# NURSING 102: NURSING CARE OF ADULTS

## UNIT I: 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.
14. Describes common problems of older adults and the role of the nurse in assisting them with selected care problems.
15. Identifies evidence-based practice/best practice standards related to nursing care for patients with disorders of the cardiovascular system.
16. Demonstrates accountability when providing nursing care for patients with disorders of the cardiovascular system.

| CONTENT | HOURS | TEACHING STRATEGY | ATI SUPPORTING ACTIVITY AND/OR RESOURCE | EVALUATION METHOD |
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| Unit I: Nursing Care of the Individual with Disturbances of the Cardiovascular System<br><br>I. The Patient with Disorders of the Heart<br>A. Review Anatomy & Physiology<br>B. Assessment of the Heart<br>C. Diagnostic Studies<br>1. CXR<br>2. EKG<br>3. Holter Monitoring<br>4. Exercise Treadmill Test<br>5. ECHO<br>6. TEE<br>7. Nuclear Cardiology<br>8. Blood Studies<br>a. Cardiac Markers<br>b. Serum Lipids<br>c. Other<br>9. Drug Levels<br>10. Cardiac Catheterization<br>11. Angiography<br>12. Electrophysiology studies<br>D. Nursing Care of Patients with disorders of the heart<br>1. Coronary Artery Disease & Acute Coronary Syndrome<br>2. Heart failure<br><br>II. The Patient with Blood Pressure Disturbances<br>A. Regulation of systemic arterial pressure<br>B. Hypertension | 15.5 T<br>10.0 C | Retrieval practice of required readings<br>Interactive Lecture<br>Questions<br>Case Studies<br>Group Discussion<br>Demonstration<br>Handouts<br>Kahoot – name that diagnostic study<br>Ticket to Exit: Label the Heart<br>A&P Review<br><br>Class Preparation: Visual Based Active learning – EdPuzzles:<br>Heart<br>Blood flow through the heart<br>Cardiac Conduction System<br>What is Coronary Artery Disease<br>Blood Pressure<br>Hypertension<br>What is Heart Failure<br><br>Video: Cardiac Catheterization<br>Unfolding Case Study: unstable angina<br>Video: CAD<br>Video: Heart Failure<br>Activity – Blood flow through heart chain<br>TTE: Video Clip: EdPuzzle: Blood Pressure | ATI Health Assess Cardiovascular System<br>ATI Pharm made Easy 4.0 Cardiac Medications, including Case Study<br><br>ATI Active Learning Templates: Cardiac medication classes & Cardiac Conditions JIGSAW | Class Preparations<br>Unit Quizzes<br>Unit Exams<br>Concept Maps<br>Clinical Anecdotal<br>Final Exam<br><br>Exam I |
| III. The Patient with Vascular Disorders | | Edpuzzle: Anatomy of Vascular | | |

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| A. Review of anatomy & physiology<br>B. Assessment<br>1. Distinguishing Arterial & Venous Symptoms<br>C. Geriatric Consideration<br>D. Disorders of the Arteries<br>1. Peripheral Arterial Disease (PAD)<br>2. Thrombo-Angitis Obliterans (Bergers Disease)<br>3. Arteriospastic Disease (Raynaud's Phenomenon)<br>4. Disorders of the Aorta<br>a. Aortic aneurysms<br>b. Aortic dissection<br>E. Disorders of the veins<br>1. Venous Thrombosis<br>a. DVT<br>b. SVT<br>2. Varicose Veins<br>3. Chronic Venous Insufficiency<br>4. Venous Ulcers<br>F. Anticoagulation Therapy<br>1. Normal clotting mechanisms: Hemostasis<br>2. Drug Therapy<br>a. Thrombin Inhibitors<br>b. Factor Xa Inhibitors<br>c. Vitamin K Antagonists<br>d. Other medications<br>4. Patient Management of Anticoagulation Therapy | | system.<br>A & P Review<br>Game-Based Learning: Kahoot- Comparison of Peripheral Artery and Venous Disease<br><br>Unfolding Case Study: Peripheral Artery Disease<br><br>Group Activity: Identifying rationale, dosage, indications, and nursing considerations for: ASA, Simvastatin, and Pentoxifylline<br><br>Visual-based active learning: Aortic rupture, Aortic dissection<br><br>Unfolding Case Study: Aortic Aneurysm<br><br>Independent Study: Varicose veins<br><br>CADSCANS: Heparin, enoxaparin (Lovenox), warfarin (Coumadin)<br>Handouts: Administration of subcutaneous heparin and enoxaparin (Lovenox) | ATI Case Study: DVT<br><br>ATI Pharmacology Made Easy 4.0: Drug Therapy for Bleeding Disorders and Thromboembolic Drugs (Supplemental)<br>ATI Video Case Study: ATI Pharmacology Made Easy 4.0: The Hematologic System | Quiz<br>Clinical<br>Anecdotal<br>Anticoagulation Lab |

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| IV. The Patient with Hematologic Disorders<br>A. Review of anatomy and physiology<br>B. Diagnostic studies<br>1. Laboratory<br>2. Radiologic<br>3. Bone marrow<br>4. Lymph system<br>C. Assessment<br>D. Geriatric Considerations<br>E. Disorders of erythrocytes<br>1. Anemias<br>2. Polycythemia<br>F. Disorders of Thrombocytes<br>1. Thrombocytopenia<br>a. Acquired thrombocytopenia – ITP, TTP, HIT<br>2. Thrombocytosis<br>G. Disorders of leukocytes<br>1. Neutropenia<br>2. Leukocytosis<br>H. Disorders of Spleen<br>I. Disorders of lymph system<br>1. Lymphomas<br>a. Hodgkin's disease<br>b. Non-Hodgkin's lymphoma<br>J. Administration of Blood Products | | Visual-based active learning: Edpuzzle:<br>"Crash course – True Blood, Part 2"<br>Group Activity: Lab interpretation on sample patient<br><br>Interpretation of lab studies on assigned clinical patients<br><br>Visual-based active learning: Lymphatic system<br><br>Flipped Classroom: Non-Hodgkin's and Hodgkin's diseases<br><br>Visual-Based Active Learning: Blood types and compatibilities | ATI Pharmacology Made Easy 4.0: The Hematologic System: Introduction (Supplemental)<br><br>ATI Pharmacology Made Easy 4.0: Drug Therapy for Anemia (Supplemental)<br><br>ATI Case Study: Anemia | **Exam IV** |