CLINICAL SPECIALITY-II

MEDICAL SURGICAL NURSING - ONCOLOGY NURSING

Placement: II year M.Sc Nsg.

Hours of Instruction

Theory : 150 hours Practical : 950 hours Total : 1100 hours

Course Description:

This course is designed to assist students in developing expertise and in-depth understanding in the field of oncology Nursing. It will help students to develop advanced skills for Nursing intervention in various oncological conditions. It will enable the student to function as oncology nurse practitioner/specialist and provide quality care. It will further enable the student to function as educator, Manager, and researcher in the field of oncology nursing.

Objectives:-

- 1. Explain the prevention, screening and early detection of cancer.
- 2. Describe the epidemiology, etiology, pathophysiology and diagnostic assessment of oncological disorders of various body systems.
- 3. Describe the psychological effects of cancer on patients and families.
- 4. Demonstrate skill in administrating/ assisting in various treatment modalities used for patients with cancer.
- 5. Apply nursing process in providing holistic care to patients with cancer.
- 6. Apply specific concepts on pain Management.
- 7. Appreciate the care of death and dying patients and value of bereavement support.
- 8. Describe the philosophy, concept and various dimensions of palliative care.
- 9. Appreciate the role of alternative systems of medicine in care of cancer patients.
- 10. Appreciate the legal & ethical issues relevant to oncology nursing
- 11. Recognize and manage Oncological emergencies.
- 12. Counsel the patients with cancer and their families.
- 13. Incorporate evidence based nursing practice and identify the areas of research in the field of oncology nursing.
- 14. Recognize the role of oncology nurse practitioner as a member of oncology item.
- 15. Collaborate with other agencies and utilize resources in caring for cancer patients.
- 16. Teach and supervise nurses and allied health workers.
- 17. Design a layout and develop standards for management of oncology units/hospitals and nursing care.

COURSE OUTLINE

	Time		-	
Unit	Hou		Content	
	Т	Р		
I	4		Introduction	
		•	Epidemiology- incidence,	
			Prevalence- Global,	
			National, State and Local	
		•	Disease burden, concept of	
	1 1 1		cancer, risk factors	
		•	Historical perspectives	
		•	Trends and issues	
		•	Principles of cancer	
			management Polos and responsibilities	
		•	Roles and responsibilities of oncology nurse	
II	5		The Nature of Cancer	
11		•	Normal cell biology	
		•	The Immune system	
		•	Pathological and	
			pathophysiological	
			changes in tissues	
			Biology of the cancer cell	
			 Clone formation Transformation 	
			 Tumors stem lines 	
			 Structure of a solid tumor 	
			 Products produced by the tumor 	
			Systemic effects of tumor growth	
III	4		Etiology of Cancer	
		•	Carcinogenesis	
		•	Theories of cancer causation	
		•	Risk factors	
		•	Carcinogens – genetic	
			factors, chemical	
			carcinogens, radiation,	
			viruses, Immune	
			system failure, rapid tissue	
			proliferation	
		•	Hormone changes, diet,	
			emotional Factors.	

Unit	Tim Hou		Content
	Т	P	
IV	10	2	Diagnostic Evaluation * Health assessment: History taking, physical examination * Staging and grading of tumors * TNM classification * Common diagnostic tests • Blood investigation: Haematological, Bio-chemical, Tumor markers, Hormonal assay • Cytology: Fine needle aspiration cytology (FNAC) • Histopathology: Biopsy • Radiological assessment: MRI, Ultrasound, Computed tomography, Mammography, Positron Emission tomography (PET), Radio nuclide imaging, Functional metabolism imaging • Endoscopies
V	10	2	Nurses responsibilities in diagnostic measures Levels of prevention and care * Primary prevention — Guidelines for cancer detection, general measures, Warning signs of cancer. * Self examination — Oral, Breast, Testicular * Secondary prevention — early diagnosis * Screening * Tertiary prevention — disability limitation * Rehabilitation : Mobility, Speech, Bowel and bladder, Ostomies etc. * Patient and family education * Discharge instruction, follow-up care and use of community resources.

Unit	Unit Time Hours Content		Content
	T	P	
VI	25	4	 Cancer Treatment Modalities and Nurse's Role * Surgery Principles of surgical oncology Current surgical strategy Determining surgical risk Special surgical techniques Pre-intra postoperative
			 Fre-inita postoperative nursing care Acute and chronic surgical complications Future directions and advances
			 Principles and classification of chemotherapeutics. Pharmacology of antineoplastic drugs -Mechanism of action, Absorption, protein binding, Biotransformation, excretion common side effects, drug Toxicity. Calculating drug doses, Therapeutic response to chemotheraphy-Tumor variables, drug resistance, Safety precautions
			 Radiation Therapy Physics of radiotherapy Types of ionizing rays Radiation equipments: Linear accelerator, cobalt, Implants, Isotopes. Types of therapies: Oral, Brachytherapy, teletherapy, selection Therapy.

Unit	Time Hours	Content
	T	P
		Effects of radiation on
		the body Tissue.
		Radiation biology-cell
		damage hypoxic cells,
		alteration of tumor
		Kinetics.
		Approaches to radiation
		therapy
		External radiotherapy
		Internal radiotherapy-
		unsealed,
		Sealed sources.
		• Effectiveness of
		radiotherapy-
		Radiosensitivity,
		treatment effects
		Complications of
		radiotherapy
		• Radiation safety :
		Standards of
		Bhaba Atomic Research
		Centre (BARC)
		Bone Marrow Transplantation/Stem Cell Transplantation
		• Types, indications, t
		transplantation Procedure
		and complications.
		Types and donor sources
		Preparation and care of
		donor and recipient
		• Legal and ethical issues
		Immunotherapy (Biotherapy)
		• Concepts and principles
		• Classifications of agents
		• Treatment and
		applications
		Gene Therapy
		Current Concepts and
		practices
		Alternative and Complementary Therapies
		Current practices

Unit	Time		Content	
Ont	Hour		Content	
	T	P		
VII	10	4	Pain management : Theories, types and	
			Nature of cancer pain	
			Pathophysiology of pain	
			• Pain threshold	
			Assessment of pain	
			Principles of cancer pain	
			control	
			Pharmacological: Opioid and population and population	
			and nonopioid analgesic therapy	
			Patient controlled	
			analgesia (PCA)	
			 Other invasive techniques 	
			of pain control	
			Recent developments in	
			Cancer pain	
			Non Dhawmaaalaaisal nain usliaf taabuigus	
			Non-Pharmacological pain relief technique.	
			 Complementary therapies (Music, massage, 	
			meditation, relaxation	
			techniques, biofeed back	
			etc)	
			Psychological	
			intervention in pain	
			control	
			Alternative system of	
			medicines	
			Role of nurse	
VIII	5		Palliative care	
			Definition an scope,	
			philosophy	
			Concept and elements of	
			palliative care	
			Global and Indian	
			perspective of	
			palliative care	
			• Quality of life issues	
			Communication skill	
			Nursing perspective of Nursing perspective of	
			palliative care and its elements	
			Home care Hosping care	
			Hospice care	
			Role of nurse in palliative care	

Unit	Tin Hou		Learning Objectives	Content	Method of Teaching	Evaluation
	T	P				
IX	2		Recognize the process of infection and preventive methods	 Infection control Process of infection, risk of hospitalization, nosocomial infections-prevention and control of in acute, long term care facility and community based care Standard safety measure 	Seminar Presentation	Essay type questions
X	30		Describe the care of patients with various type of malignancies.	Nursing Care of Patients With Specific Malignant Disorders • Malignancies of G.I. system-oral, oesophagus, stomach, rectal, liver & pancreas, care of ostomies/stoma • Respiratory malignancies • Genito urinary system malignancies prostate Bladder, renal testicular malignancies. • Gynecological malignancies-cervix uterus, ovary. • Hematological malignancies-Lymphomas, Leukemias. • Malignancies of musculoskeletal system • Endocrine malignancies • Skin • Head and Neck – brain tumors • Other malignancies – Breast cancer	Clinical presentation Nursing Process Nursing rounds Case conference	Evaluation of case study, care plan
XI	10		Provide nursing care to paediatric group of patients	Paediatric malignancies • Leukemia, Lymphoma, Neuro blastoma • Wilm's tumor, Soft tissue sarcoma, Retinoblastoma • Nursing Management of children with Paediatric Malignancies	Clinical presentation Nursing Rounds	Assess the skill with evaluation nursing care plan

Unit	Time Hours		Learning Content		Method of Teaching	Evaluation
	Т	P	3			
			Appreciate the role of the nurse in cancer emergencies	 Metabolic emergency: hyper and hypo calcemia Surgical emergency Urological emergency Haemorrhage Organ obstruction Brain metastasis Nurses role in managing oncologic emergencies 	Lecture Cum Discussion Seminar Presentation	Short Answers
XIV	8		Describe the psychosocial aspects of nursing care Explains the ethical, moral and legal issues in caring for the cancer patients	Psycho-Social Aspects of Nursing Care Psychological responses of patients with cancer Psychosocial assessment Crisis intervention, coping mechanisms Stress management, spiritual/ Cultural care and needs. Counseling: individual and family Maximizing quality of life of patient and family Ethical, moral and legal issues Care of dying patient Grief and grieving process Bereavement support Care of Nurses who care	Guided Group Discussion Conducting Guidance and Counseling Group Conference	Short answers checklist
XV	2		Design a layout and develop standards for management of Oncology units/hospitals and nursing care	for the dying Layout and Design of an oncology institution/ward, OPD, chemotherapy unit, Bone marrow transplantation unit, pain clinic etc. • Practice Standards of oncology nursing Policies and Procedures • Establishing Sanding orders and Protocols Quality Assurance Programme in Oncology units • Nursing audit	Field Trip Presentation of Observation Report	Evaluate the project work and presentation

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- 13. M. Frank Stromborg (2001) Cancer Prevention in Diverse P. Cultural Implications for the Multidisplinary Team.
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- 16. G. Decker (1999) An Introduction to Complementary and Alternative Therapies
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- 18. M. M. Gullatte (2001) Clinical Guide to Antineoplastic Therapy: A Chemotherapy Handbook.
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- 23. S. Ezzone (2004) Hematopoietic Stem Cell Transplantation: A Manuel for Nursing Practice
- 24. Whedon Blood and Marrow Stem Cell Transplantation (2nd ed)
- 25. Wilkes Cancer & HIV Clinical Nutrition Pocket Guide (2nd ed.)
- 26. Yarbro/Frogge/Goodman Cancer Nursing: Principles and Practice (6thed.)
- 27. American Cancer Society A Cancer Source Book for Nurses (8th ed.)
- 28. Yarbro/Frogge/Goodman Cancer Symptom Management, Patient Self-Care Guides (2)
- 29. Yarbro/Frogge/Goodman A Clinical Guide to Cancer Nursing (5th ed)
- 30. Hassey Dow Contemporary issues in Breast Cancer, A Nursing Perspective (2nd ed.)
- 31. Vogel/Bevers Handbook of Breast Cancer Risk assessment: Evidence based Guidelines for Evaluation, Prevention Counseling & Treatment
- 32. Johnson/Gross Handbook of Oncology Nursing (3rd ed) King/ Hinds Quality of Life: From Nursing and Patient Perspectives
- 33. Brunner/Siddarth Text Book of Medical Surgical Nursing. 2004 (10th ed.)
- 34. Sorresen /Luckman Medical Surgical Nursing (1994) (5th ed)

Journals:

1 Oncology nursing news letter.

PRACTICALS

- 1. Clinical practice in the care of patients with various malignant disorders.
- 2. Assessment of clients suffering with various malignant disorders.
- 3. Applying Theories and nursing process in the management of patients suffering with various malignancies.
- 4. Providing care to patients with ostomies and other appliances.
- 5. Assisting for implantations of radioisotopes.
- 6. Clinical case presentations of a patient.
- 7. Projects
- 8. Clinical and classroom teachings.
- 9. Health education on related disease conditions.
- 10. Field Visits Regional cancer centers/ cancer specialty hospitals /unit, Hospice, mobile palliative care, community oncology centers /home care unit, cancer registry, cancer detection centers etc.

Procedures Observed

- 1. CT Scan
- 2. MRI
- 3. Ultra sound
- 4. Mammography
- 5. Radio Nuclide Imaging
- 6. Bone Scan
- 7. Thyroid Function Test
- 8. Functional and Metabolic Imaging
- 9. Transportation of radioactive materials
- 10. Others

Procedures Assisted

- 1 IV cannulation Open method
- 2 Chemotherapy
- 3 Radiotherapy Brachytherapy Low Density Radiation, High Density Radiation.
- 4 Interstitial implantation
- 5 Teletherapy Treatment planning
- 6 Bone marrow aspiration and biopsy
- 7 Biopsy tissue
- 8 FNAC Fine Needle Aspiration Cytology & Biopsy
- 9 Advance cardiac life support
- 10 Endotracheal intubation
- 11 Defilbrillation ventilation
- 12 Tracheostomy
- 13 Thoracentesis
- 14 Paracentesis
- 15 Lumbar Puncture
- 16 Arterial Blood Gas
- 17 Nerve Block
- 18 Chest tube insertion
- 19 Intercostal drainage
- 20 CVP monitoring

Procedure Performed

- 1. Screening for cancer
- 2. Assessment of pain
- 3. Assessment of Nutritional status
- 4. Care of Tracheostomy
- 5. Endotracheal intubation
- 6. Gastric gavage
- 7. Pap smear
- 8. IV cannulation
- 9. Care of surgical flaps
- 10. Care of ostomies
- 11. Blood transfusion and component therapy
- 12. Counseling
- 13. Practice standard safety measure
- 14. Care of dead body and mortuary formalities

Other procedures

1. Alternative therapies

Clinical Experience

SN	Department/Unit	No. of Week	Total
511		INO. OI WCCK	Hours
1	Medical Oncology Ward	6	180
2	Surgical Oncology Ward	6	180
3	Bone marrow transplantation	2	60
4	Operation Theatre	2	60
5	Radiotherapy Unit	2	60
6	Chemotherapy Unit	4	120
7	Out patient department and pain clinic	2	60
8	Pediatric Oncology Ward	2	60
9	Palliative Care Ward	2	60
10	Community Oncology	2	60
11	Hospice	1	30
12	Other field visits	1	30
	Total	32	960

GUIDELINES TO WRITE CLINICAL PRESENTATION - MSc NURSING

- 1. Introduction
- 2. Patient's Profile
- 3. Health History
 - a. Chief complaints on admission
 - b. Present & Past illness (Medical surgical, Obstetrics, pediatric, psychiatric, Oncology)
 - c. Family History
 - d. Specific information of the patient
- 4. Health Assessment
 - a. Physical examination (head to foot & system assessment)
 - b. Investigation
 - c. Health information from other sources
- 5. Provisional Medical diagnosis
- 6. Treatment
- 7. Correlation of clinical and book picture
 - a. Definition
 - b. Clinical features
 - c. Prognosis
 - d. Etiology
 - e. Investigation
 - f. Complication
 - g. Pathophysiology
 - h. Treatment
- 8. Nursing Management Nursing process
- 9. Plan of discharge & rehabilitation
- 10. Conclusion
- 11. Bibliography

Practical Experience Assignments

Case study	:	02	(50 marks each)	$50 \times 2 =$	100	
Case Presenta	tion:	02	(50 marks each)	50 x 2 =	100	
Care Plan	:	03	(50 marks each)	50 x 3 =	150	
Clinical Perfo	rmance	Evalua	ation: 03 (100 marks e	each) 100 x	3 = 300	
Practical Exar	minatio	ı	Mid Term		50	
			Pre Term		100	
					800	

Internal Assessment Total marks out of 100 External Assessment Total marks out of 100

(Theory)

Midterm Exam	50
Prefinal Exam	75
Seminar	50
Project work on planning oncology unit	75
	800

M.Sc. NURSING: CLINICAL SPECIALITY – II

PROFORMA & GUIDELINE FOR CASE STUDY Area :- (Maximum Marks – 50)

- 01. Selection of patient.
- 02. Demographic data of the patient.
- 03. Medical history past and present illness.
- 04. Comparison of the patient's disease with book picture.
 - a) Anatomy and physiology.
 - b) Etiology.
 - c) Patho physiology.
 - d) Signs and symptoms.
 - e) Diagnosis provisional & final
 - f) Investigations
 - g) Complications & prognosis.
- 05. Management: Medical or Surgical
 - a) Aims and objectives.
 - b) Drugs and Medications.
 - c) Diet.
- 06. Nursing Management (Nursing Process approach)
 - a) Aims and objectives.
 - b) Assessment and specific observations.
 - c) Nursing diagnosis.
 - d) Nursing care plan (Short term & long term with rationale.)
 - e) Implementation of nursing care with priority.
 - f) Health teaching.
 - g) Day to day progress report & evaluation.
 - h) Discharge planning.
- 07. Drug Study.
- 08. Research evidence.
- 09. Summary and conclusion.
- 10. Bibliography.

EVALUATION CRITERIA FOR CASE STUDY.

(Maximum Marks – 50)

SN	Criteria	Marks allotted.	Marks obtained	
01.	Assessment	5		
02.	theoretical knowledge			
	about disease	5		
03.	Comparative study of the	2		
	patient's disease & book			
	picture.	10		
04.	Management: Medical			
	or Surgical.	5		
05.	Nursing Process.	15		
06.	Drug study.	3		
07.	Summary & conclusion			
	including research evider	nce. 5		
08.	Bibliography.	2		
	Total	50		

Signature of Student

Signature of Clinical supervisor

M Sc NURSING: CLINICAL SPECIALITY – II PROFORMA & GUIDELINE FOR CASE PRESENTATION

I] Patient Biodata

Name, Age, Sex, Religion, Marital status, Occupation, Source of health care, Date of admission, Provisional Diagnosis, Date of surgery if any. II] Presenting complaints

Describe the complaints with which the child has been brought to the hospital **III] Socio-economic status of the family:** Monthly income, expenditure on health, food, education etc.

IV] History of Illness (Medical & Surgical)

- i) History of present illness onset, symptoms, duration, precipitating / aggravating factors
- ii) History of past illness surgery, allergies, medications etc.
- iii) Family history Family tree, history of illness in the family members, risk factors, congenital problems, psychological problems etc.

V] Diagnosis: (Provisional & confirmed).

Description of disease: Includes the followings

- 1. Definition.
- 2. Related anatomy and physiology
- 3. Etiology & risk factors
- 4. Path physiology
- 5. Clinical features.

VI] Physical Examination of Patient (Date & Time)

Physical examination: with date and time.

Clinical features present in the book Present in the patient

VII] Investigations

Date Investigation done Results Normal value Inferences

VIII] Management - (Medical /Surgical)

- a) Aims of management
- b) Objectives of Nursing Care Plan

IX] Treatment:

S.No Drug (Pharmacological name) Dose Frequency/ Time Action Side effects & drug reaction

Nurse's

responsibility

- Medical or Surgical Management.
- Nursing management

X] Nursing Care Plan: Short Term & Long Term plan.

Assessment Nursing

Diagnosis

Objective Plan of

care

Rationale Implementation Evaluation

XI] Discharge planning:

It should include health education and discharge planning given to the patient.

XII] Prognosis of the patient:

XIII] Summary of the case:

IVX] References:

<u>EVALUATION CRITERIA FOR CASE PRESENTATION</u> Maximum Marks – 50)

SN	Criteria	Marks Allotted	Marks Obtained	Total
1	Content Subjective & objective	08		
	data.			
2	Problems & need Identified &	15		
	Nsg. Care Plan			
3	Effectiveness of presentation	5		
4	Co-relation with patient &	10		
	Book i. e. research evidence.			
5	Use of A. V. Aids	5		
6	Physical arrangement	2		
7	Group participation	3		
8	Bibliography & references	2		
	Total	50		

CLINICAL EVALUATION: COMPREHENSIVE NURSING CARE

(Maximum Marks – 100 each area.)

Name of the Student

Year: II Year M.Sc Nursing Duration of Experience:

SN	Criteria	1	2	3	4	5
I	UNDERSTANDING OF PATIENT AS PERSON					
	A. Approach.					
	1. Rapport with patient/ family members.					
	2. Collects significant information.					
	B. Understanding of patient's health problems.					
	1. Knowledge about disease condition.					
	2. Knowledge about investigations.					
	3. Knowledge about treatment.					
	4. Knowledge about progress of the patient.					
II	NURSING CARE PLAN					
	A. Assessment of the condition of					
	the patient.					
	1. History taking – past & present health and illness.					
	2. Specific observation of the patient.					
	3. Nursing diagnosis.					
	B. Development of the short – term &					
	long term Nursing care plans.					
	1. Identification of all problems in the patient/					
	family.					
	2. Prioritization & implementation of the plans.					
	3. Evaluation of the care given & replanning					
III	TECHNICAL SKILL 1.Economical & safe adaptation to the situation &					
	available facilities.					
	2.Implements the procedure with skill speed &					
	completeness.					
IV	RECORDING & REPORTING					
	1.Prompt, precise, accurate & relevant.					
	2.Maintenance of clinical experience file.					
V	HEALTH TEACHING					
	1.Incidental/ planned teaching with					
	principles of teaching & learning.					
	2.Uses visual aids appropriately					
VI	PERSONALITY					
	1. Professional appearance (uniform, dignity, tact					
	fullness interpersonal relationship, punctuality etc.					
	2. Sincerely, honesty & Sense of responsibility.					
	TOTAL MARKS					

Positive & Negative aspects.

Signature of Student

Signature of Clinical supervisor