

# **FELLOWSHIP IN ONCOLOGY CARE NURSING**

## **ABOUT THE COURSE:**

Malla Reddy School of Nursing Science and Technology believes that registered nurses need to be trained in Oncology Care Nursing in clinical and community settings in order to provide competent care to cancer patients and enhance their quality of life. Nurses play vital role in prevention, promotion, curative, rehabilitative and palliative care. Expanding roles of nurses and advances in technology necessitate additional training to prepare them for effective participation in providing such vital role. This Fellowship program is designed for nurses to enhance their knowledge and skills towards oncology care nursing.

This fellowship course is developed to help the student to recognize the etiology, pathophysiology, symptomatology, diagnostic measures, and management of patients with malignant conditions affecting various systems. The course will further help the graduates to acquire knowledge and skills in providing comprehensive nursing care to such patients and attempts to explore and expand nursing knowledge through nursing research.

## **OBJECTIVES:**

The graduates of fellowship students will be able to:

- Relate the knowledge of basic sciences related to oncology care nursing in various clinical settings.
- Enlighten the properties of cancer cells, etiology, prevention, screening, and early detection of cancer.
- Identify and assist in the diagnostic measures in various malignant conditions.
- Recognize the role of nurses in various therapies used for patients with oncological disorders.
- Categorize nursing processes in providing comprehensive care to cancer patients.
- Recognize the nutritional problems of cancer patients and their management.
- Communicate effectively with patients and families of cancer patients.

## **ELGIBILITY**

- Registered BSc Nursing in India or equivalent.

**DURATION:** 52 Weeks or One Academic Year

## **COURSE DESCRIPTION**

The course is designed to prepare registered B.Sc (N) with specialized knowledge, skills, and attitude in providing advanced quality care to oncology patients, their families, and communities at primary, secondary, and tertiary levels of care.

## **EVALUATION**

The examination will be conducted by school of nursing science and technology, Malla Reddy Vishwavidhyapeeth deemed to be university.

## **CRITERIA TO APPEAR THE EXAM**

- 80% attendance in theory
- 100% attendance in practical

## **CRITERIA TO PASS**

- In order to pass a candidate should obtain 50% in theory and 50% in practical separately
- A candidate should get 50% in internal assessment.

## **AWARD OF CERTIFICATE**

Certificate will be awarded by Malla Reddy Vishwavidhyapeeth deemed to be university

<b>S.No</b>	<b>COURSE CODE</b>	<b>SUBJECTS</b>	<b>THEORY</b>	<b>LAB</b>	<b>CLINICAL</b>	<b>TOTAL</b>
1		Basic Nursing For Oncology (No Exam)	60	20	120	200
2		Oncology Nursing – I	80	20	300	400
3		Oncology Nursing – II	80	20	300	400

## BASIC NURSING FOR ONCOLOGY CARE

**Theory: 60 hours**

**Lab: 20 hours**

**Practical: 120 hours**

Unit	Hours	Learning objectives	Content	Teaching Learning Activity	Assessment Methods
Unit I	10	Review psychological principles relevant to healthcare	<b>Psychology</b> <ul style="list-style-type: none"> <li>➤ Review               <ul style="list-style-type: none"> <li>• Individual differences</li> <li>• Learning, motivation, attention, &amp; perception</li> <li>• Emotions</li> <li>• Human behavior &amp; needs in crisis</li> <li>• Stress &amp; coping in crisis situations</li> <li>• Leadership</li> <li>• Communication &amp; IPR</li> <li>• Counseling</li> <li>• Attitudes &amp; humanizing care</li> </ul> </li> </ul>	Lectures, group discussions, role plays	Written test, group presentation, reflective journaling
Unit II	10	Understand sociological aspects in health and community	<b>Sociology</b> <ul style="list-style-type: none"> <li>➤ Review               <ul style="list-style-type: none"> <li>• Social organization &amp; community resources</li> <li>• Leadership roles in community</li> <li>• Family and family relationships</li> <li>• Socio cultural influences</li> </ul> </li> </ul>	Case studies, community visits, seminar	Viva, case study analysis
Unit III	10	Review basic microbiological concepts relevant to nursing	<b>Microbiology</b> <ul style="list-style-type: none"> <li>➤ Review               <ul style="list-style-type: none"> <li>• Immunity</li> <li>• Infection</li> <li>• Principles of asepsis, sterilization &amp; disinfection</li> <li>• Diagnostic tests in microbiology &amp; related nurses' responsibility</li> <li>• Standard safety measures &amp; biomedical waste management</li> </ul> </li> </ul>	Lab demonstrations, simulations, lectures	Practical exam, quiz
Unit IV	10	Review structure and function of human body	<b>Applied Anatomy &amp; Physiology</b> <ul style="list-style-type: none"> <li>➤ Review               <ul style="list-style-type: none"> <li>• Cell structure and physiology</li> <li>✓ Normal cell</li> </ul> </li> </ul>	Diagram practice, case-based learning,	Written exam, OSCE (Objective

		systems	<p>✓ Malignant cell</p> <ul style="list-style-type: none"> <li>• Neurological system</li> <li>• Respiratory system</li> <li>• Blood and lymphatics</li> <li>• Cardiovascular system</li> <li>• Gastro intestinal system</li> <li>• Endocrine system</li> <li>• Musculoskeletal system</li> <li>• Genitourinary system</li> <li>• Reproductive system</li> <li>• Sensory system</li> </ul> <p>Documentation and Instruction to be taken while taking opioids</p> <ul style="list-style-type: none"> <li>• Nurses role while administering opioids and observing the client for side-effects.</li> </ul>	multimedia teaching	Structured Clinical Examination)
Unit V	10	Understand pharmacological concepts and nurse's role in drug administration	<p><b>Pharmacology</b></p> <ul style="list-style-type: none"> <li>➤ Review</li> <li>• Pharmacokinetics</li> <li>• Analgesics</li> <li>• Sedatives and Narcotics</li> <li>• Antibiotics, antiseptics</li> <li>• Drug reaction &amp; toxicity</li> <li>• Drugs used in cancer chemotherapy</li> <li>• Blood and blood components</li> <li>• Principles of drug administration, role of nurse and care of drugs</li> </ul>	Drug chart review, medication demonstrations	MCQ test, prescription analysis
Unit VI	10	Enhance communication and interpersonal relationship skills	<p><b>Communication skills and IPR</b></p> <ul style="list-style-type: none"> <li>• Process and methods</li> <li>• Establishing and maintaining good IPR &amp; communication with family, staff and colleagues</li> <li>• Multidisciplinary team and role of nurse</li> <li>• Breaking bad news</li> <li>• Guidance and counseling</li> </ul>	Role play, peer interaction, audio-visual aids	Role play evaluation, peer feedback, oral presentation

## ONCOLOGY CARE NURSING – I

**Theory: 80 hours**

**Lab: 20 Hours**

**Practical: 300 hours**

Unit	Hours	Learning objectives	Content	Teaching Learning Activity	Assessment Methods
Unit - I	10	Understand types of brain tumors and nursing care approaches	<b>Tumors of the brain and central Nervous System</b> <ul style="list-style-type: none"> <li>- Gliomas, pituitary tumors</li> <li>- Meningioma, pineal tumors</li> <li>- Metastasis brain tumor</li> </ul> <b>-Nursing Care of patients with brain tumors undergoing radiation therapy / chemotherapy / surgery</b>	Case discussions, clinical exposure, videos	Written test, case study analysis
Unit - II	15	Learn types, treatment, and nursing care in head and neck cancers	<b>Head &amp; Neck Cancers</b> <ul style="list-style-type: none"> <li>• Cancers of Nasopharynx, Paranasal sinuses, oral cavity, and oropharynx</li> <li>• Cancers of larynx and hypopharynx</li> <li>• Tumors of salivary, orbit &amp; eye</li> <li>• Neck dissections</li> <li>• Reconstructive surgery</li> <li>• Nursing care of patients undergoing head &amp; neck surgery</li> <li>• Nurses' role in rehabilitation</li> </ul>	Simulation, surgical video review, role plays	OSCE, oral exam
Unit - III	15	Gain foundational understanding of oncology nursing and cancer biology	<b>Introduction to oncology nursing;</b> <ul style="list-style-type: none"> <li>• Biology of cancer</li> <li>• Etiology of cancer</li> <li>• Epidemiology of cancer</li> <li>• Warning signs</li> <li>• Pathogenesis of cancer</li> <li>• Staging of tumors</li> <li>• Cancer prevention, screening and Early detection and nurses role</li> <li>• Standards of oncology nursing practice principle of cancer management</li> <li>• Role and responsibility of oncology nurse</li> </ul>	Lectures, interactive Q&A, group work	MCQs, group presentation

			<ul style="list-style-type: none"> <li>• Cancer care setting and role of nurse in different settings</li> <li>• Nursing process</li> </ul>		
Unit IV	20	Understand diagnostic procedures and nurses' responsibilities	<b>Techniques of Diagnosis</b> <ul style="list-style-type: none"> <li>• Fine needle Aspiration Cytology</li> <li>• Biopsies</li> <li>• Endoscopy</li> <li>• Laproscopy</li> <li>• Histopathology</li> <li>• Cytology</li> <li>• Computed tomography</li> <li>• MRI</li> <li>• Radio nuclide imaging</li> <li>• Ultra sound</li> <li>• Functional and metabolic imaging</li> <li>• Using radiotopes</li> <li>• Pap smear</li> <li>• Nurses responsibility in diagnostic measures</li> </ul>	Diagnostic tool demonstrations, hospital visits	Objective structured assessments, quiz
Unit V	20	Learn principles and nursing care in various treatment modalities	<b>Radiotherapy</b> <ul style="list-style-type: none"> <li>• Principles and techniques of radiotherapy <ul style="list-style-type: none"> <li>➤ Nature of radioactivity</li> <li>➤ Radio active elements</li> <li>➤ Radio biology</li> <li>➤ Types and sources</li> <li>➤ Principles of radiation protection</li> </ul> </li> <li>• Radiotherapy- brachytherapy LDR,HDR, interstitial implantation</li> <li>• Teletherapy / treatment planning/ stimulation</li> <li>• Adverse effect and their management</li> <li>• Nurse role</li> </ul> <b>Chemotherapy</b> <ul style="list-style-type: none"> <li>• Principle and classification of chemotherapeutics</li> <li>• Safe handling and administration</li> <li>• Side effects, complications and management</li> </ul>	Role play, group seminars, expert sessions, clinical demonstrations	Practical exam, written test, case-based discussion

			<ul style="list-style-type: none"> <li>• Future directions and advances</li> <li>• Nurses role</li> </ul> <p><b>Surgery:</b></p> <ul style="list-style-type: none"> <li>• Principles of surgical oncology</li> <li>• Special surgical techniques</li> <li>• Palliative Surgery</li> <li>• Pre operative &amp; postoperative nursing care</li> <li>• Care of flaps and amputations</li> <li>• Future directions and advances</li> </ul> <p><b>Biotherapy:</b></p> <ul style="list-style-type: none"> <li>• Major biologic response modifiers</li> <li>• Nurses' role in Biotherapy</li> <li>• Monoclonal antibodies &amp; immunomodulating agents</li> </ul> <p><b>New approaches</b></p> <ul style="list-style-type: none"> <li>• Gene therapy, Immuno – toxin therapy and Vaccines</li> <li>• AIDS related Malignancies</li> </ul>		
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## ONCOLOGY CARE NURSING – II

**Theory: 80 hours**

**Lab: 20 Hours**

**Practical: 300 hours**

Unit	Hours	Learning objectives	Content	Teaching Learning Activity	Assessment Methods
Unit-I	08	Understand types of lung and mediastinal tumors and related nursing care	<p><b>Tumors of Lung and Mediastinum</b></p> <ul style="list-style-type: none"> <li>• Small cell lung cancer &amp; Non-small cell lung cancer</li> <li>• Neoplasms of the mediastinum and thymic neoplasms</li> <li>• Nursing care of patients undergoing radiation therapy / chemotherapy / surgery</li> <li>• Nursing implications in intercostal drainage</li> </ul>	Clinical demonstrations, case studies	Case study discussion, MCQs
Unit-II	08	Learn screening, diagnosis,	<p><b>Cancer of the Breast</b></p> <ul style="list-style-type: none"> <li>• Screening, diagnosis &amp; staging</li> <li>• Clinical features</li> </ul>	Breast models, role play,	OSCE, written test

		treatment, and care	<ul style="list-style-type: none"> <li>• Primary tumors of the breast</li> <li>• Treatment of breast cancer</li> <li>• Nursing care of patients undergoing surgery / radiotherapy/chemotherapy</li> <li>• Nurses' role in rehabilitation</li> </ul>	counseling simulation	
Unit - III	10	Identify GI cancers and nursing management	<b>Gastrointestinal Tumor</b> <ul style="list-style-type: none"> <li>• Oesophagus, stomach, liver, pancreas, and rectal cancers</li> <li>• Nursing care of patients undergoing surgery/ radiotherapy/chemotherapy</li> <li>• Care of ostomies</li> </ul>	Ostomy care demo, video teaching	Practical assessment, scenario-based questions
Unit- IV	08	Understand GU cancers and nursing responsibilities	<b>Genitourinary Cancers</b> <ul style="list-style-type: none"> <li>• Cancers of kidney, ureter, bladder, prostate, testis &amp; penis</li> <li>• Nursing care of patients undergoing surgery/radiotherapy/chemotherapy</li> </ul>	Visual lectures, patient care plans	Case presentation, viva
Unit- V	08	Learn types, diagnosis, and nursing care	<b>Gynaecologic Cancers</b> <ul style="list-style-type: none"> <li>• Cancer of cervix, endometrium, ovary, vulva &amp; vagina</li> <li>• Nursing care of patients undergoing surgery/radiotherapy/chemotherapy</li> </ul>	Simulation labs, patient stories	MCQs, reflective writing
Unit- VI	08	Understand endocrine cancers and treatment	<b>Cancer of Thyroid &amp; Adrenal Glands</b> <ul style="list-style-type: none"> <li>• Epidemiology, etiology, pathology, diagnosis &amp; staging, and treatment of cancer of Thyroid, Parathyroid &amp; Adrenal glands.</li> <li>• Nursing care of patients undergoing surgery</li> <li>• Nursing implications in Radio Iodine therapy</li> </ul>	Video case review, discussion	Written test, Q&A
Unit- VII	05	Identify types and management	<b>Skin Cancers</b> <ul style="list-style-type: none"> <li>• Sarcoma of soft tissue and bone</li> <li>• Basal cell carcinoma</li> <li>• Squamous cell carcinoma</li> <li>• Malignant melanoma</li> <li>• Nursing care of patients undergoing surgery / radiotherapy / chemotherapy</li> </ul>	UV exposure prevention demo, patient education	Quiz, role play



Unit-VIII	12	Understand hematologic malignancies and nursing interventions	<b>Leukemia &amp; Lymphoma</b> <ul style="list-style-type: none"> <li>• Acute Leukemia</li> <li>• Chronic Leukemia</li> <li>• Hairy cell Leukemia</li> <li>• Myelodysplastic Syndrome</li> <li>• Hodgkin's and Non-Hodgkin's Lymphoma</li> <li>• Nursing care in all types of leukemia &amp; Lymphoma</li> <li>• Nursing implications in bone marrow depression</li> </ul>	Flowcharts, lab interpretation	Clinical scenario exam
Unit-IX	05	Learn etiology, features, and nursing care	<b>Multiple Myeloma</b> <ul style="list-style-type: none"> <li>• Etiology &amp; risk factors</li> <li>• Clinical features, diagnosis &amp; staging</li> <li>• Treatment &amp; prognosis</li> <li>• Management of complications</li> <li>• Nursing management</li> </ul>	Chart reviews, symptom management workshops	MCQs, care plan submission
Unit-X	08	Understand transplant processes and nursing care	<b>Bone Marrow &amp; Stem Cell Transplantation (BMT &amp; PBST)</b> <ul style="list-style-type: none"> <li>• Indications, procedure, principles &amp; process of transplantation</li> <li>• Associated complications and management</li> <li>• Nursing implications in BMT &amp; PBST</li> </ul>	Expert talks, process videos	Viva, case-based quiz
Unit-XI	08	Identify bone and soft tissue cancers and their management	<b>Bone Cancers &amp; Cancers &amp; Soft Tissue Sarcoma</b> <ul style="list-style-type: none"> <li>• Osteosarcoma, Chondrosarcoma</li> <li>• Fibrosarcoma, Ewing's sarcoma, Soft tissue sarcomas</li> <li>• Nursing care of patients undergoing surgery/radiotherapy/chemotherapy</li> <li>• Nurses' role in rehabilitation</li> </ul>	Surgical case studies, group discussion	Written test, group presentation
Unit-XII	15	Recognize and manage emergencies in cancer care	<b>Oncological Emergencies</b> <ul style="list-style-type: none"> <li>• Disseminated intravascular coagulation (DIC), hypercalcemia</li> <li>• Malignant pleural effusion</li> <li>• Neoplastic cardiac tamponade &amp; septic shock, Spinal cord compression</li> </ul>	Emergency drills, simulation labs	OSCE, emergency response evaluation

			<ul style="list-style-type: none"> <li>• Superior vena cava syndrome</li> <li>• Metabolic emergency</li> <li>• Surgical emergency</li> <li>• Urological emergency</li> <li>• Nurses role in managing oncologic emergencies</li> </ul>		
Unit-XIII	12	Understand pediatric cancer types and specialized nursing care	<b>Pediatric Malignancies</b> <ul style="list-style-type: none"> <li>• Leukemia, Lymphoma, Neuroblastoma</li> <li>• Wilm's tumor, Soft tissue sarcoma, Retinoblastoma</li> <li>• Nursing Management of children with Pediatric Malignancies</li> </ul>	Pediatric mannequin, caregiver interviews	Pediatric case review, viva

### ONCOLOGICAL CARE AT END STAGE

Unit	Hours	Learning objectives	Content	Teaching Learning Activity	Assessment Methods
Unit-I		Understand philosophy and elements of palliative care and the nurse's role	<b>End stage care</b> <ul style="list-style-type: none"> <li>• Definition &amp; Scope, Philosophy</li> <li>• Concept &amp; Elements of Palliative Care</li> <li>• Global &amp; Indian perspective of Palliative Care</li> <li>• Quality of life issues</li> <li>• Communication Skill</li> <li>• Nursing perspective of Palliative Care &amp; its elements</li> <li>• Home care</li> <li>• Hospice care</li> <li>• Role of nurse in palliative care</li> </ul>	video demonstrations, patient narratives	Reflective journals, case-based discussion
Unit-II		Address sexual health and counseling in cancer care	<b>Impact of Cancer on Sexuality</b> <ul style="list-style-type: none"> <li>• Effect of Radiotherapy/Chemotherapy/Surgery on Sexuality of the cancer patient</li> <li>• Nursing management of cancer patients experiencing sexual dysfunction</li> <li>• Sexual counseling</li> </ul>	Role play, peer discussions, expert session	Case scenario evaluation, OSCE
Unit - III		Support psychosocial and spiritual needs,	<b>Psychosocial, Spiritual &amp; Ethical Issues</b> <ul style="list-style-type: none"> <li>• Psychological reactions of patients with cancer</li> <li>• Spiritual/cultural care &amp; needs</li> </ul>	Group work, cultural care planning,	Presentations, essay writing, role play

		address ethical concerns	<ul style="list-style-type: none"> <li>• Ethics - definition, principles, euthanasia</li> <li>• Counseling skills, family counseling</li> <li>• Nursing interventions of psychosocial problems</li> </ul>	ethical debates	
Unit-IV		Provide compassionate care to terminally ill patients and their families	<b>Care of the Dying Patient</b> <ul style="list-style-type: none"> <li>• Care of the terminally ill</li> <li>• Grief and grieving process</li> <li>• Bereavement support</li> </ul>	Hospice visit, simulation with standardized patients, video case analysis	Practical exam, reflective assessment, group discussion

### Research Activity:

An independent research is to be carried out by the student.

## ESSENTIAL ONCOLOGY NURSING SKILLS

### I. Procedures Observed

1. Chemotherapy Administration (IV, oral, intrathecal)
2. Radiation Therapy Procedures (External Beam, Brachytherapy)
3. Bone Marrow Aspiration & Biopsy
4. Central Venous Access Device Insertion (e.g., PICC, Port-a-Cath)
5. Oncological Surgeries (e.g., Mastectomy, Colectomy, Nephrectomy)
6. Imaging Studies (e.g., PET scan, CT, MRI for staging)
7. Stem Cell/Bone Marrow Transplant Procedures
8. Palliative Care Interventions
9. Hospice Care and End-of-Life Discussions

### II. Procedures Assisted

1. Preparation and Monitoring for Chemotherapy
2. Handling and Disposal of Cytotoxic Drugs
3. Central Line Care (e.g., Flushing, Dressing Change)
4. Management of Radiation Therapy Side Effects

5. Administration of Antiemetics and Supportive Therapies
6. Blood Transfusion for Anemia or Thrombocytopenia
7. Paracentesis and Thoracentesis
8. Pain Management and Opioid Titration
9. Nutritional Therapy (Enteral/Parenteral Feeding)
10. Psychosocial Support and Counseling
11. Monitoring for Tumor Lysis Syndrome
12. Infection Control for Immunocompromised Patients
13. Management of Oncological Emergencies:
  - Spinal cord compression
  - Superior vena cava syndrome
  - Febrile neutropenia

### **III. Procedures Performed**

#### **1. Assessment & Monitoring**

- Initial and Ongoing Patient Assessment
- Pain and Symptom Assessment
- Skin and Oral Mucosa Assessment (for mucositis)
- Monitoring for Side Effects of Chemotherapy and Radiation
- Vital Signs, Intake/Output Monitoring
- Neutropenic Precautions
- Fall Risk and Pressure Ulcer Prevention

#### **2. Patient Care Management**

- Administration of Oral Chemotherapeutic Agents
- Care of Patients on Immunosuppressive Therapy
- IV Therapy: Medication Administration, Fluid Management
- Nutritional Support: TPN, Tube Feeding, Monitoring Intake
- Education on Self-Care, Side Effects, and Medication Compliance
- Teaching on Use and Care of Central Venous Devices
- Coordinating Multidisciplinary Care (Nutrition, Social Work, Palliative Team)

### **3. Symptom Management**

- Management of Nausea, Vomiting, Diarrhea, and Constipation
- Management of Cancer-related Fatigue
- Wound and Ostomy Care (e.g., for post-surgical oncology patients)
- Skin Care during Radiation Therapy
- Oral Care for Mucositis/Stomatitis
- Management of Lymphedema

### **4. Infection Prevention**

- Aseptic Technique in All Procedures
- Strict Hand Hygiene and PPE Usage
- Safe Handling and Disposal of Chemotherapeutic Agents
- Monitoring for Signs of Infection in Neutropenic Patients

### **5. Psychosocial and Palliative Care**

- Therapeutic Communication and Emotional Support
- Counseling Patients and Families on Diagnosis and Prognosis
- Supporting Grief and Bereavement
- Spiritual and Cultural Sensitivity in End-of-Life Care
- Advanced Directives and Code Status Discussions
- Collaboration with Hospice Services

**Signature of Resident/SNO**