**UNIT XXII** Skills required in critical care:

- Care of patient on ventilator, monitors, intravenous catheters (IVC) and tubings, advance cardiac life support (CPR), chest physiotherapy
- Rehabilitation,

**UNITXXIII** Alternative therapies in critical care

- Holistic approach: Therapeutic touch, Relaxation, Guided imagery
- Music therapy
- Reflexology
- Reiki Therapy
- Acupressure

# CLINICAL NURSING II – NEUROSCIENCES NURSING

## PLACEMENT: 2nd YEAR

HOURS OF INSTRUCTION: Theory 150 hours + Practical 800 hours = 950 hours

**PURPOSE:** Develop in depth understanding and competency in the care of patients/clients with problems of neurological system.

## SPECIFIC OBJECTIVES:

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

1. Discuss recent trends in the field of Neurology & Neuro-surgery and their nursing implications
2. Describe the anatomy and physiology of nervous system
3. Demonstrate skill in performing neurological assessment of patients.
4. Apply nursing process in the care of patients with neurological disorders.
5. Describe the diseases affecting CNS & peripheral nervous system
6. Demonstrate skill in the preparation and post procedure care of patients undergoing various diagnostic procedures done in neurology & neuro-surgery.
7. Develop standards of care in neurological nursing practice quality assurance
8. Administer special drugs used in neurology and describe their nursing implications.
9. Identify psychosocial problems of patients with disabilities
10. Describe concept of rehabilitation and use principles of rehabilitation in nursing of neuro patients.
11. Plan and develop physical lay out of neuro-intensive care unit
12. Organize and conduct orientation and in-service education program for nursing personnel.

13. Identify areas for nursing research and use research findings in nursing practice
14. Explain the ethical and legal issues related to brain death, organ transplantation and practice of neuro nursing

## CONTENT OUTLINE

**Unit I** Introduction:

- Scope of neurological nursing practice
- Emerging trends in neurology & neurosurgery & its implications to Nursing practice
- Review of anatomy & physiology of nervous system

**Unit II** Neurological assessment:

- Overview of neurological assessment and Glasgow coma scale
- Assessment parameters of cerebral function, cranial nerves and reflexes, motor & sensory functions
- Nursing implication
- Diagnostic tests in neurological conditions, their purposes, indications, pre and post procedure care of patients & their interpretation: X Ray studies & angiography, special central nervous system imaging, C. T., M.R.I., PET (Positron Emission Transaxial Tomography), CSF & Spinal testing, electrical potential & conduction, testing of special senses-ENG, calorical testing, doppler, muscle & nerve biopsy, neuro-psychological testing

**Unit III** Nutritional needs of neurological patients:

- Basic Nutritional Requirements
- Metabolic changes following injury & starvation
- Nutritional assessment
- Common neurological problems that interfere with nutrition and strategies for meeting their nutritional needs
- Special metabolic & electrolyte imbalances
- Chronic fatigue syndrome

**Unit IV** Craniocerebral & spinal trauma:

- Head injuries – incidence, types, primary and secondary assessment, diagnosis and management of complications
- Spinal cord injuries – epidemiology, pathophysiology, classification, assessment and management

**Unit V** Central nervous system disorders - etiology, types, clinical features, pathophysiology, diagnosis and management of:

- CNS Infections– focal and general
- HIV/AIDS,
- Neuro syphilis.
- Brain tumors

**Unit VI** Spinal cord disorders– etiology, types, clinical features, pathophysiology, diagnosis and management of:

- Spinal cord tumors
- Infections
- Arterio- venous malformations
- Disc disease
- infarctions

**Unit VII** Movement disorders:

- Tics, dystonia, chorea, wilson's disease, essential teremors

**Unit VIII** Seizures & Epilepsy:

- Epidemiology, classification, pathogenesis, assessment & management of epilepsy
- Status Epilepticus

**Unit IX** Cerebro- vascular disorders – etiology, types, clinical features, pathophysiology, diagnosis and management of:

- cerebrovascular anomalies: Cerebral aneurysms, A.V.M., cerebral venous and sinus thrombosis, vasculitis of nervous system, Cerebral ischemia, intracerebral hemorrhage, subarachnoid hemorrhage, Stroke.

**Unit X** Cranial nerve disorders- definition, causes, clinical feature, assessment, diagnosis & management:

- Trigeminal Neuralgia, bell's palsy neuropathology, Menier's disease, Down syndrome

**Unit XI** Peripheral nerve disorders- definition, causes, pathophysiology, clinical features, assessment, diagnosis & management of:

- Peripheral nerve injury
- Peripheral nerve tumors
- Chronic peripheral neuropathies
- Carpal tunnel syndrome

**Unit XII** Metabolic disorders - definition, causes, clinical feature, assessment, diagnosis & management:

- Diabetes insipidus & Metabolic encephalopathy

**Unit XIII** Sleep disorders:

- Normal sleep pattern
- Sleep disorders

**Unit XIV** Degenerative diseases of nervous system:

- Definition, causes, clinical features, pathophysiology diagnosis & management of Alzheimer's disease, Myesthenia gravis, Parkinson's disease, LGB syndrome,

**Unit XV**: Auto immune disorders - definition, causes, clinical features, pathophysiology diagnosis & management of:

- Multiple sclerosis,
- Inflammatory myopathies

**Unit XVI** Ethical and legal issues in neruo nursing:

- Brain death & organ tansplantation
- Euthanasia
- Negligence & malpractice
- Nosocomial infections: incidence, prevention and management

**Unit XVII** Rehabilitation:

- Concept of rehabilitation
- Principles of Rehabilitating patients in acute care setting, and following stroke, head injury and degenerative disorders of brain.

**Unit XVIII** Drugs used in neurology:

- Mechanism of action, drug reactions and interactions, abuse and nursing implications of neuro transmitters, Osmotic diuretics, cholinergic, anticholinergic, anticonvulsants, antiplatelets.

**Unit XIX** Quality assurance in neurological nursing:

- Standards of neurological nursing practice
- Continuing education in neurological nursing

# CLINICAL NURSING II – ONCOLOGICAL NURSING

## PLACEMENT: 2ND YEAR

HOURS OF INSTRUCTION: Theory 150 hours + Practical 800 hours = 950 hours

**PURPOSE:** This course is designed for an advanced course of study for developing expertise and an in depth understanding in the field of oncological nursing.

## SPECIFIC OBJECTIVES:

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

1. Describe the concept of cancer, difference between normal cell & cancer cell, its growth and appearance, cell structure, biological differences and genetic difference.
2. Apply nursing process in providing comprehensive care to medical and surgical oncology patient.
3. Demonstrate skill in administering/assisting with various therapies like chemotherapy, teletherapy, brachytherapy and selectron therapy.
4. Appreciate general principles of management of cancer patients
5. Practice as advance practitioner in the field of oncological nursing
6. Demonstrate empathetic approach for management of cancer patients.
7. Describe nursing management of oncological emergencies.