the CanMEDS competencies-based end-of-rotation evaluation, the fellow's performance will be evaluated jointly by the section staff members for the following competencies:

- 1) Observed performance of the trainee during daily work.
- 2) Performance in academic activities (see the "Evaluation of the Presenter by Staff Supervisor" form below)
- 3) Participation in different academic activities based on electronic logbook contents.
- 4) Performance in a 10-20-minute direct observation assessment of a trainee-patient interaction. Trainers are encouraged to perform at least one assessment per clinical rotation, preferably close to the end of the rotation. Trainers should provide timely and specific feedback to the trainee after each assessment of a trainee-patient encounter (Mini-CEX form is attached below).
- 5) Performance of the trainee while performing diagnostic and therapeutic procedure skills (The direct observation of procedure skills (DOPS) form is attached below). A timely and specific feedback to the trainee after each procedure is mandatory.
- 6) A clearance form medical record for any pending dictation is mandatory prior to the completion of the evaluation form.
- 7) The CanMEDS-based competencies end-of-rotation evaluation form "preferably electronic" must be completed within two weeks following each rotation and signed by at least two consultants. The Program Director will discuss the evaluation with the resident, as necessary. The evaluation form will be submitted to the Regional Training Supervisory Committee of the SCFHS within four weeks following the end of rotation.

In-training end-of-year examinations

The SCFHS conducts an annual written examination for F1-F2. The training center conducts clinical examination (preferably OSCE) for both levels towards the end of each training year.

Promotion

Criteria for promotion from one level to the next

- 1) An annual overall evaluation of 60% or higher.
- 2) No less than 50% score in the end of rotation evaluations.
- 3) Attendance to teaching activities of not less than 80% (excluding approved leaves)
- 4) Promotion to F2 requires passing the promotion written Examination.

Criteria for issuing a certificate of completion of training to F2 fellows

- 1) 50% of cumulative rotational evaluation during F2 level.
- 2) 20% of attendance.
- 3) 20% of Research .
- 4) 10% of Institution training committee overall evaluation.

A total score of **70%** is required to issue a certificate of completion of training and to allow for sitting for the final Saudi Specialty Certificate in Palliative Medicine.

Specialty examinations

Promotion Examination

- 1) A written examination in MCQ format held at least once a year at the SCFHS.
- 2) Passing the promotion Examination is mandatory to be promoted to (F2) level.
- 3) Fellows with valid SCFHS registration and who have successfully completed at least nine months of first-year fellowship training are eligible to take the examination.
- 4) Fellows are allowed a total of three attempts to pass the examination. Failure to pass the third attempt will result in dismissal, unless the SCFHS Executive Council allows an exceptional examination for the fourth time.
- 5) The pass mark is 70%.

Second Part (Final) Saudi Specialty Examination

The final Saudi Specialty Examination is composed of the following:

- 1) Written
 - o To assess the theoretical knowledge base (including recent advances) and problem-solving capabilities of candidates in the specialty of palliative medicine.
 - o The pass mark is 70%.
 - o The examination is held at least once per year at the SCFHS.
 - o The candidate must have successfully completed the fellowship training and must receive a satisfactory final in-training evaluation report from the Palliative Care Scientific Committee. The eligibility for this examination is valid for a maximum of three years, provided that the candidate presents a proof of continued clinical practice.
- 2) Clinical/OSCE
 - o To assess a broad range of clinical skills at the high level including data gathering, patient management, and communication and counseling skills. The examination is held at least once a year in one or more of the training centers.
 - o The candidate must pass the Second Part (Final) Written Examination and is allowed a maximum of three years to pass the clinical part, provided that clinical practice is not interrupted. A candidate who fails to pass the clinical examination within this period must apply to the RSTC for renewal of eligibility in due time prior to the scheduled examination that the trainee intends to attend. If the candidate fails the clinical examination during this renewed eligibility, the trainee may again apply for a final renewal. Failure to pass the clinical examination during the final renewal will require the candidate to take and pass the Final Written Examination again.
 - o The pass mark for each OSCE station is 70% (6 stations out of 8 stations needed to pass the OSCE exam).

Candidates passing the final specialty examination are awarded the “Saudi Specialty Certificate in Palliative Medicine”

Summary of evaluations

F1	80% or more attendance in all academic activities is mandatory for promotion.			
	Annual evaluation	Continuous assessment	50%	
		Attendance	20%	
		Research	20%	
		Training committee assessment	10%	
Promotion written examination: 100 MCQs			70%(Passing score)	

F2	80% or more attendance in all academic activities is mandatory for promotion.			
	Annual evaluation	Continuous assessment	50%	
		Attendance	20%	
		Research	20%	
		Training committee assessment	10%	
Final Examination	Written (100 MCQs)		70% (Passing score)	
	Clinical (OSCE)		70%(Passing score)	

Leaves

The following describes leave eligibility applicable to the residents in the training program.

- 1) Thirty vacation leave days per year, which may be split into two (2) or three (3) segments, depending on the trainee and the departments' policies.
- 2) One of the two Eid holidays (Ramadan or Hajj holiday) not to exceed 10 days.
- 3) The Program Director may grant the fellow a study leave to attend meetings, courses, conferences, or seminar related to the specialty, for a maximum of one week per academic year.
- 4) Leave without pay and carry-over of leave days to the next year are not allowed.
- 5) Sick leave, exceptional emergency leave, and maternity leave for a period not exceeding 90 days shall be compensated with an equivalent number of days during annual leaves, or at the end of training.
- 6) A certificate of training completion will only be issued upon the fellow's compensation of any training interruptions.

XI. APPENDICES

Appendix A

Log Book

Objectives

The objectives of the logbook as follows:

- 1) Records and documents all academic activities (e.g., procedures, lectures, journal clubs, meetings, training courses, workshops, symposia, and case presentations) undertaken during the training program
- 2) Assist the fellow in identifying his/her deficiencies in specific areas
- 3) Assist the program director/evaluator in documenting the contribution and evaluation of trainees
- 4) Provide the evaluator with guidance about appropriate and fair assessment of trainees
- 5) Provide the program director with guidance regarding deficiencies in training

Guidelines for fellows

- 1) Fellows are required to maintain log books during the entire training period
- 2) Log book entries concerning recorded activities should be completed on the day on which activities are conducted
- 3) All entries must be signed by a mentor within one week
- 4) Fellows should discuss their training progress, as indicated in the log book, with the mentor and/or program director every month
- 5) Fellows should submit their completed log books to the program director at the end of rotations and training, for subsequent submission to the Scientific committee
- 6) If a log book is not signed by the program director, the fellow will be ineligible for end-of-training certification and final examination

Logbook

Date	MRN	Age/Gender	Activity /Procedure Name	Supervising Consultant	Comments

Appendix B

The Portfolio will be a collection of the trainee’s work, which provides evidence of achievement of knowledge, skills, and professional growth through a process self-reflection. The portfolio should be assessed every 3 months by the supervisor or mentor.

Saudi Board of Palliative Care Medicine Portfolio Assessment						
(This form is to be completed at least every 3 months during the mentoring/supervision meeting with the resident)						
Fellow Name: Level:						
Mentor Name:						
Date: Time:						
Clinical Rotation: Rotation:..... Duration:						
	Domain	Achievement Required	Scoring 0 = Poor ↔ 4 = outstanding			Remarks
Mini CEX (1/ 3month)	Minimum number achieved	Did the resident do a minimum of 2 Mini-CEX last month?				
	Competency assessment score	What were the average results of the assessment?				
DOPs (2/ 3month)	Minimum number achieved	Did the resident do a minimum of 2 DOPs last month?				
	Competency assessment score	What were the average results of the assessment?				
Learning contract/objectives (2–3 objectives/week)		Did the Fellow complete at least one sheet for the learning objectives, for an average of 2–3 objectives every week with feedback and signed by trainer?				
Evidence of self-directed learning		Did the Fellow show any document of self-directed learning (CME, topic review, course, workshop, etc.)?				
Overall assessment of portfolio			/18			/50

Comments:

.....

Original for program secretary/resident file. Copy for the resident.

Appendix C

Purpose:

To evaluate the level of professional judgment exercised in clinical cases by the trainee.

CBD is designed to:

- Guide the trainee’s learning through structured feedback
- Help improve clinical decision making, clinical knowledge and patient management
- Provide the trainee with an opportunity to discuss their approach to the case and identify strategies to improve their practice
- Be a teaching opportunity enabling the evaluator to share their professional knowledge and experience.

Overview

CBD encounter involves a comprehensive review of clinical cases between a trainee and an evaluator. The trainee is given feedback from an evaluator across a range of areas relating to clinical knowledge, clinical decision making and patient management. CBD encounter takes approximately 20-30 minutes.

Trainee responsibilities

- Arrange a CBD encounter with an evaluator.
- Provide the evaluator with a copy of the CBD rating form.

Evaluator responsibilities

- Choose the case(s) for discussion.
- Use the CBD form to rate the trainee.
- Provide constructive feedback and discuss improvement strategies.
- Provide an overall judgment on the trainee’s clinical decision-making skills.

Case-Based Discussion (CBD) Rating Form

Case-Based Discussion (CBD) Rating Form									
Trainee name: _____									
Registration no: _____									
Fellowship level: _____ Date: _____									
Brief summary of case:									
New example <input type="checkbox"/> Follow-up case <input type="checkbox"/> <input type="checkbox"/> Inpatient <input type="checkbox"/> Ambulatory <input type="checkbox"/> Emergency <input type="checkbox"/> Department <input type="checkbox"/> Other									
Complexity <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High									
Focus <input type="checkbox"/> Data <input type="checkbox"/> Gathering <input type="checkbox"/> Diagnosis <input type="checkbox"/> Therapy <input type="checkbox"/> Counseling <input type="checkbox"/> Other									
ASSESSMENT									
SCORE FOR STAGE OF TRAINING									
Questions	Unsatisfactory			Satisfactory			Superior		
	1	2	3	4	5	6	7	8	9
Clinical Assessment									
Investigation and Referrals									
Treatment									
Follow-up and Future Planning									
Professionalism									
Clinical Judgment									
Leadership/Managerial skills									
Overall Performance									
Suggestions of development:									
1-									
2-									
3-									
Evaluators Name: _____									
Evaluators Signature: _____									

Appendix D

In-Training Evaluation Report (ITER) Form

In-Training Evaluation Report (ITER) Form					
Center: _____					
Level of trainee: _____					
Name: _____					
Registration number: _____					
Rotation: _____ Period: _____					
Program director: _____					
Competencies	Clear failure (1)	Borderline (2)	Clear Pass (3)	Exceeds expectation (4)	Not applicable
Medical Expert					
Basic and clinical Knowledge					
Understand the basic and clinical science and pathophysiology of common medical illnesses					
Understand the clinical presentation, natural history, and prognosis of common medical illnesses					
Demonstrate expertise in all aspects of the diagnosis and management of common medical illnesses					
Practice contemporary, evidence-based and cost-effective medicine					
Avoid unnecessary or harmful investigations or management					
Provide care to diverse communities					
Demonstrate the appropriate knowledge, skills, and attitudes relating to gender, culture, and ethnicity					
Complete and accurate history and physical examination					
Formulate appropriate differential diagnoses					
Develop an appropriate plan of investigation and interpret the results					
Develop a therapeutic plan					
Develop a plan of secondary prevention					
Demonstrate appropriate clinical judgment					
Demonstrate knowledge of the used medications; mechanisms of action, clinically relevant pharmacokinetics, indications, contraindications, and adverse effects					

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Procedural skills					
Understand the indications, contraindications, and complications of specific procedure					
Demonstrate mastery of specific procedure techniques					
B. Communicator					
Write appropriate progress notes; transfer and discharge summaries					
Communicate appropriately with junior medical, nursing, and allied health staff					
Communicate appropriately with patients					
Appropriate communication with patient families					
Establish therapeutic relationships with patients/families					
Deliver understandable information to patients/families					
Provide effective counseling to patients/ families					
Maintain professional relationships with other health care providers					
Provide clear and complete records, reports, informed and written consent					
C. Collaborator					
Work effectively in a team environment					
Able to work with allied health care staff					
Able to work with nursing staff					
Able to work with attending and junior medical staff					
Consult effectively with other physicians and other health care providers					
D. Manager					
Participate in activities that contribute to the effectiveness of their healthcare organizations and systems					
Manage their practice and career effectively					
Allocate finite healthcare resources appropriately					
Serve in administration and leadership roles, as appropriate					
Utilize information technology to optimize patient care, life-long learning, and other activities					
E. Health advocate					
Attentive to preventive measures					
Demonstrate adequate patient education on compliance and role of medications					
Attentive to issues of public policy for health					
Recognize important social, environmental, and biological determinants of health					
Demonstrate concern that patients have access to appropriate supports, information and services					

APPENDICES

Offer advocacy on behalf of patients at practice and general population levels					
F. Scholar					
Attend and contribute to rounds, seminars, and other learning events					
Appropriately discuss present selected topics as requested					
Demonstrate adequate ability to search literature					
Demonstrate efforts to increase knowledge base					
Accept and act on constructive feedback					
Read about patient cases and take an evidence-based approach to management problems					
Contribute to the education of patients, house staff/students, and other health professionals					
Contribute to the development of new knowledge					
G. Professional					
Recognize limitations and seek advice and consultation when needed					
Understand the professional, legal, and ethical obligations of physicians					
Deliver evidence-based care with integrity, honesty, and compassion					
Demonstrate appropriate insight into own strengths and weaknesses					
Exercise initiative within the limits of knowledge and training					
Discharge duties and assignments responsibly and in a timely and ethical manner					
Report facts accurately, including own errors					
Maintain appropriate boundaries in work and learning situations					
Respect diversity of race, age, gender, disability, intelligence, and socio-economic status					
Total Score	Total score = _____ X 25 = 100% Number of evaluated items =				
Comments:					

I certify that I have read all the parts of this evaluation report, and I have discussed it with the evaluators

Fellow: _____

Signature: _____

Evaluator 1: _____

Signature: _____

Evaluator 2: _____

Signature: _____

Program Director: _____

Signature: _____

Appendix E

Final In-Training Evaluation Report (FITER)

- 1) This is a summative evaluation prepared at the end of the fellowship program, which grants the Fellow with the full range of competencies (knowledge, skills and attitudes) required for the Pediatric Hematology-Oncology specialist, and a readiness to sit the Saudi certification examinations.
- 2) It provides information that will be considered by the Saudi Examination Board during the deliberation of a candidate whose performance at the Saudi certification examination falls into the borderline category.
- 3) The FITER is requested by the Saudi Board at the end of fellowship training.
- 4) The FITER is completed by the fellowship training Program Director.
- 5) The FITER is not a composite of the regular in-training evaluations; rather it is a testimony of the evaluation of competencies at the end of a fellowship education program.
- 6) It will be completed as late as possible in the Fellow's training but no later than two months before the OSCE Exam.
- 7) The FITER of individual candidates is available only to the Chair of the Examination Committee, who must maintain confidentiality regarding the name of the candidate, the training center and the program director always.

Final In-Training Evaluation Report (FITER)/Comprehensive Competency Report (CCR)		
Trainee Name:		
Trainee SCFHS number:		
Evaluation covering the last year as a Fellow: In the Fellowship Program Committee's view, the trainee mentioned above has acquired the competencies of the Pediatric Hematology-Oncology as prescribed in the Objectives of Training and is competent to practice as a specialist. (Please tick ✓ in the appropriate box)	Yes	No
The following sources of information were used for this evaluation:		
Items	Yes	No
Written exams		
Oral exams		
Clinical observations (e.g., CERs) by Faculty		
OSCEs		
Feedback from healthcare professionals		
Completion of a scholarly project		
Other evaluations		
Note: If, during the period from the date of signature of this document to the completion of training, the Residency Program Committee judges that the candidate's demonstration of competence is inconsistent with the present evaluation, it may declare the document null and void and replace it with an updated FITER. Eligibility for the examination would be dependent on the updated FITER		
Comments:		
Name of Program Director:		
Date:	Signature:	
This is to attest that I have read this document.		

Name of Trainee: _____

SCFHS Number: _____

Date: _____ Signature: _____

Trainer's Comments: _____

Appendix F

Mini-Clinical Evaluation Exercise (Mini-CEX)

Definition

The mini-CEX is a 10-20 minutes direct observation assessment or “snapshot” of a trainee- patient interaction. To be most useful, the evaluator should provide timely and specific feedback to the trainee after each assessment of a trainee-patient encounter.

Purpose

A mini-CEX is designed to:

- Guide the trainee’s learning through structured feedback
- Help improve communication, history taking, physical examination and professional practice
- Provide the trainee with an opportunity to be observed during interactions with patients and identify strategies to improve their practice
- Be a teaching opportunity enabling the evaluator to share their professional knowledge and experience

Trainee responsibilities

- Arrange a mini-CEX encounter with an evaluator
- Provide the evaluator with a copy of the mini-CEX rating form

Evaluator responsibilities

- Choose an appropriate consultation for the encounter
- Use the mini-CEX rating form to rate the trainee
- Provide constructive feedback and discuss improvement strategies. If a trainee received a rating which is unsatisfactory, the assessor must complete the “suggestion for Development” section.

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Mini-CEX time:	Observing: min	Providing feedback: min
Evaluator satisfaction with Mini-CEX:	Low 1 2 3 4 5 6 7 8 9 High.	
Trainee satisfaction with Mini-CEX :	Low 1 2 3 4 5 6 7 8 9 High.	
Trainee Signature:	_____	
Evaluator:	_____	
Remarks:	_____	

Question	Description
History taking	Facilitate patients telling their story; effectively use appropriate questions to obtain accurate, adequate information; respond appropriately to verbal and non-verbal cues.
Physical examination skills	Follow efficient, logical sequence; examination appropriate to clinical problem; explain to patient; sensitive to patient's comfort and modesty.
Communication skills	Explore patient's perspective; jargon free; open and honest; empathic; agrees about the management plan/therapy with patient.
Critical Judgment	Make appropriate diagnosis and formulate a suitable management plan; selectively order/perform appropriate diagnostic studies; consider risks and benefits.
Humanistic quality/ Professionalism	Show respect, compassion, empathy and establish trust; attend to patient's needs of comfort; respect confidentiality; behave in an ethical manner; awareness of legal frameworks; aware of own limitations.
Organization and efficiency	Prioritize; timely and succinct; summarize.
Overall clinical care	A global judgment based on the above question areas.

Appendix G

Direct Observation of Procedural Skills (DOPS) Assessment Form

Direct Observation of Procedural Skills (DOPS) Assessment Form			
Trainee's name:			
Registration no:			
Observation		Registration #:	
Observed by		Date	
Signature of supervising doctor			
Description	Satisfactory	Unsatisfactory	Comment
Understand the indications for the procedure and clinical alternatives			
Clearly explain plans and potential risks in a manner that the patient understands			
Good understanding of theoretical background of procedure including anatomy, physiology, and imaging.			
Good advance preparation for the procedure.			
Communicated plan for procedure to relevant staff.			
Demonstrate awareness of risks of cross-infection and effective aseptic technique during procedure			
Procedure successor failure understood in the current setting			
Cope well with unexpected problems			
Handle patient and tissues gently and skillfully			
Maintain accurate and legible records including descriptions of problems or difficulties			
Issued clear post-procedure instructions to patient and/or staff			
Sought at all times to work at the highest professional standards			
ASSESSMENT			
Practice was satisfactory			
Practice was unsatisfactory			
Examples of good practice:			

Areas of practice requiring improvement:			

Focus areas for further learning and experience:			

Appendix H

Saudi Commission for Health Specialties – Palliative Care Medicine Fellowship Research Manual

Definition of research

Research is the systematic, rigorous investigation of a situation or problem in order to generate new knowledge or validate existing knowledge. Research in health care takes place in a variety of areas and has many potential benefits; the areas include professional practice, environmental issues affecting health, vitality, treatments, theory development, health care economics, and many others. Most of researches which are conducted in health field are called clinical researches.

Clinical research is a branch of healthcare science that determines the safety and effectiveness (efficacy) of medications, devices, diagnostic products and treatment regimens intended for human use. These may be used for prevention, treatment, diagnosis or for relieving symptoms of a disease.

Type of researches

- Basic medical research: Areas tackled in the most fundamental parts of medical research include cellular and molecular biology, medical genetics, immunology, neuroscience, and psychology.
- Preclinical research: Pre-clinical research covers research that prepares the ground for clinical research with patients. Typically, the work requires no ethical approval (though some work with animals does), is supervised by people with PhDs rather than medical doctors, and is carried out in a university or company rather than a hospital or surgery.
- Clinical research: Clinical research is carried out with patients. It is generally supervised by doctors in a medical setting such as a hospital and requires ethical approval.
- The clinical phase of drug testing is called Clinical trial.

Types of clinical study Designs

- Meta-Analysis. A way of combining data from many different research studies: A way of combining data from many different research studies. A meta-analysis is a statistical process that combines the findings from individual studies
- Systematic Review: A summary of the clinical literature. A systematic review is a critical assessment and evaluation of all research studies that address a particular clinical issue. The researchers use an organized method of locating, assembling, and evaluating a body of literature on a particular topic using a set of specific criteria. A systematic review typically includes a description of the findings of the collection of research studies.
- Randomized Controlled Trial: A controlled clinical trial that randomly (by chance) assigns participants to two or more groups. There are various methods to randomize study participants to their groups.
- Cohort Study (Prospective Observational Study: A clinical research study in which people who presently have a certain condition or receive a particular treatment are followed over time and compared with another group of people who are not affected by the condition.
- Case-control Study: Case-control studies begin with the outcomes and do not follow people over time. Researchers choose people with a particular result (the cases) and interview the groups or check their records to ascertain what different experiences they had. They compare the odds of having an experience with the outcome to the odds of having an experience without the outcome
- Cross-sectional study: The observation of a defined population at a single point in time or time interval. Exposure and outcome are determined simultaneously

- Case Reports and Series: A report on a series of patients with an outcome of interest. No control group is involved.
- N.B. For Palliative Care Medicine fellowship program, this study design is not accepted as the main graduation research project.
- Ideas, Editorials, Opinions: Put forth by experts in the field

Research Requirements

- 1) Selection of research
- 2) Research team
- 3) Approval of project by local training committee
- 4) Preparation of proposal with references
- 5) Fulfilling the IRB requirements
- 6) IRB approval
- 7) Data collection
- 8) Data Analysis
- 9) Writing the paper
- 10) Publication

Research duration, Components and Presentation

During the 2 years of Palliative Medicine training fellowship program, a total of 2 months is assigned for the completion of the individual fellow research project.

The 2 months are distributed to be:

- 1 month in the first year
- 1 months in the second year

During the first year, the candidate should select the research project, write the proposal, apply for IRB, and start initial data collection. Fellow should be able to present his/her work at the end of first year research day. The 100-total score is distributed as per the above processes: 25% for the selection of research project, 25% for completion of proposal, 30% IRB approval, and 20% initial data collection.

During the second year, the candidate should complete data collection (30%) and start analysis of data (30%), and (40%) for completing manuscript, in which fellows are encouraged to submit their completed research for publication to a peer reviewed journal.

Evaluation of research and scoring

The final research should be assessed and scored by the Palliative Fellowship Scientific Council members. The whole research work for 1st and 2nd years should be scored from 0% to 100% as per mark distribution in section G. The final score for the first and second years will be calculated as 20% of total promotion mark for each year. The completion of the end of training research is evaluated with the following score distribution: 15% for proposal, 15% for IRB approval, 20% for data collection and analysis and 50% for publication or at least acceptance in well-known journal. Passing mark for research is 75%. If a fellow achieves 75% or more, he/she will be eligible to set for final exit written exam. Certificate of completion of training will be issued and signed by the local program director and should be submitted to SCHS before the exit written exam.

Saudi Board in Palliative Care Medicine (Year 1) Research Evaluation Sheet

Name of the candidate: _____			
Research title: _____			
COMPONENTS	MARKS		FINAL GRADE
	Evaluator One	Evaluator Two	
Selection of research project (25%)			
Completion of proposal (25%)			
IRB approval (30%)			
Initial Data Collection (20%)			
TOTAL (100%)			
Name of Research Supervisor: _____			
Result: Pass <input type="checkbox"/> Revision <input type="checkbox"/> ≥ 75% = PASS Under 75% = Revision Recommendation: <input type="checkbox"/> Correction within: _____			
EVALUATION PANEL			
Name of Evaluator		Signature	
Date: _____			

Saudi Board in Palliative Care Medicine Final Research Results Sheet

Name of the candidate: _____		
Research title: _____		
RESEARCH COMPONENTS	MARKS	FINAL GRADE
Proposal	15	
IRB approval	15	
Data collection & analysis	20	
Written manuscript and publication)	50	
TOTAL (100%)		
Name of Research Supervisor: _____		
Result: Pass <input type="checkbox"/> Revision <input type="checkbox"/>		
≥ 75% = PASS Under 75% = Revision Recommendation: <input type="checkbox"/>		
Correction within: _____		
EVALUATION PANEL		
Name of Evaluator	Signature	
Date: _____		

Appendix I

Written Exam Blueprint

Content	Percentage
Approach to Care	9%
Psychosocial and Spiritual Considerations	11%
Impending Death	9%
Grief and Bereavement	5%
Pain	20%
Management of Non-Pain Conditions	25%
Communication and Teamwork	6%
Ethical and Legal Decision Making	7%
Prognostication and Natural History of Serious Illness	8%
Total	100%

Appendix J

OSCE Blueprint

DIMENSIONS OF CARE							# Stations
Domains for integrated clinical encounter	Symptom Management 4-5 station	Acute care 1 station	Psychological , Social and spiritual issues 2 station	Bereavement and Grief 0-1 station	Advance Care Plan and Imminent		
Patient Care 5-7 station	3-4	1	1		0-1	5-7	
Communication Skills 2-3 station			1	0-1	1	2-3	
Examination, investigation and procedures 1-2	1	0-1				1-2	
Total Stations	4-5	1-2	2	0-1	1-2	8-12	

Adapted from SCFHS policy and procedure for examination

DEFINITIONS	
Dimensions of Care	Focus of care for the patient, family, community, and/or population
Health Promotion & Illness Prevention	The process of enabling people to increase control over their health and its determinants, and thereby improve their health. Illness prevention covers measures not only to prevent the occurrence of illness such as risk factor reduction but also arrest its progress and reduce its consequences once established. This includes but is not limited to screening, periodic health exam, health maintenance, patient education and advocacy, and community and population health.
Acute	Brief episode of illness, within the time span defined by initial presentation through to transition of care. This dimension includes but is not limited to urgent, emergent, and life- threatening conditions, new conditions, exacerbation of underlying conditions.
Chronic	Illness of long duration that includes but is not limited to illnesses with slow progression.
Psychosocial Aspects	Presentations rooted in the social and psychosocial determinants of health that include but are not limited to life challenges, income, culture and the impact of the patient's social and physical environment.

APPENDICES

DEFINITIONS	
Domains	Reflects the scope of practice & behaviors of a practicing clinician
Patient Care	Exploration of illness and disease through gathering, interpreting and synthesizing relevant information that includes but is not limited to history taking, physical examination and investigation. Management is a process that includes but is not limited to generating, planning, organizing care in collaboration with patients, families, communities, populations, and healthcare professionals (e.g. finding common ground, agreeing on problems & goals of care, time and resource management, roles to arrive at mutual decisions for treatment).
Patient Safety & Procedural Skills	Patient safety emphasizes the reporting, analysis, and prevention of medical error that often leads to adverse healthcare events. Procedural skills encompass the areas of clinical care that require physical and practical skills of the clinician integrated with other clinical competencies in order to accomplish a specific and well characterized technical task or procedure.
Communication & Interpersonal Skills	Interaction with patients, families, caregivers, other professionals, communities & populations. Elements include but are not limited to active listening, relationship development, education, verbal, non-verbal and written communication (e.g. patient- centered interview, disclosure of error, informed consent)
Professional Behaviors	Attitudes, knowledge, and skills based on clinical and/or medical administrative competence, ethics, societal, and legal duties resulting in the wise application of behaviors that demonstrate a commitment to excellence, respect, integrity, accountability and altruism (e.g. self-awareness, reflection, lifelong learning, scholarly habits, and physician health for sustainable practice).