Western Technical College

10543113 Nursing: Complex Health Alterations 2

Course Outcome Summary

Course Information

Description
Complex Health Alterations II prepares the learner to expand knowledge and skills from previous courses in caring for clients across the lifespan with alterations in the immune, neuro sensory, musculoskeletal, gastrointestinal, hepatobiliary, renal / urinary and the reproductive systems. The learner will also focus on management of care for clients with high risk perinatal conditions, high risk newborns and the ill child. Synthesis and application of previously learned concepts will be evident in the management of clients with critical life threatening situations.

Career Cluster
Health Science

Instructional Level
Associate Degree Courses

Total Credits
3.00

Textbooks


Learner Supplies


Core Abilities

1. Apply mathematical concepts.

2. Demonstrate ability to think critically.

3. Demonstrate ability to value self and work ethically with others in a diverse population.
4. Transfer social and natural science theories into practical applications.

5. Use effective communication skills.

6. Use technology effectively.

Course Competencies

1. Evaluate nursing care for patients with alterations in the immune systems

   Assessment Strategies
   1.1. in an oral, written or performance assessment
   1.2. pre-class assignment
   1.3. objective test

   Learning Objectives
   1.a. Describe the purpose, significance of results, and nursing responsibilities related to diagnostic studies of the immune system.
   1.b. Explain nursing implications for medications and other therapies used to treat patients with alterations in the immune system: chemotherapy, hyperthermia, biologic response modifiers, gene therapy, external beam therapy and brachytherapy, bone marrow and stem cell transplantation.
   1.c. Develop a nursing care plan for patients with alterations in the immune system.
   1.d. Describe the pathophysiology, etiology, clinical manifestations and collaborative management (to include health and preventative education) of patients with the following disorders: skin cancer & HIV.
   1.e. Identify available agency and community resources to promote care for patients with alterations in the immune system including hospice care.
   1.f. Explain the pathophysiology of autoimmune disorders and tissue transplant rejection.

2. Evaluate nursing care for patients with alterations in the neuro-sensory system (including CVA's)

   Assessment Strategies
   2.1. in an oral, written or performance assessment
   2.2. Pre-class assignment
   2.3. Objective test

   Learning Objectives
   2.a. Explain the pathophysiology, manifestations, complications, and collaborative care of intracranial disorders, including increased intracranial pressure, seizures, stroke, aneurysms, traumatic brain injury, tumors, and headaches.
   2.b. Describe the purpose, significance of results, and nursing responsibilities related to diagnostic studies of the neurosensory system.
   2.c. Identify a nursing plan of care to include teaching to facilitate safety and to provide information and community support necessary for patients with neurosensory alterations across the lifespan.
   2.d. Explain the pathophysiology, manifestations, complications, and collaborative care of patients with spinal cord disorders including spinal cord injury, herniated discs, tumors and CNS infections.
   2.e. Summarize the collaborative management of the patient with neurosensory alterations to include pharmacological therapy, nutritional needs, diagnostic tests and screening, teaching, and available community resources.
   2.f. Consider surgical intervention, pharmacological management, nutritional considerations and patient diversity when developing a plan of care for patients with neurosensory alterations across the lifespan.
   2.g. Explain the pathophysiology, manifestations, complications, and collaborative care of patients with degenerative neurological disorders to include dementia, Alzheimer's, multiple sclerosis (MS), Parkinson's (PD), Huntington's, amyotrophic lateral sclerosis (ALS).
   2.h. Explain the pathophysiology, manifestations, complications, and collaborative care of patients with peripheral nervous system disorders (myasthenia gravis, Guillain-Barre syndrome) and cranial nerve disorders (trigeminal neuralgia and Bell's palsy).
2.i. Explain the pathophysiology, manifestations, complications, and collaborative care of commonly occurring eye and ear disorders (cataracts, glaucoma, macular degeneration, Meniere's, infections, retinal detachment, diabetic retinopathy, vertigo).

2.j. Prioritize a nursing plan of care for a patient with hearing/vision loss across the lifespan.

3. **Evaluate nursing care for patients with alterations in the musculo-skeletal system**

   **Assessment Strategies**
   3.1. in an oral, written or performance assessment
   3.2. Pre-class assignment
   3.3. Objective test

   **Learning Objectives**
   3.a. Describe the pathophysiology, etiology, clinical manifestations and collaborative management (to include health and preventative education) of patients with the following disorders: fractures, soft tissue injuries, limb amputations, osteoarthritis, rheumatic disorders, osteoporosis, and Paget's disease.
   3.b. Describe the pathophysiology, etiology, clinical manifestations and collaborative management (to include health and preventative education) of patients with the following complications: compartment syndrome, fat embolism syndrome, deep venous thrombosis, infection, delayed union and nonunion, complex regional pain syndrome, pulmonary emboli and osteomyelitis.
   3.c. Describe the pathophysiology, etiology, clinical manifestations and collaborative management (to include health and preventative education) of patients with the following musculoskeletal disorders in children: osteogenesis imperfecta, muscular dystrophy, scoliosis, and Legg-Calves-Perthes.
   3.d. Develop a nursing plan of care for a patient with alterations in the musculoskeletal system to include lifespan considerations, health, wellness and prevention education, nutrition and utilization of community and agency resources.
   3.e. Explain diagnostic tests used to screen, diagnose, and treat clients with alterations in the musculoskeletal system: Radiology-Cat Scan, MRI, arthroscopy, arthrocentesis, arthrogram, Lab- RF, HLA-DR4, CK, potassium, PT, INR, PTT, wound cultures.

4. **Evaluate nursing care for patients with alterations in the gastrointestinal and hepatobiliary systems**

   **Assessment Strategies**
   4.1. in an oral, written or performance assessment
   4.2. Pre-class assignment
   4.3. Objective test

   **Learning Objectives**
   4.a. Describe variations in the gastrointestinal and hepatobiliary assessment findings throughout the lifespan.
   4.b. Explain diagnostic tests used to screen, diagnose, and treat patients with alterations in the gastrointestinal and hepatobiliary systems.
   4.c. Consider nutritional implications and cultural values when developing a plan of care for patients with gastrointestinal or hepatobiliary alterations across the lifespan.
   4.d. Describe the pathophysiology, etiology, clinical manifestations and collaborative management of the patient with alterations in the upper gastrointestinal system (GERD, hiatal hernia, esophageal tumors and esophageal surgery, gastritis, peptic ulcer, gastric carcinoma, pyloric stenosis and bariatric surgery).
   4.e. Describe the pathophysiology, etiology, clinical manifestations and collaborative management of the patient with alterations in the hepatobiliary system (cirrhosis, hepatitis, liver cancer, cholecystitis, gallbladder cancer, pancreatitis, pancreatic cancer).
   4.f. Select teaching/learning topics to promote self care for the patient with gastrointestinal and hepatobiliary system alterations.
   4.g. Summarize the collaborative management of the patient with gastrointestinal or hepatobiliary alterations to include pharmacological therapy, nutritional needs, diagnostic tests and screening, teaching, and available community resources.
   4.h. Explain the rationale for using selected diets, including those for diarrhea and constipation and low-residue, gluten-free, and high or low fiber diets.
4.i. Compare and contrast the etiology, pathophysiology, manifestations and collaborative management of patients with disorders of bowel motility (diarrhea, constipation, irritable bowel syndrome).

4.j. Explain the pathophysiology, manifestations, complications and collaborative management of patients with acute or chronic inflammatory bowel disorders, neoplastic disorders, structural and obstructive bowel disorders.

4.k. Describe the pathophysiology, etiology, clinical manifestations and collaborative management of patients with the following gastrointestinal disorders in children: cleft lip/palate, pyloric stenosis, Hirschsprung's disease, appendicitis, celiac disease.

5. Evaluate nursing care for patients with alterations in the renal/urinary system

Assessment Strategies
5.1. in an oral, written or performance assessment
5.2. Pre-class assignment
5.3. Objective test

Learning Objectives
5.a. Describe the effects and nursing implications of medications, treatments and diagnostic tests prescribed for patients with alterations in the renal/urinary system.

5.b. Summarize nutritional needs and restrictions for the patient with renal/urinary alterations.

5.c. Compare and contrast renal replacement therapies, including dialysis and kidney transplant, to manage acute and chronic renal failure.

5.d. Differentiate between acute renal failure and chronic renal failure.

5.e. Explain the pathophysiology, manifestations, complications and collaborative management of patients with urinary system alterations (infection, calculi, cancer, urinary diversion, urinary retention, benign prostatic hypertrophy, incontinence).

5.f. Explain the pathophysiology, manifestations, complications and collaborative management of patients with renal system alterations (polycystic kidney, glomerular disorders, cancer, renal failure).

5.g. Explain the pathophysiology, etiology, manifestations, complications and collaborative management of the following renal disorders seen in pediatric patients: nephrotic syndrome, acute postinfectious glomerulonephritis, hemolytic uremic syndrome.

5.h. Develop a nursing plan of care for a patient with alterations in the urinary/renal systems including lifespan considerations, teaching and available resources.

6. Evaluate nursing care for patients with critical/life threatening situations including shock, burns and trauma

Assessment Strategies
6.1. in an oral, written or performance assessment
6.2. Concept map - oral presentation
6.3. Pre-class assignment
6.4. Objective test

Learning Objectives
6.a. Explain the pathophysiology, manifestations, complications and collaborative management of patients experiencing critical/life threatening situations that include shock (hypovolemic, cardiogenic, distributive, and obstructive).

6.b. Develop a nursing plan of care for a patient with critical/life threatening situation to include lifespan considerations, health, wellness and prevention education, and utilization of community and agency resources.

6.c. Explain the pathophysiology, manifestations, complications and collaborative management of patients experiencing critical/life threatening situations that includes trauma and burns.

6.d. Explain procedures used to screen, diagnose, and treat patients experiencing critical/life threatening situations.

6.e. Describe the nursing implications of pharmacological and nonpharmacological therapy, nutritional interventions, diagnostic tests and therapies prescribed for patients experiencing critical/life threatening situations.

6.f. Identify teaching/learning needs to promote informed decisions for the patient and family experiencing a critical/life threatening situation.

6.g. Discuss caring interventions to provide for psychosocial needs of the patient and families experiencing critical/life threatening situations.

7. Evaluate nursing care for patients with alterations in the reproductive system
Assessment Strategies
7.1. in an oral, written or performance assessment
7.2. Pre-class assignment
7.3. Objective test

Learning Objectives
7.a. Explain the pathophysiology, manifestations, complications and collaborative management of patients with the following alterations in the female reproductive system: premenstrual syndrome, bleeding disorders, structural disorders, breast disorders and cancer.
7.b. Explain the pathophysiology, manifestations, complications and collaborative management of patients with the following alterations in the male reproductive system: erectile dysfunction, phimosis, priapism, hydrocele, neoplasm, benign prostatic hypertrophy.
7.c. Describe the purpose, significance of results, and nursing responsibilities related to diagnostic studies and screening of the reproductive system.
7.d. Identify a nursing plan of care to provide health information and promote screening and self care for patients with reproductive alterations considering individual and cultural values and variations across the lifespan.
7.e. Summarize the collaborative management of the patient with reproductive alterations to include pharmacological therapy, nutritional needs, teaching, and available community resources.

8. Evaluate nursing care for the high-risk perinatal patient

Assessment Strategies
8.1. in an oral, written or performance assessment
8.2. Pre-class assignment
8.3. Objective test

Learning Objectives
8.a. Describe the various fetal diagnostic tests performed to evaluate fetal development and well-being (NST, electronic fetal monitoring, fetal kick count, and biophysical profile)
8.b. Explain the maternal and fetal-neonatal implications, and collaborative management of the pregnant woman with the following disorders: substance abuse, diabetes mellitus, HIV, heart disease, bleeding disorders, incompetent cervix, hyperemesis, hypertensive disorders, Rh/ABO incompatibility, infection.
8.c. Explain the pathophysiology, etiology, manifestations, and complications of the following high risk pregnancy and birth conditions: pre-eclampsia/eclampsia, gestational diabetes, perinatal infection, premature rupture of membranes, abruptio placenta, placenta previa, preterm labor, tocolysis, fetal malposition, prolapsed cord, amniotic fluid embolism, perinatal loss.
8.d. Integrate pharmacological therapies, dietary teaching, preventative and self care into the plan of care for patients experiencing high-risk perinatal conditions.
8.e. Identify agencies and community resources for a patient experiencing high-risk perinatal conditions and birth or perinatal loss.

9. Evaluate nursing care for a high-risk newborn

Assessment Strategies
9.1. in an oral, written or performance assessment
9.2. Pre-class assignment
9.3. Objective test

Learning Objectives
9.a. Describe the purpose, significance of results, and nursing responsibilities related to diagnostic studies and screening of the high-risk newborn.
9.b. Explain the physiological characteristics and complications of conditions present at birth that place the newborn at risk (SGA, maternal DM, preterm, postterm, alcohol or drug exposed, HIV/AIDS, LGA).
9.c. Explain the pathophysiology, risk factors, etiology and complications of birth related stressors on the newborn (cold stress, hyperbilirubinemia, hypoglycemia, meconium aspiration syndrome, respiratory distress syndrome (RDS), necrotizing enterocolitis (NEC), intracranial hemorrhage, infection, anemia).
9.d. Compare the characteristics and potential complications that influence nursing care management of the high-risk newborn to include: surgical management, nutrition, long-term needs & available community resources.
9.e. Describe incidence, risk factors, anatomy, clinical manifestations and parental education related to congenital disorders of the newborn. (cardiac, gastrointestinal, neuromuscular)
9.f. Describe the interventions to facilitate parental attachment and meet the initial and long-term needs of parents of at-risk infants.