EMERGENCY NURSING DIPLOMA







Saudi Emergency Nursing Diploma Curriculum

PREPARTION

Curriculum Scientific Group

DR. SANA AL MAHMOU DR. ESHTIAQ AL FARAJ DR. FATMA MOKABEL MS. REZA AL OTABI

SUPERVISION

Curriculum Specialist

PROF. ZUBAIR AMIN DR. SAMI ALSHAMMARI

REVIEWED & APPROVED

Scientific Committee

DR. AHMAD ABOSHAIQAH DR. WAEL AL ZAYER DR. HASNAH BANJAR DR. SANA ALMAHMOUD DR. KHALID ALJOHANI DR. HASSAN ALSHAHRANI MS. BUSHRA AI HUNIDI DR. ELHAM BUKHARI DR. ESHTIAQ AL FARJ DR. SHADIA YOUSEF DR. ALI ALBISHI

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P.O. Box: 94656

Postal Code: Riyadh 11614

Contact Center: 92-001-9393

Website: www.scfhs.org.sa

Formatted and Designed by:

Salem M Altamimi (SCFHS)/Manoj Thomas Varghese, CMT (SCFHS)

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INTRODUCTION

Emergency care deals with human responses to any trauma or sudden illness that requires immediate intervention to prevent imminent severe damage or death. Care is provided in any setting to persons of all ages with actual or perceived alterations in physical or emotional health. Initially, patients may not have a medical diagnosis. Care is episodic when patients return frequently, primary when it is the initial option for health or preventive care, or acute when patients need immediate and additional interventions.

Emergency care is typically sought for serious injuries and acute medical conditions (i.e., heart attack or stroke). However, excessive delays and overcrowding of emergency departments (EDs) have become serious problems, thus, causing concern about compromised care.

Time is truly an important factor in the care of emergency and trauma patients. The acuity and complexity of nursing practice in diverse settings continue to grow. As a result, emergency and trauma nurses are faced with challenges of varying degrees from practice issues and healthcare system delivery complexities that effectively and adequately prepare a confident and competent nurse or nurse specialist. Essential practice patterns in emergency and trauma integrate clinical and non-clinical practitioners to deliver appropriate, efficient, and effective care to healthcare consumers.

Emergency Nursing is the provision of immediate nursing care to people who have identified their problem as an emergency or where nursing intervention may prevent an emergency arising. The emergency nurse accepts (without prior warning) any person requiring healthcare with undifferentiated and undiagnosed problems originating from social, psychological, physical, spiritual, or cultural factors. The emergency nurse must lead, initiate, and coordinate patient care. This includes rapid patient assessment, prioritizing care, appropriate intervention - based on assessment, ongoing evaluation, and discharge or referral to other sources including discharge education where indicated. Emergency nurses play a major role in disaster response and have the knowledge and skills to care for mass casualties to ensure maximum survivability is achieved. An emergency nurse is a medical professional who specializes in emergency care. This type of nursing focuses on identifying serious problems in incoming trauma cases and on stabilizing those patients so that they can receive further medical treatment.

There are number of arenas in which a trauma nurse can work; employment prospects in this field are generally very good, as these nurses are constantly in demand globally. One of the most common places for a trauma nurse to work is in an emergency room, processing incoming patients. Nurses can also work in critical care units, applying their specialized training to patients who may be prone to experiencing medical emergencies and various crises.

The key requirement for people in this field is the ability to work under pressure. They may be required to cope with chaotic environments, stressful situations, and catastrophic trauma cases. These nurses must often contend with cultural and language barriers and they must be able to coordinate with doctors, other nurses, and healthcare professionals who work together as a team to provide patient care.

Therefore, this postgraduate diploma in emergency specialty is designed to assist students to exercise critical thinking skills to anticipate patients' immediate needs and demands in the emergent and critical phases of patients' clinical courses. Furthermore, this post-graduate diploma program prepares professional nurses to develop abilities to be competent and safe in providing emergency and disaster nursing care in a variety of high dependence emergency settings.

INTRODUCTION

Emergency Care in Saudi Arabia

Saudi Arabia is undergoing rapid population growth; along with improved socioeconomics, many individuals now own a car or even a number of cars per family, resulting in a greater number of vehicles on the roads. The reduced focus on public transportation systems and the dependence on cars for transportation have created many drivers who are unfamiliar with local driving rules and lack basic skills for safe driving. This is in addition to some young drivers who frequently violate traffic laws and tend to speed most of the time. This unplanned expansion in road traffic has resulted in more car accidents, injuries, disabilities, and deaths. Accompanying that is an increased socioeconomic burden, depletion of human resources, emotional and psychological stress on families, and strain on healthcare facilities. If this continues without prompt intervention, it will lead to increased insurance premiums and may become unmanageable.

To minimize this impact, a national or regional multidisciplinary trauma system has to be developed and implemented. A trauma system is a preplanned, comprehensive, and coordinated regional injury response network that includes all facilities with the capability to care for the injured. Essential components of the system include trauma prevention, pre-hospital care, hospital care, rehabilitation, system administration, trauma care education and training, trauma care evaluation and quality improvement, and societal participation. Research has documented a significant decrease in morbidity and mortality from trauma after the implementation of such systems, depending on their efficiency. The population in Saudi Arabia increased from 26 million in 2004 to 29,897,000 million in 2015, with further growth projected to 45 million by the year 2025. Healthcare facilities are expanding to meet the demand of the population. This expansion, of course, requires more trained/specialized healthcare professionals. The Saudi Arabian Red Crescent Society Emergency Medical Services Year-End Accountability Report (1426 H) indicates the total requests/referrals of critical cases to emergency rooms in the Eastern Province increased from 1423 H – 1426/1427 H by 46.6%.

Hence, the previous information mandate to develop an emergency program that enables healthcare professionals and nurses in particular to be trained specifically to care for people in different emergency situations.

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¹ Further information can be obtain from Central Department of Statistics and Information via URL: http://www.cdsi.gov.sa/

GENERAL TRAINING REQUIREMENTS

GENERAL TRAINING REQUIREMENTS

- 1) The trainee shall abide by the training regulations and obligations set by the Saudi Commission for Health Specialties (SCFHS).
- 2) Training is a full-time commitment. The trainee shall be enrolled in full-time, continuous training for the entire duration of the program.
- 3) Training is to be conducted in institutions accredited for nursing training by the Saudi Commission for Health Specialties.
- 4) The training will be comprehensive in the specialties of emergency nursing.
- 5) The trainee shall be actively involved in patient care with gradual progression of responsibility.

PROGRAM OVERVIEW

The Advanced Nursing Practice Diploma in Emergency program is a module-based one that melds a comprehensive curriculum of emergency nursing theory and clinical practice. These modules provide the necessary pathophysiology, assessment frameworks, and nursing theory to enable nurses to serve a multicultural client base presenting a diverse range of illness and injury from a wide age spectrum.

This program is designed to provide an opportunity for professional nurses to develop a specialized practice and to upgrade knowledge and clinical competence in the area of emergency and disaster nursing based on international standards. It is constructed in a form that enables the learner to understand and apply the necessary knowledge, skills, and attitudes about contemporary nursing issues, theory, and research to emergency and disaster nursing practice. It also focuses on creating learning opportunities and exemplar case studies that contribute to quality practice environments.

The program aims at facilitating the learner's personal and professional growth in emergency and disaster nursing by enhancing critical thinking skills necessary for making rapid, sound nursing judgments and demonstration of self-direction in providing immediate emergency care in a variety of high dependency emergency settings such as pre-hospital, emergency department, burn, and trauma units. Furthermore, this program will synthesize evidence-based data and theoretical knowledge to deliver immediate, competent, culturally sensitive care, as well as develop expertise in utilizing human and material resources to support clinical reasoning.

Upon completion of the program, the learner will earn an Advanced Nursing Practice Diploma in Emergency. This program is offered under the supervision of the Saudi Commission of Health Specialties.

PROGRAM OBJECTIVES

Upon completion of the Advanced Nursing Practice Diploma in Adult Emergency Specialty, the learner will be able to:

- 1) Provide specialized knowledge and skills to contribute to the development of emergency care.
- Understand the professional issues influencing emergency nursing and the wider nursing profession.
- Apply management principles for acutely ill and traumatized patients, including multiple casualties in different health settings.
- 4) Implement a systematic patient assessment.
- 5) Incorporate advanced life support skills in the management of traumatized ill patients.
- 6) Understand the implications of hazards and risk potential risk when managing emergencies.
- Plan for health promotion, prevention of diseases, and recovery from emergency and disasters.
- Apply infection control measures when caring for emergency/disaster patients and their families.
- 9) Utilize an evidence-based and research-supported approach in evaluating nursing practice within an emergency department.
- 10) Manage ethical issues concerning emergency/disaster care of patients and their families in accordance with Saudi Arabia's rules and regulations.
- 11) Apply leadership concepts in emergencies.
- 12) Apply quality improvement concepts in evaluating emergency nursing care.

ADMISSION REQUIREMENTS

ADMISSION REQUIREMENTS

To be eligible to enroll in the program, the applicant must conform to the application requirements of the Saudi Council of Health Specialties, in addition to the following:

- 1) Be a graduate with a bachelor of nursing (BSN) degree or equivalent.
- 2) Have completed the internship year
- 3) Interview successfully.
- 4) Have a valid nursing license from the SCFHS.
- 5) Be prepared to study on full-time basis.
- 6) Provide a letter from employer allowing participation.
- 7) Being physically fit.

PROGRAM REQUIREMENTS

PROGRAM REQUIREMENTS

In order to obtain an Advanced Practice Clinical Nursing Diploma in Adult Emergency, the candidate must fulfil the following requirements:

- 1) The period for completing this program is two calendar years.
- 2) The program consists of 44 weeks per calendar year, excluding examination weeks and annual vacation. A total of 88 weeks must be completed for the entire study period.
- 3) A total of 48 didactic and clinical hours must be completed each week.
- 4) Trainees may complete clinical rotations as an 8-hour shift per day, excluding lunchtime, or as a 12-hour shift to complete a total of no more than 40 hours per week.
- 5) The language of instruction for the program is English.

Leaves

- 1) The trainee is entitled to an annual leave of thirty days in addition to an Eid's leave.
- Sick leaves, maternity leaves, and exceptional "emergency" leaves for a period not exceeding ninety days shall be compensated by an equivalent period of days before the trainee is awarded the Certificate of Training Completion.
- 3) Leaves ² that are not utilized in due time within the year shall not be shifted to the coming year.
- 4) Trainee may be granted a special leave for scientific purposes nor exceeding seven days per training year to attend scientific conferences, seminars, or workshop in the same specialty provided that trainee presents proof of attending such activities.

http://www.scfhs.org.sa/en/Reglations/Documents/Rules%20of%20Procedure%20for%20Training%20of%20Saudi%20Board%20Specialties.pdf

² For further information on leaves, refer to article (6) in Rules of Procedure for Training of Saudi Board Specialties Booklet, 4th edition. 2012 that can be accessed through URL:

TEACHING AND LEARNING METHODS

Methods of teaching

This includes the following:

- 1) Interactive lecture and discussion
- 2) Computer assisted interactive instructional programs
- 3) Weekly reading assignments and use of SCFHS digital library3
- 4) Simulations and clinical skills demonstration
- 5) Presentations
- 6) Group discussion of case studies
- Clinical practicum including theory to precede related clinical assignment (as needed), post clinical debriefing (one to two per week), and the development of nursing plans of care for selected patients (Appendix K).

The Advanced Practice Clinical Nursing Diploma in Adult Emergency contains sixteen modules addressing the education and training of nurses who will provide comprehensive emergency care to clients. Each one of these modules includes specific competencies. The clinical competencies of the program are adopted from Mosby's online nursing skills database and some were modified for this program. Each trainee will be issued a username and a password to access the Mosby's Nursing Consult database. The trainee is expected to perform competency online testing. Results of these tests will be monitored by the assigned clinical instructor. The assigned clinical instructor, based on the trainee's score on the online exam, will schedule the trainee for a competency checklist review in the nursing skills laboratory. The attached checklist is used as a tool to monitor the competency review for each trainee.

Clinical practicum

- 1) Theory to precede related clinical assignment (as needed).
- Post clinical debriefing sessions will be conducted once or twice per week as needed for presentation of individual work and development of nursing care plans for selected patients.

Case presentation guidelines

Each student will present a case study of a patient treated in the clinical setting. Case presentation is to include: patient's past medical/surgical history, diagnosis, treatment, and nursing diagnosis with appropriate assessment findings with identification of optimal outcomes. Presentations are to be approximately 15 minutes with the student facilitating the post-presentation discussion. Discussion is to include a comparison of plans of care with the current Mosby Clinical Skills Adult Emergency Nursing and any other related evidence-based practice standards for adult emergency practice.

³ SCFHS digital library provides Instructor and trainee with access to diverse electronic learning resources that provide full-text for evidence-based for best practice such as Ovid Medical Collection, Mosby's Nursing consult, LexiComp, PubMed Central Journal and UpTodate. Digital library can be browsed through URL: http://www.scfhs.org.sa/eservices/ELibrary/Pages/default.aspx

Hospital rotations

A significant proportion of problems are frequently encountered in emergencies. Therefore, to experience the nurse's role in emergency and disaster nursing, trainees must have an adequate specialty experience, enabling them to have confidence and competency in terms of assessment and overall management of common emergency and disaster problems. At the end of the rotation, the trainee should acquire knowledge, skills, and attitudes and demonstrate core competencies.

Guidelines

- Hospital rotations in first two years are considered one block and can be completed in any sequence. Therefore, any rotation can be taken any time during the first two year after introductory course.
- Rotations including inpatient setting should be completed in inpatient and emergency departments.
- An outpatient department rotation candidate should perform a minimum of 8 clinics per week.

Content

The core content of knowledge and skills expected for emergencies and disasters should be attained during appropriate hospital rotations as described for each rotation.

Learning methods

- 1) Emergency Department and casualties
- 2) Clinical rounds case discussion
- 3) Presentations in continuing professional development activities
- 4) Chart reviews
- 5) Clinical and topics presentations
- 6) Self-directed learning and conferences
- 7) Simulation and workshops
- 8) Small group discussions
- 9) Learning with other healthcare professionals (dietician, educator, etc.)

Methods of evaluation

Attendance
Assignments
Clinical evaluation/OSCE
Quizzes
Final examination/Project

Method of assessment

- 1) Cognition
 - Multiple choice questions (MCQs) and extended matching items
- 2) Clinical skills/Patient Management
 - Portfolio and logbook4
 - Case-based discussion

⁴ Instructor and trainee need to refer to electronic logbook, instructions, and log-ins for users through the following URL:

http://www.scfhs.org.sa/en/MESPS/TrainingProgs/ElectrobookCases/Pages/default.aspx http://www.scfhs.org.sa/en/MESPS/TrainingProgs/ElectrobookCases/Pages/Instructions.aspx To view the video tutorial refer to this URL:www.youtube.com/watch?v=ZncCbDhehns www.scfhs.info/medical/Bmedical/login.php

(Please see Appendix A)

Module I: Foundation of emergency nursing

Learning Objectives

At the end of this module, the learner will be able to:

- Demonstrate flexibility and innovation in the application of specialist knowledge and skills appropriate to the area of practice.
- 2) Use professional/therapeutic communication techniques in nursing practice.
- 3) Comprehend the functions and responsibilities of the professional emergency nurse.
- 4) Differentiate the potential stressors in the emergency care environment and apply strategies to minimize their effects on the patient and families.
- 5) Implement the basic principles of time management in the performance of nursing activities for patients presenting to the Emergency Department.

Content Outline

- 1) Emergency room nurse
 - · Scope of practice
 - · Professionalism and ethics
 - Legal responsibility
 - Credentialing
 - Advanced practice role
 - Professional development
- 2) Stressors in the emergency care environment
 - Identifying stressors
 - Stress coping
 - · Emergency room psychosis
- 3) Time management in the Emergency Department
 - Teamwork
 - · Pattern and routine
 - Acuity index
 - Triage system5
- 4) Crisis management
- 5) Basics of first aid emergency nursing care
- 6) Stabilization of injuries
- 7) Pain management and sedation6
- 8) End-of-life care

Competencies

1) Assessment: Head and Neck

⁵ The Canadian Triage & Acuity Scale (CTAS) can be accessed through URL: http://caep.ca/resources/ctas#intro

⁶ Refer to the universal topic of Medical and Surgical Emergencies for pain management through the URL: http://www.scfhs.org.sa/en/MESPS/Pages/UniversalTopics.aspx.

- 2) Assessment: Visual Acuity
- 3) Assessment: Cardiovascular
- 4) Assessment: Thorax and Lungs
- 5) Assessment: Respiration
- 6) Assessment: Musculoskeletal and Neurologic
- 7) Pelvic Examination
- 8) Assessment: Abdomen, Genitalia, and Rectum
- 9) Assessment: Intake and Output
- 10) Assessment: Nutrition Screening
- 11) Assessment: Wound
- 12) Pain Relief
- 13) Determination of Death: Advanced Practice
- 14) Life-Sustaining Therapy: Withholding and Withdrawing
- 15) Symptom Management at End of Life
- 16) Grief Support for Patients and Family

Module II: Foundations of emergency nursing practicum I

Learning Objectives

At the end of this module, the learner will be able to:

- Describe steps of the primary and secondary survey to diagnose and manage life-threatening injuries.
- 2) Obtains initial subjective and objective data of the trauma patient.
- 3) Identify the main elements in emergency resuscitation.
- 4) Describe different therapeutic airway management options.
- 5) Describe principles of wound and burn management.
- 6) Explain cardiopulmonary resuscitation techniques.

Content Outline

- 1) Systematic primary and secondary survey
- 2) Vascular access monitoring
- 3) Airway management and ventilation
- Calculate and administer medications safely for care of patients undergoing invasive procedures
- 5) Wound management
- 6) Burn management
- 7) Cardiopulmonary resuscitation

Competencies

- Emergency Primary Assessment
- 2) Emergency Secondary Assessment
- 3) Code Management
- 4) Airway Positioning
- 5) Airway Foreign Object Removal
- 6) Esophageal Foreign Body Removal
- 7) Nasal Foreign Body Removal
- 8) External Defibrillation

- 9) Aspiration Precautions
- 10) Blood Pressure (Systolic): Palpation
- Apical Pulse
- 12) Pulse Oximetry
- 13) Pulsus Paradoxus Assessment
- 14) Cardiac Output Measurement
- 15) Cardiac Monitor Setup and Lead Placement
- Oxygen Therapy and Oxygen Delivery
- 17) Nasal Cannula or Oxygen Mask Application
- 18) Ventilation: Bag Mask
- 19) Ventilation: Mouth to Mask
- Electrocardiogram: 12 Lead
- 21) Oral Airway Insertion
- 22) Endotracheal Tube Intubation
- 23) Endotracheal Tube Intubation: Advanced Practice
- 24) Endotracheal Tube and Tracheostomy Tube: Oxygen Administration
- 25) Endotracheal Tube: Skin and Oral Care
- 26) Laryngeal Mask Airway
- 27) Tracheostomy Tube: Care and Suctioning
- 28) Intravenous Therapy: Initiation
- 29) Venous Cut down
- 30) External Jugular Venous Access
- 31) Mechanical Ventilation: Volume and Pressure Modes
- 32) Nasopharyngeal Airway Insertion
- 33) Nasopharyngeal Suctioning
- 34) Burn Wound Care
- 35) Wound Cleansing and Irrigation of Traumatic Wounds
- 36) Wound Drainage Evacuation
- 37) Wound Irrigation

Module III: Pharmacological management of emergencies

Learning Objectives

At the end of this module, the learner will be able to:

- 1) Understand the legal and ethical aspects of drug administration.
- 2) Identify the drug dosage, prescription reading, and commonly used medical abbreviations.
- 3) Understand principles of pharmacokinetics, pharmacodynamics, and drug-drug interactions.
- 4) Discuss clinical pharmacology of anticoagulant and thrombolytic drugs.
- 5) Describe toxicological emergencies in pre-hospital settings.

- 1) Introduction to pharmacology and legal and ethical aspects of drug administration
- Dosage calculation, administration of IV fluids, and drug incompatibilities in addition to prescription reading
- 3) Principles of pharmacokinetics and pharmacodynamics
- 4) Adverse drug reactions and drug interactions
- 5) Psychological factors affecting drug therapy
- 6) Toxicological emergencies pre-hospital

- 7) Drugs and coagulation (anticoagulants, thrombolytic)
- 8) Drugs used in treatment of different emergencies:
 - · Respiratory emergencies
 - Cardiovascular emergencies
 - Neurological emergencies
 - · Gastrointestinal emergencies
 - Renal emergencies
 - Endocrine emergencies
 - Obstetrical and Gynecological emergencies
 - Behavioral emergencies

Competencies

- 1) Medication Administration: Oral
- 2) Medication Administration: Topical
- 3) Medication Administration: Nasal Instillation
- 4) Medication Administration: Nebulized
- 5) Medication Administration: Rectal Suppositories
- 6) Medication Administration: Local Infiltration and Topical Agents for Wound Anesthesia
- 7) Medication Administration: Intradermal Injection and Allergy Skin Testing
- 8) Medication Administration: Continuous Subcutaneous Infusion
- 9) Medication Administration: Subcutaneous Injection
- 10) Medication Administration: Intramuscular Injection
- 11) Medication Administration: Intermittent Infusion Methods
- 12) Intravenous Therapy: Regulation of Flow Rate
- 13) Intravenous Therapy: Solution Change
- 14) Blood Products Administration
- 15) Medication Administration: Intravenous Bolus
- 16) Medication Administration: Mixing Medications in One Syringe
- 17) Gastric Lavage for Removal of Toxic Substances
- 18) Streptokinase for Acute Myocardial Infarction
- 19) Seizure Precautions

Module IV: Pathophysiological changes in emergency nursing

Learning Objectives

At the end of this module, the learner will be able to:

- 1) Recognize physiological changes occurring during life-threatening situations.
- 2) Understand the pathophysiology of disease processes commonly seen in emergency patients.
- 3) Understand the inflammatory response and infection process.
- 4) Discuss the fluid, electrolyte disturbance, and acid base balance imbalance.
- 5) Explain the pathophysiology of shock.

- 1) Introduction to pathophysiology adaptations and alteration in cellular function
- 2) Body defense mechanisms
- 3) Inflammation and repair
- 4) Immunity

- 5) Fluid, electrolyte, and acid base balance and imbalance
- 6) Pathophysiology shock
- 7) System and associated pathophysiological problems:
 - Respiratory alteration
 - Cardiovascular alteration
 - · Hematological disorders
 - Neurological Disorders
 - Gastrointestinal disturbance
 - Endocrine Disorders
 - Urinary Disorders
 - Motor, sensory disturbance
 - Immunologic and lymphatic disorders
 - Reproductive disorders
- Toxicological emergencies

Competencies

- 1) Alteplase for Acute Ischemic Stroke
- 2) Alteplase for Acute Myocardial Infarction
- Alteplase for Pulmonary Embolism

Module V: Management of behavioral problems and psychosocial concepts

Learning Objectives

At the end of this module, the learner will be able to:

- 1) Identify communication and interpersonal relationships in an emergency.
- 2) Describe the relationship between stress and anxiety.
- 3) Identify the stages of grieving and describe nursing interventions for each stage.
- 4) Recognize the emotional implications of transferring a patient from the critical unit and describe interventions that help the patient cope with changes.
- 5) Discuss the physical and emotional responses to stress, including local and general adaptation syndromes, mind-body interaction, anxiety, coping, and defense mechanisms.

- 1) Assessment and management of mental health emergencies
 - Anxiety and panic reaction
 - Ineffective coping and situational crisis
 - Depression
 - Suicidal behavior
- 2) Therapeutic communication skills
- 3) Developmental factors in effective coping responses
 - Stress
 - Anxiety
 - Dependency
 - Responses to loss
- 4) General systems theory applied to individual and family coping responses
- 5) Major coping risks associated with physical and or emotional illness

- Major developmental issues
- Control
- Loss
- Guilt
- 6) Psychosocial interventions with ineffectively coping patients and/or families:
- 7) Interventions with dying client and the family

Competencies

- 1) Seizure Precautions
- 2) Communication with Anxious Patients
- 3) Communication with Depressed Patients
- 4) Life-Sustaining Therapy: Withholding and Withdrawing
- 5) Symptom Management at End of Life
- 6) Grief Support for Patients and Family

Module VI: Ethics in nursing and dimension of care

Learning Objectives

At the end of this module, the learner will be able to:

- Examine the nature and role of ethical theories in guiding sound ethical decision making in workplace settings.
- 2) Discuss the ethical and legal contexts of professional nursing practice.
- 3) Examine key ethical issues occurring in nursing and related health care contexts.
- 4) Discuss processes for achieving desired moral outcomes in nursing and healthcare domains.
- 5) Analyze conflicting duties and rights inherent in moral dilemmas.
- Discuss the impact of current issues related to healthcare delivery.
- 7) Use ethical reasoning to synthesize standards of practice, ethical principles, and legal/regulatory requirements in the resolution of ethical dilemmas.
- 8) Discuss relevant ethical issues to traumatized patients.

Content Outline

- 1) Introduction to moral and legal concepts
- 2) Credentialing and licensing
- 3) Autonomy and paternalism
- 4) Life and death
- 5) Public health
- 6) Ethical issues related to emergency situations

Competencies

For competencies, refer to (Appendix L)

Module VII: Epidemiology

Learning Objectives

At the end of this module, the learner will be able to:

- Describe the mechanisms and dynamics of disease transmission in populations and the risk factors that determine their distribution.
- 2) Calculate the measures of morbidity, mortality, incidence, and prevalence.
- 3) Assess the validity and reliability of diagnostic and screening tests.
- Explain the different mechanisms used to describe disease prognosis in quantitative terms for groups of patients.
- 5) Assess the efficacy of preventive and therapeutic measures via randomized trials.
- Conduct epidemiological study designs (cohort, cross-sectional, retrospective, and prospective).
- 7) Differentiate between association and causation.
- 8) Identify potential biases, confounders, and interacting factors in an epidemiological study.
- 9) Explain the role of genetic and environmental factors in disease causation.
- 10) Apply epidemiologic methods to evaluate screening programs.
- 11) Identify the sources of information on disease occurrence.
- 12) Critique medical and health research studies.

Content Outline

- 1) Definition of epidemiology and health
- 2) Dynamics of disease transmission
- Infectious disease epidemiology
- 4) Measuring the occurrence of disease
- 5) Assessing the reliability and validity of diagnostic and screening tests
- 6) Assessing the efficacy of preventive and therapeutic measures through randomized trials
- 7) Cohort studies
- 8) Case control and cross-sectional studies
- 9) Estimating risk determining association
- 10) Estimating the potential for prevention
- 11) From association to causation: deriving inferences from epidemiologic studies
- 12) Bias, confounding, and interaction
- 13) Roles of genetic and environmental factors in disease causation
- 14) Ethical and professional issues in epidemiology

Competencies

For competencies, refer to (Appendix L)

Module VIII: Biostatistics

Learning Objectives

At the end of this module, the learner will be able to:

- 1) Demonstrate familiarity with statistical terminology and the purpose of statistics.
- 2) Identify ways of organizing data.
- 3) Recognize measures of central tendency and variability.
- 4) Demonstrate an understanding of the analysis of statistical data within the research context.

- 5) Provide necessary statistical background for analyzing data and drawing inferences from that analysis.
- 6) Discuss logic of hypothesis testing.

Content Outline

- 1) Descriptive statistics, frequencies, shapes, measures of central tendency
- 2) Univariate descriptive statistics, measures of variability, range standard deviation scores within a distribution, Z scores standardized distribution
- 3) Bivariate descriptive statistics
- 4) Inferential statistics, probability, sampling distribution, hypothesis testing
- 5) Power analysis, Types 1 and II errors, level of significance/critical regions, confidence interval, one-tailed and two-tailed tests, and parametric tests
- 6) Bivariate inferential statistics, t tests for independent groups, paired t tests (dependent groups)
- 7) ANOVA, between versus within groups, nonparametric tests, Chi square test for independence, bivariate inferential statistics, Pearson r as inferential testing.

Competencies

For competencies, refer to (Appendix L).

MODULES OF SECOND YEAR TRAINING

(Appendix B)

Module IX: Introduction to research and evidence based practice

Learning Objectives

At the end of this module, the learner will be able to:

- 1) Define the basic concepts of research methodology.
- 2) Describe the different research designs.
- 3) Describe the scientific process and its use in nursing research.
- 4) Design a research proposal project.
- 5) Explain the steps of the research process in the proposal and/or conduct of a circumscribed nursing research project.
- 6) Identify research problems and literature review process related to nursing practice.
- 7) Compare and contrast research designs.
- 8) Discuss appropriate statistical techniques in analysis of data.
- 9) Critique current studies of nursing practice.
- 10) Describe the utilization of research findings.
- 11) Define the historical perspective of evidence based practice.
- 12) Define and apply evidence based nursing practice principles identified through nursing research.

Please refer to (Appendix C) for Nursing Research Project Guidelines

Content Outline

- 1) Overview of nursing research
- 2) Research methodology and process
- 3) Research designs
- 4) Data collection and analyses
- 5) Evidence based research and application

Competencies

For competencies, refer to (Appendix L)

Module X: Trauma assessment and nursing consideration

Learning Objectives

At the end of this module, the learner will be able to:

- 1) Demonstrate knowledge of health assessment skills.
- 2) Comprehend the various components of comprehensive health assessment.
- Determine the four basic assessment techniques of physical examination and their mnemonic sequences.
- 4) Integrate the knowledge gained from pathophysiologic effects of disease in conducting the health assessment for different body systems.
- 5) Describe the primary and secondary survey for diagnosis and management of life –threatening injuries.

MODULES OF SECOND-YEAR TRAINING

Content Outline

- 1) Patient history
- 2) General approaches to physical examination
- 3) Assessment of treatment modalities' side effects
- 4) Assessment of nutritional states, spiritual and behavior changes
- 5) Pain assessment
- 6) Comprehensive system assessment (head-to-toe assessment)
- 7) Adapting assessment to special populations (child, infant, adult...)
- 8) Document quality of care issues associated with the trauma patient.

Competencies

- 1) Nurse-Patient Relationship
- 2) Assessment: General Survey
- 3) Emergency Primary Assessment
- 4) Emergency Secondary Assessment
- 5) Assessment: Orthostatic Vital Signs
- 6) Assessment: Nutrition Screening
- 7) Arterial Catheter Radial Insertion: Advanced Practice
- 8) Arterial Catheter: Blood Sampling
- 9) Arterial Puncture: Arterial Blood Gas Sampling
- 10) Arterial Catheter Radial Insertion: Advanced Practice
- 11) Nursing Report

Module XI: Major trauma and surgical emergencies

Learning Objectives

At the end of this module, the learner will be able to:

- 1) Understand the phases of a disaster and nursing's role during each phase.
- 2) Describe phases of initial assessment and related care of the trauma patient.
- Identify appropriate nursing diagnosis, interventions, and expected outcomes for the trauma patient.
- 4) Understand of the management of disasters/mass casualty incidents.
- 5) Describe the complications of different types of trauma and their clinical manifestations and nursing management.

- Disasters and disaster nursing
- 2) Characteristics of disaster nursing
- 3) Phases of a disaster and nursing's role during each phase
- 4) Basis of trauma and management
- 5) Head trauma and management
- 6) Spinal trauma and management
- 7) Thoracic trauma and management
- 8) Gastrointestinal trauma and management
- 9) Renal and genitourinary trauma and management
- 10) Orthopedic and neurovascular trauma and management
- 11) Burns and management

MODULES OF SECOND-YEAR TRAINING

- 12) Maxillofacial trauma and management
- 13) Pediatric trauma and management
- 14) Elder Trauma and management
- 15) Obstetric trauma and management

Refer to Universal Topics/SCFHS Module (4) Medical and Surgical Emergencies. 7

- 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

Competencies

- 1) Ambulation Aids: Measuring and Fitting
- 2) Automated External Defibrillator (AED)
- 3) Chest Physiotherapy: Postural Drainage
- 4) Ear Irrigations
- 5) Ophthalmic Foreign Body Immobilization
- 6) Epistaxis: Anterior Packing
- 7) Epistaxis: Insertion of Balloon Catheters
- 8) Epistaxis: Posterior Packing
- 9) Immobilization Devices
- 10) Lumbar Puncture
- 11) Ophthalmic Foreign Body Immobilization
- 12) Spinal Immobilization: Cervical Collar, Backboard, and Vacuum Mattress
- 13) Cervical Collar: Management
- 14) Cervical Tongs and Halo Pins: Site Care
- 15) Cervical Traction Maintenance
- 16) Skin Traction
- 17) Splinting: General Principles
- 18) Splinting: Traction Splints
- 19) Splinting: Vacuum Splints
- 20) Restraint Application and Monitoring
- 21) Thoracentesis
- 22) Emergency Needle Thoracentesis
- 23) Chest Tube Insertion
- 24) Chest Tube Removal
- 25) Chest Tube: Closed Drainage Systems
- 26) Paracentesis
- 27) Preoperative Care

⁷ Refer to the universal topic of Module (4) Medical and Surgical Emergencies through the URL:http://www.scfhs.org.sa/en/MESPS/Pages/UniversalTopics.aspx.

Module XII: Clinical practicum in emergency nursing II

Learning Objectives

At the end of this module, the learner will be able to:

- 1) Understand the principles of electrocardiogram (ECG) and 12 Leads ECG.
- 2) Discuss the measures used to control esophageal bleeding.
- 3) Discuss enteral and parenteral nutrition.
- 4) Describe the route for blood glucose monitoring technique and self-injection of insulin.
- Explain urinary bladder catheterization and the management of patients undergoing supra public bladder drainage.

Content Outline

- 1) The principles of electrocardiogram (ECG) and 12 Leads ECG
- 2) Nasogastric tube intubation and removal
- 3) Esophageal bleeding
- 4) Enteral and parenteral nutrition
- 5) Blood glucose monitoring technique and self-injection of insulin
- 6) Catheterization of the urinary bladder
- 7) Management of patient undergoing supra pubic bladder drainage
- 8) Application and removal of a cast
- 9) Glasgow Coma Scale measurement

Competencies

- 1) Electrocardiogram: 12 Lead
- 2) Electrocardiogram: Right Precordial and Left Posterior Leads
- 3) Esophagogastric Tamponade Tube: Insertion and Care
- 4) Feeding Tube: Verification of Placement
- 5) Feeding Tubes: PEG, Gastrostomy, and Jejunostomy Care
- 6) Gastric Lavage for Removal of Toxic Substances
- 7) Feeding Tube: Medication Administration
- 8) Fecal Impaction Removal
- 9) Massive Transfusion
- 10) Blood Glucose Monitoring
- 11) Peritoneal Lavage: Diagnostic: Advanced Practice
- 12) Specimen Collection: Timed Urine Specimen
- 13) Specimen Collection: Urine from Indwelling Catheter
- 14) Specimen Collection: Urine Screening for Glucose, Ketones, Protein, Blood, pH, and Specific Gravity
- 15) Urinary Catheter: Closed Continuous Irrigation
- 16) Urinary Catheter: Indwelling Catheter Care
- 17) Urinary Catheter: Indwelling Catheter Removal
- 18) Urinary Catheter: Straight and Indwelling Catheter Insertion (Female)
- 19) Urinary Catheter: Straight and Indwelling Catheter Insertion (Male)
- 20) Urinary Catheter: Suprapubic Catheter Care
- 21) Restraint Application and Monitoring

Module XIII: Clinical practicum in emergency nursing III

Learning Objectives

At the end of this module, the learner will be able to:

- 1) Explain the approaches to acute abdominal and ectopic pregnancy.
- 2) Describe the therapy for sepsis during pregnancy and postpartum hemorrhages.
- 3) Explain different trauma and cardiopulmonary resuscitation in pregnancy.
- 4) Discuss the triage process for the pediatric patient and the difference between emergent and urgent pediatric illness and/or injury.
- 5) Discuss the top ten pediatric emergencies.

Content Outline

- 1) Approach to the acute abdomen in pregnancy
- 2) Management of ectopic pregnancy
- 3) Postpartum hemorrhage
- 4) Sepsis during pregnancy
- 5) Thromboembolism in pregnancy
- 6) Diabetic ketoacidosis in pregnancy
- 7) Amniotic fluid embolism
- 8) Trauma in pregnancy
- 9) Cardiopulmonary resuscitation in pregnancy
- 10) Pediatric medical emergency
- 11) Pediatric resuscitation
- 12) Pediatric orthopedics
- 13) Pediatric surgical emergencies
- 14) Pediatric toxicology
- 15) Pediatric trauma

Competencies

- 1) Emergency Primary Assessment
- 2) Emergency Secondary Assessment
- Code Management
- 4) Airway Positioning
- 5) Airway Foreign Object Removal
- 6) Esophageal Foreign Body Removal
- 7) Nasal Foreign Body Removal
- 8) External Defibrillation
- 9) Aspiration Precautions

Module XIV: Nursing informatics

Learning Objectives

At the end of this module, the learner will be able to:

- 1) Describe the foundation of nursing informatics as an emerging field in the nursing profession.
- 2) Identify key factors and legislative organizations that help shape nursing informatics.
- 3) Discuss evolving models and theories of nursing informatics that define roles and competencies.

MODULES OF SECOND-YEAR TRAINING

- Explain the implications of nursing informatics for nursing practice, administration, education, and research.
- 5) Demonstrate skills in the acquisition and retrieval of nursing information using health information systems within the institution and through the Internet and varied electronic resources.
- Apply approaches that safeguard data and information integrity while maintaining privacy and confidentiality

Content Outline

- 1) Introduction of nursing informatics and overview
- 2) Nursing informatics goals, standards, and scope of practice
- 3) Nursing informatics competencies (i.e., computer literacy skills, informatics literacy skills, etc.)
- 4) Models and theories of informatics
- 5) Internet, search engines, and electronic databases and resources
- 6) Selection of health care information systems
- 7) System implementation, maintenance, and development
- 8) Data integrity, security, and confidentiality
- 9) Intranet, extranet, and network integration
- 10) Information technology in patient education
- 11) Integrating computers and information technology in nursing education and practice

Competencies

For competencies, refer to (Appendix L)

Module XV: Leadership and management

Learning Objectives

At the end of this module, the learner will be able to:

- 1) Analyze the components of organizational structure and culture.
- 2) Apply theories of effective leadership and management within selected healthcare arenas.
- 3) Utilize the skills of nursing process, critical thinking, ethical decision-making, communication, and therapeutic nursing intervention in managing culturally competent, cost-effective care of groups of clients across the wellness/illness continuum.
- Collaborate with multidisciplinary healthcare team members in prioritizing and coordinating quality/cost-effective healthcare.
- 5) Demonstrate leadership and management of a care-giving team comprised of individuals with varied cultural backgrounds and varied levels of clinical knowledge and competencies.
- 6) Utilize skills of inquiry and research as a means to enhance knowledge base, facilitate change, and improve quality of care.
- 7) Demonstrate professional accountability for effective leadership in nursing practice.
- 8) Contribute to organizational strategic planning and its implementation at different levels within healthcare organizations.

- 1) Organizational structure and culture
- 2) Application of leadership and management theories

MODULES OF SECOND-YEAR TRAINING

- 3) Organizational and personal mission, vision, and goals
- 4) Critical thinking, problem solving, and effective decision making
- 5) Quality and risk management
- 6) Budgeting, cost, care delivery models, and staffing
- 7) Communication, motivation, and team building
- 8) Change and conflict management
- 9) Role transition and delegation
- 10) Strategic planning and strategic management
- 11) Career planning

Competencies

For competencies, refer to (Appendix L)

Module XVI: Professional performance

Learning Objectives

At the end of this module, the learner will be able to:

- 1) Assume responsibility for personal professional development.
- 2) Initiate independent learning activities.
- 3) Provide care in an inter-professional environment
- 4) Advocate for the health and safety of patients.
- 5) Differentiate between effective versus ineffective communication.
- 6) Discuss the meaning of active listening.
- 7) Identify three skills necessary for active listening.
- 8) Describe ways patients and coworkers benefit when nurses communicate effectively.
- 9) Discuss the difference between "I" and "You" statements.
- 10) Identify skills required for therapeutic communication.

Content Outline

- 1) Sources of data for evidence-based practice
- Education process (teaching and learning principles)
- Legal issues
- 4) Ethical issues
- Patient advocacy
- 6) Quality assurance
- 7) Professional development
- 8) Multidisciplinary collaboration
- 9) Effective communication

Competencies

For competencies, refer to (Appendix L)

ASSESSMENT

Overall, evaluation and assessment of trainees is performed according to the Saudi Commission training and examination rules and regulations. Assessment is divided into two parts:

- 1) Continuous evaluation process
- 2) Centralized examinations

Continuous evaluation

The main aim of the continuous evaluation process is to evaluate every aspect of the trainees' performance during their presence at the training center. This process provides objective feedback obtained from those who are involved in the training process (i.e., preceptors). This process also involves evaluation of interactive training activities such as case studies and seminars. The following are the continuous evaluation process components:

- 1) Feedback from the assigned clinical instructor: this feedback should be obtained and documented every month and as needed (Appendix D).
- 2) Feedback from the assigned preceptor: this feedback should be obtained and documented every month and as needed (Appendix E).
- 3) Feedback from the assigned head nurse/nurse manager: this feedback should be obtained every month and as needed (Appendix E).
- 4) Seminar evaluation: one group seminar will be conducted each training year. Seminar topics should be selected by the trainee and approved by the assigned clinical instructor and the program director (Appendix F).
- 5) Case study evaluation: case study of a patient treated in the clinical setting. Case presentation is to include: patient's past medical/surgical history, diagnosis/treatment history, current medical/surgical diagnosis and nursing diagnosis with appropriate assessment findings, and current medical/nursing plans of care with identification of optimal outcomes. Presentations are to be approximately 15 minutes with the trainee facilitating the post-presentation discussion. The case study evaluation form has to be completed and signed by the clinical instructor and the trainee (Appendix G).

Centralized examinations

This assessment component includes examinations conducted centrally by the Saudi Commission for Health Specialties, which are:

- 1) Promotion Examinations
- Final Examinations

Promotion examination

This examination is held at the end of first year of the program. Successful completion of the examination will enable the trainee to enter the second training year of the program. The promotion examination will consist of a written test. The main objective of this exam is to assess the theoretical knowledge as well as the critical thinking skills of the trainees regarding the topics and clinical experiences covered in the first training year. The examination format including number of items, eligibility, and passing scores will be according to the Saudi Commission Examination Rules and Regulations available on the Saudi Commission Website; www.scfhs.org.sa.

ASSESSMENT

Final (End-of-program) examinations

The end-of-program examinations are comprehensive. The trainees would be awarded their diploma certificate once they successfully complete these examinations.

Final Written Examination

This exam assesses the theoretical knowledge as well as the critical thinking skills of the trainees regarding the topics and clinical experiences covered in the entire program. The examination format including number of items, eligibility, and passing scores will be according to the Saudi Commission Examination Rules and Regulations (available on the Saudi Commission Website, www.scfhs.org.sa;.

Final Clinical Examination

An objective structured clinical examination exam will be conducted to assess the trainees' clinical skills, including data gathering, patient management, communication, and counseling skills. This examination will include a specific number of stations designed to achieve the training objectives. The examination format including number of items, eligibility, and passing scores will be according to the Saudi Commission Examination Rules and Regulations (available on the Saudi Commission website, www.scfhs.org.sa.

Certification

Certificate of training completion will only be issued upon the trainee's successful completion of all program requirements. Successful completion of all program requirements (including examinations, competencies, etc.) would result in awarding the trainees the "Emergency Nursing Diploma"

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Appendix A

Didactic and Clinical Rotations (1 st Year)							
First Year							
Courses	Duration	Theoretical	Clinical				
Module I: Foundation of Emergency Nursing *	12 Weeks	96 Hours (1 day per week)	384 Hours (4 days per week) Simulation and workshop, including ACLS				
Module II: Foundation of Emergency Nursing Practicum I	12 weeks	96 Hours (1 day per week)	384 Hours (4 days per week) ER & Casualty				
Module III: Pharmacological Management of Emergencies *	2 Weeks	32 Hours (2 days per week)	48 Hours (3 days per week) ER & Casualty				
Module IV: Pathophysiological Management of Emergencies	4 weeks	32 Hours (1 day per week)	128 Hours (4 days per week) ER & Casualty				
Module V: Emergency Management of Behavioral Problems and Psychosocial Concepts *	4 Weeks	32 Hours (1 day per week)	128 Hours (4 days per week) ER & Casualty				
Modules VI: Ethics in Nursing & Dimensions of Care *	6 Weeks	48 Hours (1 day per week)	192 Hours (4 days per week) Application of foundations of emergency nursing in ER & Casualty				
Module VII: Epidemiology *	2 Weeks	80 Hours (5 days per week)	Application in computer lab and library				
Module VIII: Biostatistics *	2 Weeks	80 Hours (5 days per week)	Application in computer lab and library				
Total	44 Weeks	496 Hours	1,264 Hours				

^{*}These modules are didactic modules.

Appendix B

	Didactic and Clinical Rotations (2 nd Year)						
Second Year							
Courses	Duration	Theoretical	Clinical				
Module IX: Introduction to Research and Evidence Based Practice *	4 Weeks	64 Hours (2 days per week)	96 Hours (3 days per week) Consolidate rotation in the research area of interest and in areas that provide resources for nursing research (e.g., nursing researchers, biostatisticians, librarians, etc)				
Module X: Trauma Assessment and Nursing Consideration	6 Weeks	48 hours (1 day per week)	192 Hours (4 days per week) ER & Casualty				
Module XI: Major Trauma and Surgical Emergencies	8 Weeks	64 Hours (1 day per week)	256 Hours (4 days per week) ER and OR				
Module XII: Clinical Practicum in Emergency Nursing II	8 Weeks	64 Hours (1 day per week)	256 Hours (4 days per week) ER and Casualty				
Module XIII: Clinical Practicum in Emergency Nursing III	8 Weeks	64 Hours (1 day per week)	256 Hours (4 days per week) ER and Casualty				
Module XIV: Nursing Informatics*	4 Weeks	64 Hours (2 days per week)	96 Hours (3 days per week) Rotations with nursing informatics staff, and/or working with healthcare informatics systems				
Module XV: Leadership and Management*	4 Weeks	32 Hours (1 day per week)	128 Hours (4 days per week) Rotations with Nurse Managers				
Module XVI: Professional Performance*	2 Week	32 Hours (2 days per week)	48 Hours (3 days per week) Rotation in the oncology specialty area of interest				
Total	44 Weeks	432 Hours	1,328 Hours				

^{*}These modules are didactic modules.

Appendix C

Nursing Research Project Guidelines8

Under the guidance of the advisor, the student takes three credit hours for a research project and submits it to the adviser. A clinical research project, under the supervision of a faculty member, employs the scientific process in analyzing a clinical problem or issues related to advanced nursing practice. Emphasis is on a project that has tangible application to the practice setting.

Learning Objectives

At the end of this module, the learner will be able to:

- 1) Demonstrate ability to collect, analyze, synthesize, and evaluate information.
- Formulate research questions on problems of clinical significance on advanced nursing practice.
- 3) Critically analyze and apply studies pertinent to client care.
- Interpret research findings and recommendations to clients, agencies, and health care professionals.
- 5) Write a scholarly paper in a formal suitable for professional publication.

Clinical Research Project Guidelines

Utilization Studies

A student may create a research utilization project relevant to nursing. Examples include design of clinical protocols for implementation of previous research findings.

Pilot Studies

A student may wish to conduct a small-scale study that provides a foundation for future research. This might include a pilot study (based on a smaller sample or refined methodology), a descriptive survey of a group targeted for later study, intervention studies, or studies that establish or extend tool reliability and validity.

Replicated Studies

A student may conduct an exact or approximate (under similar conditions) replication of a study to extend findings of previous research.

Advisor

For each research project, one faculty member will function as an advisor. This person gives final approval for the student to register for the course, advises the student during project implementation, verifies that all requirements for the project and written report have been met, and submits the final course grade. Graduate faculty will assign faculty members to the role of advisor or readers.

Preliminary approval (prior to registration for project module)

Nursing Research Project Guidelines are adopted from the McNeese State University College of Nursing Graduate Program 2012-2013 through URL:http://www.mcneese.edu/

- Choose an advisor for the project who has expertise or interest in the area of your proposed clinical research
- 2) Provide a description of the project, including the following:
 - · Problem statement;
 - Purpose and objectives of the project; and
 - Significance of the project.

Enrollment in project module

- 1) Register for project module assigned to advisor.
- Attend conferences with the advisor as recommended or requested. Submission of working drafts of research report to faculty advisor is suggested.
- 3) Submit copies of written research report to the advisor.

Evaluation

- 1) Written Research Report
- 2) Completion of the clinical research project, as outlined

Grading Criteria

The maximum score for this paper is 100 points. Each item is weighted for its importance in fulfilling the purposes of the project.

Appendix D

SCFHS Mentor Guidelines

Goals

- Guide residents towards personal and professional development through continuous monitoring of progress.
- 2) Early identification of struggling residents as well as high achievers.
- 3) Early detection of residents who are at risk of emotional and psychological disturbances.
- 4) Provide career guidance.

Roles of the Mentor

The primary role of the mentor is to nurture a long-term professional relationship with the assigned residents. The mentor is expected to provide an "academic home" for the residents so that they can feel comfortable in sharing their experiences, expressing their concerns, and clarifying issues in a non-threatening environment. The mentor is expected to keep sensitive information about the residents in confidence.

Mentors are also expected to make appropriate and early referral to the Program Director or Department Head if they discover a problem that would require expertise or resources beyond their capacity. Examples of such referral might include:

- 1) Serious academic problems;
- 2) Progressive deterioration of academic performance;
- 3) Potential mental or psychological issues;
- 4) Personal problems interfering with academic duties;
- Professional misconduct, etc.

However, the following are NOT expected roles of a mentor:

- 1) Provide extra tutorials, lectures, or clinical sessions;
- 2) Provide counseling for serious mental and psychological problems;
- Being involved in residents' personal matters;
- 4) Provide financial or other material supports.

Roles of the trainee

- 1) Submits resume at the start of the relationship.
- 2) Provide mentor with short (1 year) and longer term (2 years) goal.
- 3) Takes primary responsibility in maintaining the relationship.
- Schedule monthly meeting with mentor in a timely manner; do not request ad hoc meetings except in emergency.
- 5) Recognize self-learning as an essential element of specialty training.
- 6) Report any major events to the mentor in a timely manner.

Who can be mentor?

Any faculty member consultant grade and above within the specialty program can be a mentor. There is no special training required.

Number of trainees per mentor

As a guideline, each mentor should not have more than 4–6 trainees. As much as possible, the trainees should come from the first and second years of training. This will create an opportunity for the senior trainees to work as a guide for the junior trainees.

Frequency and duration of engagement

The recommended minimum frequency is once every four weeks. Each meeting might take 30 minutes to an hour. It is also expected that once assigned, the mentor should continue with the same trainee preferably for the entire duration of the training program (i.e., two years).

Tasks during the meeting

Following are suggested tasks to be completed during the meeting:

- Discuss overall clinical experience of the trainee with particular attention to any concerns raised:
- Review logbook or portfolio with the trainee to determine whether the trainee is on target of meeting the training goals;
- 3) Revisit earlier concerns or unresolved issues, if any;
- 4) Explore any non-academic factors seriously interfering with training;
- 5) Document excerpts of the interaction in the logbook.

Mandatory Reporting to Program Director or Department Head

- 1) Consecutive absence from three scheduled meetings without any valid reasons;
- 2) Unprofessional behavior;
- 3) Consistent underperformance in spite of counseling;
- 4) Serious psychological, emotional, or health problems that may potentially cause unsafe patient care:
- 5) Any other serious concerns by the mentor.

Appendix E

Advanced Practice Clinical Nursing Diplor	ma in E	merge	ency			
Performance Assessment of the Trainee						
(To be completed by the Preceptor ⁹ on completion of the clinical hours required monthly in the						
specialty)	iiiicai i	iouis i	cquircu	montan	,	
specially)						
- · · · ·						
Trainee Name:			ID Numi	oer:		
Evaluation for the Period From:						
Performance Indicators: Weak: 1 Fair: 2 Good: 3 Ve	ry good	: 4 Exce	ellent: 5			
Skill Assessment Criteria	1	2	3	4	5	
Demonstrates the ability to effectively assess, diagnose, plan, implement, and						
evaluate patient care.						
Plans patient-specific care and uses the care maps or clinical pathways (if						
appropriate) for the clinical setting.						
Implements nursing interventions and makes individualized therapeutic decisions						
related to patient health condition and planned outcomes.						
Demonstrates safe medication administration practices at all times.						
Participates in formal and informal teaching/training.						
Maintains professional behavior at all times.						
Maintains complete documentation according to hospital policies.						
Works collaboratively with the multidisciplinary team (preceptor, manager,						
physicians, etc.) to achieve training goals.						
Requests assistance, support, and supervision appropriately as needed.						
Shares goals/objectives with preceptor for each clinical day.						
Shows initiative in identifying and articulating training needs.						
Completes all responsibilities for care associated with designated patients each						
clinical day.						
Demonstrates effective time management, organization in planning, and						
appropriate performance in nursing responsibilities.						
Displays punctuality, and provides appropriate absence notification based on						
hospital policy.						
Displays professional behavior and appearance (uniform and ID).						
Demonstrates accountability and responsibility for own practice.						
Accepts constructive feedback.						
Adheres to the code of ethics.						
Maintains patient confidentiality at all times.						
Demonstrates respect for cultural differences.						
Total /20					1	
Comments: Preceptor:						
comments. Preceptor.						
Preceptor Name:						
Signature: Date:						
-						
Trainee Name:						
Signature: Date:						

 $^{^{9}}$ Appendix E, F and G are adopted from Advanced Practice Clinical Nursing Diploma in Oncology 2014.

Appendix F

Advanced Practice Clinical Nursing Diploma in Emerger	тсу				
Performance Assessment of the Trainee					
(To be completed by the Clinical Instructor on completion of the clinical hours in	equire	d mo	nthly	/ in t	he
specialty)	·		•		
• "					
Trainee Name:					
ID Number: Evaluation for the Period From:	То	:			
Performance Indicators: Weak: 1 Fair: 2 Good: 3 Very good: 4 Excell	ent: 5				
Skill Assessment Criteria	1	2	3	4	5
Collects relevant patient information to form a comprehensive care plan.					
Conducts a thorough physical assessment and documents findings in the patient's medical	al				
record according to organizational policies.					
Identifies, based on assessment findings, appropriate patient outcomes.					
Develops a comprehensive plan of care that would ensure continuity of care in					
collaboration with patients and their families.					
Provides appropriate interventions based on the patient's plan of care.					
Adheres to safety standards/protocols as outlined in hospital policies and procedures.					
Communicates with patients and families using therapeutic communication skills.					
Evaluates patient's progress based on planned outcomes and revises plan of care					
accordingly.					
Is self-directing; assumes initiative and responsibility for own practice.					
Develops plan of care for specific patient population as needed.					
Accepts constructive criticism and uses suggestions for improvement.					
Demonstrates punctuality and reports absence or sickness through the correct channels					
according to hospital policies.					
Participates in staff and trainee education.					
Turns in completed written assignments on time.					
Cooperates with and supports other members of the healthcare team.					
Adheres to code of ethics.					
Maintains patient confidentiality and privacy at all times.					
Communicates effectively with the multidisciplinary team members.					
Synthesizes appropriate research findings and incorporates them in practice.					
Utilizes evidence-based practice in developing the patient's plan of care.					
Total / 20					
Comments: Clinical Instructor:					
Clinical Instructor Name:					
Signature:Date:					
Trainee Name:					
Signature:Date:					

Appendix G

Advanced Practice Clinical Nursing Diploma in Er	nerge	ncy			
Performance Assessment of the Trainee (To be completed by the Nurse Manager on completion of the clinical hours required monthly in the specialty)					
Trainee Name:ID N	lumbe	r:			
Evaluation for the Period From:To:					
Performance Indicators: Weak: 1 Fair: 2 Good: 3 Very good: 4 Excellent: 5					
Skill Assessment Criteria	1	2	3	4	5
Actively participates in departmental activities (meetings, education, etc.).					
Assists with development, updating, and implementation of clinical guidelines.					
Proactively intervenes in challenging situations within the clinical setting.					
Attends and actively participates in hospital committees as needed.					
Adheres to relevant standards of care and follows hospital policies at all times.					
Coordinates with other departments within the hospital to promote optimal					
continuity of care.					
Serves as patient advocate in exploring other plans of care in collaboration with					
the multidisciplinary team members.					
Accepts constructive criticism and uses suggestions for improvement.					
Demonstrates punctuality and reports absence or sickness through the correct					
channels according to hospital policies.					
Participates in staff and trainee education.					
Turns in completed written assignments on time.					
Cooperates with and supports other members of the healthcare team.					
Adheres to the code of ethics.					
Maintains patient confidentiality and privacy at all times.					
Communicates effectively with the multidisciplinary team members.					
Utilizes evidence-based practice in developing the patient's plan of care.					
Total	1'	16			
Comments: Nurse Manager:					
Nurse Manager Name:					
Signature:Date:					
Trainee Name:					
Signature:Date:					

Appendix H

	(Case B	ased I	Disc	ussior	ı (CB	D)					
Trainee Name:												
Assessor name:												
Date:			Locat	tion:	:							
ER□ OPD□ In-patie	ER \square OPD \square In-patient \square A&E \square New \square Follow-up \square											
Reason for clinical encoun Focus of clinical encounter												
Clinical assessment	Ma	nagem	ent 🗆		Reco	ord ke	eepin	g 🗆	Profe	essi	onalis	sm 🗆
Complexity of case: Low□	Ave	erage			High	ı						
Please rate the trainee again	st wha	t you	would	exp	ect of	a tra	inee i	n that	t year	of t	rainii	ng
Theme	Unsati	sfactory		Sati	isfactor	у	:	Superio	r		No	ot Observed
Medical record keeping	1	2	3	4	5	6		7	8	9	n/	0
2. History taking	1	2	3	4	5	6		7	8	9	n/	0
3. Clinical findings and interpretation	1	2	3	4	5	6		7	8	9	n/	0
4. Management plan	1	2	3	4	5	6		7	8	9	n/	0
5. Follow-up and future planning	1	2	3	4	5	6		7	8	9	n/	0
6. Professional qualities	1	2	3	4	5	6		7	8	9	n/	0
7. Overall clinical judgment	1	2	3	4	5	6		7	8	9	n/	0
Strengths: Suggestions for development:												
Time taken for discussion:min Time taken for feedbackmin Trainee to complete the reflection of this CBD using Gibbs framework for reflection												
Trained to complete the renection	OT CITIS	CDD d3i	ing Gibb	,5 mai	mewor	K TOT T	criccu	011				
Assessor satisfaction using CBD		LOW 1	2		3	4	5	6	7		8	9HIGH
Trainee satisfaction using CBD		LOW 1	2		3	4	5	6	7		8	9HIGH
Assessor's Signature: Trainee's Signature:												

Appendix I

Direct Observation Procedure (DOP) Evaluation Form											
Trainee Name:							Ye	ar 1□		Yea	ır 2□
Assessor name:	Assessor name:										
Date:						Loc	ation	:			
ER□ OPD□ In-patie	nt⊔		A&E_	J	vew⊔		гоном	⁄-up□			
Reason for clinical encounter:											
Complexity of case: Low□		rage□			High□						
Please rate the trainee agains	st wha	t you v	would	expec	t of a	train	ee in	that y	ear of	trainir	ıg
Theme	Unsatis	factory		Satisfa	ctory		Su	perior		N	ot Observed
Understanding indications, relative anatomy, and technique	1	2	3	4	5	6	7	8	9	n/	o
2. Obtain informed consent	1	2	3	4	5	6	7	8	9	n/	0
3. Pre-procedure preparation	1	2	3	4	5	6	7	8	9	n/	0
4. Patient safety	1	2	3	4	5	6	7	8	9	n/	0
5. Antiseptic technique	1	2	3	4	5	6	7	8	9	n/	0
6. Technical ability	1	2	3	4	5	6	7	8	9	n/	0
7. Seek help where appropriate	1	2	3	4	5	6	7	8	9	n/	0
8. Post-procedure management	1	2	3	4	5	6	7	8	9	n/	0
9. Communication skills	1	2	3	4	5	6	7	8	9	n/	0
10. Professionalism	1	2	3	4	5	6	7	8	9	n/	0
11. Overall clinical judgment	1	2	3	4	5	6	7	8	9	n/	0
Strengths: Suggestions for development:											
Time taken for discussion:	m	in		T	ime ta	ken fo	r feedl	back			min
Trainee to complete the reflection	of this I	OOPS or	n the ba	ck of t	nis forr	n usin	g Gibbs	s frame	work fo	r reflec	tion
Assessor satisfaction using DOPS		LOW 1	2	3	4	Ę	5	6	7	8	9HIGH
Trainee satisfaction using DOPS		LOW 1	2	3	4	5	5	6	7	8	9HIGH
Assessor's Signature:											

Appendix J

Trainee Reflection Form
Description of the event:
Feelings and Thoughts (Self-awareness):
Evaluation and Analysis:
Conclusion:
Conduction.
Action Plan:

Appendix K

	Logbook							
NAME:								
YEAR/MOI	YEAR/MODULE:							
Date	Patient Data	Clinical Problem	Management	Learning Points				

Appendix L

	Competency List
1)	☐ Airway Foreign Object Removal
2)	☐ Airway Positioning
3)	☐ Alteplase for Acute Ischemic Stroke
4)	☐ Alteplase for Acute Myocardial Infarction
5)	☐ Alteplase for Pulmonary Embolism
6)	☐ Ambulation Aids: Measuring and Fitting
7)	☐ Apical Pulse
8)	☐ Arterial Catheter Insertion (Assisting), Care, and Removal
9)	☐ Arterial Catheter Radial Insertion: Advanced Practice
10)	☐ Arterial Catheter: Blood Sampling
11)	☐ Arterial Puncture: Arterial Blood Gas Sampling
12)	☐ Aspiration Precautions
13)	☐ Assessment: Abdomen, Genitalia, and Rectum
14)	☐ Assessment: Cardiovascular

	Competency List
15)	☐ Assessment: Head and Neck
16)	☐ Assessment: Intake and Output
17)	☐ Assessment: Musculoskeletal and Neurologic
18)	☐ Assessment: Nutrition Screening
19)	☐ Assessment: Orthostatic Vital Signs
20)	☐ Assessment: Respirations
21)	☐ Assessment: Thorax and Lungs
22)	☐ Assessment: Wound
23)	☐ Automated External Defibrillator (AED)
24)	☐ Blood Glucose Monitoring
25)	☐ Blood Pressure (Systolic): Palpation
26)	☐ Blood Pressure: Upper Extremity
27)	☐ Blood Products Administration
28)	☐ Blood Specimen Collection: Blood Cultures
29)	☐ Blood Specimen Collection: Venipuncture Syringe Method
30)	☐ Blood Specimen Collection: Venipuncture Vacuum-Extraction Method
31)	☐ Burn Wound Care
32)	☐ Caps, Masks, and Eye Protection
33)	☐ Cardiac Monitor Setup and Lead Placement
34)	☐ Cardiac Output Measurement
35)	☐ Central Venous Catheter Insertion
36)	☐ Central Venous Catheter: Blood Sampling
37)	☐ Cervical Collar: Management
38)	☐ Cervical Traction Maintenance
39)	☐ Chest Physiotherapy: Postural Drainage
40)	☐ Chest Tube Insertion
41)	☐ Chest Tube Removal
42)	☐ Chest Tube: Closed Drainage Systems
43)	□ Code Management

	Competency List
44)	☐ Continuous ST-Segment Monitoring
45)	☐ Determination of Death: Advanced Practice
46)	☐ Diagnostic Peritoneal Aspiration and Lavage
47)	☐ Ear Irrigations
48)	□ Electrocardiogram: I2 Lead
49)	☐ Electrocardiogram: Right Precordial and Left Posterior Leads
50)	☐ Emergency Needle Thoracentesis
51)	☐ Emergency Primary Assessment
52)	☐ Emergency Secondary Assessment
53)	☐ Emergency Thoracotomy and Internal Defibrillation
54)	☐ End-Tidal Carbon Dioxide Monitoring
55)	☐ Endotracheal and Tracheostomy Tube Cuff Care
56)	☐ Endotracheal Tube and Tracheostomy Tube: Oxygen Administration
57)	☐ Endotracheal Tube Extubation and Tracheostomy Tube Decannulation
58)	☐ Endotracheal Tube Intubation
59)	☐ Endotracheal Tube Intubation: Advanced Practice
60)	☐ Endotracheal Tube: Skin and Oral Care
61)	☐ Epistaxis: Anterior Packing
62)	☐ Epistaxis: Insertion of Balloon Catheters
63)	☐ Epistaxis: Posterior Packing
64)	☐ Epistaxis: Topical Agents
65)	☐ Esophageal Foreign Body Removal
66)	☐ Esophageal Tracheal Double-Lumen Airway (Combitube)
67)	☐ Esophagogastric Tamponade Tube: Insertion and Care
68)	☐ External Defibrillation
69)	☐ External Jugular Venous Access
70)	☐ Fecal Impaction Removal
71)	☐ Feeding Tube: Medication Administration
72)	☐ Feeding Tube: Verification of Placement

	Competency List
73)	☐ Feeding Tubes: PEG, Gastrostomy, and Jejunostomy Care
74)	☐ Gastric Lavage for Gastrointestinal Bleeding
75)	☐ Gastric Lavage for Removal of Toxic Substances
76)	☐ Gauze and Elastic Bandages
77)	☐ Grief Support for Patients and Family
78)	☐ Hyperthermia Measures
79)	☐ Hypothermia Measures
80)	☐ Immobilization Devices
81)	☐ Intraabdominal Pressure Monitoring
82)	☐ Intravenous Therapy: Discontinuation
83)	☐ Intravenous Therapy: Dose and Flow Rate Calculation
84)	☐ Intravenous Therapy: Dressing Change
85)	☐ Intravenous Therapy: Initiation
86)	☐ Intravenous Therapy: Regulation of Flow Rate
87)	☐ Intravenous Therapy: Solution Change
88)	□ Laryngeal Mask Airway
89)	☐ Life-Sustaining Therapy: Withholding and Withdrawing
90)	☐ Lumbar Puncture
91)	☐ Massive Transfusion
92)	☐ Mechanical Ventilation: Volume and Pressure Modes
93)	☐ Medication Administration: Continuous Subcutaneous Infusion
94)	☐ Medication Administration: Intermittent Infusion Methods
95)	☐ Medication Administration: Intradermal Injection and Allergy Skin Testing
96)	☐ Medication Administration: Intramuscular Injection
97)	☐ Medication Administration: Intravenous Bolus
98)	$\hfill\square$ Medication Administration: Local Infiltration and Topical Agents for Wound Anesthesia
99)	☐ Medication Administration: Mixing Medications in One Syringe
100)	☐ Medication Administration: Nasal Instillation
101)	☐ Medication Administration: Nebulized

	Competency List
102)	☐ Medication Administration: Oral
103)	☐ Medication Administration: Rectal Suppositories
104)	☐ Medication Administration: Subcutaneous Injection
105)	☐ Medication Administration: Topical
106)	☐ Midline Catheter: Maintenance and Dressing Change
107)	☐ Midline Catheter: Removal
108)	☐ Moist Heat: Compresses and Sitz Baths
109)	☐ Nasal Cannula or Oxygen Mask Application
110)	□ Nasal Foreign Body Removal
111)	☐ Nasogastric Tube: Insertion, Irrigation, and Removal
112)	☐ Nasopharyngeal Airway Insertion
113)	☐ Nasopharyngeal Suctioning
114)	☐ Ophthalmic Foreign Body Immobilization
115)	☐ Oral Airway Insertion
116)	☐ Oxygen Therapy and Oxygen Delivery
117)	☐ Pain Relief
118)	Paracentesis
119)	☐ Patient Positioning: Dyspnea
120)	☐ Patient Positioning: Hypotension
121)	☐ Patient Positioning: Increased Intracranial Pressure
122)	☐ Patient Positioning: Lateral, Sims (Semiprone), and Log Rolling
123)	☐ Patient Positioning: Moving Up in Bed
124)	☐ Patient Positioning: Supine or Prone
125)	☐ Patient Positioning: Supported Fowler
126)	☐ Peak Expiratory Flow Measurement
127)	☐ Pelvic Examination
128)	☐ Peritoneal Lavage: Diagnostic: Advanced Practice
129)	□ Pneumatic Antishock Garment
130)	☐ Preoperative Care

	Competency List
131)	☐ Pressure Dressing
132)	☐ Pulmonary Artery Catheter Insertion (Assisting) and Monitoring
133)	☐ Pulmonary Artery Catheter: Mixed Venous Oxygen Saturation Sample
134)	☐ Pulse Oximetry
135)	☐ Pulsus Paradoxus Assessment
136)	□ Radial Pulse
137)	Restraint Application and Monitoring
138)	Resuscitation Bag: Manual Self-Inflating in Mechanically Ventilated Patients
139)	Right Atrial and Central Venous Pressure Monitoring
140)	☐ Seizure Precautions
141)	☐ Skin Traction
142)	☐ Specimen Collection: Capillary Blood Gases
143)	☐ Specimen Collection: Midstream (Clean-Voided) Urine
144)	$\hfill \square$ Specimen Collection: Nose and Throat Specimens for Culture
145)	☐ Specimen Collection: Sputum
146)	☐ Specimen Collection: Stool
147)	☐ Specimen Collection: Timed Urine Specimen
148)	☐ Specimen Collection: Urine from Indwelling Catheter
149)	$\label{eq:specimen} \square \ Specimen \ Collection: \ Urine \ Screening \ for \ Glucose, \ Ketones, \ Protein, \ Blood, \ pH, \ and \ Specific \ Gravity$
150)	☐ Specimen Collection: Wound Drainage
151)	$\hfill \square$ Spinal Immobilization: Cervical Collar, Backboard, and Vacuum Mattress
152)	☐ Splinting: General Principles
153)	☐ Splinting: Traction Splints
154)	☐ Splinting: Vacuum Splints
155)	☐ Staple and Suture Removal
156)	☐ Streptokinase for Acute Myocardial Infarction
157)	☐ Suctioning: Endotracheal and Tracheostomy Tube
158)	☐ Suctioning: Nasotracheal
159)	☐ Suctioning: Oropharyngeal

Competency List		
160)	☐ Symptom Management at End of Life	
161)	☐ Thoracentesis	
162)	☐ Tracheostomy Tube: Care and Suctioning	
163)	☐ Transfer Technique: Assisting Patients from Bed to Chair	
164)	☐ Transfer Technique: Assisting Patients to Sitting Position	
165)	$\hfill \Box$ Transfer Technique: Horizontal Transfer of Patients from Bed to Stretcher (Slide Board or Friction-Reducing Board)	
166)	☐ Transfer Technique: Using Mechanical Lifting Device	
167)	☐ Transfusion Reaction	
168)	☐ Urinary Catheter: Closed Continuous Irrigation	
169)	☐ Urinary Catheter: Indwelling Catheter Care	
170)	☐ Urinary Catheter: Indwelling Catheter Removal	
171)	☐ Urinary Catheter: Straight and Indwelling Catheter Insertion (Female)	
172)	☐ Urinary Catheter: Straight and Indwelling Catheter Insertion (Male)	
173)	☐ Urinary Catheter: Suprapubic Catheter Care	
174)	☐ Venous Cut down	
175)	☐ Ventilation: Bag Mask	
176)	☐ Ventilation: Mouth to Mask	
177)	☐ Whole Bowel Irrigation	
178)	☐ Wound Care: Amputation	
179)	☐ Wound Cleansing and Irrigation of Traumatic Wounds	
180)	☐ Wound Closure: Advanced Practice	
181)	☐ Wound Drainage Evacuation	
182)	☐ Wound Irrigation	