

Subject: MEDICAL SURGICAL NURSING

Course: PhD syllabus

AIMs:

- It is designed to assist students in developing expertise and in depth knowledge in the field of Medical –Surgical Nursing .It will help students to appreciate the patient as a holistic individual and develop a skill to function as a specialized Medical –Surgical Nurse .It will further enable the student to function as a n educator, manager and researcher in the field of Medical –Surgical Nursing.
- This course is designed to assist students in developing expertise and in depth understanding in the field of cardiovascular and thoracic nursing. It will help students to develop advanced skills for nursing intervention in various cardio medical and surgical conditions. It will enable the students to function as cardio vascular and thoracic nurse/practitioner/specialist. It will further enable the student to function as educator, manager and researcher in the field of cardio vascular and thoracic nursing.
- This course is designed to assist students in developing expertise and in depth understanding in the field of Nephro and urological Nursing. I t will help students to develop advanced skills for nursing intervention in various. nephro and urological conditions. It will enable the student to function as nephro and urology nurse practitioner/specialist and provide quality care. It 'will further enable the student to function as educator, manager, and researcher in the field of nephro and urology nursing.
- 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:

At the end of the course the students will be able to:

- Appreciate the trends and issues in the field of Medical –Surgical Nursing as a speciality.
- Apply nursing concepts and theories related to health promotion.
- Apply the client as a holistic individual.
- Perform physical and psychosocial assessments of a Medical –Surgical Patient.
- Apply nursing process in providing care to the patients.
- Integrate the concept of family centered nursing care with associated disorders such as genetic, congenital and long term illness.
- Recognize and manage emergencies with medical surgical patients.
- Describe various recent technologies and treatment modalities in the management of critically ill patients.
- Appreciate the legal and ethical issues relevant to Medical –Surgical Nursing.
- Prepare a design for layout and management of Medical –Surgical Unit.

- Appreciate the role of alternative systems of Medicine in the care of patients.
 - Incorporate evidence based Nursing practice and identifies the areas of Nursing Research in the field of Medical Surgical nursing.
 - Recognize the role of Nurse Practitioner as a member of the Medical –Surgical health team.
 - Teach Medical and Surgical Nursing to under graduate nurse s ad in-service nurses.
 - Appreciate trends and issues related to cardio vascular and thoracic nursing.
 - Describe the epidemiology, etiology, pathophysiology and diagnostic assessment of cardio vascular and thoracic conditions.
 - Participate in national health programs for health promotion, prevention and rehabilitation of patients with cardio vascular and thoracic conditions.
 - Perform physical, psychosocial and spiritual assessment.
 - Assist in various diagnostic, therapeutic and surgical procedures.
 - Apply nursing process in providing compressive care to patients with cardio vascular conditions.
 - Demonstrate advance skills /competence in managing patients with cardio vascular condition and thoracic conditions including advanced thoracic life support.
 - Describe the various drugs used in cardio vascular and thoracic conditions and nurses responsibility.
 - Demonstrate skill in handling various equipments/ gadgets used for critical care of cardiovascular and thoracic patients.
 - Appreciate team work and coordinate activities related to patient care.
 - Practice infection control measures.
 - Identify emergencies and complications and take appropriate measures.
 - Discuss the legal and ethical issues in cardiovascular and thoracic nursing.
 - Assist patients and their families to cope with emotional stress, grief, anxiety and spiritual needs.
 - Appreciate the role of alternative system of medicine in care of patients.
 - Incorporate evidence based nursing practice and identify the areas of research in the field of cardiovascular and thoracic nursing.
 - Identify the source of stress and manage burnout syndrome among health care providers.
 - Teach and supervise nurses and allied health workers.
 - Design a layout of ICCU and ICTU and develop; standards for cardiovascular and thoracic nursing practice.
-
- Appreciate trends and issues related to nephro and urological nursing.
 - Describe the epidemiology, etiology, pathophysiology and diagnostic assessment of nephro and urological conditions.
 - Perform physical, psychosocial & spiritual assessment.
 - Assist in various diagnostic, therapeutic and surgical interventions.
 - Provide comprehensive nursing care to patients with nephro and urological conditions.
 - Describe the various drugs used in nephro and urological conditions and nurses responsibility.
 - Demonstrate skill in handling various equipments & gadgets used for patients with nephro and urological conditions.

- Appreciate team work & coordinate activities related to patient care.
 - Practice infection control measures.
 - Identify emergencies and complications & take appropriate measures.
 - Assist patients and their family to cope with emotional distress, grief, anxiety and spiritual needs.
 - Discuss the legal and ethical issues in nephro and urological nursing.
 - Identify the sources of stress and manage burnout syndrome among health care providers.
 - Appreciate the role of alternative system of medicine in the care of patient.
 - Incorporate evidence based nursing practice and identify the areas of research in the field of nephro and urological nursing.
 - Teach and supervise nurses and allied health workers.
 - Design a layout of kidney transplant unit and dialysis unit.
 - Develop standards of nephro-urological nursing practice.
-
- Explain the prevention, screening and early detection of cancer.
 - Describe the epidemiology, etiology, pathophysiology and diagnostic assessment of oncological disorders of various body systems.
 - Describe the psychosocial effects of cancer on patients and families.
 - Demonstrate skill, in administering/assisting in various treatment modalities used for patients with cancer.
 - Apply nursing process in providing holistic, care to patients with cancer.
 - Apply specific concepts of pain management.
 - Appreciate the care of death and dying patients and value of bereavement support.
 - Describe the philosophy, concept and various dimensions of palliative care.
 - Appreciate the role of alternative systems of medicine in care of cancer patients.
 - Appreciate the legal & ethical issues relevant to oncology nursing.
 - Recognize and manage Oncological emergencies.
 - Counsel the patients with cancer and their families.
 - Incorporate evidence based nursing practice and identify the areas of research in the field of oncology nursing.
 - Recognize the role of oncology nurse practitioner as a member of oncology team.
 - Collaborate with other agencies and utilize resources in caring for cancer patients.
 - Teach and supervise nurses and allied health workers.
 - Design a layout and develop standards for management of oncology units/hospitals and nursing care.

COURSE CONTENT:

Introduction:

- Historical development of Medical – Surgical Nursing in India.
- Current status of health and disease burden in India.
- Current concept of health.
- Trends & issues in Medical – Surgical Nursing.
- Ethical & cultural issues in Medical – Surgical Nursing.
- Rights of patients.
- National health policy, special laws & ordinances relating to older people.
- National goals.

- Five years plans
- National health programs related to adult health.

Health assessment of patients:

- History taking.
- Physical examination of various systems.
- Nutritional assessment.
- Related investigations and diagnostic assessment
- Role of nurse in diagnostic procedures

Care in hospital setting:

- Ambulatory care
- Acute & Critical care
- Long term care.
- Home Health Care.
- Characteristics, care models, practice settings, interdisciplinary team.
- Hospitalization- effects of hospitalization on the patient & family.
- Stressors & reactions related to disease process
- Nursing care using Nursing process approach.

Management of patients with disorders of Gastro intestinal tract:

- Review of anatomy and physiology.
- Common disorders-etiology, Patho physiology, Clinical manifestations, complications, prognosis.
- Health assessment-History taking, physical examination, investigation & diagnostic assessment.
- Treatment modalities and trends.
- Nursing management.
- Related Research Studies.
- Evidence based nursing practice.
- Rehabilitation and follow-up.

Management of patients with disorders of Nervous System:

- Review of anatomy and physiology.
- Common Disorders-etiology, Pathophysiology, Clinical manifestations, complications, prognosis.
- Health assessment-History taking, physical examination, investigation and diagnostic assessment.
- Treatment modalities and trends.
- Nursing management.
- Related research studies.
- Evidence based nursing practice.
- Rehabilitation and follow-up.
- Role of nurse in communicating with neurological deficit patients
Special therapies.
 - Brain death confirmation test

Management of patients with disorders of Respiratory System:

- Review of anatomy and physiology.
- Common Disorders-etiology, Patho physiology, Clinical manifestations, Complications, prognosis
- Health assessment-History taking, physical examination, investigation and diagnostic assessment.
- Treatment modalities and trends.
- Nursing management.
- Related research studies.
- Evidence based nursing practice.
- Rehabilitation and follow-up.

Management of patients with disorders of cardio Vascular System:

- Review of anatomy and physiology.
- Common Disorders-etiology, Pathophysiology, Clinical manifestations, Complications, prognosis.

- Health assessment-History taking, physical examination, investigation and diagnostic assessment.
- Treatment modalities and trends.
- Nursing management.
- Related research studies.
- Evidence based nursing practice.
- Rehabilitation and follow-up.

Management of patients with Disorders of Blood:

- Review of anatomy and physiology.
- Common Disorders-etiology, Pathophysiology, Clinical manifestations, Complications, prognosis.
- Health assessment-History taking, physical examination, investigation and diagnostic assessment.
- Treatment modalities and trends.
- Nursing management.
- Related research studies.
- Evidence based nursing practice.
- Rehabilitation and follow-up .

Management of patients with disorders of Genito Urinary System:

- Review of anatomy and physiology.
- Common Disorders-etiology, Pathophysiology, Clinical manifestations, Complications, prognosis.
- Health assessment-History taking, physical examination, investigation and diagnostic assessment.
- Treatment modalities and trends.
- Nursing management.
- Related research studies.
- Evidence based nursing practice.

- Rehabilitation and follow-up.

Management of patients with disorders of Endocrine System:

- Review of anatomy and physiology.
- Common Disorders-etiology, Pathophysiology, Clinical manifestations, Complications, prognosis.
- Health assessment-History taking, physical examination, investigation and diagnostic assessment.
- Treatment modalities and trends.
- Nursing management.
- Related research studies.
- Evidence based nursing practice.
- Rehabilitation and follow-up.

Management of patients with disorders of Musculo-Skeletal System:

- Review of anatomy and physiology.
- Common Disorders-etiology, Pathophysiology, Clinical manifestations, Complications, prognosis.
- Health assessment-History taking, physical examination, investigation and diagnostic assessment.
- Treatment modalities and trends.
- Nursing management.
- Related research studies
- Evidence based nursing practice.
- Rehabilitation and follow-up.
- Role of nurse in musculo skeletal disorders.

Management of patients with disorders of Integumentary System:

- Review of anatomy and physiology.
- Common Disorders-etiology, Pathophysiology, Clinical manifestations, Complications, prognosis.

- Health assessment-History taking, physical examination, investigation and diagnostic assessment.
- Treatment modalities and trends.
- Nursing management.
- Related research studies.
- Evidence based nursing practice.
- Rehabilitation and follow-up.

Management of patients with disorders of Eye and ENT:

- Review of anatomy and physiology.
- Common Disorders-etiology, Pathophysiology, Clinical manifestations, Complications, prognosis.
- Health assessment-History taking, physical examination, investigation and diagnostic assessment.
- Treatment modalities and trends.
- Nursing management.
- Related research studies.
- Evidence based nursing practice.
- Rehabilitation and follow-up.

Management of patients with Disorders of Reproductive System:

- Review of anatomy and physiology.
- Common Disorders-etiology, Pathophysiology, Clinical manifestations, Complications, prognosis.
- Health assessment-History taking, physical examination, investigation and diagnostic assessment.
- Treatment modalities and trends.
- Nursing management.
- Related research studies.
- Evidence based nursing practice.

- Rehabilitation and follow-up.

Geriatric Nursing:

- Nursing Assessment – History and Physical assessment.
- Ageing:
- Demography; Myths and realities.
- Concepts and theories of ageing.
- Cognitive Aspects of Ageing.
- Normal biological ageing.
- Age related body systems changes,
- Psychosocial Aspects of Ageing.
- Medications and elderly.
- Stress & coping in older adults.
- Common Health Problems & Nursing Management;
- Psychosocial and Sexual.
- Abuse of elderly.
- Role of nurse for care of elderly; ambulation, nutritional communicational, Psychosocial and spiritual.
- Role of nurse for care givers of elderly.
- Role of family and formal and non formal caregivers.
- Use of aids and prosthesis (hearing aids, dentures),
- Legal & Ethical Issues.
- Provisions and Programmes for elderly; privileges, Community Programs and health services;
- Home and institutional care.
- Issues, problems and trends.

Management of patients with communicable and Sexually Transmitted Diseases:

- Review of immune system.
- Common Disorders of immune system – HIV / AIDS.
- Review of infectious disease process.
- Communicable diseases-etiology, Pathophysiology, Clinical manifestations complications, prognosis.
- Health assessment-History taking physical examination, investigation and Diagnostic assessment.
- Treatment modalities and trends.
- Nursing management
- Related research studies.
- Evidence based nursing practice.
- Rehabilitation and follow-up.
- New communicable diseases- swine flu& Ebola ,Role of nurse in prevention of communicable diseases.
- **Dengue, NIPAH, Leptospirosis .**

Emergency, Trauma and Multi-System Organ Failure:

- DIC (disseminated intravascular coagulation)
- Trauma burns, poisoning.
- Etiology, Patho- physiology, Clinical manifestations, complications, prognosis.
- Health assessment-History taking, physical examination, investigation and
- Diagnostic assessment.
- Treatment modalities and trends.
- Nursing management.
- Related research studies.
- Evidence based nursing practice.
- Rehabilitation and follow-up.
- Role of nurse in emergencies ,Triage ,Role of nurse in organ donation.

SUB SPECIALITY- CARDIO VASCULAR AND THORACIC NURSING

CONTENTS:

Introduction:

- Historical development, trends and issues in the field of cardiology.
- Cardiovascular and thoracic conditions – major health problem. .
- Concepts, principles and nursing perspectives.
- Ethical and legal issues
- Evidence based nursing and its application in cardio vascular and thoracic nursing.(to be incorporated in all the units)
- Role of nurse in Ethical and legal issues.

Epidemiology:

- Risk factors: Heredity, psychosocial factors, hypertension, smoking, obesity, diabetic mellitus. etc.
- Health promotion, disease prevention, life style modification.
- National health programmed related to cardio vascular and thoracic conditions.
- Alternate system of medicine.
- Complementary therapies.

Review of Anatomy and Physiology of cardio vascular and respiratory system:

- Review of anatomy and physiology of heart, lung, thoracic cavity and blood vessels. Embryology of heart and lung.
- Coronary circulation.
- Hemodynamic and electro physiology of heart.
- Biochemistry of blood in relation to cardio pulmonary function.

Assessment and Diagnostic measures:

- History taking
- Physical assessment: Heart rate variability: Mechanism, measurements, pattern, factors, impact of interventions on HRV.
- Diagnostic Tests: Hemodynamic monitoring: Technical aspects, monitoring, functional hemodynamic indices, output measurements (Arterial and swan Ganz monitoring), Blood gases and its significance, oxygen supply and demand.
- Radiologic examination of the chest: interpretation, chest film findings.
- Electrocardiography(ECG): electrical conduction through the heart, basic electrocardiography,12 lead electrocardiogram,axis determination
- ECG changes in :intraventricular conduction abnormalities-arrhythmias,ischemia,injury and infarction, trial and ventricular enlargement, electrolyte imbalance,
- Electrocardiography: technical aspects, special techniques, echocardiography of cardiac structures in health and disease, newer techniques.
- Nuclear and other imaging studies of the heart; Magnetic resonance imaging
- Cardio electro physiology procedures: Diagnostic studies, interventional and catheter ablation, nursing care.

- Exercise testing; indication and objectives, safety and personnel, pre test considerations, selection, interpretation, tests termination, recovery period..
- Cardiac catheterization: indications, contraindications, patient preparation, procedure, interpretation of data.
- Pulmonary function test: Broncho scopy and graphies.
- Interpretation of diagnostic measures.
- Nurses role in diagnostic tests
- Laboratory tests using Blood: Blood specimen collection, cardiac markers, blood lipids, hematologic studies, blood cultures, Coagulation studies, arterial blood gases, Blood chemistries, cardiac enzymestudies,
- Serum concentration of selected drugs.
- Interpretation and role of nurse
- **Assessment and Diagnostic measures:**
- Hemodynamic monitoring: technical aspects.

Cardiac disorders and nursing management:

Etiology, clinical manifestations, diagnosis, prognosis, related pathophysiology and nursing management of:

- Hypertention
- Coronary artery disease.
- Angina of various types.
- Cardiomegaly
- Myocardial infarction,. Congestive cardiac failure (CCF)
- Heart failure, pulmonary edema, shock.
- Rheumatic heart disease and other valvular diseases
- Inflammatory heart diseases, Infective Endocarditis, Myocarditis, Pericarditis.
- Cardio myopathy, dilated, restrictive, hypertrophic.
- Arrhythmias, heart block.
- Associated illnesses.

Altered pulmonary conditions:

- Etiology, clinical manifestations, diagnosis, prognosis, related pathophysiology, treatment modalities and nursing management of:
- Bronchitis.
- Bronchial asthma.
- Bronchiectasis.
- Pneumonias.
- Lung Abscess. Lung tumor
- Pulmonary tuberculosis, fibrosis, pneumoconiosis, etc.
- Pleuritis, effusion.
- Pneumo, haemo and pyothorax.
- Intestinal lung disease.
- Cystic fibrosis
- Acute and chronic obstructive pulmonary disease(conditions leading to)
- Cor pulmonale.
- Acute respiratory failure.

- Adult respiratory distress syndrome.
- Pulmonary embolism.
- Pulmonary hypertension.
- FFR(function flow reserve)
- Head table tilt test

Role of nurse in hemodynamic monitoring

Vascular disorders and nursing management:

- Etiology, clinical manifestations, diagnosis, prognosis, related pathophysiology,treatment modalities and nursing management of:
 - Disorders of arteries.
 - Disorders of the aorta.
 - Aortic aneurysms.
 - Aortic dissection.
 - Raynaud’s phenomenon.
 - Peripheral arterial disease of the lower extremities.
 - Venous thrombosis.
 - Varicose veins.
 - Chronic venous insufficiency and venous leg ulcers.
 - Pulmonary embolism.

Cardiothoracic emergency interventions:

- CPR- BLS and ALS,
- Use of ventilators, defibrillations, pace maker.
- Post resuscitating care.
- Care of the critically ill patients,
- Psycho social and spiritual aspects of care,

Stress management; ICU psychosis.

- Role of nurse
- Cardioversion Role of nurse in defibrillation & cardioversion
- Cardiothoracic emergency interventions:

Nursing care of patient with obstructive air way:

- Assessment.
- Use of artificial air way.
- Endo tracheal intubation, tracheostomy and its care. Complications, minimum cuff leak, securing tubes.
 - **Oxygen delivery systems:**
 - Nasal cannula,
 - Oxygen mask, Venturi mask,
 - Partial re breathing bag.
 - Bi –PAP and C- PAP masks,
 - Uses, advantages, disadvantages, nursing implications of each.

- **Mechanical Ventilation:**
- Principles of mechanical ventilation.
- Types of mechanical ventilation and ventilators.

- Modes of ventilation, advantage, disadvantage, complications.
- PEEP therapy, indications, physiology and complication. Weaning off the ventilators.
- Nursing assessment and interventions of ventilated patients.

Congenital Heart Diseases:

- Etiology, clinical manifestations, diagnosis, prognosis, related patho physiology, treatment modalities and nursing management of:
- Embryological development of heart.
- Classification – Cyanotic and acyanotic heart disease.
- Tetralogy of Fallots.
- Atrial Septal defects, Ventricular septal defect, Eisenmenger's complex.
- Patent Ductus arteriosus, AP window,
- Truncus Arteriosus.
- Transposition of great arteries
- Total anomaly of pulmonary venous connection.
- Pulmonary stenosis, atresia.
- Coarctation of aorta.
- Ebstein's anomaly.
- Double outlet right ventricle, Single ventricle, hypoplastic left heart syndrome.
- Fetal circulation

Review: Pharmacology:

- Pharmacokinetics.
- Analgesics/anti inflammatory agents.
- Antibiotics, antiseptics.
- Drug reaction and toxicity.
- Drug used in cardiac emergencies.
- **Blood and Blood components,**
- Anti thrombolytic agents,
- Inotropic agents
- Beta blocking agents,
- Calcium channel blockers,
- Vasoconstrictors,
- Vasodilators,
- ACE inhibitors,
- Anti coagulants,
- Anti arrhythmic drugs,
- Antihypertensives,
- Diuretics,
- Sedatives and tranquilizers,
- digitalis,
- Antilipemics.

- Principles of drug administration, role and responsibilities of nurses and care of drugs.
- Health education for patients on anti coagulants, anti hypertensive

Nursing Care of Patient undergoing thoracic surgery:

- Indications, selection of patient.
- Preoperative assessment and preparation;counselling.
- Intra operative care: Principles of open heart surgery, equipments, anesthesia, cardiopulmonary bypass.
- Surgical procedures for coronary Artery bypass Grafting, recent advances and types of grafts, Valve replacement or reconstruction, cardiac transplant, Palliative surgery and different Stents, vascular surgery, other recent advances.
- Thoracic surgery: lobectomy.Pneumonectomy, tumor excision, etc.
- Immediate post operative care, Assessment, post operative problems and interventions: Bleeding, Cardiac tamponade Low cardiac output, Infarction, Pericardial effusion, pleural effusion, Pneumothorax, Haemothorax, Coagulopathy, Thermal imbalance, Inadequate ventilation/perfusion, Neurological problems, Renal problems, Psychological problems.
- Chest physiotherapy.
- Nursing intervention: Life style modification, complimentary therapies/alternative systems of medicine.
- Intermediate and late post operative care after CABG, valve surgery, others.
- Follow up care.

Cardiac Rehabilitation:

- Process.
- Physical evaluation
- Life style modification.
- Physical conditioning for cardio vascular efficiency through exercise.
- Counseling.
- Follow up care.
- **Role of nurse in cardiac rehabilitation**

Intensive Coronary Care Unit/Intensive cardio thoracic Unit:

Quality Assurance

- Standard, Protocols, Policies, Procedures.
- Infection control; standard safety measures.
- Nursing audit.
- Design of ICCU/OICTU.
- Staffing, Cardiac team.
- Burnout syndrome
- Nurses role in the management of ICCU and ICTU.
- Mobile coronary care unit.
- Planning in service educational programme and teaching.

- Role of nurse in quality assurance.

SUB SPECIALITY – NEPHRO-UROLOGY NURSING

CONTENTS:

Introduction:

- Historical development: trends and issues in the field of nephro and urological nursing.
- Nephro and urological problems. Concepts, principles and nursing perspectives. Ethical and legal issues. Evidence based nursing and its application in nephro and urological nursing (to be incorporated in all the units).

Epidemiology:

- Major health problems- urinary dysfunction, urinary tract infections, Glomerular disorders, obstructive disorders and other urinary disorders. Risk factors associated with nephro and urological conditions- Hereditary, Psychosocial factors, smoking, alcoholism, dietary habits, cultural and ethnic considerations. Health promotion, disease prevention, life style modification and its implications to nursing.
- Alternate system of medicine/complementary therapies

Review of anatomy and physiology of urinary system:

- Embryology. Structure and functions. Renal circulation. Physiology of urine formation. Fluid and electrolyte balance. Acid base balance. Immunology specific to kidney.

Assessment of diagnostic measures:

- History taking. Physical assessment, psychosocial assessment. Common assessment abnormalities-dysurea, frequency, enuresis, urgency, hesitancy, hematuria, pain, retention, burning on urination, pneumaturia, incontinence, nocturia, polyurea, anuria, oliguria. Diagnostic tests-urine studies, blood chemistry, radiological procedures -KUB, IVP, nephrotomogram, retrograde pyelogram, renal arteriogram, renal ultrasound, CT scan, MRI, cystogram, renal scan, biopsy, endoscopy-cystoscopy, urodynamics studies- cystometrogram, urinary flow study, sphincter electromyography, voiding pressure flow study, videourodynamics, Whitaker study. Interpretation of diagnostic measures.
- Nurse's role in diagnostic tests.

Renal immunopathy / Immunopathology:

- General Concept of immunopathology. Immune mechanism of glomerular vascular disease.
- Role of mediator systems in glomerular vascular disease.

Urological Disorders and Nursing Management:

- Etiology, clinical manifestations, diagnosis, prognosis, related pathophysiology, medical, surgical and nursing management of: Urinary tract infections- pyelonephritis, lower urinary tract infections, Disorders for ureters, bladder and urethra Urinary tract infections. Urinary dysfunctions- urinary retention, urinary incontinence, urinary reflux, Bladder disorders- neoplasms, calculi, neurogenic bladder, trauma, congenital abnormalities. Benign prostrate

hypertrophy (BPH.) Ureteral disorders: ureteritis, ureteral trauma, congenital: anomalies of ureters. Urethral disorders- tumours, trauma, and congenital anomalies of ureters.

Glomerular disorders and nursing management:

- Etiology, clinical manifestations, diagnosis, prognosis, related pathophysiology, medical, surgical and nursing management of: Glomerulo-nephritis- chronic, acute nephrotic syndrome. Acute Renal failure and chronic renal failure. Renal calculi. Renal tumours-benign and malignant. Renal trauma. Renal abscess. Diabetic nephropathy. Vascular disorders. Renal tuberculosis. Polycystic. Congenital disorders. Hereditary renal disorders.

Management of Renal emergencies:

- Anuria. Acute Renal failure, Poisoning. Trauma, Haematuria. Urine retention. Acute graft rejection.
- Nurse's role.

Drugs used in urinary disorders:

- Classification. Indications, contraindications, actions and effects, toxic effects. Role of nurse.

Dialysis:

- Dialysis- Historical, types, Principles, goals. Hemodialysis- vascular access sites- temporary and permanent. Peritoneal dialysis. Dialysis Procedures- steps, equipments, maintenance. Role of nurse- pre dialysis, intra and post dialysis. Complications. Counseling and Patient education, Records and reports.

Kidney transplantation:

- Nursing management of a patient with Kidney transplantation: Kidney transplantations- a historical review. Immunology of graft rejections. The recipient of a renal transplant. Renal preservations. Human -Leucocytic Antigen (HLA) typing matching and cross matching in renal transplantation. Surgical techniques of renal transplantations. Chronic renal transplant rejection. Complication after KTP: Vascular and lymphatic, Urological, cardiovascular, liver and neurological, infectious complication. KTP in children and management of pediatric patient with KTP. KTP in developing countries. Results of KTP. Work up of donor and recipient for renal transplant. Psychological aspect of KTP and organ donations. Ethics in transplants, Cadaveric transplantation.

Rehabilitation of patient with nephrological problems.

- Risk factors and prevention. Rehabilitation of patients on dialysis and after kidney transplant. Rehabilitation of patients after urinary diversions. Family and patient teaching.

Pediatric urinary disorders:

- Etiology, clinical manifestations, diagnosis, prognosis, related pathophysiology.
- Medical, surgical and nursing management of children with Renal Diseases -UTI, ureteral reflux, glomerule nephritis, nephrotic syndrome infantile nephrosis, cystic kidneys, familial factors in renal diseases in childhood, Haemolytic uraemic syndrome. Benign recurrent haematuria, nephropathy, wilms' tumour.

Critical care units – dialysis, KTP unit:

- Philosophy, aims and objectives. Policies, staffing pattern, design and physical plan of Dialysis and KTP units. Team approach, functions. Psychosocial aspects in relation to staff

and clients of ICU, dialysis unit. In-service education. Ethical and legal issues.

Quality assurance in nephrological nursing practice:

- Role of advance practitioner in nephrological nursing. Professional practice standards. Quality control in nephrological nursing and Nursing audit.

SUBSPECIALITY-ONCOLOGY NURSING

CONTENTS:

Introduction:

- Epidemiology-Incidence, Prevalence - Global, National, State and Local. Disease burden, concept of cancer, risk factors. Historical perspectives. Trends and issues. Principles of cancer management. Roles and responsibilities of oncology nurse.

The nature of Cancer:

- Normal cell biology. The Immune system. Pathological and patho-physiological 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.

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.

Diagnostic Evaluation:

- Health assessment: History taking, physical examination; Staging and grading of tumors, TNM Classification. Common diagnostic tests: Blood investigation: Hematological, Bio-chemical, Tumor markers. Hormonal assay. Cyrology: 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. 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.

Cancer Treatment Modalities and Nurse's Role

- **Surgery:** Principles of surgical oncology, Current surgical strategy, Determining surgical risk, Special surgical techniques, Pre-intra-postoperative nursing care, Acute and chronic surgical complications. Future directions and

advances

- **Chemotherapy:** Principles and classification of chemotherapeutics, Pharmacology of antineoplastic drugs- Mechanism of action, Absorption, protein binding, Bio-transformation, excretion, common side effects, drug toxicity, Calculating drug doses. Therapeutic response to chemotherapy-Tumor variables, drug resistance and Safety precautions.
- **Radiation Therapy:** Physics of radiotherapy, Types of ionizing rays. Radiation equipments: Linear accelerator, cobalt, Implants, Isotopes. Types of therapies: Oral, Brachy therapy, tele-therapy, selectron therapy. 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- Radio sensitivity, treatment effects Complications of radiotherapy. Radiation safety: Standards of Bhabha Atomic Research Centre(BARC)
- **Bone Marrow Transplantation /Stem Cell Transplantation:**
 - Types, indications, transplantation procedure and complications and **nursing management**, Types and donor sources, Preparation and care of donor and recipient, **bone marrow bank** Legal and ethical issues.
- **Immunotherapy (Biotherapy):** Concepts and principles, Classification of agents, Treatment and applications
- **Gene Therapy:** Current Concepts and practices.
- **Alternative and Complementary Therapies:** Current practices
- **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.

Pain management: Theories, types and Management modalities:

- Nature of cancer pain, Pathophysiology of pain, Pain threshold, Assessment of pain
Principles of cancer pain control, Pharmacological: Opioid and non-opioid analgesic therapy, Patient controlled analgesia (PCA), **other invasive techniques of pain control**, recent developments in cancer pain **relief**, Non Pharmacological pain relief technique: Complementary therapies (Music, massage, meditation, relaxation techniques, biofeedback, etc.) Psychological intervention in pain control, Alternative system of medicines, Role of nurse.

Palliative care:

- Definition and scope, philosophy, Concept and elements of palliative care, Global and Indian perspective of palliative care, Quality of life issues, Communication skill ,Nursing perspective of palliative care and its elements, Home care , Hospice care.
- Role of nurse in palliative care.

Infection control: Process of infection, risk of hospitalization, nosocomial infections- prevention and control of infection in acute, long term care facility and community based care, Standard safety measures.

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, Leukemia. Malignancies of musculoskeletal system. Endocrine malignancies. Skin. Head and Neck-brain tumors. Other malignancies - Breast cancer, **AIDS related malignancies (Kaposi's sarcoma)**

Pediatric malignancies:

- Leukemia, Lymphoma, Neuro-blastoma. Wilm's tumor, Soft tissue sarcoma, Retinoblastoma.
- Nursing Management of children with Paediatric Malignancies.

Nursing Management of Physiological conditions and Symptoms of Cancer Patient:

- Nutrition: - effects of cancer on nutritional Status and its consequences:-Anemia, Cachexia, Xerostomia, mucositis, Dysphagia, nausea and vomiting, constipation, diarrhea, electrolyte imbalance, taste alterations.
- Impaired mobility: Decubitus ulcer, pathologic fractures, thrombophlebitis, pulmonary embolism, contractures, footdrop.
- **Other symptoms:** Dyspepsia & hiccup, dyspnoea. Intestinal obstruction, Fungating wounds. Anxiety & depression, insomnia .Lymph edema.
- **Impact of cancer on sexuality:** Effects of radiotherapy / chemotherapy/surgery on sexuality of the cancer patient. Nursing management of cancer patients experiencing sexual dysfunction. Sexual counseling.

Cancer Emergencies:

- Disseminated intravascular coagulation (DIC). Malignant pleural effusion. Neoplastic cardiac tamponade and septic shock spinal cord Compression. Superior venacava syndrome. Metabolic emergency: hyper and hypo calcemia. Surgical emergency, Urological emergency, Hemorrhage, Organ obstruction. Brain metastasis. Nurses role in managing oncologic emergencies.

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: End of life care, Grief and grieving process, Bereavement support. Care of Nurses who 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 Standing orders and Protocols. Quality Assurance Programme in oncology units. Nursing audit.

Course: PhD in Medical Surgical Nursing

Theme no.	Themes	Specific objectives	Contents
I.	<ul style="list-style-type: none"> • Introduction • Health assessment of patients • Care in hospital setting • Management of patients with disorders of Gastro intestinal tract • Management of patients with Disorders of Blood • Management of patients with disorders of Genito Urinary System • Management of patients with disorders of Endocrine System • Management of patients with disorders of Musculo-Skeletal System • Management of patients with disorders of Integumentary System • Management of patients with disorders of Eye and ENT • Management of patients with Disorders of Reproductive System 	<p>At the end of unit students are able to</p> <p>Knowledge:</p> <ul style="list-style-type: none"> • Know about current status of medical surgical nursing. • Recall health assessment of various patients • Find out the appropriate care to be given in the hospital setting • Describe anatomy physiology, etiology, Pathophysiology, clinical manifestation, diagnostic assessment, management of complication of patients with disorders of gastrointestinal tract. • Explain anatomy and physiology, etiology, Pathophysiology, 	<p>Introduction:</p> <ul style="list-style-type: none"> • Historical development of Medical – Surgical Nursing in India. • Current status of health and disease burden in India. • Current concept of health. • Trends & issues in Medical – Surgical Nursing. • Ethical & cultural issues in Medical – Surgical Nursing. • Rights of patients. • National health policy, special laws & ordinances relating to older people. • National goals. • Five years plans • National health programs related to adult health. <p>Health Assessment of Patient:</p> <ul style="list-style-type: none"> • History taking. • Physical examination of various systems. • Nutritional assessment. • Related investigations and diagnostic assessment • Role of nurse in diagnostic procedures <p>Care in Hospital Setting:</p> <ul style="list-style-type: none"> • Ambulatory care • Acute & Critical care • Long term care. • Home Health Care. • Characteristics, care models, practice settings, interdisciplinary team. • Hospitalization- effects of hospitalization on the patient & family.

	<ul style="list-style-type: none"> • Geriatric Nursing • Management of patients with communicable and Sexually Transmitted Diseases • Emergency, Trauma and Multi-System Organ Failure 	<p>diagnosis assessment, management and complication of patients with disorders of blood.</p> <ul style="list-style-type: none"> • Explain anatomy and physiology, etiology, Pathophysiology, diagnosis assessment, management and complication of patients with disorders of urinary system. • Explain anatomy and physiology, etiology, Pathophysiology, diagnosis assessment, management and complication of patients with disorders of endocrine system. • Explain anatomy and physiology, etiology, Pathophysiology, diagnosis assessment, management and complication of 	<ul style="list-style-type: none"> • Stressors & reactions related to disease process • Nursing care using Nursing process approach. <p>Management of patient with Gastro Intestinal Tract Disorders:</p> <ul style="list-style-type: none"> • Review of anatomy and physiology. • Common disorders-etiology, Patho physiology, Clinical manifestations, complications, prognosis. • Health assessment-History taking, physical examination, investigation & diagnostic assessment. • Treatment modalities and trends. • Nursing management. • Related Research Studies. • Evidence based nursing practice. • Rehabilitation and follow-up. <p>Management of patient with Disorders of Blood:</p> <ul style="list-style-type: none"> • Review of anatomy and physiology. • Common Disorders-etiology, Pathophysiology, Clinical manifestations, Complications, prognosis. • Health assessment-History taking, physical examination, investigation and diagnostic assessment. • Treatment modalities and trends. • Nursing management. • Related research studies. • Evidence based nursing practice. • Rehabilitation and follow-up . <p>Management of patient with Disorders of Genito Urinary System:</p> <ul style="list-style-type: none"> • Review of anatomy and physiology. • Common Disorders-etiology, Pathophysiology, Clinical manifestations, Complications, prognosis. • Health assessment-History taking, physical examination, investigation and diagnostic assessment. • Treatment modalities and trends.
--	---	---	--

		<p>patients with disorders of musculo-skeletal system.</p> <ul style="list-style-type: none"> • Explain anatomy and physiology, etiology, Pathophysiology, diagnosis assessment, management and complication of patients with disorders of integumentary system. • Explain anatomy and physiology, etiology, Pathophysiology, diagnosis assessment, management and complication of patients with disorders of Eye and ENT • Explain anatomy and physiology, etiology, Pathophysiology, diagnosis assessment, management and complication of patients with 	<ul style="list-style-type: none"> • Nursing management. • Related research studies. • Evidence based nursing practice. • Rehabilitation and follow-up. <p>Management of patient with Disorders of Endocrine System:</p> <ul style="list-style-type: none"> • Review of anatomy and physiology. • Common Disorders-etiology, Pathophysiology, Clinical manifestations, Complications, prognosis. • Health assessment-History taking, physical examination, investigation and diagnostic assessment. • Treatment modalities and trends. • Nursing management. • Related research studies. • Evidence based nursing practice. • Rehabilitation and follow-up. <p>Management of patient with Disorders of Musculo Skeletal System:</p> <ul style="list-style-type: none"> • Review of anatomy and physiology. • Common Disorders-etiology, Pathophysiology, Clinical manifestations, Complications, prognosis. • Health assessment-History taking, physical examination, investigation and diagnostic assessment. • Treatment modalities and trends. • Nursing management. • Role of nurse in musculo skeletal disorders. • Related research studies • Evidence based nursing practice. • Rehabilitation and follow-up. <p>Management of patient with Disorders of Integumentary System:</p> <ul style="list-style-type: none"> • Review of anatomy and physiology. • Common Disorders-etiology, Pathophysiology, Clinical
--	--	--	---

		<p>disorders of reproductive system.</p> <ul style="list-style-type: none"> • Explain anatomy and physiology, etiology, Pathophysiology, diagnosis assessment, management and complication of patients with disorders of geriatric nursing. • Explain anatomy and physiology, etiology, Pathophysiology, diagnosis assessment, management and complication of patients with disorders of patients with communicable and sexually transmitted diseases. • Explain anatomy and physiology, etiology, Pathophysiology, diagnosis, assessment, management and complication of patients with emergency, trauma 	<p>manifestations, Complications, prognosis.</p> <ul style="list-style-type: none"> • Health assessment-History taking, physical examination, investigation and diagnostic assessment. • Treatment modalities and trends. • Nursing management. • Related research studies. • Evidence based nursing practice. • Rehabilitation and follow-up. <p>Management of patient with Disorders of Eye and ENT:</p> <ul style="list-style-type: none"> • Review of anatomy and physiology. • Common Disorders-etiology, Pathophysiology, Clinical manifestations, Complications, prognosis. • Health assessment-History taking, physical examination, investigation and diagnostic assessment. • Treatment modalities and trends. • Nursing management. • Related research studies. • Evidence based nursing practice. • Rehabilitation and follow-up. <p>Management of patient with Disorders of Reproductive System:</p> <ul style="list-style-type: none"> • Review of anatomy and physiology. • Common Disorders-etiology, Pathophysiology, Clinical manifestations, Complications, prognosis. • Health assessment-History taking, physical examination, investigation and diagnostic assessment. • Treatment modalities and trends. • Nursing management. • Related research studies. • Evidence based nursing practice. • Rehabilitation and follow-up.
--	--	--	--

		<p>and multisystem organ failure.</p> <p>Skill: Recognize ethical and cultural needs of patients.</p> <p>Perform the assessment correctly. Render nursing care using nursing process approach. Demonstrate skill in providing nursing care to the patient with GIT disorders after assessment Perform physical, psychosocial and spiritual assessment. Assess diagnostic, treatment modalities & new trends Demonstrate advance skills/competent in managing patients with disorders of blood. Perform physical, psychosocial and spiritual assessment, Assess diagnostic, treatment modalities and new trends Demonstrate advance skills/competent in managing patients with disorders of urinary system</p>	<p>Geriatric Nursing:</p> <ul style="list-style-type: none"> • Nursing Assessment – History and Physical assessment. • Ageing: <ul style="list-style-type: none"> • Demography; Myths and realities. • Concepts and theories of ageing. • Cognitive Aspects of Ageing. • Normal biological ageing. • Age related body systems changes, • Psychosocial Aspects of Ageing. • Medications and elderly. • Stress & coping in older adults. • Common Health Problems & Nursing Management; • Psychosocial and Sexual. • Abuse of elderly. • Role of nurse for care of elderly; ambulation, nutritional communicational, Psychosocial and spiritual. • Role of nurse for care givers of elderly. • Role of family and formal and non formal caregivers. • Home and institutional care. • Use of aids and prosthesis (hearing aids, dentures), • Legal & Ethical Issues. • Provisions and Programmes for elderly; privileges, Community Programs and health services;Issues, problems and trends. <p>Management of patient with Communicable and Sexually Transmitted Diseases:</p> <ul style="list-style-type: none"> • Review of immune system. • Common Disorders of immune system – HIV / AIDS. • Review of infectious disease process.
--	--	--	--

		<p>Perform physical, psychosocial and spiritual assessment. Assess the diagnostic, treatment modalities and new trends. Demonstrate advance skills/competent in managing patients with disorders of endocrine system.</p> <p>Perform physical, psychosocial and spiritual assessment. Assess the diagnostic, treatment modalities and new trends Demonstrate advance skills/ competent in managing patients with disorders of musculo-skeletal system.</p> <p>Perform physical, psychosocial and spiritual assessment. Assess the diagnostic, treatment modalities and new trends. Demonstrate advance skills in managing patients with disorders of integumentary system.</p> <p>Perform physical, psychosocial and spiritual assessment. Assess the diagnostic, treatment modalities and new trends</p>	<ul style="list-style-type: none"> • Communicable diseases-etiology, Pathophysiology, Clinical manifestations complications, prognosis. • Health assessment-History taking physical examination, investigation and Diagnostic assessment. • Treatment modalities and trends. • Nursing management • Related research studies. • Evidence based nursing practice. • Rehabilitation and follow-up. • New communicable diseases- swine flu& Ebola ,Role of nurse in prevention of communicable diseases • Dengue, NIPAH, Leptospirosis <p>Emergency, Trauma and Multi System Organ Failure:</p> <ul style="list-style-type: none"> • DIC (disseminated intravascular coagulation) • Trauma burns, poisoning. • Etiology, Patho- physiology, Clinical manifestations, complications, prognosis. • Health assessment-History taking, physical examination, investigation and • Diagnostic assessment. • Treatment modalities and trends. • Nursing management. • Related research studies. • Evidence based nursing practice. • Role of nurse in emergencies Triage ,Role of nurse in organ donation • Rehabilitation and follow-up.
--	--	---	--

		<p>Demonstrate advance skills/competent in managing patients with disorders of Eye and ENT Assess the diagnostic, treatment modalities and new trends Demonstrate advance skills/competent in managing patients with disorders of reproductive system. & relate nursing research and evidence based nursing practice. Perform physical, psychosocial and spiritual assessment. Assess the diagnostic, treatment modalities and new trends Demonstrate advance skills/competent in managing patients with disorders of geriatric nursing. Perform complete assessment, Assess the diagnostic, treatment modalities and new trends. Demonstrate advance skills in managing patients with disorders of patients with communicable and sexually transmitted diseases. Perform assessment, Assess</p>	
--	--	---	--

		<p>the diagnostic, treatment modalities and new trends and Demonstrate advance skills/competent in managing patients with disorders of emergency, trauma and multisystem organ failure.</p> <p>Attitude: Appreciate the role of nurse in health team.</p> <p>Relate investigations and diagnostic assessments with disease conditions. Justify the reaction related to stress in disease condition. Recognize and relate the nursing research and evidence based nursing practice. Recognize and relate the nursing research and evidence based nursing practice. Recognize and relate the nursing research and evidence based nursing practice Recognize and relate the nursing research and evidence based nursing practice</p>	
--	--	--	--

		<p>practice. Recognize and relate t he nursing research and evidence based nursing practice.</p> <p>Recognize and relate t he nursing research and evidence based nursing practice.</p> <p>Recognize and relate t he nursing research and evidence based nursing practice.</p> <p>Recognize and relate t he nursing research and evidence based nursing practice.</p> <p>Recognize and relate t he nursing research and evidence based nursing practice.</p> <p>Recognize and relate t he nursing research and evidence based nursing practice.</p> <p>Recognize and relate t he nursing research and evidence based nursing practice.</p>	
--	--	--	--

<p>II.</p>	<ul style="list-style-type: none"> • Introduction • Epidemiology • Assessment and Diagnostic measures • Altered pulmonary conditions • Vascular disorders and nursing management • Cardiothoracic emergency interventions • Nursing care of patient with obstructive air way • Congenital Heart Diseases • Review: Pharmacology • Nursing Care of Patient undergoing thoracic surgery • Cardiac Rehabilitation • Intensive Coronary Care Unit/Intensive cardio thoracic Unit. 	<p>At the end of unit students are able to:</p> <p>Knowledge: Know the historical development, trends and issues related to CVTS nursing.</p> <p>Understand and Identify risk factors associated with cardiovascular problems.</p> <p>Understand and explain importance of history taking and other diagnostic tests in confirming diagnosis of cardiovascular conditions.</p> <p>Understand and explain the etiology, clinical manifestation, pathophysiology and management of pulmonary conditions and its association & impact on cardiovascular conditions.</p> <p>Differentiate various vascular conditions from cardiac problems, its association with each other and impact on patient's prognosis and health needs.</p> <p>Understand and explain treatment modalities in cardiovascular emergencies.</p> <p>Discuss various obstructive air way conditions, its</p>	<p>Introduction:</p> <ul style="list-style-type: none"> • Historical development, trends and issues in the field of cardiology • Cardiovascular and thoracic conditions – major health problem. • Evidence based nursing and its application in cardio vascular and thoracic nursing.(to be incorporated in all the units • Concepts, principles and nursing perspectives. • Ethical and legal issues • Role of nurse in Ethical and legal issues. <p>Epidemiology:</p> <ul style="list-style-type: none"> • Risk factors: Heredity, psychosocial factors, hypertension, smoking, obesity, diabetic mellitus. etc. • Health promotion, disease prevention, life style modification. • National health programmed related to cardio vascular and thoracic conditions. <ul style="list-style-type: none"> • Alternate system of medicine. • Complementary therapies. <p>Assessment and Diagnostic measures:</p> <ul style="list-style-type: none"> • History taking • Physical assessment: Heart rate variability: Mechanism, measurements, pattern, factors, impact of interventions on HRV. • Electrocardiography(ECG): electrical conduction through the heart, basic elctrocardiogram,12 lead elctrocardiogram,axis determination - ECG changes in :intraventricular conduction abnormalities- arrhythmias,ischemia,injury and infarction, trial and ventricular enlargement, electrolyte imbalance, • Electrocardiography: technical aspects, special techniques, echocardiography of cardiac structures in health and disease, newer techniques. Cardio electro physiology procedures: Diagnostic studies, interventional and catheter ablation, nursing care. • Exercise testing; indication and objectives, safety and personnel, pre test considerations, selection, interpretation, tests termination, recovery period..
------------	---	--	---

		<p>clinical manifestations and nursing management. Understand and explain the etiology, pathophysiology, diagnosis, treatment modalities and prognosis of client with congenital heart diseases Illustrate various drugs used in cardiovascular condition along with its effects, side effects and adverse effects. Understand and discuss various surgical modalities of management Discuss the life style modifications and rehabilitation process of client. Know the ideal design of cardiovascular & thoracic unit and its importance in rendering quality services.</p>	<ul style="list-style-type: none"> • Pulmonary function test: Broncho scopy and graphies. • Interpretation of diagnostic measures. • Nurses role in diagnostic tests. • Laboratory tests using Blood: Blood specimen collection, cardiac markers, blood lipids, hematologic studies, blood cultures, Coagulation studies, arterial blood gases, Blood chemistries, cardiac enzymestudies, • Interpretation and role of nurse • Output measurements (Arterial and swan Ganz monitoring), Blood gases and its significance, oxygen supply and demand. • Radiologic examination of the chest: interpretation, chest film findings. • Cardiac catheterization: indications, contraindications, patient preparation, procedure,interpretation of data. • Serum concentration of selected drugs. <p>Assessment and Diagnostic measures: Diagnostic Tests: Hemodynamic monitoring: technical aspects. monitoring, functional hemodynamic indices</p> <ul style="list-style-type: none"> • Nuclear and other imaging studies of the heart; Magnetic resonance imaging <p>Altered pulmonary conditions:</p> <ul style="list-style-type: none"> • Etiology, clinical manifestations, diagnosis, prognosis, related pathophysiology,treatment modalities and nursing management of: • Bronchitis. • Bronchieal asthma. • Bronchiectiasis. • Pneumonias. • Lung Abscess. • Pulmonary tuberculosis, fibrosis, pneumoconiosis, etc. • Pleuritis, effusion. • Pneumo, haemo and pyothorax. • Intestinal lung disease. • Cystic fibrosis
--	--	---	---

		<p>Skill: Identify major and render care to client. Educate & motivate people in modifying their life style & promoting their health. Collect samples for various tests correctly and assist in conducting diagnostic tests. Recognize association of pulmonary problem with cardiovascular condition and demonstrate confidence and competence while caring such clients. Identify vascular conditions and recognizing health needs of the client and render nursing services based on the needs of the client. Handle cardiac emergencies promptly and confidently, contribute in reducing disease specific mortality rate. Handle various mechanical devices used for client with obstructive air way disease and make the client</p>	<ul style="list-style-type: none"> • Acute and chronic obstructive pulmonary disease(conditions leading to) • Cor pulmonale. • Acute respiratory failure. • Adult respiratory distress syndrome. • Pulmonary embolism. • Pulmonary hypertension. (8 hours) • FFR(function flow reserve) • Head table tilt test • Role of nurse in hemodynamic monitoring • Altered pulmonary conditions:Lung tumor <p>Vascular disorders and nursing management</p> <ul style="list-style-type: none"> • Etiology, clinical manifestations, diagnosis, prognosis, related pathophysiology,treatment modalities and nursing management of: • Disorders of arteries. • Disorders of the aorta. • Aortic aneurysms. • Aortic dissection. • Peripheral arterial disease of the lower extremities. • Venous thrombosis. • Varicose veins. • Chronic venous insufficiency and venous leg ulcers. • Pulmonary embolism. • Raynaud’s phenomenon. <p>Cardiothoracic emergency interventions:</p> <ul style="list-style-type: none"> • CPR- BLS and ALS, • Use of ventilators, defibrillations, pace maker. • Post resuscitating care. • Care of the critically ill patients, • Psycho social and spiritual aspects of care, <p>Stress management</p> <ul style="list-style-type: none"> • Role of nurse
--	--	---	---

		<p>comfortable without or minimize complications. Incorporate knowledge of pediatric nursing while providing quality care Evaluate the condition of patient for the desired effects, side effects and adverse effects of prescribed drugs and calculate the dosages & administer drugs accurately.</p> <p>Render quality care to the client during preoperative, intra operative and post operative period.</p> <p>Participate effectively and efficiently in rehabilitation of client.</p> <p>Identify learning needs of staff working in the unit, plan and implement in service educational programmers. Conduct nursing audit & strive for improving quality of care.</p> <p>Attitude: Provide evidence based nursing care to clients. Contribute in National Health programme. Recognize the apprehension of client and relatives undergoing various tests and</p>	<ul style="list-style-type: none"> • Cardioversion Role of nurse in defibrillation & cardioversion. • Cardiothoracic emergency interventions ICU psychosis. <ul style="list-style-type: none"> • Nursing care of patient with obstructive air way: • Assessment. • Use of artificial air way. • Endo tracheal intubation, treacheostomy and its care. Complications, minimum cuff leak, securing tubes. <p>Oxygen delivery systems:</p> <ul style="list-style-type: none"> • Nasal cannula, • Oxygen mask, Venturi mask, • Partial re breathing bag. • Bi –PAP and C- PAP masks, • Uses, advantages, disadvantages, nursing implications of each. <p>Mechanical Ventilation:</p> <ul style="list-style-type: none"> • Principles of mechanical ventilation. • Types of mechanical ventilation and ventilators. <ul style="list-style-type: none"> • Modes of ventilation, advantage, disadvantage, complications. • PEEP therapy, indications, physiology and complication. Weaning off the ventilators. <ul style="list-style-type: none"> • Nursing assessment and interventions of ventilated patients. <p>Congenital Heart Diseases:</p> <ul style="list-style-type: none"> • Etiology, clinical manifestations, diagnosis, prognosis, related patho physiology, treatment modalities and nursing management of: • Classification – Cyniotic and acynotic heart disease. • Atrial Septal defects, Ventricular septal defect, Eisenmenger’s complex. • Patent Ductus arteriosis, AP window, • Truncus Arteriosis. Pulmonary stenosis, atresia. • Coarctation of aorta. • Tetralogy of Fallots. • Transposition of great arteries
--	--	--	--

		<p>educate and prepare both for the tests and results of the tests.</p> <p>Know the health need of the client having cardiovascular problem in association of pulmonary problems and provide need based quality care.</p> <p>Educate the client about disease condition, limitations in life and motivate them for minimizing complications.</p> <p>Be accountable for decisions taken while handling cardiac emergencies.</p> <p>Appreciate the apprehension of client and family members while putting on support system for client with obstructive air way conditions.</p> <p>Involve parents and family members in nursing care of children having congenital heart diseases.</p> <p>Follow the principles of drug administration and educate client & family members about importance of following prescribed regime and observing and reporting</p>	<ul style="list-style-type: none"> • Total anomaly of pulmonary venous connection. • Ebstein’s anomaly. • Fetal circulation • Embryological development of heart. • Double outlet right ventricle, Single ventricle, hypoplastic left heart syndrome. <p>Pharmacology.</p> <p>Review:</p> <ul style="list-style-type: none"> • Pharmacokinetics. • Analgesics/anti inflammatory agents. • Antibiotics, antiseptics. • Drug used in cardiac emergencies. • Blood and Blood components, • Beta blocking agents, • Calcium channel blockers, • Vasoconstrictors, • Vasodilators, • ACE inhibitors, • Anti coagulants, • Anti arrhythmic drugs, • Antihypertensives, • Diuretics, • Sedatives and tranquilizers, • digitalis, • Antilipemics. • Beta blocking agents, • Principles of drug administration, role and responsibilities of nurses and care of drugs. • Drug reaction and toxicity. • Anti thrombolytic agents, lipemics • Inotropic agents <ul style="list-style-type: none"> • Health education for patients on anti coagulants, anti hypertensive
--	--	--	---

		<p>probable side effects of drugs.</p> <p>Recognize the importance of team work in dealing with cardiovascular and thoracic conditions.</p> <p>Educate and motivate client and family members to understand the process of rehabilitation & to cooperate.</p> <p>Identify the problems of staff, help them to overcome the burn out syndrome and maintains cordial interpersonal relationship in the unit.</p>	<p>Nursing Care of Patient undergoing thoracic surgery:</p> <ul style="list-style-type: none"> • Indications, selection of patient. • Preoperative assessment and preparation;counselling. • Intra operative care: Principles of open heart surgery, equipments, anesthesia, cardiopulmonary bypass. • Immediate post operative care, Assessment, post operative problems and interventions: Bleeding, Cardiac tamponade Low cardiac output, Infarction, Pericardial effusion, pleural effusion, Pneumothorax, Haemothorax, Coagulopathy, Thermal imbalance, Inadequate ventilation/perfusion, Neurological problems, Renal problems, Psychological problems. • Chest physiotherapy. • Nursing intervention: Life style modification, complimentary therapies/alternative systems of medicine. • Intermediate and late post operative care after CABG, valve surgery, others. • Follow up care. • Surgical procedures for coronary Artery bypass Grafting, recent advances and types of grafts, Valve replacement or reconstruction, cardiac transplant. • Palliative surgery and different Stents, vascular surgery, other recent advances. • Thoracic surgery: lobectomy.Pneumonectomy, tumor excision, etc <p>Cardiac Rehabilitation:</p> <ul style="list-style-type: none"> • Process. • Counseling. • Follow up care. • Physical evaluation • Life style modification. • Physical conditioning for cardio vascular efficiency through exercise. • Role of nurse in cardiac rehabilitation. <p>Intensive Coronary Care Unit/Intensive cardio thoracic Unit:</p>
--	--	--	--

			<p>Quality Assurance</p> <ul style="list-style-type: none"> • Standard, Protocols, Policies, Procedures. • Infection control; standard safety measures. • Nursing audit. • Staffing, Cardiac team. • Burnout syndrome <ul style="list-style-type: none"> • Nurses role in the management of ICCU and ICTU. • Mobile coronary care unit, • Role of nurse in quality assurance • Planning in service educational programme and teaching. • Design of ICCU/OICTU
III.	<ul style="list-style-type: none"> • Introduction • Epidemiology • Review of anatomy and physiology of urinary system • Assessment of diagnostic measures • Renal immunopathy / Immunopathology • Urological Disorders and Nursing Management • Glomerular disorders and nursing management • Kidney transplantation • Rehabilitation of patient with nephrological problems • Pediatric urinary 	<p>At the end of unit students are able to:</p> <p>Knowledge: Understand the concepts and principles of nursing client with nephro-uro conditions. Describe major nephro-uro problems among populations. Recall anatomy and physiology of urinary system. Explain the assessment of clients with urinary conditions. Explain the immune mechanism of glomerular vascular diseases. Describe different</p>	<p>Introduction:</p> <ul style="list-style-type: none"> • Historical development: trends and issues in the field of nephro and urological nursing. • Nephro and urological problems • Concepts, principles and nursing perspectives • Ethical and legal issues. • Evidence based nursing and its application in nephro and urological nursing (to be incorporated in all the units) <p>Epidemiology:</p> <ul style="list-style-type: none"> • Major health problems- urinary dysfunction, urinary tract infections, Glomerular disorders, obstructive disorders and other urinary disorders. • Risk factors associated with nephro and urological conditions- Hereditary, Psychosocial factors, smoking, alcoholism, dietary habits, cultural and ethnic considerations. • Health promotion, disease prevention, life style modification and its implications to nursing. <p>Alternate system of medicine/complementary therapies</p> <p>Review of anatomy and physiology of urinary system:</p>

	<p>disorders</p> <ul style="list-style-type: none"> • Critical care units – dialysis, KTP unit. • Quality assurance in nephrological nursing practice 	<p>disorders of ureters, bladder, and urethra and their medical, surgical and nursing management.</p> <p>Understand and explain glomerular disorders & its medical, surgical & nursing management.</p> <p>Understand and explain the procedure of kidney transplant and preparation for and post operative care of the clients with kidney transplant.</p> <p>Understand and explain the need of rehabilitation.</p> <p>Describe the management modalities for the children with renal diseases.</p> <p>Describe the equipment and requirements of the dialysis and KTP units.</p> <p>Skill: Practice principles of nursing while caring for these clients.</p> <p>Identify the risk factors contributing to renal conditions.</p>	<ul style="list-style-type: none"> • Embryology • Structure and functions • Renal circulation • Physiology of urine formation • Fluid and electrolyte balance • Acid base balance • Immunology specific to kidney <p>Assessment of diagnostic measures:</p> <ul style="list-style-type: none"> • History taking. • Physical assessment, psychological assessment • Common assessment abnormalities-dysurea, frequency, enuresis, urgency, hesitancy, haematuria, pain, retention, burning on urination, pneumaturia, incontinence, nocturia, polyurea, anuria, oliguria. • Diagnostic tests-urine studies, blood chemistry, radiological procedures -KUB, IVP, nephrotomogram, retrograde pyelogram, renal arteriogram, Renal ultra sound, CT scan, MRI, cystogram, renal scan, biopsy, endoscopy-cystoscopy, urodynamics studies-cystometrogram, urinary flow study, sphincter electromyography, voiding pressure flow study, videourodynamics, Whitaker study. • Interpretation of diagnostic measures. <p>Nurse's role in diagnostic tests.</p> <p>Renal immunopathy/ Immunopathology:</p> <ul style="list-style-type: none"> • General Concept of immunopathology • Immune mechanism of glomerular vascular disease • Role of mediator systems in glomerular vascular disease. <p>Urological Disorders and Nursing Management:</p> <p>Etiology, clinical manifestations, diagnosis, prognosis, related pathophysiology, medical, surgical and nursing management of:</p> <ul style="list-style-type: none"> • Urinary tract infections- pyelonephritis, lower urinary tract infections, • Disorders for ureters, bladder and urethra • Urinary tract infections-
--	---	---	--

		<p>Identify fluid & electrolyte balance needs & provide care accordingly. Prepare the clients for various investigations. Collect specimen for different investigations. Interpret the reports of diagnostic tests. Assist &/or carry various diagnostic procedures correctly. Identify the role of mediator systems in glomerular vascular diseases and the symptomatology related to it. Identify the clients with disorders of ureters, bladder and urethra and render efficient care to them. Identify the signs and symptoms of different glomerular disorders and render specific care to these clients. Identify the bio psychosocial needs of client undergoing kidney transplant. Render competent care</p>	<ul style="list-style-type: none"> • Urinary dysfunctions- urinary retention, urinary incontinence, urinary reflux, • Bladder disorders- neoplasms, calculi, neurogenic bladder, trauma, Congenital abnormalities • Benign prostrate hypertrophy (BPH) • Ureteral disorders: ureteritis, ureteral trauma, congenital: anomalies of ureters • Urethral disorders- tumours, trauma, Congenital anomalies of ureters. <p>Glomerular disorders and nursing management</p> <ul style="list-style-type: none"> • Etiology, clinical manifestations, diagnosis, prognosis, related pathophysiology, medical, surgical and nursing management of • Glomerulo-nephritis- chronic, acute, nephritic syndrome • Acute Renal failure and chronic renal failure. • Renal calculi • Renal tumors-benign and malignant. • Renal trauma. • Renal abscess. • Diabetic nephropathy • Vascular disorders • Renal tuberculosis • Polycystic • Congenital disorder's • Hereditary renal disorders. <p>Kidney transplantation Nursing management of a patient with Kidney transplantation:</p> <ul style="list-style-type: none"> • Kidney transplantation a historical review • Immunology of graft rejections • The recipient of a renal transplant • Renal preservations • Human –Leucocytic Antigen (HLA) typing matching and cross matching in renal transplantation.
--	--	--	---

	<p>to the clients with kidney transplant. Recognize early signs of transplant rejection, report & intervene promptly. Initiate & Participate in rehabilitation of client undergoing dialysis & kidney transplant. Identify renal diseases in children and render effective care. Prepare children for different diagnostic & treatment procedures. Participate in establishing policies, procedures</p> <p>Attitude: Provide evidence based nursing care.</p> <p>Provide health education related to lifestyle modification and promotion of health to the clients & family. Appreciate anatomical and/or physiological deviations & its effects on quality of life. provide adequate</p>	<ul style="list-style-type: none"> • Surgical techniques of renal transplantations. • Chronic renal transplant rejection. • Complication after KTP: Vascular and lymphatic, Urological, cardiovascular, liver and neurological, infectious complication. • KTP in children and management of pediatric patient with KTP. • KTP in developing countries. • Results of KTP. • Work up of donor and recipient for renal transplant. • Psychological aspect of KTP and organ donations. • Ethics in transplants <p>Cadaveric transplantation.</p> <p>Rehabilitation:</p> <ul style="list-style-type: none"> • Rehabilitation of patient with nephrological problems. Risk factors and prevention. • Rehabilitation of patients on dialysis and after kidney transplant. • Rehabilitation of patients after urinary diversions. • Family and patient teaching. <p>Pediatric urinary disorders</p> <ul style="list-style-type: none"> • Etiology, clinical manifestations, diagnosis, prognosis, related pathophysiology, medical, surgical and nursing management of children with Renal Diseases -UTI, ureteral reflux, glomerulo nephritis, nephrotic syndrome infantile nephrosis, cystic kidneys, familial factors in renal diseases in childhood, Haemolytic uraemic syndrome. Tumour. <p>Critical care units – dialysis, KTP unit</p> <ul style="list-style-type: none"> • Philosophy, aims and objectives. • Policies Staffing pattern, design and physical plan of Dialysis and KTP units. • Team approach, functions • Psychosocial aspects in relation to staff and clients of ICU, dialysis unit. • In-service education.
--	--	---

		<p>explanation and relieve anxiety of clients undergoing invasive diagnostic procedures. Educate the clients about normal immune response and the precautions in autoimmune diseases Provide relevant health education related to diet, life style modifications and prevention of recurrence to the clients suffering from urological disorders. Help client modify their diet, life style, to prevent recurrence and promote renal health.</p> <p>Educate the client, family members with kidney transplant. Educate clients and their families on care & modification in lifestyle. Educate care giver about lifestyle modification required by children with renal disorders. Provide fruitful suggestions for</p>	<ul style="list-style-type: none"> • Ethical and legal issues. • Quality assurance in nephrological nursing practice. • Role of advance practitioner in nephrological nursing. • Professional practice standards. • Quality control in nephrological nursing. • Nursing audit.
--	--	--	--

		improvement in the functioning and the dialysis and KTP units.	
IV	<ul style="list-style-type: none"> • Introduction • The nature of Cancer • Etiology of Cancer • Diagnostic Evaluation • Levels of prevention and care • Cancer Treatment Modalities and Nurse's • Role Pain management: Theories, types and Management modalities • Palliative care • Infection control • Pediatric malignancies • Nursing Management of Physiological conditions and Symptoms of Cancer Patient • Cancer Emergencies • Psycho-Social Aspects of Nursing Care • Layout and Design of an oncology institution / ward, OPD, chemotherapy unit, Bone marrow, transplantation unit, Pain clinic etc. 	<p>At the end of the unit the students are able to –</p> <p>Knowledge:</p> <ul style="list-style-type: none"> • Describe common malignancies in pediatric clients. • Understand the significance of practice standards, policies and protocols. • Describe the emergency conditions in cancer clients. • Understand the need for and explain the techniques involved in crisis intervention and stress management for the clients with cancer. • Understand the symptomatic treatment modalities for the cancer clients. <p>Skill:</p> <ul style="list-style-type: none"> • Identify need of children with various 	<p>Introduction:</p> <ul style="list-style-type: none"> • Epidemiology-Incidence, Prevalence - Global, National, State and Local • Disease burden, concept of cancer, risk factors. • Historical perspectives • Trends and issues • Principles of cancer management. • Role and responsibilities of oncology nurse <p>The nature of Cancer:</p> <ul style="list-style-type: none"> • Normal cell biology • The Immune system. <p>Pathological and pathophysiological changes in tissues:</p> <ul style="list-style-type: none"> • Biology of the cancer cell • Clone formation Transformation • Tumors stem lines. • Products produced by the tumor. • Systemic effects of tumor growth. <p>Etiology of Cancer:</p> <ul style="list-style-type: none"> • 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. <p>Diagnostic Evaluation:</p> <ul style="list-style-type: none"> • Common diagnostic tests. ○ Blood investigation: Hematological, Biochemical, Tumor markers, Hormonal assay

		<p>malignancies and render them effective care.</p> <ul style="list-style-type: none"> • Plan and arrange for appropriate diet for cancer clients. • Render effective an efficient care for bed ridden cancer clients. • Manage physiological symptoms in cancer clients. • Demonstrate competence in identifying emergency situations in cancer clients. • Report and intervene promptly an effectively to manage the cancer emergencies. • Practices various spiritual and alternative treatment modalities for management of stress in cancer case. Participates in crisis interventions for 	<ul style="list-style-type: none"> ○ Cytology : Fine needle aspiration cytology (FNAC) • Histopathology: Biopsy <p>Radiological assessment: MRI, Ultrasound, Computed tomography, Positron emission tomography, Radio nuclide imaging, Functional metabolism imaging.</p> <ul style="list-style-type: none"> • Mammography, Endoscopies. • Nurses responsibilities in diagnostic measures. • Health assessment : History taking, physical examination; Staging and grading of tumors, • TNM Classification. <p>Levels of prevention and care :</p> <ul style="list-style-type: none"> • 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. <p>Cancer Treatment Modalities and Nurse's Role:</p> <p>Surgery-</p> <ul style="list-style-type: none"> • Principles of surgical oncology. • Current surgical strategy. • Determining surgical risk • Special surgical techniques • Pre-intra-postoperative nursing. • Acute & chronic surgical complications. Future directions and advances
--	--	---	--

		<p>cancer clients.</p> <ul style="list-style-type: none"> • Frame policies and protocols for the oncology nursing unit. <p>Attitude:</p> <ul style="list-style-type: none"> • Provide relevant health education to the parents. • Understand the impact of cancer on sexuality and provide sexual counseling to the cancer clients. • Recognizes the signs of brain metastasis and vital organ involvement in cancer and render efficient care to relieve discomfort. • Provide culturally congruent care to the dying cancer client. • Provide suggestions for the improvement of functioning of oncology unit. 	<p>Chemotherapy:</p> <ul style="list-style-type: none"> • Principles and classification of chemotherapeutics. • Pharmacology of anti neoplastic drugs- Mechanism of action, Absorption, protein binding, Bio-transformation, excretion, common side effects, drug toxicity. • Calculating drug doses, • Therapeutic response to chemotherapy – tumor variables, drug resistance • Safety precautions <p>Radiation Therapy:</p> <ul style="list-style-type: none"> • Physics of radiotherapy. • Types of ionizing rays. • Radiation equipments: Linear accelerator, cobalt, Implants, Isotopes. • Types of therapies: Oral, Brachytherapy, teletherapy, selectron therapy. • Effects of radiation on the body tissue, • Radiation biology- cell damage hypoxic cells, alteration of tumor kinetics. <p>Approaches to radiation –</p> <ul style="list-style-type: none"> • External radiotherapy • Internal radiotherapy- unsealed, • Sealed sources. • Effectiveness of radiotherapy- Radio-sensitivity, treatment effects. Complications of radiotherapy. <ul style="list-style-type: none"> • Radiation safety : Standards of Bhabha Atomic Research Centre (BARC) <p>Bone Marrow Transplantation /Stem Cell Transplantation</p> <ul style="list-style-type: none"> • Types, indications, transplantation procedure and complications and nursing management,
--	--	---	--

		<ul style="list-style-type: none"> • Types and donor sources. • Preparation and care of donor and recipient. • Bone marrow bank • Legal and ethical issues. <p>Immunotherapy (Biotherapy): Concepts and principles. Classification of agents. Treatment and applications</p> <ul style="list-style-type: none"> • Gene Therapy: Current Concepts and practices. <p>Alternative & Complementary Therapies: Current practices .</p> <p>Pain management: Theories, types and Management modalities:</p> <ul style="list-style-type: none"> ○ Nature of cancer pain. ○ Pathophysiology of pain. • Pain threshold <p>Assessment of pain.</p> <ul style="list-style-type: none"> • Principles of cancer pain control. • Pharmacological: Opioid and non-opioid analgesic therapy. • Patient controlled analgesia (PCA) • Other invasive techniques of pain control • Recent developments in Cancer pain relief <p>Non Pharmacological pain relief technique:</p> <ul style="list-style-type: none"> ○ Complementary therapies (Music, massage, meditation, relaxation techniques, biofeedback, etc.) ○ Psychological intervention in pain control. • Alternative system of medicines. <p>Role of nurse.</p> <p>Palliative care:</p> <ul style="list-style-type: none"> • Definition and scope, philosophy
--	--	--

		<ul style="list-style-type: none"> • Concept and elements of palliative care. • Global and Indian perspective of palliative care • Quality of life issues. • Communication skill. • Nursing perspective of palliative care and its elements. Role of nurse in palliative care. • Home care • Hospice care. <p>Infection control :</p> <ul style="list-style-type: none"> • Process of infection, risk of hospitalization, Nosocomial infections- prevention and control of infection in acute, long term care facility and community based care • Standard safety measures <p>Cancer Emergencies:</p> <ul style="list-style-type: none"> • Disseminated intravascular coagulation (DIC) • Malignant pleural effusion. • Neoplastic cardiac tamponade, septic shock, spinal cord Compression. • Superior venacava syndrome. • Metabolic emergency: hyper and hypo calcemia. • Surgical emergency. • Urological emergency • Hemorrhage, Organ obstruction. • Brain metastasis. • Nurses role in managing oncologic emergencies. <p>Psycho-Social Aspects of Nursing Care:</p> <ul style="list-style-type: none"> • Psychological responses of patients with cancer. • Psychosocial assessment. Crisis intervention, coping. Stress management, spiritual/cultural care and needs. • Counseling: individual and family.
--	--	---

			<ul style="list-style-type: none"> • Maximizing quality of life of patient and family. <p>Ethical, moral and legal issues:</p> <ul style="list-style-type: none"> • End of life care • Grief and grieving process • Bereavement support. • Care of Nurses who care for the dying. <p>Layout & Design of an oncology institution / ward, OPD, chemotherapy unit, Bone marrow, transplantation unit, Pain clinic etc.</p> <ul style="list-style-type: none"> • Practice Standards of oncology nursing. Policies and Procedures • Establishing Standing orders and Protocols. • Quality Assurance Programme in oncology units • Nursing audit
V	<ul style="list-style-type: none"> • Management of patients with disorders of Nervous System • Management of patients with disorders of Respiratory System • Management of patients with disorders of cardio Vascular System • Cardiac disorders and nursing management • Review of Anatomy and Physiology of cardio vascular and respiratory system • Management of Renal emergencies 	<p>At the end of unit students are able to</p> <p>Knowledge: Explain anatomy physiology, etiology, Pathophysiology, clinical manifestation, diagnostic assessment, management of complication of patients with disorders of nervous system.</p> <p>Explain anatomy and physiology, etiology, Pathophysiology, diagnosis assessment, management and complication of patients with disorders of respiratory</p>	<p>Management of patient with Disorders of Nervous System:</p> <ul style="list-style-type: none"> • Review of anatomy and physiology. • Common Disorders-etiology, Pathophysiology, Clinical manifestations, complications, prognosis. • Health assessment-History taking, physical examination, investigation and diagnostic assessment. • Treatment modalities and trends. Nursing management. • Rehabilitation and follow-up. • Related research studies. • Evidence based nursing practice. • Role of nurse in communicating with neurological deficit patients <p>Special therapies</p> <p>Brain death confirmation test</p> <p>Management of patient with Disorders of Respiratory System:</p> <ul style="list-style-type: none"> • Review of anatomy and physiology. • Common Disorders-etiology, Patho physiology, Clinical

	<ul style="list-style-type: none"> • Drugs used in urinary disorders • Dialysis • Nursing Care of Patients With specific Malignant Disorders 	<p>system. Explain anatomy and physiology, etiology, Pathophysiology, diagnosis assessment, management and complication of patients with disorders of cardiovascular system. Explain anatomy and physiology of cardiovascular and respiratory system. Discuss the etiology, clinical manifestation, pathophysiology and management of cardiovascular conditions. Discuss renal emergencies & its management. Understand different groups of drugs used in the urinary disorders. Discuss dialysis, preparation & care of patients undergoing dialysis. Explain the nursing care of clients with specific malignant disorders.</p>	<p>manifestations, Complications, prognosis</p> <ul style="list-style-type: none"> • Health assessment-History taking, physical examination, investigation and diagnostic assessment. • Treatment modalities and trends. • Nursing management. • Related research studies. • Evidence based nursing practice. Rehabilitation and follow-up. <p>Management of patient with Disorders of Cardio vascular System:</p> <ul style="list-style-type: none"> • Review of anatomy and physiology. • Common Disorders-etiology, Pathophysiology, Clinical manifestations, Complications, prognosis. • Health assessment-History taking, physical examination, investigation and diagnostic assessment. • Treatment modalities and trends. • Nursing management. • Related research studies. • Evidence based nursing practice. • Rehabilitation and follow-up. <p>Review of Anatomy and Physiology of cardio vascular and respiratory system:</p> <ul style="list-style-type: none"> • Review of anatomy and physiology of heart, lung, thoracic cavity and blood vessels. • Embryology of heart and lung. • Coronary circulation. • Hemodynamic and electro physiology of heart. Biochemistry of blood in relation to cardio pulmonary function. <p>Cardiac disorders and nursing management: Etiology, clinical manifestations, diagnosis, prognosis, related pathophysiology and nursing management of:</p> <ul style="list-style-type: none"> • Hypertention
--	---	--	---

		<p>Skill: Apply nursing process providing comprehensive care to the patients and demonstrate advanced skills and competence in managing patients in nervous system disorders. Assess the diagnostic, treatment modalities & new trends and demonstrate advance skills/competent in managing patients with respiratory system. Assess the diagnostic, treatment modalities and new trends and demonstrate advance skills/competent in managing patients with cardiovascular system. Assess the cardiopulmonary function based on the blood biochemistry. Demonstrate competence in interpreting test results and management of client. Recognize renal emergencies & provide competent care. Interpret the effects of various drugs administered. Identify the needs of the</p>	<ul style="list-style-type: none"> • Coronary artery disease. • Angina of various types. • Cardiomegaly • Myocardial infarction,. Congestive cardiac failure (CCF). • Heart failure, pulmonary edema, shock. • Rheumatic heart disease • other valvular diseases • Arrhythmias, heart block. • Associated illnesses. • Inflammatory heart diseases, Infective Endocarditis, Myocarditis, Pericarditis. • Cardio myopathy, dilated, restrictive, hypertrophic. • Management of Renal emergencies: • Anuria • Acute renal failure, • Poisoning • Trauma, • Urine retention • Acute graft rejection • Hematuria • Nurse's role. <p>Drugs used in urinary disorders:</p> <ul style="list-style-type: none"> • Classification • Indications, contraindications, actions and effects, toxic effects . • Role of nurse. <p>Dialysis:</p> <ul style="list-style-type: none"> • Dialysis- Historical, types, Principles, goals • Hemodialysis- vascular access sites- temporary and permanent. • Peritoneal dialysis. • Dialysis Procedures- steps, equipments, maintenance • Role of nurse- pre dialysis, intra and post dialysis. • Complications.
--	--	---	--

		<p>clients treated with dialysis and render effective pre, intra and post dialysis care & maintain accurate adequate records of clients undergoing dialysis</p> <p>Render culturally congruent and competent comprehensive care to the cancer patients</p> <p>Attitude: Recognize and relate the nursing research and evidence based nursing practice.</p> <p>Recognize and relate the nursing research and evidence based nursing practice</p> <p>Recognize and relate the nursing research and evidence based nursing practice</p> <p>Appreciate other conditions altering cardiopulmonary functions.</p> <p>Appreciate client's problems with various cardiovascular conditions and provide</p>	<ul style="list-style-type: none"> • Counseling. • Patient education. • Records and reports. <p>Nursing Care of Patients With specific Malignant Disorders:</p> <ul style="list-style-type: none"> • Malignancies of G.I. system-oral, oesophagus, stomach, rectal, liver & pancreas, care of ostomies / stoma • Respiratory malignancies • Genitourinary 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, AIDS related malignancies (Kaposi's)
--	--	---	---

		<p>nursing care accordingly. Equip self with modern therapies used in the treatment of renal emergencies. Recognize record & report the effects of drugs. Provide necessary health education on life style modification & care of vascular access sites. Educate clients and families about nutrition, exercises and other health promotion activities in cancer.</p>	
--	--	---	--

References

1. Text book of Medical Surgical Nursing –Brunner and Suddarth
2. Medical Surgical Nursing –Clinical Positive outcome-Joyce and Black
3. Medical Surgical Assessment and Management of clinical problems –Lewis, Colliner
4. Medical Surgical Nursing –A Psychopathologic Approach –Luckmann and Sorensen
5. Medical Surgical Nursing –A Nursing process Approach
6. Medical Surgical nursing –B.T.Basvanthappa
7. Moroneys Surgery for nurses –Colmer
8. API Textbook of Medicine:-Shah N.S
9. Fundamental of Operation theatre Services –Datta T.K
10. Essentials of Orthopaedics:-Maheshwari
11. Davidsons Principles and Practice of Medicine –Haslett C,Chilvers E.R.

12. Watsons Clinical Nursing and related sciences –Walsh M
13. The Lippincott Manual of Nursing practice –Nettina, Sandra
14. Medical Surgical Nursing an integrated approach – Write L. and Delmar.
15. Pharmacology and Pharmacotherapeutics – Satoskat and Bhandarkar.
16. Text book of medical surgical nursing, S.N. Chugh, Avichal Publishing Company.
17. Joyce Griffin Sable (2007) Site Specific Cancer Series: Gastrointestinal cancer.
18. L.K. Clarke and M.S. Drophin (2006) Site specific cancer series, Head Neck cancer.
19. R.M. Carrol Johnson L. and N.S. Bush (2006) Psychological Nursing Care and Cancer Continuum. 2nd Edition.
20. Ramsharan Mehta, Oncology Nursing, Jaypee brothers publishers
21. Regina M. Fink and Rose A. Gates, Oncology Nursing Secrets,