

Advanced Practice Clinical Nursing Diploma in Oncology

Final Clinical Exam Blueprint

Objectives:

The final clinical exam is designed to assess the competency of the candidate to:

- practice independently as a specialist, and provide consultation in the general domain of his/her specialty to other healthcare professionals.
- evaluate the knowledge of the candidate in relation to nursing care for patients with various oncologic disorders.
- assess the ability to formulate a comprehensive nursing plan based on assessment findings.
- evaluate nursing care plan outcomes for patients with different oncologic disorders.

Eligibility:

- Successful completion of the final written exam
- Successful completion of ongoing evaluations and competency check offs.
- Candidates are allowed a maximum of three attempts to pass the final clinical examination within a period of five years provided that evidence of continuing clinical practice is presented and approved by the scientific specialty council.
- If the candidate did not pass the three attempts, an exceptional attempt may be granted upon the recommendation of the nursing scientific council, provided evidence of continuing clinical practice is presented.
- Upon the recommendation of the nursing scientific council, a candidate who fails to pass the clinical examination including the exceptional attempt has to pass the diploma final written examination again, after which he/she is allowed to sit the final specialty clinical examination twice provided that evidence of continuing clinical practice is presented and approved by the nursing scientific council.
- After exhausting all the above attempts the candidate will not be permitted to sit the final clinical examination.

Rules:

- The examination is held once in two years and the date and time are determined by the Saudi Commission for Health Specialties (SCFHS).
- If the percentage of failures in the examination is 50% or more, the exam shall be repeated after 6 months. Upon the approval of the General Secretary and at the discretion of the Nursing Examination Committee the exam may be repeated even if failure is less than 50% with a maximum number of two exams per academic year.

Examination Format:

- a. The final clinical exam consists of 12 stations of which 10 are OSCE stations and 2 are Structured Oral Exam (SOE) stations.

- b. All stations shall be designed to assess integrated clinical encounters.
- c. OSCE stations are encouraged to be manned stations (with real or simulated patients).
- d. SOE component shall be conducted using predetermined questions and unified ideal answers.
- e. Clinical evaluation in OSCE/SOE questions/scenarios will include nursing assessment, diagnosis, intervention, and evaluation in relation to different oncologic disorders as well as various clinical procedures/competencies.
- f. The examination content covers topics relevant to oncology nursing as well as evidence based practice, professionalism, ethics.
- g. SOE case development shall follow SCFHS standards.
- h. OSCE station development shall comply with SCFHS OSCE manual.
- i. The time allocation for each station is 15 minutes per encounter.

Passing Score:

- a. The pass/fail cut off for each OSCE/SOE station is determined by the Nursing Examination Committee prior to conducting the exam using a Minimum Performance Level (MPL) Scoring System.
- b. Each station shall be assigned an MPL based on the expected performance of a minimally competent candidate. The Nursing Examination Committee shall approve station MPLs prior to the exam.
- c. At least one examiner marks each OSCE station and two examiners independently mark each part of the SOE.
- d. To pass the examination, a candidate must attain a score > MPL in at least 70% of the number of stations and 60% in each component (OSCE and SOE). (Please refer to the SCFHS website: www.scfhs.org.sa)

Score Report:

All score reports shall go through a post-hoc item analysis before being issued and approved by the SCFHS and Nursing Examination Committee within two weeks of the examination.

Examiners Conduct

All examiners' conduct shall be exemplary and satisfy the highest professional standards including their personal demeanor, inter-action with candidates and colleagues, as well as adherence to the rules and regulations, including grading practices. The chairperson of the Nursing Examination Committee shall be responsible for ensuring the standards of all the examiners, including any external examiner.

Exemption:

Exemption from this examination is not permitted. Requests for exam exemption should be directed to the nursing scientific board for review and feedback and recommendation to the Saudi Commission Executive Council.

Final Clinical Exam Blueprint

		Dimensions of Care					Number of Stations
		Health Promotion, Prevention and Early Detection	Cancer Treatment Modalities	Symptoms Management	Oncologic Emergencies	End of Life Care	
		1 Station	4 Stations	4 Stations	2 Stations	1 Station	
Domains Learning	Cognitive and Critical Thinking Skills		1	3	1		5
	5 Stations						
	Psychomotor/Procedural Skills		3	1	1		5
	5 Stations						
Affective (Ethical & Psychosocial) Skills	1				1	2	
2 Stations							
Total Stations		1	4	4	2	1	12

Definitions

Dimensions of Care	Focus of care for the patient, family, community, and/or population
Health Promotion, Prevention and Early Detection	Refers to nursing activities that involve assessment, planning, intervention, and evaluation of the public, and patients with early stages of cancer for the aim of promoting healthy life style, prevention and early detection of cancer
Cancer Treatment Modalities	Refers to nursing activities that involve assessment, planning, intervention, and evaluation of the cancer patient receiving single or combined treatment modality such as chemotherapy, biologic and targeted therapy, surgical procedures, and radiation therapy
Symptom Management	Refers to nursing activities that involve assessment, planning, intervention, and evaluation of the cancer patient experiencing symptoms related to cancer and/or cancer treatment
Oncologic Emergencies	Refers to nursing activities that involve assessment, planning, intervention, and evaluation of the patient at risk or experiencing a medical emergency related cancer or cancer treatment
End of Life Care	Refers to nursing activities that involve assessment, planning, intervention, and evaluation of the patient requiring end of life and palliative care and encompassing the physical, psychosocial, spiritual, ethical dimensions of care

Domains	Reflects the scope of practice & behaviors of a practicing clinician
Cognitive and Critical Thinking Skills	Refers to those skills that involve intellectual skills. This includes recalling of scientific basis of practice such as facts about process of carcinogenesis, pathophysiology. The learner is expected to demonstrate knowledge, comprehension, application, analysis, synthesis, and evaluation skills in response to a clinical patient scenario.
Psychomotor/Procedural Skills	Refers to those skills that involve physical movement which demonstrate the motor skills such as use of instruments or equipment, or actions which evidence gross motor skills.
Affective (Ethical & Psychosocial) Skills	Refers to those skills that involve behaviors indicating attitudes, attention, concern, ability to listen and respond in interactions with others, and ability to demonstrate compassion and values which are appropriate to the scenario.

OSCE Station Example

EXTRAVASATION

Instructions to candidate: (15 minutes)

Muneera is a 47 years old, female, diagnosed with Left Breast Cancer with node involvement. Her plan of treatment consists of a total left breast mastectomy with sentinel node removal, then Adriamycin and Cyclophosphamide every 3 weeks for a total of 4 cycles and Taxotere of 3 weeks for a total of 4 cycles.

Muneera came to the infusion area accompanied by a clinic nurse who endorsed to you that Muneera has already had surgery and received 2 cycles of AC (Adriamycin and Cyclophosphamide). This was her 3rd cycle.

You introduced yourself, made Muneera comfortable in one of the treatment chairs, and proceeded to check her lab results. As per the date of the lab results, you realized that she had her labs drawn just a few hours before coming to you.

Labs were within normal limits, you confirmed the order with Pharmacy, and prepared to insert a peripheral IV access.

How would you initially assess and prepare the patient before administering the Adriamycin?

The trainee is expected to:

- Perform hand hygiene before patient contact.
- Verify the correct patient using two identifiers.

- Review the chemotherapeutic agents to be administered and note their vesicant properties.
- Review drug information about the vesicant agent, as well as the antidote and treatment of extravasation, before administration.
- Assess the patient for risk factors for extravasation and document the findings.
- Ensure extravasation kit or antidotes are accessible.

The trainee will be asked to start an IV access?

The trainee is expected to:

- Assess the access site, including skin and vein integrity; the length and type of prescribed therapy; and the venue of care.
- Choose a large peripheral vein to administer the chemotherapy.
- Avoid fingers, hands, and points of flexion.
- When inserting the cannula, start distally and move proximally.
- Avoid sites distal to preexisting conditions, such as edema or lymphedema.
- Choose a small-gauge, plastic cannula instead of a metal needle, such as a butterfly set, if clinically feasible.

You found the perfect vein and inserted the cannula without difficulty. You connected the normal saline IV tubing, and it flowed freely. On initial assessment you had excellent blood return from the IV site. You administered the pre-medication via the IV line using an IV pump, 30 minutes later you prepared to push the Adriamycin, first donning the recommended PPE.

You checked the chemo with another nurse, the dose was 120 mg which you received in 2 separate syringes 60 cc each.

What steps should you follow immediately before starting the push?

The trainee is expected to:

- Perform hand hygiene.
- Verify the patient using two identifiers.
- Confirm with the patient the planned treatment, and verify the drug name, dose, volume, rate and route of administration, expiration dates and times, and appearance and integrity of the drugs.
- Check the Label of the medication, the medication container, and other solutions.
- Ensure the six rights of medication safety: right medication, right dose, right time, right route, right patient, and right documentation.
- Label the tubing at a site close to the patient and at a site close to the source when there are different access sites or several bags.
- Trace tubing or catheter from the patient to point of origin before connecting or reconnecting any infusion.
- Check vital signs immediately after making any connection.
- Determine that a blood return can be obtained from the IV site before infusing any chemotherapeutic agent.

- Verify patency before administering chemotherapy, if the peripheral line does not have a blood return, the trainee should not use it for chemotherapy, the trainee would be expected to discontinue the line and start another IV line.

All is well, and you begin your push. How will you administer Adriamycin safely?

The trainee is expected to:

- Don double chemotherapy gloves, gown, and eye protection according to the organization's practice for administering chemotherapy.
- Determine patency by assessing blood return and by infusing IV fluids at a high flow rate.
- Observe the venipuncture site and surrounding area throughout the entire vesicant infusion or IV bolus push to ensure that no swelling, erythema, or local pain is present.
- Check the patency of an IV bolus push of medication every 2 to 5 ml.
- Question the patient repeatedly during the administration about pain, stinging, or changes in sensation at the IV site.

While you are pushing the Adriamycin through the IV line the patient starts to complain of burning sensation, what are the priority actions that should be taken?

The trainee is expected to:

- Stop the infusion immediately.
- Disconnect IV tubing without flushing the line. Attach 3-ml syringe, and attempt to aspirate as much drug as possible; then discard in a chemotherapy or biotherapy designated waste box.
- Notify practitioner of possible extravasation.
- Measure and document the area of edema or erythema, photograph area and document with date and time in picture.
- Administer a dexrazoxane IV as prescribed within 6 hours of extravasation or as soon as possible.
- Apply ice over tissue that is extravasated with an anthracycline.
- Remove ice 15 minutes before initiating the dexrazoxane treatment to allow blood flow to the area of extravasation.
- Administer intravenously away from the extravasation site, such as the opposite arm.
- Monitor complete blood count and liver enzyme levels, including granulocyte and platelet counts.

Station Example

Instructions to candidate: (15 minutes)

Noor is a 42- year-old unmarried Saudi, female with newly diagnosed locally advanced right breast cancer. Noor recently discovered a non-painful mass incidentally while showering. Pathology: Infiltrating ductal carcinoma, ER+ / Her-2 +, Stage III

Treatment: Neoadjuvant chemotherapy (before surgery), surgery, radiation therapy, Trastuzumab treatment every three weeks for one year and hormonal therapy for duration of 5 years.

She has received the first of four planned cycles of Adriamycin and Cyclophosphamide.

Noor explains that 7 days after completing chemotherapy, she measured a temperature of 38.9 degrees and complained of extreme fatigue. She presented to the local emergency room and was found to have an absolute neutrophil count of 0.9. She was treated appropriately and later discharged.

1. *What is the normal value of the Absolute Neutrophil Count?*
The ANC should be above 1.5
2. *Is Noor's ANC normal?*
No
3. *What is the name of this condition?*
Neutropenia
4. *Explain the role of the neutrophils.*
Neutrophils are mature white blood cells responsible for protecting the body from bacterial infections.

After Cycle 4 of chemotherapy Noor notices that her skin is extremely dry and there are bruises appearing on her legs after she bumps into the furniture. She feels well. Temperature is 37.2. A CBC reveals a platelet count of 65,000. She calls the office and asks your advice.

5. *Is the platelet count normal?*
No
6. *What is the name of this condition?*
Thrombocytopenia.
7. *What is the normal platelet count required before proceeding with chemotherapy?*
The normal value is > 100,000 to start chemotherapy. The normal range is 100-450 or 100,000-450,000.
8. *What is the role of the platelets?*
The role of the platelet is to prevent bleeding within the coagulation process.
9. *What type of medication would you anticipate Noor to receive after the second cycle of chemotherapy?*
Noor would likely receive a GCSF (granulocyte-colony stimulating factor) such as Filgrastim and / or Epogen (Epotien alfa)
10. *What do these drugs do?*
Stimulate white and red blood cells.
11. *How will these drugs affect Noor's condition?*

An increased number of white blood cells (neutrophils) will protect Noor from potential infections, especially sepsis, which could be fatal. An increased number of red blood cells will prevent Noor from spontaneous or prolonged bleeding.

12. *What treatment did the patient likely receive in the emergency room?*

The patient will likely receive cultures of blood, sputum, urine and invasive lines, antibiotics, antipyretics and fluids. Should specify that first dose of antibiotics is given after cultures are taken.

13. *How would you educate Noor?*

Educate on neutropenic precautions:

- a. Avoiding crowds and known ill patients.
- b. Wash hands frequently.
- c. Avoid undercooked food.
- d. Wash fresh vegetables and fruits well to rid of bacteria.
- e. Report to the Emergency Room if fever above 38.5 on one reading, or 38 for more than one hour.
- f. Report to the emergency room if severe chills and fatigue develop, even in the absence of a fever.