

# Care of Medical and Surgical Patients In the Clinical Setting

## *The Cardiovascular System*

Contact Hours: 6.75 CE for each day

### *Introduction*

In March of 2004, the Archives of Internal Medicine reported cardiovascular disease had become the leading cause of death in both men and women. Two full days of instruction are devoted to enhancing the care of patients with heart disease to ensure prompt assessment and interventions by health care professionals to save lives.



The first day starts with an understanding and development of assessment skills using a physiologic approach. The therapeutic action of pharmacologic measures, side effects, and nursing interventions are correlated with various cardiovascular alterations. An introduction to the types of shock and clinical presentation and treatment is included. The electrophysiology of dysrhythmia formation and rhythms seen in heart patients is introduced and a beginning approach to 12-lead ECG recognition and interpretation is covered.

The second day includes an in-depth discussion of coronary artery disease, causative factors including blood lipids, pharmacologic interventions, and the importance of nursing impact on lifestyle modifications. Types of angina, clinical presentation of patients with ischemia, and the treatment of patients with acute myocardial infarction are covered. Various other cardiovascular alterations are covered during the two day session and include:

- Hypertension
- Valvular heart disease
- Deep vein thrombosis
- Pericarditis
- Pericardial tamponade
- Arterial occlusive disease
- Chronic venous insufficiency

### *Objectives*

1. Discuss the anatomy and physiology of the cardiovascular system.
2. Verbalize an understanding of the various assessment techniques utilized in cardiovascular patients and the normal and abnormal findings.
3. Differentiate between the pharmacologic action and uses of the various classifications of medications used to treat patients with cardiovascular disorders.
4. Differentiate between select alterations in cardiovascular function in terms of pathophysiology, signs and symptoms, and management. Alterations include hypertension, hypertensive crisis, valvular heart disease and deep vein thrombosis.

5. Identify the pathophysiology, presentation and management of the various types of shock.
6. Verbalize a beginning understanding of the mechanisms of dysrhythmia formation and some basic dysrhythmias seen in cardiac patients.
7. Begin to recognize the potential changes seen on a 12-lead EKG and the significance in cardiac patients.
8. Discuss the role of blood lipids in coronary artery disease and methods to reduce levels and risk factors.
9. Differentiate between the various types of angina, presenting symptoms, and treatment modes.
10. Verbalize an understanding of the pathophysiology of acute myocardial infarction, clinical manifestations, diagnostic measures, and medical and nursing management.
11. Recognize the clinical manifestations of congestive heart failure and the impact and monitoring of pharmacologic interventions.
12. Differentiate between select alterations in cardiovascular function in terms of pathophysiology, signs and symptoms, and management. Alterations include pericarditis, cardiac tamponade, arterial occlusive disease, and chronic venous insufficiency.

***Recent seminar participants had this to say about “The Cardiovascular System”.***



*“Great review of the physiology of the conduction system and how rhythms occur. This will help me to read ECG strips more effectively.”*

*“I especially enjoyed the emergency treatment of acute MI patients. Assessment and treatment were especially well covered.”*

*“Instructor has a wonderful knowledge of this subject and could really break it down so I can apply it to my patients.”*



Cynthia Liette,  
MS, APRN, ACNS-BC, CCRN

Educational Concepts, LLC (OH-251/060112) is an approved provider of continuing nursing education by the Ohio Nurse's Association (OBN-001-91), an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

P.O. Box 55  
Coldwater, OH 45828  
Phone: 419-305-3043  
Email: [cindy@edconcepts.net](mailto:cindy@edconcepts.net)  
Web site: [www.edconcepts.net](http://www.edconcepts.net)