

NURSING 102: NURSING CARE OF ADULTS

UNIT II: NURSING CARE OF THE INDIVIDUAL WITH DISORDERS OF THE CARDIOVASCULAR SYSTEM

UNIT OBJECTIVES

AT THE COMPLETION OF THE UNIT, THE STUDENT:

1. Relates the normal anatomy and physiology of the cardiovascular system.
2. Explains the importance of normal functioning of the cardiovascular system to the maintenance of life.
3. Explains the interrelationships of the cardiovascular system to other body systems.
4. Differentiates normal from abnormal characteristics of nursing assessment for the cardiovascular system.
5. Explains the purpose, significance, results, and nursing responsibilities of diagnostic studies for the cardiovascular system.
6. Describes the etiology, clinical manifestations, complications, and nursing responsibilities for the patient with disorders of the heart, blood vessels, lymphatic system, and hematologic system.
7. Discusses the usual medical, surgical and nursing management of patients with disorders of the heart, blood vessels, lymphatic system, and hematologic system.
8. Implements therapeutic nursing care, using the nursing process and critical thinking skills, for patients with disorders of the cardiovascular system.
9. Utilizes communication skills when delivering nursing care to patients with disorders of the cardiovascular system.
10. Identifies the psychosocial needs of the patient with a disorder of the cardiovascular system.
11. Teaches patients about their cardiovascular disorders.
12. Relates knowledge of community resources available to assist the patient with disorders of the cardiovascular system.
13. Discusses clinical manifestations related to specific age-related physiologic changes of the cardiovascular system.
14. Describes common cardiovascular problems of older adults and the role of the nurse in caring for them.
15. Identifies evidence-based practice/best practice standards related to nursing care for patients with disorders of the cardiovascular system.

CONTENT/ HOURS	TEACHING STRATEGIES	SUPPORTING ACTIVITIES	EVALUATION METHODS
<p>Unit II: Nursing Care of the Individual with Disturbances of the Cardiovascular System Theory Hours- 16 T Clinical Hours- 7.5 C The Patient with Disorders of the Heart</p> <ol style="list-style-type: none"> 1) Review anatomy and Physiology 2) Assessment of the heart 3) Diagnostic Studies <ol style="list-style-type: none"> a) CXR b) EKG c) Holter Monitoring d) Exercise Treadmill Test e) ECHO f) TEE g) Nuclear Cardiology h) Blood Studies i) Drug Levels <ol style="list-style-type: none"> i) Cardiac Markers ii) Serum Lipids iii) Other j. Cardiac Catherization k. Angiography l. Electrophysiology Studies 4) Nursing Care of Patient’s with disorders of the Heart. <ol style="list-style-type: none"> a) Coronary Artery Disease & Acute Coronary Syndrome. b) Unstable (NSTEMI & STEMI) vs. Stable Angina <ol style="list-style-type: none"> i) Medication management ii) Patient teaching and lifestyle management c) Heart Failure – Right and Left Sided clinical manifestations <ol style="list-style-type: none"> i) Medication management ii) Patient teaching and lifestyle management 5) The patient with blood pressure disturbances <ol style="list-style-type: none"> a) Regulation of systematic arterial pressure b) Hypertension c) Lifestyle and medication management d) Age related considerations 	<p>Interactive Lecture</p> <p>Game-Based Learning: EdPuzzles on the Cardiovascular System Questioning</p> <p>Visual-based active learning: Cardiac Catherization, Heart Failure, CAD</p> <p>Collaborative Learning: Blood Flow Through Heart</p> <p>Socratic questioning</p>	<p>Observe in Cardiovascular Office Sites, Cardiovascular Catherization Lab</p> <p>Edpuzzle - CAD</p> <p>ATI Active Learning Templates: Cardiac medication classes & Cardiac Conditions</p> <p>Cardiac Matching worksheet</p> <p>Daily content review questions</p> <p>Role Play Exercise</p> <p>Case study (Heart Failure)– J.L</p>	<p>Pre & Post-Conference: Care of the Cardiovascular patient</p> <p>Clinical Simulation: Charles Jones</p> <p>Anecdotal</p> <p>Class Preparations</p> <p>Quizzes Concept Maps</p> <p>Kahoot Review</p> <p>Exam 1</p>

CONTENT/ HOURS	TEACHING STRATEGIES	SUPPORTING ACTIVITIES	EVALUATION METHODS
<p>6) The patient with peripheral vascular disorders</p> <p>A. Introduction to the vascular system & its purpose</p> <ol style="list-style-type: none"> i. Types of blood vessels <ol style="list-style-type: none"> 1. Arteries 2. Capillaries 3. Veins <p>B. Assessment</p> <ol style="list-style-type: none"> i. Distinguishing arterial & Venous ii. Neurovascular Assessment (6p's) <p>C. Geriatric consideration</p> <ol style="list-style-type: none"> a. Disorders of the arteries <ol style="list-style-type: none"> i. Peripheral Arterial Disease (PAD) ii. Thrombo-angiitis Obliterans (Berger's Disease) iii. Arteriospastic Disease (Raynaud's Phenomenon) iv. Disorders of the aorta <ol style="list-style-type: none"> 1. Aortic aneurysm 2. Aortic dissection b. Disorders of the veins <ol style="list-style-type: none"> i. Venous thrombosis <ol style="list-style-type: none"> 1. DVT 2. SVT ii. Varicose Veins iii. Chronic Venous Insufficiency (CVI) iv. Venous Ulcers c. Anticoagulation therapy <ol style="list-style-type: none"> i. Normal clotting mechanisms: Hemostasis ii. Drug therapy <ol style="list-style-type: none"> 1. Thrombin Inhibitors 2. Factor Xa Inhibitors 3. Vitamin K Antagonists 4. Other medications iii. Patient Management of anticoagulation therapy 	<p>Interactive Lecture</p> <p>Game-Based Learning: Kahoot-Comparison of Peripheral Artery and Venous Disease</p> <p>Unfolding Case Study: Peripheral Artery Disease (PAD)</p> <p>Collaborative Learning: ATI Active Learning Template, PAD</p> <p>Visual-Based Active Learning: Aortic rupture and Aortic dissection</p> <p>Unfolding Case Study: Aortic Aneurysm</p> <p>Group Activity: Identifying rationale, dosage, indications, and nursing considerations for: ASA, Simvastatin, and Pentoxifylline</p> <p>Game-Based Learning: Kahoot-Anticoagulation</p> <p>ATI Templates: Heparin, enoxaparin (Lovenox), warfarin (Coumadin) Handouts: Administration</p>	<p>ATI Case Study: DVT</p> <p>ATI Pharmacology Made Easy 4.0: Drug Therapy for Bleeding Disorders and Thromboembolic Drugs (Supplemental)</p> <p>ATI Video Case Study: ATI Pharmacology Made Easy 4.0: The Hematologic System</p> <p>ATI Pharmacology Made Easy 4.0: The Hematologic System: Introduction (Supplemental)</p>	<p>Anticoagulation Lab</p>

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<p>7) Overview of blood components</p> <p>8) The patient with hematologic disorders</p> <p style="padding-left: 20px;">A. Overview of Hematology</p> <p style="padding-left: 40px;">i. Hematopoiesis/Bone marrow</p> <p style="padding-left: 40px;">ii. Major Components of blood</p> <p style="padding-left: 60px;">1. Erythrocytes</p> <p style="padding-left: 60px;">2. Leukocytes</p> <p style="padding-left: 60px;">3. Thrombocytes</p> <p style="padding-left: 20px;">B. Diagnostic studies</p> <p style="padding-left: 40px;">i. Laboratory</p> <p style="padding-left: 40px;">ii. Radiologic</p> <p style="padding-left: 40px;">iii. Bone marrow</p> <p style="padding-left: 20px;">C. Peripheral vascular assessment</p> <p style="padding-left: 20px;">D. Geriatric considerations</p> <p style="padding-left: 20px;">E. Disorders of the erythrocytes</p> <p style="padding-left: 40px;">i. Anemias</p> <p style="padding-left: 60px;">1. Iron deficiency anemia</p> <p style="padding-left: 60px;">2. Megaloblastic anemias (Cobalamin & Folic acid)</p> <p style="padding-left: 60px;">3. Anemia blood loss</p> <p style="padding-left: 60px;">4. Hemolytic anemia</p> <p style="padding-left: 40px;">ii. Polycythemia</p> <p style="padding-left: 20px;">F. Disorders of the thrombocytes</p> <p style="padding-left: 40px;">i. Thrombocytopenia</p> <p style="padding-left: 60px;">1. Acquired thrombocytopenia (ITP)</p> <p style="padding-left: 60px;">2. TTP</p> <p style="padding-left: 60px;">3. HIT</p> <p style="padding-left: 20px;">G. Disorders of the Leukocytes</p> <p style="padding-left: 20px;">H. Disorders of the spleen</p> <p style="padding-left: 20px;">I. Disorders of the lymph system</p> <p style="padding-left: 40px;">i. Lymphoma's</p> <p style="padding-left: 60px;">1. Hodgkin's vs, Non-Hodgkin's</p>	<p>of subcutaneous heparin and enoxaparin (Lovenox)</p> <p>Visual-Based Active Learning: EdPuzzle: "Crash Course"-True Blood, Part 2"</p> <p>Cooperative Learning: Lab interpretation on sample client</p> <p>Visual-Based Active Learning: The Lymphatic System</p> <p>Flipped Classroom: Hodgkin's & Non-Hodgkin's Diseases</p> <p>Visual-Based Active Learning: Blood Types & Compatibilities</p>	<p>ATI Pharmacology Made Easy 4.0: Drug Therapy for Anemia (Supplemental)</p> <p>ATI Case Study: Anemia</p> <p>Visual-Based Active Learning: EdPuzzle: "Crash Course"-True Blood, Part 1</p>	<p>Exam 2</p>