Module C-2: Application of the Nursing Process in Caring for the Pediatric Patient with Common Problems of the Cardiovascular System

1. **Statement of Purpose**

   Special emphasis will be given to common cardiovascular disorders in pediatric patients. Abnormalities in the development of the heart or blood vessels may occur prenatally and manifest at or shortly after birth. Children who have symptoms of deficient cardiac output may be treated medically or surgically. The nurse must be alert to the signs of cardiac distress, and must be proficient in technical and interpersonal skills in dealing with the patient and the family.

2. **Terminology**

   - Congenital Heart Disease
   - Acyanotic Heart Defects
   - Patent Ductus Arteriosus
   - Coarctation of the Aorta
   - Aortic Stenosis
   - Pulmonic Stenosis
   - Ventricular Septal Defect
   - Atrial Septal Defect
   - Cyanotic Heart Defects
   - Tetralogy of Fallot
   - Transposition of Great Vessels
   - Tricuspid Atresia
   - Truncus Arteriosus
   - Rheumatic Fever

3. **Classroom Objectives**

   3.1

   a. Identify common congenital heart defects.
   b. Discuss medical and surgical interventions for common congenital heart defects
   c. Plan care for a patient who is being treated medically for a cardiovascular disorder.
Include:

1) Pathophysiology
2) Diagnostic tests
3) Pharmacologic agents
4) Nutritional requirements
5) Teaching/learning needs
6) Nursing interventions
7) Growth and developmental needs
8) Coping mechanisms
9) Legal/ethical issues
10) Cultural aspects
11) Psychosocial needs

d. Complete a plan of care for a patient who is having surgical intervention for a cardiovascular disorder. If a patient is not available, the instructor will provide a patient situation. Class discussion will include preoperative, intraoperative and postoperative care.

e. Review medications administered to a pediatric patient with a common cardiovascular disorder

f. Identify common infectious processes that result in cardiovascular problems.

*** Not required of the VN student.

3.2 Learning Objectives

a. Know terminology
b. Given a simulated case study, plan care for an infant or child who has a chronic cardiovascular problem.
c. Given a simulated case study, develop a plan of care for a pediatric patient having cardiac surgery. Include preoperative, intraoperative and postoperative care.
d. Review assigned cardiovascular audio-visual materials, computer programs and journal articles.
e. Discuss psychosocial aspects of care for the child with cardiovascular problems.
f. Discuss the role of the nurse in interaction with the patient, family, and community.

3.3 References

a. Current textbooks

4. Clinical Objectives
a. Provide nursing care for an infant or child with a cardiovascular problem. Evaluate use of a cardiac monitor when possible.
b. Prepare a child and the family for diagnostic procedures.
c. Administer oral and parenteral medications to a cardiovascular pediatric patient (except IV medications).
d. Complete a nursing care plan for a pediatric patient with a cardiovascular problem.
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f. Prepare a teaching plan for the family of a pediatric patient with a chronic cardiac condition.

5. Skills Laboratory Requirements
   b. Perform a cardiovascular assessment on:
      1) an infant
      2) a child

Reference

Current texts
*** Not required of the VN student