Module C: Application of the Nursing Process in Caring for Patients with Common Health Problems of the Upper Gastrointestinal System

1. Statement of Purpose

   The upper gastrointestinal system facilitates nutrition with mechanisms for ingestion and digestion necessary to support growth and maintain metabolism throughout the lifespan. Common health problems may interfere with these mechanisms. This module will provide the information and skills necessary for identifying actual and potential nursing problems in order to plan for health promotion, maintenance, and restoration.

2. Terminology

   Cleft Lip                          Pyloroplasty
   Cleft Palate                      Hepatitis
   Esophageal Atresia                Cirrhosis
   Tracheoesophageal Fistula         Ascites
   Pyloric Stenosis                  Hepatic
   Coma                             Portal
   Phenylketonuria (PKU)             Portal
   Hypertension                     Esophageal
   Biliary Atresia                  Portal
   Varices                          Esophageal
   Celiac Disease                   Pancreatitus
   Failure to Thrive                Stomatitis
   Peptic Ulcer Disease             Parotitis
   Cholelithiasis                    Thrush
   Cholecystitis                     Herpes
   Simplex                          Gastritis
   Cholecystectomy                  Hernia
   Hemigastrectomy                  Gastric
   Vagotomy                         Gastric
   Analysis                         Gastroscopy
   Subtotal Gastric Resection       Gastroscopy
   Billroth I                       Billroth II
   Billroth II

3. Classroom Objectives

   3.1 a. Identify the common conditions of the upper G.I. system that result in problems for the neonate, infant, and child.
   b. Discuss the malignancies common to the upper G.I. system; include the various treatment modalities.
   c. Identify the common conditions of the upper G.I. system that result in problems for the adult: peptic ulcer, pancreatitis, cholelithiasis, cholecystitis, hernias (umbilical, inguinal, hiatal).
d. Discuss the medical and surgical treatment modalities for the common adult conditions of the upper G.I. system.

e. Review cirrhosis and hepatitis related to:

1) Etiology
2) Nutrition
3) Diagnostic and laboratory tests
4) Pharmacology
5) Nursing interventions
6) Cultural, legal, ethical issues
7) Complications

f. Describe the alterations in nutrition as exemplified by obesity vs anorexia nervosa.

g. Identify the common conditions of the mouth.

h. Discuss the health teaching needs of patients with altered upper G.I. system function.

i. Describe the medical treatment modalities for patients experiencing upper G.I. system dysfunction. Include:
   1) Special diets
   2) Alternative feeding patterns
   3) Pharmacological agents

j. Identify the various diagnostic tests used for patients with upper G.I. system dysfunction: Radiology, endoscopy, biopsies, gastric analysis, liver function studies.

k. Plan nursing care for adults/children having common problems of the upper G.I. system.


3.2 Learning Activities

a. Review anatomy and physiology of upper G.I. system.

b. Know terminology.

c. Review anatomy and physiology of gallbladder, pancreas, and liver and the relation of the body systems.

d. Review nutritional needs throughout the lifespan including ethnic and religious dietary patterns.

e. Plan care for a variety of patients (adult & children) having common problems of the upper gastrointestinal system.


   1. Bates, Abdominal Assessment

3.3 References

a. Anatomy and Physiology text.


c. Ricci, Maternity & Pediatric Nursing, 1st ed., Walters Kluwer/Lippincott Williams & Wilkins, 2009

d. Roth, Nutrition & Diet Therapy, 9th ed., Thompson

e. Laboratory Tests & Diagnostic Procedures: Student choice
4. **Clinical Objectives**

   a. Provide nursing care for patients of all ages with a variety of upper G.I. system conditions.
   b. Prepare patients for diagnostic procedures.
   c. Administer medications to patients with upper G.I. system problems (oral & parenteral).
   d. Administer nutrition by alternative feeding routes as possible.
   e. Complete a nursing care plan for a patient with a dysfunction of the upper G.I. system.
   f. Assist with endoscopy, and other medical procedures as relevant to the patient's condition.

*** The VN student is not required to administer I.V. medications.

5. **Skills Laboratory Requirements**

   a. Review:
      1) Nutritional supplements
      2) Providing gastrostomy and tube feedings
   b. Perform abdominal assessment on adult, infant, child.
   c. Administer and monitor provision of nutrition by alternative routes:
      *** 1) TPN
      *** 2) Lipids
      3) J-tube feedings
      4) Gastrostomy feedings
      5) Feeding tubes
   d. Assist with central vein catheter placement, dressing changes and removal.
   e. Central vein catheter dressing changes.
   f. Assisting with central vein catheter removal.

References:

Lynn, Taylor’s Clinical Nursing Skills, 2nd ed., Walters Kluwer/Lippincott Williams & Wilkins, 2008

*** Not required of the VN student.