

HOW YOUR BOOK IS ORGANIZED

| | | |
|--|--|-----|
| PART I | MEDICAL-SURGICAL NURSING PRACTICE | |
| | Unit 1 Dimensions of Medical-Surgical Nursing | 3 |
| 1 | Medical-Surgical Nursing | 4 |
| 2 | Health and Illness in the Adult Client | 18 |
| 3 | Community-Based and Home Care of the Adult Client | 35 |
| Unit 2 Alterations in Patterns of Health | | 52 |
| 4 | Nursing Care of Clients Having Surgery | 53 |
| 5 | Nursing Care of Clients Experiencing Loss, Grief, and Death | 84 |
| 6 | Nursing Care of Clients with Problems of Substance Abuse | 101 |
| 7 | Nursing Care of Clients Experiencing Disasters | 125 |
| Unit 3 Pathophysiology and Patterns of Health | | 146 |
| 8 | Genetic Implications of Adult Health Nursing | 147 |
| 9 | Nursing Care of Clients Experiencing Pain | 169 |
| 10 | Nursing Care of Clients with Altered Fluid, Electrolyte, and Acid-Base Balance | 194 |
| 11 | Nursing Care of Clients Experiencing Trauma and Shock | 254 |
| 12 | Nursing Care of Clients with Infections | 286 |
| 13 | Nursing Care of Clients with Altered Immunity | 328 |
| 14 | Nursing Care of Clients with Cancer | 368 |
| PART II | NUTRITIONAL-METABOLIC PATTERNS | |
| | Unit 4 Responses to Altered Integumentary Structure and Function | 421 |
| 15 | Assessing Clients with Integumentary Disorders | 422 |
| 16 | Nursing Care of Clients with Integumentary Disorders | 439 |
| 17 | Nursing Care of Clients with Burns | 486 |
| Unit 5 Responses to Altered Endocrine Function | | 516 |
| 18 | Assessing Clients with Endocrine Disorders | 517 |
| 19 | Nursing Care of Clients with Endocrine Disorders | 533 |
| 20 | Nursing Care of Clients with Diabetes Mellitus | 562 |
| Unit 6 Responses to Altered Nutrition | | 603 |
| 21 | Assessing Clients with Nutritional and Gastrointestinal Disorders | 604 |
| 22 | Nursing Care of Clients with Nutritional Disorders | 629 |
| 23 | Nursing Care of Clients with Upper Gastrointestinal Disorders | 655 |
| 24 | Nursing Care of Clients with Gallbladder, Liver, and Pancreatic Disorders | 696 |
| PART III | ELIMINATION PATTERNS | |
| | Unit 7 Responses to Altered Bowel Elimination | 740 |
| 25 | Assessing Clients with Bowel Elimination Disorders | 741 |
| 26 | Nursing Care of Clients with Bowel Disorders | 753 |
| Unit 8 Responses to Altered Urinary Elimination | | 827 |
| 27 | Assessing Clients with Urinary Elimination Disorders | 828 |
| 28 | Nursing Care of Clients with Urinary Tract Disorders | 845 |
| 29 | Nursing Care of Clients with Kidney Disorders | 882 |

| | | |
|--|--|------|
| PART IV | ACTIVITY-EXERCISE PATTERNS | |
| | Unit 9 Responses to Altered Cardiac Function | 934 |
| 30 | Assessing Clients with Cardiac Disorders | 935 |
| 31 | Nursing Care of Clients with Coronary Heart Disease | 957 |
| 32 | Nursing Care of Clients with Cardiac Disorders | 1021 |
| Unit 10 Responses to Altered Peripheral Tissue Perfusion | | 1074 |
| 33 | Assessing Clients with Hematologic, Peripheral Vascular, and Lymphatic Disorders | 1075 |
| 34 | Nursing Care of Clients with Hematologic Disorders | 1101 |
| 35 | Nursing Care of Clients with Peripheral Vascular Disorders | 1153 |
| Unit 11 Responses to Altered Respiratory Function | | 1208 |
| 36 | Assessing Clients with Respiratory Disorders | 1209 |
| 37 | Nursing Care of Clients with Upper Respiratory Disorders | 1228 |
| 38 | Nursing Care of Clients with Ventilation Disorders | 1265 |
| 39 | Nursing Care of Clients with Gas Exchange Disorders | 1320 |
| Unit 12 Responses to Altered Musculoskeletal Function | | 1378 |
| 40 | Assessing Clients with Musculoskeletal Disorders | 1379 |
| 41 | Nursing Care of Clients with Musculoskeletal Trauma | 1398 |
| 42 | Nursing Care of Clients with Musculoskeletal Disorders | 1432 |
| PART V | COGNITIVE-PERCEPTUAL PATTERNS | |
| | Unit 13 Responses to Altered Neurologic Function | 1502 |
| 43 | Assessing Clients with Neurologic Disorders | 1503 |
| 44 | Nursing Care of Clients with Intracranial Disorders | 1527 |
| 45 | Nursing Care of Clients with Cerebrovascular and Spinal Cord Disorders | 1578 |
| 46 | Nursing Care of Clients with Neurologic Disorders | 1616 |
| Unit 14 Responses to Altered Visual and Auditory Function | | 1668 |
| 47 | Assessing Clients with Eye and Ear Disorders | 1669 |
| 48 | Nursing Care of Clients with Eye and Ear Disorders | 1691 |
| PART VI | SEXUALITY-REPRODUCTIVE PATTERNS | |
| | Unit 15 Responses to Altered Reproductive Function | 1742 |
| 49 | Assessing Clients with Reproductive System and Breast Disorders | 1743 |
| 50 | Nursing Care of Men with Reproductive System and Breast Disorders | 1767 |
| 51 | Nursing Care of Women with Reproductive System and Breast Disorders | 1793 |
| 52 | Nursing Care of Clients with Sexually Transmitted Infections | 1836 |

1. BUILD UPON YOUR FOUNDATIONAL KNOWLEDGE

Building upon your experience from anatomy, physiology, and fundamentals courses, each body system unit begins with an assessment chapter. Reviewing this chapter gives you the foundation for the nursing care chapters that follow.

ANATOMY AND PHYSIOLOGY REVIEW ►

The Anatomy and Physiology Review for each body system reviews structures and functions essential for understanding the assessment, pathophysiology, and nursing care that come later.

GENETIC CONSIDERATIONS
Neurologic Disorders

- In all types of spinocerebellar ataxia, there is degeneration of the spinal cord and cerebellum, resulting in loss of muscular coordination and spasticity.
- One recently confirmed risk factor for Parkinson disease is a positive family history of the disease. This neurodegenerative disease affects more than half a million people, manifested by tremor, muscular stiffness, and difficulty with balance and walking.
- Although multiple sclerosis (MS) is not directly inherited, genetic factors may influence a predisposition to MS within families as well as the severity and course of the disease.
- Narcolepsy, a sleep disorder, does have a familial connection.
- Huntington disease is an inherited degenerative disorder that leads to dementia. It currently affects approximately 30,000 Americans, with an additional 150,000 at risk for inheriting the disease from their parents.
- Friedreich's ataxia is a rare inherited disease that causes a progressive loss of voluntary muscle coordination and enlargement of the heart.
- Essential tremor, as a primary disorder, affects as many as 3 to 4 million people. In more than half of cases, essential tremor is inherited as an autosomal dominant trait, meaning that children of an individual with the disease have a 50% chance of also developing the disorder.
- Epilepsy is one of the most common neurological diseases, characterized by abnormal cell firing in the brain that causes recurring seizures. Recent evidence suggests that there may be a genetic predisposition in up to 70% of cases.
- Charcot-Marie-Tooth syndrome is the most common inherited peripheral neuropathy in the world, characterized by a slowly progressive degeneration of the muscles of the foot, lower leg, hand, and forearm.
- Alzheimer's disease (AD) is a leading cause of death in adults, increasing in incidence with age and more common in women. AD tends to run in families, with mutations in 4 genes believed to be responsible for the disease.
- Amyotrophic lateral sclerosis (ALS) is a neurologic disease that causes progressive degeneration of motor neurons in the brain and spinal cord, resulting in paralysis and death. Chromosome abnormalities have been linked to familial ALS.
- Although Tay-Sachs disease is most often considered a disease of children, there is a chronic adult form that causes neuron dysfunction and psychosis.

424 UNIT 4 / Responses to Altered Integumentary Structure and Function

Figure 15-1 ■ Anatomy of the skin.

cells, nerve fibers, and lymphatic vessels. Most of the hair follicles, sebaceous glands, and sweat glands are located in the dermis. The dermis consists of a papillary and a reticular layer. The papillary layer contains ridges that indent the overlying epidermis. It also contains capillaries and receptors for pain and touch. The deeper, reticular layer contains blood vessels, sweat and sebaceous glands, deep pressure receptors, and dense bundles of collagen fibers. The regions between these bundles form lines of cleavage in the skin. Surgical incisions parallel to these lines of cleavage heal more easily and with less scarring than incisions or traumatic wounds across cleavage lines.

Superficial Fascia
A layer of subcutaneous tissue called the superficial fascia lies under the dermis. It consists primarily of adipose (fat) tissue and helps the skin adhere to underlying structures.

Glands of the Skin
The skin contains sebaceous (oil) glands, sudoriferous (sweat) glands, and ceruminous glands. Each of these glands has a different function.

Sebaceous glands are found all over the body except on the palms and soles. These glands secrete an oily substance called **sebum**, which usually is ducted into a hair follicle. Sebum softens and lubricates the skin and hair and also decreases water loss from the skin in low humidity. Sebum also protects the body from infection by killing bacteria. The secretion of sebum is stimulated by hormones, especially androgens. If a sebaceous gland becomes blocked, a pimple or whitehead appears on the surface of the skin; as the material oxidizes and dries, it forms a blackhead. Acne vulgaris is an inflammation of the sebaceous glands.

There are two types of sweat glands: eccrine and apocrine. Eccrine sweat glands are more numerous on the forehead, palms, and soles. The gland itself is located in the dermis; the duct to the skin rises through the epidermis to open in a pore at the surface. Sweat, the secretion of the eccrine glands, is composed mostly of water but also contains sodium, antibodies, small amounts of metabolic wastes, lactic acid, and vitamin C. The production of sweat is regulated by the sympathetic nervous system and serves to maintain normal body temperature. Sweating also occurs in response to emotions.

Most apocrine sweat glands are located in the axillary, anal, and genital areas. The secretions from apocrine glands are similar to those of sweat glands, but they also contain fatty acids and proteins. Apocrine glands are a remnant of sexual scent glands. Ceruminous glands are modified apocrine sweat glands. Located in the skin of the external ear canal, they secrete yellow-brown waxy cerumen. This substance provides a sticky trap for foreign materials.

◀ GENETIC CONSIDERATIONS

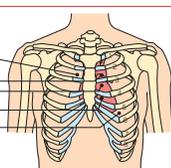
This box lists specific genetic issues for each body system that help you incorporate relevant questions when you take a client health history.

| DIAGNOSTIC TESTS of the Integumentary System | | |
|--|--|---|
| NAME OF TEST | PURPOSE AND DESCRIPTION | RELATED NURSING CARE |
| Punch Skin Biopsy | This biopsy is done to differentiate benign lesions from skin cancers. An instrument is used to remove a small section of dermis and subcutaneous fat. Depending on size, the incision may be sutured. | Explain the procedure to the client, and ensure a consent form is signed (if required). Assist with the procedure. Apply dressing and provide information about self-care and when to return for suture removal. Document the procedure and send the labeled specimen to the lab. |
| Incisional Skin Biopsy | This biopsy is done to differentiate benign lesions from skin cancers. An incision is made and a part of the lesion or tumor is removed. The incision is closed with sutures. | See above. |
| Excisional Skin Biopsy | This biopsy is done to differentiate benign lesions from skin cancers. An incision is made and the entire skin lesion or tumor is removed for analysis. The incision is closed with sutures. | See above. |
| Shave Skin Biopsy | This skin biopsy is done to shave off superficial lesions and to differentiate infectious from inflammatory lesions. A single-edged razor is used for shaving. | See above. |
| Culture | A culture of scrapings from a lesion, from drainage, or of exudate is done to identify fungal, bacterial, or viral skin infections. Obtain the culture with a sterile Culturette swab and culture tubes. | Confirm physician's orders. Explain the procedure to the client. Maintain strict asepsis while obtaining the culture. Document the procedure and send the labeled specimen to the lab. |
| Oil Slides | Oil slides are used to determine the type of skin infestation present. Scrapings of the lesion are placed on a slide with mineral oil and examined microscopically. | Explain the procedure to the client. Assist with or obtain the specimen and complete the slide. Document the procedure and send the labeled specimen to the lab. |
| Immunofluorescent Slides | Immunofluorescent studies of samples from skin and/or serum may be done to identify IgG antibodies (present in pemphigus vulgaris) and to identify varicella in skin cells (to herpes zoster). Skin or blood samples are placed on a slide and examined microscopically. | See above. |
| Wood's Lamp | This test uses an ultraviolet light that causes certain organisms to fluoresce (such as <i>Pseudomonas</i> organisms and fungi). The skin is examined under a special lamp. | Explain the procedure to the client. Document the procedure. |
| Potassium Hydroxide (KOH) | A specimen from hair or nails is examined for a fungal infection. The specimen is obtained by placing material from a scraping on a slide, adding a potassium hydroxide solution, and examining it microscopically. | Explain the procedure to the client. Assist with or obtain the specimen and complete the slide. Document the procedure and send the labeled specimen to the lab. |
| Tzanck Test | This test is used to diagnose herpes infections, but it does not differentiate herpes simplex from herpes zoster. Fluid and cells from the vesicles are obtained, put on a slide, stained, and examined microscopically. | Explain the procedure to the client. Use sterile procedure to assist with or obtain the specimen and complete the slide. Document the procedure and send the labeled specimen to the lab. |
| Patch Test, Scratch Tests | These tests are used to determine a specific allergen. In a patch test, a small amount of the suspected material is placed on the skin under an occlusive bandage. In a scratch test, a needle is used to "scratch" small amounts of potentially allergic materials on the skin surface. | Explain the procedure to the client, including the need to return in 48 hours to have the patched area or scratched areas evaluated. Document the procedure. |

▶ DIAGNOSTIC TESTS

This table summarizes the key diagnostic tests used for disorders of each body system and the related nursing care.

CHAPTER 30 | Assessing Clients with Cardiac Disorders 953



Technique/Normal Findings
and the apical impulse for location, size, amplitude, and duration. The sequence for palpation is shown in Figure 30-10. Simultaneous palpation of the carotid pulse may also be helpful. The apical impulse is not palpable in all clients. The apical impulse may be palpated in the mitral area, and has only a brief small amplitude.

Abnormal Findings
stenosis, and with pressure overload (increased preload) in conditions such as aortic or mitral regurgitation.
Increased amplitude alone may occur with hyperkinetic states, such as anxiety, hyperthyroidism, and anemia.
Decreased amplitude is associated with a dilated heart in cardiomyopathy.
Displacement alone may also occur with dextrocardia.
A thrill (a palpable vibration over the precordium or an artery) may accompany severe valve stenosis.
A marked increase in amplitude of the apical impulse at the right ventricular area occurs with right ventricular volume overload in atrial septal defect.
An increase in amplitude and duration occurs with right ventricular pressure overload in pulmonary stenosis and pulmonary hypertension. A lift or heave may also be seen in these conditions (and in chronic lung disease).
A palpable thrill in this area occurs with ventricular septal defect.
Right ventricular enlargement may produce a downward pulsation against the fingertips.
An accentuated pulsation at the pulmonary area may be present in hyperkinetic states.
A prominent pulsation reflects increased flow or dilation of the pulmonary artery.
A thrill may be associated with aortic or pulmonary stenosis, aortic stenosis, pulmonary HTN, or atrial septal defect.
Increased pulsation at the aortic area may suggest aortic aneurysm.
A palpable second heart sound (S₂) may be noted with systemic HTN.

Palpate the subpharyngeal area with the index and middle finger. No pulsations or vibrations should be palpated.
A palpable thrill in this area occurs with ventricular septal defect.
An accentuated pulsation at the pulmonary area may be present in hyperkinetic states.
A prominent pulsation reflects increased flow or dilation of the pulmonary artery.
A thrill may be associated with aortic or pulmonary stenosis, aortic stenosis, pulmonary HTN, or atrial septal defect.
Increased pulsation at the aortic area may suggest aortic aneurysm.
A palpable second heart sound (S₂) may be noted with systemic HTN.

Cardiac Rate and Rhythm Assessment
Ascultate heart rate. The heart rate should be 60 to 100 beats per minute with regular rhythm.
Simultaneously palpate the radial pulse while listening to the apical pulse. The radial and apical pulses should be equal.
Ascultate heart rhythm. The heart rhythm should be regular.
A heart rate exceeding 100 beats per minute (beats/min) is tachycardia. A heart rate less than 60 beats/min is bradycardia.
If the radial pulse falls behind the apical rate, the client has a pulse deficit, indicating weak, ineffective contractions of the left ventricle.
Dysrhythmias (abnormal heart rate or rhythm) may be regular or irregular in rhythm; their rates may be slow or fast. Irregular rhythms may occur in a pattern (e.g., an early beat every second beat, called bigeminy), sporadically, or with frequency and disorganization (e.g., atrial fibrillation). A pattern of gradual increase and decrease in heart rate that is within normal heart rate and that correlates with inspiration and expiration is called sinus arrhythmia.

CHAPTER 43 | Assessing Clients with Neurologic Disorders 17

| FUNCTIONAL HEALTH PATTERN INTERVIEW Neurologic | |
|--|--|
| Functional Health Pattern | Interview Questions and Leading Statements |
| Health Perception-Health Management | <ul style="list-style-type: none"> Have you ever had a surgery, injury or illness of the neurologic system, such as seizures, stroke, tumor, meningitis. If so, describe the problem and how it was treated. Do you have high blood pressure? If so, how is it treated? Have you ever had problems with the ability to move body parts? Describe. Would you say you think clearly? If not, how and when did the change occur? Are you having any problems with the ability to see, hear, taste or smell? Explain. Have you ever had any diagnostic tests for a neurologic problem, such as a MRI or spinal tap? If so, what were the results? Do you take medications for seizures, headaches or other neurologic problems? If so, what are they and how often do you take them? Do you now or have you ever smoked, used street drugs, or drunk alcohol? If so, what type, how much and for how long? Where were you born and raised as a child? |
| Nutritional-Metabolic | <ul style="list-style-type: none"> Describe your usual food and fluid intake for a 24-hour period. Have you noticed any problems with chewing or swallowing your food? Do you have trouble with coughing when you eat or drink? |
| Elimination | <ul style="list-style-type: none"> Has there been any change in your urinary or bowel elimination? If so, describe the change. Do you use laxatives, suppositories, or enemas to assist with bowel elimination? If so, what type and how often? Are you able to go to the bathroom without assistance? If not, describe your usual routine. |
| Activity-Exercise | <ul style="list-style-type: none"> Describe your usual activities in a 24-hour period. Do you have any problems with balance, coordination, or walking? Do you use any assistive device when you walk, such as a cane or walker? Have you noticed any weakness in your arms or legs? If so, describe. Are you able to move all of your body parts? If not, explain. Do you trip or fall easily? Have you experienced any shakiness or tremors? Where? If you have seizures, what type do you have? Can you tell when they are going to happen? Does anything specific make you have a seizure? How do you feel after the seizure is over? |
| Sleep-Rest | <ul style="list-style-type: none"> Does this health problem interfere with your ability to sleep and rest? If so, how? Do you take any medication to help you sleep? If so, what? Describe your energy level. Does rest and sleep restore your energy? |
| Cognitive-Perceptual | <ul style="list-style-type: none"> Describe any headaches you experience, including frequency, type, location, and precipitating/relieving factors. Do you ever feel dizzy or have you lapsed? Do you ever feel the room is spinning? Explain. Do you ever experience any numbness, burning, or tingling sensations? If so, where and when? Do you have any visual problems, such as double vision, blurring, or blind spots? Do you have any problems with hearing? Explain. Has there been any change in your ability to taste or smell? If so, explain. Do you have any difficulty remembering things? If so, describe what you do. |
| Self Perception-Self Concept | <ul style="list-style-type: none"> How does having this condition make you feel about yourself? How does having this condition make you feel about yourself? |
| Role-Relationships | <ul style="list-style-type: none"> How has having this condition affected your relationships with others? Has having this condition interfered with your ability to work? Explain. Has anyone in your family has problems with neurologic disease? Explain. |
| Sexuality-Reproductive | <ul style="list-style-type: none"> Has this condition interfered with your usual sexual activity? |
| Coping-Stress-Tolerance | <ul style="list-style-type: none"> Has having this condition created stress for you? If so, does your health problem seem to be more difficult when you are stressed? Have you experienced any kind of stress that makes the condition worse? Explain. Describe what you do when you feel stressed. |
| Value-Belief | <ul style="list-style-type: none"> Describe how specific relationships or activities help you cope with this problem. Describe specific cultural beliefs or practices that affect how you care for and feel about this problem. Are there any specific treatments that you would not use to treat this problem? |

▶ ASSESSMENTS WITH ABNORMAL FINDINGS

Organized in a new, two-column format, the assessment section provides easy-to-follow steps that include normal findings, as well as abnormal findings that might be present.

▶ FUNCTIONAL HEALTH PATTERN INTERVIEW

This table provides you with sample assessment questions related to functional health patterns so you can plan your interviews during a client health history and physical assessment.

2. HONE YOUR CLINICAL SKILLS

Use the special application boxes to help prepare for clinical experiences.

PATHOPHYSIOLOGY ILLUSTRATED
Sickle Cell Anemia

Hemoglobin S and Red Blood Cell Sickling

Sickle cell anemia is caused by an inherited autosomal recessive defect in Hb synthesis. Sickle cell hemoglobin (HbS) differs from normal hemoglobin only in the substitution of the amino acid valine for glutamine in both beta chains of the hemoglobin molecule.

When HbS is oxygenated, it has the same globular shape as normal hemoglobin. However, when HbS off-loads oxygen, it becomes insoluble in intracellular fluid and crystallizes into rodlike structures. Clusters of rods form polymers (long chains) that bend the erythrocyte into the characteristic crescent shape of the sickle cell.

The Sickle Cell Disease Process

Sickle cell disease is characterized by episodes of acute painful crises. Sickling crises are triggered by conditions causing high tissue oxygen demands or that affect cellular pH. As the crisis begins, sickled erythrocytes adhere to capillary walls and to each other, obstructing blood flow and causing cellular hypoxia. The crisis accelerates as tissue hypoxia and acidic metabolic waste products cause further sickling and cell damage.

Sickle cell crises cause microinfarcts in joints and organs, and repeated crises slowly destroy organs and tissues. The spleen and kidneys are especially prone to sickling damage.

NURSING CARE OF THE OLDER ADULT
Fluid Volume Deficit

Fluid volume deficit, or dehydration, is a common reason for hospitalization of people over age 65 who live either in the community or in a long-term care setting. Older adults have a significant number of risk factors for fluid volume deficit (see the preceding section of this chapter). In addition, the older adult has fewer intracellular reserves, contributing to rapid development of dehydration. Without intervention, mortality from dehydration can exceed 50% in the older adult population (Suhayda & Walton, 2002).

Manifestations of fluid volume deficit may be more difficult to recognize in the older adult. A change in mental status, memory, or attention may be an early sign. Skin turgor is less reliable as an indicator of dehydration, although assessing turgor over the sternum or on the inner aspect of the thigh may be more effective. Dry oral mucous membranes and tongue furrows also are indicative of dehydration. Orthostatic vital signs may not demonstrate typical changes in the dehydrated older adult.

▲ NURSING CARE OF THE OLDER ADULT

This box prepares you with essential guidelines to provide nursing care for older adults you will see in clinical settings.

▲ PATHOPHYSIOLOGY ILLUSTRATED

The 3-D art brings the concepts to life—visual illustrations of disease processes help you better understand pathophysiology and its impact on the body.

NURSING RESEARCH Evidence-Based Practice: Disaster Education

The nursing profession has recognized the need to develop resources to teach practicing and future nurses to improve their response to victims of radiologic, biologic, and chemical terrorism. However, nursing students may have different perceptions about working with disaster victims. The purpose of a descriptive study (Young & Persell, 2004) was to identify student nurses' major concerns and learning needs in working with victims of terrorism. Ninety-five junior and senior baccalaureate nursing students participated in the study by completing an anonymous questionnaire regarding their concerns about terrorism and how their lives had changed following September 11, 2001. The students' main concern was for the safety of themselves and their families. The students indicated they would not be willing to care for victims if there was a lack of protection for all types of terrorist agents for themselves and their families. The students did not demonstrate an accurate understanding of the pathogenic nature of many terrorist agents even though the nursing faculty members had provided self-education articles for the students. The students' concerns for specific infectious agents appeared to be based on unnecessary fear or inappropriate confidence.

IMPLICATIONS FOR NURSING
If nurses do not believe that a terrorist event is a real threat in their communities, they may not be motivated to become more prepared for terrorist events. The nation's emergency healthcare planners and trauma nurses will have a major challenge preparing more nurses for disasters, especially mass casualty events. During a terrorist attack, the general public will seek information about the event from all healthcare providers. The public will also expect nurses to deliver safe and competent care to the victims of terrorism. Disaster care information should be a part of the curriculum in all basic nursing education schools. Continuing education and elective courses should continue to be planned. Basic disaster preparedness competencies should be required for all new graduate nurses so that they have a solid foundation on which to build.

CRITICAL THINKING IN CLIENT CARE

1. Make a list of all the barriers that nursing students and practicing nurses might express as reasons they do not need or value disaster/terrorism education and preparation.
2. Discuss the rationale for including basic disaster preparedness content in all basic nursing education programs.
3. Consider the results of this study. What could have been done differently to assist the nursing students in learning facts and the pathogenic nature of the terrorist agents presented in the articles?

Source: Adapted from "Biological, Chemical, and Nuclear Terrorism Readiness: Major Concerns and Preparedness of Future Nurses" by C. F. Young & D. Persell, 2004, *Disaster Management & Response*, 2(4), pp. 109-114.

▲ NURSING RESEARCH BOXES

These evidence-based practice boxes focus on research into specific topics and relate it to current nursing care. Critical thinking questions show you how research can be applied to nursing care.

MEDICATION ADMINISTRATION Hypokalemia

POTASSIUM SOURCES
Potassium acetate (Tri-K)
Potassium bicarbonate (K + Care ET)
Potassium citrate (K-Lyte)
Potassium chloride (K-Lease, Micro-K 10, Apo-K)
Potassium gluconate (Kaon Elixir, Royonate)

Potassium is rapidly absorbed from the gastrointestinal tract; potassium chloride is the agent of choice, because low chloride often accompanies low potassium. Potassium is used to prevent and/or treat hypokalemia (e.g., with parenteral nutrition and potassium-wasting diuretics, and prophylactically after major surgery).

Nursing Responsibilities

- When giving oral forms of potassium:
 - a. Dilute or dissolve effervescent, soluble, or liquid potassium in fruit or vegetable juice or cold water.
 - b. Chill to increase palatability.
 - c. Give with food to minimize GI effects.
- When giving parenteral forms of potassium:
 - a. Administer slowly.
 - b. Do not administer undiluted.
 - c. Assess injection site frequently for signs of pain and inflammation.
 - d. Use an infusion control device.
- Assess for abdominal pain, distention, gastrointestinal bleeding; if present, do not administer medication. Notify healthcare provider.
- Monitor fluid intake and output.
- Assess for manifestations of hyperkalemia: weakness, feeling of heaviness in legs, mental confusion, hypotension, cardiac arrhythmias, changes in ECG, increased serum potassium levels.

Health Education for the Client and Family

- Do not take potassium supplements if you are also taking a potassium-sparing diuretic.
- When parenteral potassium is discontinued, eat potassium-rich foods.
- Do not chew enteric-coated tablets or allow them to dissolve in the mouth; this may affect the potency and action of the medications.
- Take potassium supplements with meals.
- Do not use salt substitutes when taking potassium (most salt substitutes are potassium based).

▲ MEDICATION ADMINISTRATION BOXES

This box prepares you to administer the most common drugs you will encounter in treating disorders within the chapter, as well as related nursing responsibilities and client-family teaching.

NURSING CARE PLAN A Client with Acute Respiratory Acidosis

Marlene Hitz, age 76, is eating lunch with her friends when she suddenly begins to choke and is unable to breathe. After several minutes of trying, an attendant at the senior center successfully dislodges some meat caught in Ms. Hitz's throat using the Heimlich maneuver. Ms. Hitz is taken by ambulance to the emergency department for follow-up because she was apneic for 3 to 4 minutes, her respirations are shallow, and she is disoriented.

ASSESSMENT
Ms. Hitz is placed in an observation room. Oxygen is started at 4 L/min per nasal cannula. David Love, the nurse admitting Ms. Hitz, makes the following assessments: T 98.2, P 102, R 36 and shallow, BP 146/92. Skin is warm and dry. Alert but restless and not oriented to time or place; she responds slowly to questions. Sat ABGs are drawn, a chest x-ray is done, and D₅ 1/2 NS is started intravenously at 50 mL/h.

The chest x-ray shows no abnormality. ABG results are pH 7.38 (normal: 7.35 to 7.45), PaCO₂ 48 mmHg (normal: 35 to 45 mmHg), PaO₂ 92 mmHg (normal: 80 to 100 mmHg), and HCO₃⁻ 24 mEq/L (normal: 22 to 26 mEq/L).

DIAGNOSES

- Impaired Gas Exchange related to temporary airway obstruction
- Anxiety related to emergency hospital admission
- Risk for Injury related to confusion

EXPECTED OUTCOMES

- Regain normal gas exchange and ABG values.
- Be oriented to time, place, and person.
- Regain baseline mental status.
- Remain free of injury.

PLANNING AND IMPLEMENTATION

- Monitor ABCs, to be redrawn in 2 hours.
- Monitor vital signs and respiratory status (including oxygen saturation) every 15 minutes for the first hour then every hour.
- Assess color of skin, nail beds, and oral mucous membranes every hour.
- Assess mental status and orientation every hour.
- Monitor anxiety level as evidenced by restlessness and agitation.
- Maintain a calm, quiet environment.
- Provide reorientation and explain all activities.
- Keep side rails in place, and place call bell within reach.

EVALUATION
Ms. Hitz remains in the emergency department for 6 hours. Her ABCs are still abnormal, and David Love now notes the presence of respiratory crackles and wheezes. She is less anxious and responds appropriately when asked who and where she is. Because she has not regained normal gas exchange, Ms. Hitz is admitted to the hospital for continued observation and treatment.

CRITICAL THINKING IN THE NURSING PROCESS

1. Describe the pathophysiologic process that leads to acute respiratory acidosis in Ms. Hitz.
2. Describe the effect of acidosis on mental function.
3. What teaching would you provide to Ms. Hitz to prevent future episodes of choking?
See Evaluating Your Response in Appendix C.

▲ NURSING CARE PLANS

Learn how to construct nursing care plans by studying the case study model presented in your book, including assessment, diagnoses, expected outcomes, planning and implementation, and evaluation. Critical thinking questions give you more opportunity to apply what you learn.

3. PREPARE FOR NCLEX-RN® SUCCESS

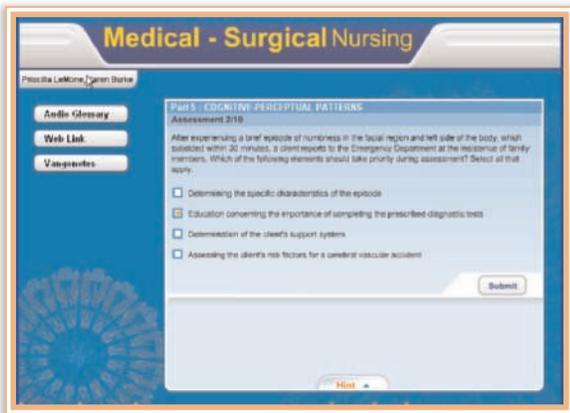
Take advantage of multiple opportunities to prepare yourself for the NCLEX-RN®. We offer unique sets of test questions at the end-of-chapter, on the student Prentice Hall Nursing MediaLink DVD-ROM, on your textbook Companion Website, and in the Study Guide.

TEST YOURSELF NCLEX-RN® REVIEW ►

At the end of each chapter, test your application and analysis of the chapter concepts within NCLEX®-style review questions. Answers and comprehensive rationales appear in Appendix C.

TEST YOURSELF NCLEX-RN® REVIEW

| | |
|---|---|
| <p>1 The key difference between emergencies and disasters is that:</p> <ol style="list-style-type: none"> emergencies are controlled. disasters result from man-made errors. emergencies can typically be handled by available emergency services. disasters typically involve the local emergency services and no other agencies. | <p>5 Which of the following is NOT true regarding nurses' responsibilities in disaster preparedness?</p> <ol style="list-style-type: none"> Nurses have a responsibility to the public to be knowledgeable about disaster preparedness and response. Nurses must have a personal and family plan as a part of their disaster preparedness and response plan. Nurses will be the leaders in the incident command structure set up at the site of the disaster. Nurses who are prepared for disasters will be better able to help themselves, their families, and their communities in a |
| <p>2 Which of the following is NOT true regarding nurses' responsibilities in disaster preparedness?</p> <ol style="list-style-type: none"> Nurses have a responsibility to the public to be knowledgeable about disaster preparedness and response. Nurses must have a personal and family plan as a part of their disaster preparedness and response plan. Nurses will be the leaders in the incident command structure set up at the site of the disaster. Nurses who are prepared for disasters will be better able to help themselves, their families, and their communities in a | <p>6 Which of the following is NOT true regarding nurses' responsibilities in disaster preparedness?</p> <ol style="list-style-type: none"> Decontamination should be performed on all personnel and equipment. Eye, face, and hand protection should be worn at all times. Health care workers should avoid contact with contaminated areas. Decontamination should be performed on all personnel and equipment. |



◀ PRENTICE HALL NURSING MEDIALINK DVD-ROM

Packaged with your textbook, the Student DVD-ROM provides you with additional practice NCLEX®-style tests and feedback with rationales for right and wrong answers. Each question is coded to the step in the Nursing Process, Cognitive Level, and the Category of Client Need according to the NCLEX-RN® Test Plan.

A CD-ROM version of this student resource can be purchased online at www.MyPearsonStore.com using ISBN: 0-13-235057-2

COMPANION WEBSITE ►

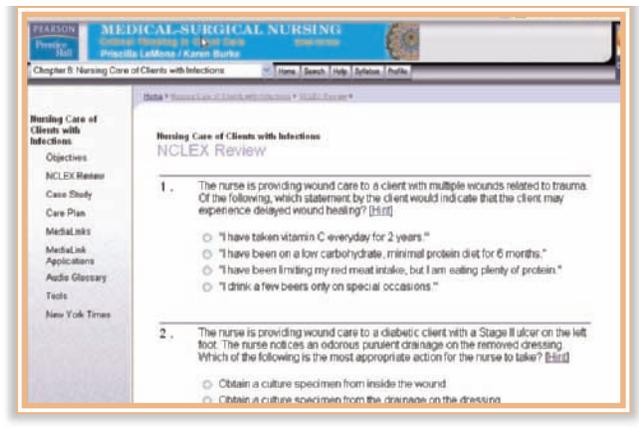
This bonus online study guide provides even more NCLEX-RN® review questions with instant feedback, and rationales for all answers help you learn the material and prepare you for course exams.

www.prenhall.com/lemone

STUDENT STUDY GUIDE

ISBN: 0-13-198570-1

Using your Study Guide, you can test yourself with NCLEX-RN® review questions in each chapter.



4. BUILD YOUR CLINICAL COMPETENCE

Finally, to achieve nursing excellence, you need to synthesize and apply the concepts you learned from all the chapters in a body system unit. At the end of each unit in your textbook, Building Clinical Competence gives you the opportunity to pull the unit material together by practicing skills needed to care for multiple patients simultaneously. This activity has three parts:

FUNCTIONAL HEALTH PATTERN ACTIVITY ▶

Through this activity you will learn more about how disorders discussed in the unit affect clients' functional health status. The Functional Health Pattern is further defined, priority nursing diagnosis are identified, and critical thinking questions allow you to apply your learning.

CLINICAL SCENARIO ▶

Each clinical scenario presents you with multiple clients. The critical thinking questions ask you to set priorities while managing multiple clients, preparing you for NCLEX® questions that test prioritization and safe nursing care. To be successful, you need to apply not only knowledge from across the unit but also principles related to setting priorities and maintaining patient safety.

CASE STUDY WITH CONCEPT MAP ▶

Read the Case Study and review the Concept Map that diagrams the priority diagnosis. Go to the student DVD-ROM and use the concept mapping software to practice organizing and representing a priority nursing diagnosis in a concept map that you build on your own.

UNIT 2 BUILDING CLINICAL COMPETENCE Alterations in Patterns of Health

FUNCTIONAL HEALTH PATTERN: Health Perception-Health Management

- Think about clients with altered health perception or health management for whom you have cared in your clinical experiences.
 - What were the clients' major medical diagnoses (e.g., a surgical procedure, terminal illness, impending death, substance abuse, or victim of multiple or mass casualty incident)?
 - What manifestations did each of these clients have? Were these manifestations similar or different?
 - How did the clients' healthcare behaviors interfere with their health status? Have the clients had surgery before? Did the clients experience any complications due to having surgery? Did they have any problems with anesthesia? What medications were the clients taking? Did they take medications as prescribed? Did they use any substances other than prescribed medications and over-the-counter medications? If so, what substances and how much were used? How much alcohol did the clients drink? Has substance abuse caused a problem for the clients or their family, friends, finances, and health? Were the clients exposed to environmental hazards? Did the clients have sensory deficits or sight or speech impairment? What language did they speak? What spiritual or religious considerations did they verbalize? Did they have living wills, do-not-resuscitate orders, or powers of attorney? Have end-of-life issues been discussed with the family?
- The Health Perception-Health Management Pattern includes healthcare behaviors, such as health promotion and illness prevention activities, medical treatments, and follow-up care. Individuals may or may not have the ability to change their healthcare practices. Health perception and health maintenance are affected by perceived health status in two primary ways:

Directions: Read the clinical scenario below and answer the questions that follow. To complete this exercise successfully, you will use not only knowledge of the content in this unit, but also principles related to setting priorities and maintaining client safety.

CLINICAL SCENARIO

You have been assigned to work with the following four clients for the 0700 shift on a hospital medical-surgical unit. Significant data obtained during report are as follows:

- Peter Black is a 46-year-old who was admitted from the emergency department 2 hours ago for observation after being thrown 50 yards during a tornado. His vital signs on admission were stable: T 98.8°; P 86; R 24; and BP 140/80. He had multiple abrasions and lacerations that were sutured in the emergency room. He is now complaining of numbness in both legs.
- Mary Black is the 44-year-old wife of Peter Black. She was admitted 1 hour ago with a fracture of the left ankle, multiple lacerations, and ecchymotic areas. She is scheduled to go to surgery at 0900 for an open reduction of the fracture. Current vital signs are T 99°; P 90; R 26; BP 154/98. She is requesting pain medication and wants to see her children, who were admitted to the pediatric unit, before going to surgery.
- John Limer, age 67, was admitted 1 week ago in the terminal stages of colon cancer. Vital signs are T 98.6°; P 54; R 18; BP 88/68. The family is requesting that a nurse check on Mr. Limer because they feel that death is imminent.
- Paul Goetz, age 42, was admitted 3 days ago after being found unconscious in his car. On admission his alcohol level was 0.45. Current vital signs are T 100°; P 110; R 30; BP 168/94. He is daphnetic, disoriented, complaining of nausea, and seeing spiders on the wall.

Questions

- In what order would you visit these clients after report?
 - _____
 - _____
 - _____
 - _____
- What top two priority nursing diagnoses would you choose for each of the clients presented above? Can you explain if asked, the rationale for your choices?

| | Priority Nursing Diagnosis #1 | Priority Nursing Diagnosis #2 |
|-------------|-------------------------------|-------------------------------|
| Peter Black | | |
| Mary Black | | |
| John Limer | | |
| Paul Goetz | | |
- You need to complete preoperative preparation on Mrs. Black. In which order would you complete nursing interventions? (Arrange

With a history of alcoholism for 5 years, what is a priority nursing intervention in the plan of care for Mr. Goetz?

- Identify maladaptive behaviors that may contribute to the alcoholism.
- Encourage participation in therapeutic group activities.
- Teach the effects of alcohol on the body.
- Use a respectful, nonjudgmental approach to gain trust.

A prescription for mallesterone (Brelvi) is given to Mr. Goetz upon discharge. He voices understanding of how to take the medication when he states:

- "I must avoid all forms of alcohol and narcotics while taking this medication."
- "It is all right to take over-the-counter cold medications if I catch a cold."
- "This medication will keep me from having withdrawal symptoms."
- "I can get physically ill if I drink alcohol while taking this medication."

CASE STUDY

Fritz Matthews, age 72, has had uncontrolled hypertension for the past 2 years. His healthcare provider has tried different antihypertensives to control his disease. Mr. Matthews has been admitted to the hospital four times in the last 6 months. This is his fourth admission with acute heart failure. The physician explained to Mr. Matthews that hypertension that is not controlled can cause an excessive workload to the heart, thus decreasing the heart's ability to pump efficiently. Mr. Matthews has recently lost his wife and is living alone. He states that he forgets to take his medication at the prescribed times. He also eats a lot of frozen dinners and does not have the energy to cook his meals. Mr. Matthews has gained 10 pounds since his last admission. He has had difficulty sleeping at night and uses two pillows due to shortness of breath. He also reports that he frequently gets up at night at least twice to urinate. Mr. Matthews complains of fatigue during the day and is unable to even walk to his mailbox. He also tells the nurse that he is tired even on rising in the morning. Based on Mr. Matthews' physical assessment and complaints of fatigue and orthopnea, Decreased Cardiac Output is identified as the highest priority nursing diagnosis. Please review the accompanying concept map.

On the Next Page, you will find a list of all the Building Clinical Competence activities and where to find them in your textbook.

BUILDING CLINICAL COMPETENCE

Use the *Building Clinical Competence* features to review for unit exams in your course.

| | | |
|---------|---|-----------------|
| Unit 1 | Dimensions of Medical-Surgical Nursing | Pages 49-51 |
| Unit 2 | Alterations in Patterns of Health | Pages 143-145 |
| Unit 3 | Pathophysiology and Patterns of Health | Pages 416-418 |
| Unit 4 | Responses to Altered Integumentary Structure and Function | Pages 513-515 |
| Unit 5 | Responses to Altered Endocrine Function | Pages 600-602 |
| Unit 6 | Responses to Altered Nutrition | Pages 735-737 |
| Unit 7 | Responses to Altered Bowel Elimination | Pages 824-826 |
| Unit 8 | Responses to Altered Urinary Elimination | Pages 929-931 |
| Unit 9 | Responses to Altered Cardiac Function | Pages 1071-1073 |
| Unit 10 | Responses to Altered Peripheral Tissue Perfusion | Pages 1205-1207 |
| Unit 11 | Responses to Altered Respiratory Function | Pages 1375-1377 |
| Unit 12 | Responses to Altered Musculoskeletal Function | Pages 1497-1499 |
| Unit 13 | Responses to Altered Neurologic Function | Pages 1665-1667 |
| Unit 14 | Responses to Altered Visual and Auditory Function | Pages 1737-1739 |
| Unit 15 | Responses to Altered Reproductive Function | Pages 1854-1856 |



Medical-Surgical Nursing

Critical Thinking in Client Care

FOURTH EDITION

Priscilla LeMone, RN, DSN, FAAN

Associate Professor Emeritus
Sinclair School of Nursing
University of Missouri–Columbia
Columbia, Missouri

Karen Burke, RN, MS

Education Consultant
Oregon State Board of Nursing
Portland, Oregon

PEARSON

Prentice
Hall



Upper Saddle River, New Jersey 07458

Library of Congress Cataloging-in-Publication Data

Medical-surgical nursing : critical thinking in client care / [edited by] Priscilla LeMone, Karen Burke.—4th ed.

p. ; cm.

Includes bibliographical references and index.

ISBN-13: 978-0-13-171308-6 (alk. paper)

ISBN-10: 0-13-171308-6 (alk. paper)

1. Nursing. 2. Surgical nursing. 3. Critical thinking. I. LeMone, Priscilla. II. Burke, Karen M.

[DNLM: 1. Nursing Process. 2. Nursing Care. 3. Patient Care Planning. 4. Perioperative Nursing. WY 100 M4892 2008]

RT41.M493 2008

617'.0231—dc22

2006101508

Publisher: Julie Levin Alexander

Publisher's Assistant: Regina Bruno

Editor-in-Chief: Maura Connor

Acquisitions Editor: Pamela Fuller

Editorial Assistant: Melisa Baez

Development Editor: Kim Wyatt

Managing Editor, Development: Marilyn Meserve

Managing Production Editor: Patrick Walsh

Production Liaison: Cathy O'Connell

Production Editor: Lynn Steines, Carlisle Publishers Services

Manufacturing Manager: Ilene Sanford

Design Director and Cover Designer: Mary Siener

Photographer: Patrick Watson

Director of Marketing: Karen Allman

Senior Marketing Manager: Francisco Del Castillo

Marketing Coordinator: Michael Sirinides

Associate Editor: Michael Giacobbe

Media Development Editor: John J. Jordan

New Media Project Manager: Tina Rudowski

Composition: Carlisle Publishing Services, Inc.

Printer/Binder: RR Donnelley Willard

Cover Printer: Phoenix Color

Cover photo: Kaleidoscope: Caribbean Blues, Paula Nadelstern, artist; Karen Bell, photographer

Notice: Care has been taken to confirm the accuracy of information presented in this book. The authors, editors, and the publisher, however, cannot accept any responsibility for errors or omissions or for consequences from application of the information in this book and make no warranty, express or implied, with respect to its contents. The authors and publisher have exerted every effort to ensure that drug selections and dosages set forth in this text are in accord with current recommendations and practice at time of publication. However, in view of ongoing research, changes in government regulations, and the constant flow of information relating to drug therapy and drug reactions, the reader is urged to check the package inserts of all drugs for any change in indications of dosage and for added warnings and precautions. This is particularly important when the recommended agent is a new and/or infrequently employed drug.

Copyright © 2008 by Pearson Education, Inc., Upper Saddle River, New Jersey 07458. Pearson Prentice Hall. All rights reserved. Printed in the United States of America. This publication is protected by Copyright and permission should be obtained from the publisher prior to any prohibited reproduction, storage in a retrieval system, or transmission in any form or by any means, electronic, mechanical, photocopying, recording, or likewise. For information regarding permission(s), write to: Rights and Permissions Department.

Pearson Prentice Hall™ is a trademark of Pearson Education, Inc.

Pearson® is a registered trademark of Pearson plc

Prentice Hall® is a registered trademark of Pearson Education, Inc.

Pearson Education Ltd.

Pearson Education Singapore, Pte. Ltd.

Pearson Education Canada, Ltd.

Pearson Education—Japan

Pearson Education Australia PTY, Limited

Pearson Education North Asia Ltd.

Pearson Educación de Mexico, S.A. de C.V.

Pearson Education Malaysia, Pte. Ltd.

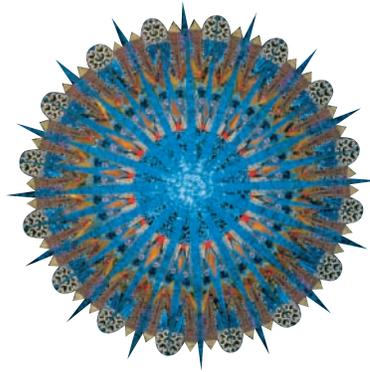
Pearson Education, Upper Saddle River, New Jersey



10 9 8 7 6 5 4 3 2 1

ISBN-13: 978-0-13-171308-6

ISBN-10: 0-13-171308-6



Dedication

I dedicate this book to Oz, who fills my days with sunshine.

Priscilla LeMone

*I dedicate this book to Louise, mentor and friend; the woman
who sets the standard for always striving to make a difference
for the future of nursing.*

Karen Burke





ABOUT THE AUTHORS



PRISCILLA LEMONE, RN, DSN, FAAN

Priscilla LeMone spent most of her career as a nurse educator, teaching medical-surgical nursing and pathophysiology at all levels from diploma to doctoral students. She has a diploma in nursing from Deaconess College of Nursing (St. Louis, Missouri), baccalaureate and master's degrees from Southeast Missouri State University, and a doctorate in nursing from the University of Alabama-Birmingham. She is retired as an Associate Professor Emeritus, Sinclair School of Nursing, University of Missouri-Columbia, but continues to keep up to date in nursing as an author of nursing textbooks.

Dr. LeMone had numerous awards for scholarship and teaching during her more than 30 years as a nurse educator. She is most honored for receiving the Kemper Fellowship for Teaching Excellence from the University of Missouri-Columbia, the Unique Contribution Award from the North American Nursing Diagnosis Association, and for being selected as a Fellow in the American Academy of Nursing.

She believes that her education gave her solid and everlasting roots in nursing. Her work with students has given her the wings that allow her love of nursing and teaching to continue through the years.

Recently married after 8 years of widowhood, Dr. LeMone lives in Ohio. When she has time, she enjoys traveling, gardening, and reading fiction.



KAREN M. BURKE, RN, MS

Karen Burke has practiced nursing in direct care and as a nurse educator and administrator. She is currently the Education Consultant for the Oregon State Board of Nursing. In this role, she serves as a consultant to new and existing nursing education programs in the state.

Ms. Burke entered nursing with a diploma from Emanuel Hospital School of Nursing in Portland, Oregon, later completing baccalaureate studies at Oregon Health & Science University (OHSU), and a master's degree at the University of Portland. She retired as the Director of Health Occupations at Clatsop Community College in Astoria, Oregon. Ms. Burke currently is a member of the steering committee for the Oregon Consortium for Nursing Education, and is actively involved in the Education Committee of the Oregon Nursing Leadership Council. She is coauthor of another text, *Medical-Surgical Nursing Care* (2nd edition) with Priscilla LeMone, Elaine Mohn-Brown, and Linda Eby.

Ms. Burke strongly values the nursing profession and the importance of providing a strong education in the art and science of nursing for all students preparing to enter the profession. Her diverse experience has prepared her to relate to nursing students at all levels and in diverse programs.

Ms. Burke divides her time between a house in the country with her husband Steve and spoiled cat, and a small condo in the city. She and Steve love to garden, travel, and spend time with their extended family. Ms. Burke enjoys a passion for quilting, accumulating and gradually completing multiple UFOs (unfinished objects).



CONTRIBUTORS



We extend a deep, sincere thanks to our contributors, who gave their time, effort, and expertise so willingly to the development and writing of chapters and resources that help foster our goal of achieving nursing excellence through building your clinical competence.

TEXTBOOK CONTRIBUTORS

Jane Bostick, PhD, RN

Assistant Professor of Clinical Nursing
University of Missouri–Columbia
Columbia, Missouri
Chapter 6: Nursing Care of Clients with Problems of Substance Abuse

Nancy R. Bowers, MSN, RN, CNS

Associate Professor
University of Cincinnati–Raymond Walters College
Cincinnati, Ohio
Chapter 8: Genetic Implications of Adult Health Nursing

Cheryl DeGraw, MSN, RN, CRNP, CNE

Nursing Instructor
Florence–Darlington Technical College
Florence, South Carolina
End-of-Unit features

Mei R. Fu, PhD, RN, MS, MA, APRN-BC, BS, BA

Assistant Professor, Course Coordinator
New York University
New York, New York
Chapter 14: Nursing Care of Clients with Cancer

Joanne C. Langan, PhD, RN

Chair, Division of Mental Health, Family, Community, and Systems Nursing
Assistant Professor
Saint Louis University, School of Nursing
St. Louis, Missouri
Chapter 7: Nursing Care of Clients Experiencing Disasters

Elaine Mohn-Brown, EdD, RN

Nursing Professor
Chemeketa Community College
Salem, Oregon
Chapter 17: Nursing Care of Clients with Burns

Helen Sandkuhl, MSN, CEN, TNS, FAEN

Director of Nursing, Emergency Services
Saint Louis University Hospital
St. Louis, Missouri
Chapter 11: Nursing Care of Clients Experiencing Trauma and Shock

Marjorie Whitman, MSN, RN, AOCNS

Nurse Clinician
University of Missouri Hospital
Columbia, Missouri
Chapter 4: Nursing Care of Clients Having Surgery
Chapter 9: Nursing Care of Clients Experiencing Pain
Chapter 12: Nursing Care of Clients with Infections
Chapter 13: Nursing Care of Clients with Altered Immunity
Chapter 19: Nursing Care of Clients with Endocrine Disorders
Chapter 20: Nursing Care of Clients with Diabetes Mellitus

STUDENT AND INSTRUCTIONAL RESOURCE CONTRIBUTORS

Katrina Allen, MSN, RN, CCRN

Nursing Instructor
Faulkner State Community College
Bay Minette, Alabama
Companion Website

Christina Baumer, PhD, RN, CNOR, CHES

Division Chair, Continuing Education
Program Director, Surgical Technology
Lancaster General College of Nursing and Health Sciences
Lancaster, Pennsylvania
Study Guide

Sharon F. Beasley, MSN, RN

Nursing Instructor
Technical College of the Lowcountry
Beaufort, South Carolina
Companion Website
Student DVD-ROM

Michelle Buchman, RN, BSN, BC

Educational Support Services LLC
St. John's Marian Center
Chesterfield, Missouri
Study Guide

Donna L. Bumpus, MSN

Assistant Professor
Lamar University
Beaumont, Texas
Instructor's Resource Manual

Joy Burnard, MSN, RN, CDE

Adjunct Faculty
Point Loma Nazarene University
Bakersfield, California
Companion Website

Barbara M. Carranti, MS, RN, CNS

Instructor, Department of Nursing
Le Moyne College
Syracuse, New York
Companion Website

Kim Cooper, MSN, RN

Nursing Department Chair, Assistant Professor
Ivy Tech Community College of Indiana
Terre Haute, Indiana
Student DVD-ROM

Nina R. Cuttler, MSN, APRN, BC

Nursing Instructor
Central Carolina Technical College
Sumter, South Carolina
Student DVD-ROM

Vera Dauffenbach, EdD, MSN, RN

Associate Professor, Director of the Graduate Program
Bellin College of Nursing
Green Bay, Wisconsin
Companion Website

Katherine H. Dimmock, EdD, MSN, RN, JD

Nursing Dean and Professor
Columbia College of Nursing
Milwaukee, Wisconsin
Companion Website
Student DVD-ROM

Susan A. Erlewine, MSN, RN, CHPN

Assistant Professor
Hocking College School of Nursing
Nelsonville, Ohio
Companion Website

xiv CONTRIBUTORS

Pamela Fowler, MSN, BSN
Assistant Professor of Nursing
Rogers State University
Claremore, Oklahoma
Instructor's Resource Manual

Polly C. Haigler, PhD, RN, BC
Clinical Associate Professor
University of South Carolina
Columbia, South Carolina
Student DVD-ROM

Amy Herrington, MSN, RN, CEN
Critical Care Staff Development Specialist
University of Kentucky Healthcare
Lexington, Kentucky
Companion Website

Ann Isaacs, MS, APRN, BC
Professor of Nursing
Luzerne County Community College
Nanticoke, Pennsylvania
Companion Website
Student DVD-ROM

Tricia Jenkins, RN, MBA, PhD
Assistant Professor
Florida Atlantic University
Boca Raton, Florida
Instructor's Resource CD-ROM

Cathleen E. Kunkler, MSN, RN, ONC
Instructor, Nurse Education
Corning Community College
Corning, New York
Companion Website

Mary Ann Siciliano McLaughlin, MSN, RN
Nurse Educator
Hospital of the University of Pennsylvania
Philadelphia, Pennsylvania
Companion Website

Linda Oakley-Clancy, MSN, RN
Assistant Professor
Manatee Community College
Bradenton, Florida
Companion Website

Tami J. Rogers, DVM, MSN, BSN
Professor of Nursing
Valencia Community College
Orlando, Florida
Companion Website
Student DVD-ROM

Christine M. Thomas, MSN, DNSc, RN
Assistant Professor
West Chester University
West Chester, Pennsylvania
Companion Website
Student DVD-ROM

Loretta Wack, MSN, RN
Associate Professor
Blue Ridge Community College
Weyers Cave, Virginia
Companion Website

Julie Will, MSN, RN
Associate Professor
Ivy Tech Community College
Terre Haute, Indiana
Companion Website

Kathleen Wilson, MSN, RN
Nursing Professor
Houston Community College
Houston, Texas
Companion Website
Student DVD-ROM

Charlotte Wisnewski, PhD, RN, BC, CDE
Assistant Professor
University of Texas Medical Branch
Galveston, Texas
Student DVD-ROM

Nancy H. Wright, RN, BS, CNOR
Professor of Nursing
Virginia College
Birmingham, Alabama
Instructor's Resource Manual

Annette Zampelli, MSN, CRNP
Nursing Professor
Pennsylvania State Hershey Medical
Center and School of Nursing
Hershey, Pennsylvania
Companion Website
Instructor's Resource Manual

Dawn Zwick, MSN, RN, CNP
Lecturer, Graduate Program
Kent State University
Kent, Ohio
Student DVD-ROM



THANK YOU

Our heartfelt thanks go out to our colleagues from schools of nursing across the country who have given their time generously during the past two years to help us create this exciting new edition of our book. These individuals helped us plan and shape this textbook and resources by reviewing chapters, art, designs, and more. **Medical-Surgical Nursing: Critical Thinking in Client Care**, fourth edition, has reaped the benefit of your collective experience as nurses and teachers, and we have made many improvements due to your efforts, insights, suggestions, objections, encouragement, and inspiration. Among those who gave us their encouragement and comments are the following:

ACADEMIC REVIEWERS

Theresa Adelman, MSN, RN, CEN, TNS,
Methodist College of Nursing

Sheila Alexander, PhD, RN,
University of Pittsburgh

Catherine A. Andrews, PhD, RN,
Edgewood College

Vivian E. Austin, RN, MSN,
Macon State College

Michael Beach, MSN, APRN,
University of Pittsburgh

Deborah Becker, MSN, CRNP, BC,
University of Pennsylvania

Margaret Bellak, MN,
Indiana University of Pennsylvania

Carol Bence, MS, RN,
Indiana Wesleyan University

Alice Blazeck, RN, DNSC,
University of Pittsburgh

Donna Bowles, EdD, MSN, RN,
Indiana University Southeast

Judith E. Breitenbach, MS, RN,
Towson University

Debra J. Brown, PhD, RN, FNP, ANP, BC,
University of North Carolina–Chapel Hill

Michelle Buchman, RN, BSN, BC,
St. John's Marian Center

Donna L. Bumpus, MSN, RN,
Lamar University

Susan E. Caulkins, MSN, APRN, BC,
Central Carolina Technical College

Cynthia L. Dakin, PhD, RN,
Northeastern University

**Barbara Ann D'Anna, DSL, MSN, RN,
CNOR,**
Anne Arundel Community College

Maggie Davis, MSN, RN,
Central Florida Community College

Rosalinda DeLuna, RN, CCRN,
Indiana University Northwest

Linda Denison, APRN, BC,
University of Wisconsin

Wanda Dooley, MSN, APRN, BC, FNP,
Northern Virginia Community College

Phyllis Dubendorf, MSN, RN, CRNP,
University of Pennsylvania

Elizabeth Farren Corbin, PhD, FNP, RN,
Baylor University

**Marianne Fasano, Med, MSN, RN, CRNI,
CWOCN, PCCN,**
Pasco–Hernando Community College

Patricia Fowler, MSN, RNC, CNS,
University of Texas–El Paso

Kathleen W. Free, MSN, RNC, ARNP,
Indiana University Southeast

Arlinda Garner, MS, RN,
College of the Mainland

Janet Goeldner, MSN, RN, AOCN,
University of Cincinnati–Raymond Walters
College

Sung Hi Gwak, MSN, CCRN, RN, BC,
Borough of Manhattan Community
College

Becky Haglund, MN, RN,
Santa Ana College

Polly Haigler, PhD, RN, BC,
University of South Carolina

Barbara A. Hannah, EdD, MS, CPAN, BS,
University of Oklahoma

Anne Helm, MSN, RN,
Owens Community College

Carolyn Insley, MS, MN, RN, BSN,
Fort Hays State University

Vanessa Johnson, PhD, MS, BSN,
University of Oklahoma

Catherine B. Kaesburg, MSN, RN, CNS,
Illinois State University

Sarah Keeling, MN, RN, BSN,
Georgia Perimeter College

Bonnie Kirkpatrick, MS, RN, CNS,
Ohio State University

Andrea Knesek, MSN, BC,
Macomb Community College

Cheryl Lantz, MS, RN, BSN,
Dickinson State University

Rhonda Lawes, RN, MS,
University of Oklahoma

Catherine Lazo-Miller, MS, RN,
Indiana University Northwest

Jennifer Leisegang, MSN, RN, ARNP,
Whatcom Community College

Christine Linert, MSN, RN, OCN,
Collin County Community College

Kit Mallow, MSN, RN,
Gogebic Community College

Hyacinth Martin, MSED, MA, RN,
Borough of Manhattan Community
College

Jill M. Mayo, MSN, RN,
Mississippi College

Ellen McAvoy, MA, RN,
Hillsborough Community College

Arlene McGrory, DNSc, RN,
University of Massachusetts–Lowell

Gail Meagher, MSN, RN,
Odessa College

Ann Merrill, MS, MA, BSN,
University of Oklahoma

Brenda Michel, EdD, MS, RN,
Lincoln Land Community College

Sue Miller, MSN, RNC, CNS,
Catawba Valley Community College

Jo Mizzi, MBA, RN,
Highline Community College; Bellevue
Community College; Overlake Hospital
and Medical Center

Elise Muller-Lindgren, RN, MN, CHPN,
Highline Community College

Judy Ogans, MS, RN,
University of Oklahoma

Gina Oliver, PhD, RN,
University of Missouri–Columbia

Wendi Palermo, MSN, RN,
McNeese State University

Karen Peel, MN, CCRN,
University of South Carolina

Rebecca A. Phillips, PhD, RN,
University of Oklahoma

Bill Powell, PhD, RN, FNP,
University of North Carolina—Chapel Hill

Tara McMillan Queen, RN, AA, BSN, MN, ANP-C, GNP,
Mercy School of Nursing

Colleen Quinn, MSN, RN,
Broward Community College

Anita K. Reed, MSN, RN,
St. Elizabeth School of Nursing

Tami J. Rogers, BSN, MSN, DVM,
Valencia Community College

Pamela Johnson Rowsey, PhD, RN,
University of North Carolina—Chapel Hill

Megan Sary, MSN, RN,
Merritt College

Jeannie Short, MSN, RN,
Indiana Wesleyan University

Annette S. Stacy, MSN, RN, AOCN,
Arkansas State University

Judith Stauder, MSN, RN,
Stark State College of Technology

Cecilia Tolson, MSN, CNOR, RN,
Owens Community College

Shirley E. Van Zandt, MSN, MPH, CRNP,
Johns Hopkins University

Benita Walton-Moss, DNS, APRN, BC,
Johns Hopkins University

Antoinette Willsea, MSN, RN,
Piedmont College

Kathleen M. Woodruff, MS, CRNP,
Johns Hopkins University

Annette Zampelli, MSN, CRNP,
Penn State Hershey Medical Center

CLINICAL REVIEWERS

Randall Beaton, PhD, EMT,
University of Washington

Pamela Bilyeu, RN, BSN, CNOR, CURN, ONC,
Saint Vincent Healthcare

William P. Carrick, MSN, BSN,
McLean Hospital; Cab Health and Recovery

Cynthia Christensen, MSN, CVN, ARNP-BC,
Ben Collins D.O.

Cathy Cormier, MN, RN,
Southeastern Louisiana State University

Caroline Kuhlman, MSN, APRN-BC, ACON,
Massachusetts General Hospital

Debra J. Lenhart, MSN, RN,
Oklahoma University

Connie Miller, MSN, FNP-C, CDE, BC-ADM,
Cheyenne Crossroads Clinic

Bonnie Pedraza, MSN, RN, CCRN,
University of Wisconsin—Milwaukee

Joanne Farley Serembus, EdD, RN, CCRN,
Roxborough Memorial Hospital

Colleen Marie Toter, MSN, RN, ANCC, APNP, CCRN,
University of Wisconsin

Denise York, MEd, MS, CNS, RNC,
Columbus State Community College

STUDENT REVIEWERS

Julie Bauder,
Johns Hopkins University School of Nursing

Lorna Benoit,
Essex Community College

Lori Bunalski,
The College of New Jersey

Marla Greco,
Pennsylvania State University

Jessica Kramer,
The College of New Jersey

Kristina Smith,
University of Maryland

Emily Watson,
The College of New Jersey

Melissa Whitty,
The College of New Jersey

PREFACE



This is a wonderful time to become a nurse! We have all heard about the nursing shortage, especially as it relates to the aging of the population. In fact, the need for new nurses is projected to be at or greater than one million by 2010. While this problem will have to be faced as a society as a whole, it means that your knowledge and skills will be in great demand to meet healthcare needs well into the future. We wrote this book to help you build those skills.

Nursing students are expected to build on knowledge of basic sciences, social sciences, and the fundamentals of nursing to synthesize and critically analyze new skills necessary to ensure clinical competence. We revised and updated the fourth edition of *Medical-Surgical Nursing: Critical Thinking in Client Care* to provide you with the knowledge and skills you need to care for adult clients to promote health, facilitate recovery from illness and injury, and provide support when coping with disability or loss.

Throughout the text, we make every effort to communicate that both nurses and adult clients may be male or female; and that clients require holistic, individualized care regardless of their age or racial, cultural, or socioeconomic background.

OUR GOAL—HELPING YOU ACHIEVE CLINICAL COMPETENCE BY BUILDING ON YOUR SKILLS

Our focus in writing this book is to provide you with knowledge that provides a base for clinical judgment and that can be applied to provide safe, individualized, and competent clinical nursing care. Our easily understood, straightforward style will help you integrate concepts in pathophysiology, pharmacology, and interdisciplinary healthcare interventions into prioritized nursing care. We developed multiple learning strategies to help you succeed—audio, illustrations, teaching tips, and video and animation media. We include boxes, tables, special features and illustrations, as well as synthesis and critical thinking exercises, so you can build your skills for class, for clinical, for NCLEX[®], and for practice.

We believe that students learn best within a nursing model of care with consistent organization and understandable text. Starting with the first edition, we have held fast to our vision that this textbook:

- Maintains a strong focus on nursing care as the essential element in learning and doing nursing, regardless of the age of the client or the setting for care.
- Provides a proper balance of physiology, pathophysiology, pharmacology, and interdisciplinary care on which to base safe, competent, and individualized nursing care.
- Emphasizes the nurse's role as an essential member of the interdisciplinary healthcare team.
- Uses functional health patterns and the nursing process as the structure for providing nursing care in today's world by prioritizing nursing diagnoses and interventions specific to altered responses to illness.

- Fosters critical thinking and decision-making skills as the basis for nursing excellence in clinical practice.
- Continues to believe that the person receiving care has not only a personal experience with health and illness, but is also an active participant in maintaining and/or regaining health. Within this philosophy, we regard that person as a client, rather than a patient, in this textbook. The client may be an individual, a family, or a community.

ORGANIZATION

The book is organized into 52 chapters in six major parts, organized by functional health patterns. Each part opens with a concept map illustrating the relationship of each functional health pattern to possible nursing diagnoses. The parts are then divided into units based on alterations in human structure and function. Each unit with a focus on altered health states opens with an assessment chapter. On the accompanying DVD-ROM, students find a comprehensive review of anatomy and physiology complete with animations, three-dimensional structures, and exercises. This draws upon the student's prerequisite knowledge, and serves to reinforce basic principles of anatomy and physiology as applied to physical assessment.

Following the assessment chapter in each unit, the nursing care chapters provide information about major conditions and diseases. Each of these nursing care chapters follows a consistent format, including three key components:

PATHOPHYSIOLOGY The discussion of each *major* illness or condition begins with incidence and prevalence with an overview of pathophysiology, followed by manifestations and complications. *Focus on Cultural Diversity* boxes demonstrate how race, age, and gender affect differences in incidence, prevalence, and mortality. *Pathophysiology Illustrated* art brings physiologic processes to life.

INTERDISCIPLINARY CARE Interdisciplinary care considers treatment of the illness or condition by the healthcare team. The section includes information about specific tests necessary for diagnosis, medications, surgery and treatments, fluid management, dietary management, and complementary and alternative therapies.

NURSING CARE Because illness prevention is critical in health care today, this section begins with health promotion information. We discuss nursing care within a context of priority nursing diagnoses and interventions, with rationales provided for each intervention. Boxes that present information essential to client care are *Nursing Care*, *Meeting Individualized Needs*, *Practice Alerts*, *Medication Administration*, *Nursing Research*, and *NANDA, NIC, and NOC Linkages*. Last, for each major disorder or condition, we provide a narrative *Nursing Care Plan* that begins with a brief case study, followed by the steps of the nursing process. Critical thinking questions specific to the care plan conclude with a section called *Evaluate Your Response* that provides additional guidance for critical thinking. Suggested guidelines are found in Appendix C.

CHAPTER REVIEW This end-of-chapter section concludes with ten multiple-choice review questions to reinforce comprehension of the chapter content. (The correct answers with rationales are found in Appendix C.) The *EXPLORE MediaLink* feature encourages students to use the DVD-ROM and the Companion Website to apply what they have learned from the textbook through critical thinking and interactive exercises.

What's New in the Fourth Edition

We carefully reviewed the third edition of this book to ensure current content and the necessary knowledge to educate the next generation of nurses. New features of the fourth edition include:

- We divided the chapter objectives into Learning Outcomes and Clinical Competencies. Learning Outcomes show you the knowledge you'll gain, while Clinical Competencies demonstrate how you will apply that knowledge.
- We changed the heading "Collaborative Care" to "Interdisciplinary Care" to better illustrate the role of each member of the healthcare team in providing safe, research-based, client-centered care.
- We added a list of key terms to the beginning of each chapter, and these terms are then printed in bold type and defined at the first occurrence within text. You can learn the correct pronunciation of all terms on the Audio Glossary, found on the textbook's Companion Website.
- We added new chapters and content to make the book absolutely current and clinically relevant.
 - Chapter 7: Nursing Care of Clients Experiencing Disasters
 - Chapter 8: Genetic Implications of Adult Health Nursing
 - Chapter 38: Nursing Care of Clients with Ventilation Disorders
 - Chapter 39: Nursing Care of Clients with Gas Exchange Disorders
- We redesigned the assessment chapters that begin each body system unit to provide students with a more structured, easy-to-use overview for assessment of that body system. The new format includes:
 - A list of needed equipment at the beginning of each chapter.
 - Increased review of normal anatomy and physiology of the system being assessed.
- The assessment section of the chapter is divided as follows:
 - *Diagnostic Tests* This section includes diagnostic test tables and a narrative summary. The tables include the name of the test, the purpose and description of the test, and related nursing care.
 - *Genetic Considerations* This section reminds you of the relevant genetic-based information to gather during the health history.
 - *Health Assessment Interview* This interview not only summarizes and prioritizes the questions to ask, but also provides an interview guide based on functional health patterns.
 - The *Physical Assessment* section is in a new, easy-to-read two-column format that demonstrates how to perform the assessment, with normal and abnormal findings.
- We added a box titled *Fast Facts* to highlight and summarize important data about the prevalence and incidence of selected disorders and other featured content.
- An end-of-unit review for each of the 15 units, called *Building Clinical Competence*, synthesizes what you've learned in the unit and applies the knowledge to specific cases. The feature includes:
 - A functional health pattern expansion that includes further discussion and critical thinking questions;
 - A clinical scenario involving a priority issue reflection piece that synthesizes underlying concepts and includes a variety of questions that allow students to apply different skills; and
 - A case study with concept map that further synthesizes material using the nursing process.

SPECIAL FEATURES



ASSESSMENT OF THE CLIENT

- Bowel Assessments 748
- Cardiac Assessments 952
- Ear and Hearing Assessments 1687
- Endocrine Assessments 529
- Eye and Vision Assessments 1676
- Female Reproductive System Assessments 1761
- Hematologic, Peripheral Vascular, and Lymphatic Assessments 1092
- Integumentary Assessment 431
- Male Reproductive System Assessments 1749
- Musculoskeletal Assessments 1391
- Neurologic Assessments 1519
- Nutritional and Gastrointestinal Assessments 620
- Reflex Assessments with Abnormal Findings 1523
- Respiratory Assessments 1092
- Special Neurologic Assessments with Abnormal Findings 1524
- Urinary Assessments 842

BUILDING CLINICAL COMPETENCE

- Alterations in Patterns of Health 143
- Dimensions of Medical-Surgical Nursing 49
- Pathophysiology and Patterns of Health 416
- Responses to Altered Bowel Elimination 824
- Responses to Altered Cardiac Function 1071
- Responses to Altered Endocrine Function 600
- Responses to Altered Integumentary Structure and Function 513
- Responses to Altered Musculoskeletal Function 1497
- Responses to Altered Neurologic Function 1665
- Responses to Altered Nutrition 735
- Responses to Altered Peripheral Tissue Perfusion 1205
- Responses to Altered Reproductive Function 1854
- Responses to Altered Respiratory Function 1375
- Responses to Altered Urinary Elimination 929
- Responses to Altered Visual and Auditory Function 1737

DIAGNOSTIC TESTS

- Cardiac Disorders 944
- Ear Disorders 1684
- Endocrine System 523
- Eye Disorders 1674
- Female Reproductive System 1756
- Gastrointestinal Disorders 615
- Hematologic, Peripheral Vascular, and Lymphatic Disorders 1087
- Integumentary System 428
- Intestinal Disorders 744
- Male Reproductive System 1746
- Musculoskeletal System 1387
- Neurologic System 1514
- Respiratory System 1217
- Urinary System Disorders 835

FOCUS ON CULTURAL DIVERSITY

- BiDiI for Treating Heart Failure in African Americans 1035
- Cirrhosis 711
- Cultural Aspects of Terminal Illness Care 89
- Gallstones 697
- Heart Disease 958
- HIV/AIDS 349
- Hypertension in African Americans 1157
- Incidence and Mortality for Breast Cancer in Women 1822
- Incidence and Prevalence of IBD 782
- Inherited Hemolytic Anemias 1106
- Lactase Deficiency 798
- Obesity 631
- Risk and Incidence of Cancer 370
- Risk and Incidence of Diabetes Mellitus 564
- Risk and Incidence of Prostate Cancer 1783
- Risk Factors for Stroke 1580
- Risk for Testicular Cancer 1774
- Sickle Cell Anemia 1107
- Substance Use and Ethnicity 105
- Tuberculosis 1281

FUNCTIONAL HEALTH PATTERNS INTERVIEW

- Endocrine System 528
- Hematologic, Peripheral Vascular, and Lymphatic Systems 1090
- Integumentary System 429
- Intestinal Tract 747
- Musculoskeletal System 1390
- Neurologic System 1517
- Nutritional Status and Gastrointestinal System 618
- Respiratory System 1221
- The Cardiac System 951
- The Ear 1685
- The Eye 1675
- The Female Reproductive System 1759
- The Male Reproductive System 1748
- Urinary System 840

GENETIC CONSIDERATIONS

- Adult Polycystic Kidney Disease 884
- Alcoholic Fathers and Their Sons 104
- Cardiac Disorders 950
- Chronic Obstructive Pulmonary Disease 1331
- Clients with Marfan Syndrome 1057
- Cystic Fibrosis 1340
- Ear Disorders 1684
- Endocrine System 527
- Eye Disorders 1674
- Female Reproductive System Disorders 1755
- Focus on Hemophilia 1143

xx SPECIAL FEATURES LIST

Focus on Lymphoma 1129
Hematologic, Peripheral Vascular, and Lymphatic Disorders 1089
Integumentary System 427
Intestinal Tract 746
Male Reproductive System Disorders 1747
Musculoskeletal Disorders 1389
Neurologic Disorders 1513
Nutritional and Gastrointestinal System 614
Primary Lymphedema 1199
Respiratory Disorders 1220
Thoracic Aortic Aneurysms 1172
Urinary System 839

MEDICATION ADMINISTRATION

Acne Medications 459
Acute Renal Failure 905
Addison's Disease 555
Alzheimer's Disease 1621
Antianginal Medications 973
Antibiotic Therapy 319
Anticoagulant Therapy 1189
Antidiarrheal Preparations 756
Antidysrhythmic Drugs 1006
Antifungal Agents 450
Antihypertensive Drugs 1161
Antiplatelet Drugs 976
Antiprotozoal Agents 780
Antiretroviral Nucleoside Analogs 357
Antispasmodics in Spinal Cord Injury 1600
Antituberculosis Drugs 1288
Antiviral Agents 322
Asthma 1327
Blood Transfusion 264
Calcium Salts 230
Cholesterol-Lowering Drugs 967
Chronic Pancreatitis 728
Cirrhosis 717
Colloid Solutions 279
Decongestants and Antihistamines 1230
Diuretics for Fluid Volume Excess 210
Drugs to Treat Anemia 1112
Drugs to Treat Obesity 634
Drugs Used to Prevent and Treat Nausea and Vomiting 673
Drugs Used to Treat GERD, Gastritis, and Peptic Ulcer Disease 665
Drugs Used to Treat Stomatitis 658
Genital Warts 1842
Glaucoma 1710
Gout 1446
Headaches 1545
Heart Failure 1033
Hyperkalemia 225
Hyperthyroidism 538
Hypokalemia 221

Hypothyroidism 544
Immunosuppressive Agents 345
Immunosuppressive Agents for SLE 1474
Increased Intracranial Pressure 1539
Inflammatory Bowel Disease 787
Insulin 573
Intravenous Insulin 586
Laxatives and Cathartics 759
Magnesium Sulfate 235
Multiple Sclerosis 1631
Myasthenia Gravis 1649
Narcotic Analgesics 182
Neurogenic Bladder 871
Neuromuscular Blockers 1356
Nonsteroidal Anti-Inflammatory Drugs 179
Oral Hypoglycemic Agents 578
Osteoporosis 1437
Paget's Disease 1442
Parkinson's Disease 1637
Seizures 1550
Shock 278
Tamoxifen 1825
Therapeutic Baths 441
The Woman with Dysmenorrhea 1802
Topical Burn Medications 501
Urinary Anti-Infectives and Analgesics 850
Vitamin and Mineral Supplements 645

NANDA, NIC, AND NOC

Acute Brain Injury 1562
Acute Myocardial Infarction 994
Acute Renal Failure 913
Altered Bowel Motility 757
Alzheimer's Disease 1625
Amputation 1426
Anemia 1115
Appendicitis or Peritonitis 769
ARDS 1371
Brain Tumor 1575
Breast Cancer 1831
Cancer 411
Cervical Cancer 1815
Chronic Pain 190
Cirrhosis 723
CNS Infection 1568
Colorectal Cancer 809
Compound Fracture 1420
COPD 1340
Cushing's Syndrome 553
DVT 1193
Endometriosis 1812
Experiencing Death Anxiety 97
Experiencing Trauma 268

Eye Infection or Inflammation 1696
 Fluid Volume Deficit 209
 Gastric Cancer 693
 GERD 667
 Glaucoma 1713
 Having Surgery for Prostate Cancer 1789
 Hearing Deficit 1733
 Heart Failure 1039
 Hemophilia 1146
 Herpes Zoster 455
 HIV Infection 365
 Hypertension 1166
 Infection 325
 Inflammatory Bowel Disease 795
 Influenza 1235
 Inner Ear Disorder 1728
 Laryngeal Cancer 1262
 Leukemia 1128
 Lung Cancer 1317
 Major Burn 511
 Malignant Lymphoma 1136
 Malignant Melanoma 471
 Malnutrition 650
 Multiple Sclerosis 1634
 Nasal Trauma 1248
 Obesity 640
 Osteoarthritis 1457
 Osteoporosis 1440
 Pancreatitis 731
 Parkinson's Disease 1642
 Peptic Ulcer Disease 688
 Peripheral Vascular Disease 1180
 Pneumonia 1276
 Potassium Imbalance 223
 Pulmonary Embolism 1352
 Respiratory Acidosis 250
 Respiratory Failure 1365
 Rheumatoid Arthritis 1469
 SCI 1606
 Seizures 1553
 Shock 283
 Stomatitis 659
 Stroke 1592
 Substance Abuse Problem 120
 The Postoperative Client 80
 Tuberculosis 1293
 Type 1 DM 596
 Urinary Incontinence 879
 Viral Hepatitis 710

NURSING CARE OF THE OLDER ADULT

Cardiac Dysrhythmias 996
 Chronic Venous Stasis 1196

End-of-Life Checklist 95
 Fluid Volume Deficit 203
 Heart Failure 1023
 Hypertension 1157
 Infections 315
 Minimizing the Risk for UTI and UI 873
 Older Adults with Cancer 371
 Peripheral Vascular Disease 1178
 Pneumonia 1268
 Pressure Ulcer Prevention 474
 Renal Failure 914
 Tuberculosis 1282
 Variations in Assessment Findings—Hypothyroidism 545
 Variations in Assessment Findings—Shock 280

NURSING CARE PLAN

A Client Experiencing Loss and Grief 98
 A Client Experiencing Withdrawal from Alcohol 119
 A Client Having Surgery 81
 A Client with a Below-the-Knee Amputation 1425
 A Client with a Bladder Tumor 867
 A Client with a Brain Tumor 1573
 A Client with Acute Appendicitis 768
 A Client with Acute Glomerulonephritis 892
 A Client with Acute Myelocytic Leukemia 1125
 A Client with Acute Myocardial Infarction 991
 A Client with Acute Pancreatitis 729
 A Client with Acute Renal Failure 912
 A Client with Acute Respiratory Acidosis 249
 A Client with Acquired Immunity 303
 A Client with AD 1622
 A Client with Addison's Disease 556
 A Client with a Hip Fracture 1418
 A Client with Alcoholic Cirrhosis 721
 A Client with a Major Burn 507
 A Client with a Migraine Headache 1547
 A Client with an SCI 1603
 A Client with ARDS 1370
 A Client with a Seizure Disorder 1552
 A Client with a Stroke 1588
 A Client with a Subdural Hematoma 1561
 A Client with Bacterial Meningitis 1567
 A Client with Cancer 403
 A Client with Cholelithiasis 702
 A Client with Chronic Pain 191
 A Client with Colorectal Cancer 807
 A Client with COPD 1338
 A Client with Coronary Artery Bypass Surgery 983
 A Client with Cushing's Syndrome 551
 A Client with Cystitis 853
 A Client with Deep Venous Thrombosis 1191
 A Client with End-Stage Renal Disease 924
 A Client with Fluid Volume Excess 212

- A Client with Folic Acid Deficiency Anemia 1113
- A Client with Gastric Cancer 692
- A Client with Glaucoma and Cataracts 1711
- A Client with Gonorrhea 1847
- A Client with Graves' Disease 540
- A Client with Heart Failure 1037
- A Client with Hemophilia 1145
- A Client with Herpes Zoster 454
- A Client with HIV Infection 363
- A Client with Hodgkin's Disease 1134
- A Client with Hyperkalemia 226
- A Client with Hypertension 1168
- A Client with Hypokalemia 222
- A Client with Hypothyroidism 546
- A Client with Injuries to Hands, Foot, and Suffering from Trauma of Natural Disaster 139
- A Client with Lung Cancer 1315
- A Client with Malignant Melanoma 469
- A Client with Malnutrition 649
- A Client with Mitral Valve Prolapse 1064
- A Client with MS 1633
- A Client with Multiple Injuries 266
- A Client with Myasthenia Gravis 1652
- A Client with Nasal Trauma 1247
- A Client with Obesity 639
- A Client with Oral Cancer 661
- A Client with Osteoarthritis 1456
- A Client with Osteoporosis 1438
- A Client with PD 1640
- A Client with Peptic Ulcer Disease 686
- A Client with Peripheral Vascular Disease 1181
- A Client with Peritonsillar Abscess 1240
- A Client with Pneumonia 1277
- A Client with Rheumatoid Arthritis 1467
- A Client with Septic Shock 281
- A Client with Supraventricular Tachycardia 1013
- A Client with Syphilis 1850
- A Client with Total Laryngectomy 1259
- A Client with Tuberculosis 1291
- A Client with Type 1 Diabetes 593
- A Client with Ulcerative Colitis 793
- A Client with Urinary Calculi 861
- A Client with Urinary Incontinence 878
- A Man with Prostate Cancer 1788
- A Woman with Breast Cancer 1828
- A Woman with Cervical Cancer 1814
- A Woman with Endometriosis 1811
- Care of ICU Clients Sustaining Multiple Trauma 280
- Caregivers of Young Adults with TBI 1563
- Client Experiencing Pain 189
- Client on Hemodialysis 926
- Client Undergoing Laparoscopic Cholecystectomy 700
- Client Undergoing Stem Cell Transplant 1133
- Client Who Is Intubated 1364
- Client with a Major Burn 510
- Client with COPD 1335
- Client with Osteoporosis 1439
- Client with Skeletal Pins 1419
- Client with Venous Leg Ulcers 1196
- Clients with Acute Leukemia and Lymphoma 1126
- Clients with Enteral Feeding Tubes 662
- Clients with Imbalanced Fluid Volume 208
- Clients with Risk for Tuberculosis 1290
- Determining Feeding Tube Placement 647
- Disaster Education 138
- End-of-Life Care 90
- Enterally Fed, Critically Ill Client 772
- Fecal Incontinence 764
- Improve Diagnosis and Treatment of African American Women with Breast Cancer 1829
- Improve Discharge Teaching 1785
- Improve Rapid Treatment of a Stroke 1589
- Male Catheterization 854
- Nurses' Willingness to Care for People with AIDS 360
- Postmenopausal Women 965
- Self-Medicating with Thyroid Hormone 545
- Smoking Cessation in Hospitalized Patients 106
- Sudden Cardiac Death 1066
- Teaching the Client with Rheumatoid Arthritis 1469
- The Client Undergoing Laryngectomy 1260
- The Client with Impaired Vision 1715
- The Client with Primary Hypertension 1164
- Treating Pressure Ulcers 475
- Urinary Incontinence 876
- Women Following Myocardial Infarction 995

SAMPLE DOCUMENTATION

- Abdominal Assessment 743
- Assessment of Cardiac Function 943
- Assessment of Nutritional Status 613
- Assessment of the Ear 1684
- Assessment of the Female Reproductive System 1755
- Assessment of the Integumentary System 427
- Assessment of the Lungs 1217
- Assessment of the Musculoskeletal System 1386
- Assessment of the Neurologic System 1512
- Assessment of the Peripheral Vascular System 1087
- Assessment of the Thyroid Gland 527
- Assessment of Urinary System Function 835

NURSING RESEARCH: EVIDENCE-BASED PRACTICE

- Aging Clients with MS 1634
- Antibiotics and Infection 310
- Assisting Older Adults to Communicate Postoperative Pain 65
- Balancing Quality of Life and Living with Diabetes 591

CONTENTS



| | | | |
|------------------|---|------------|--|
| PART | MEDICAL-SURGICAL NURSING PRACTICE | 1 | |
| | Unit 1 Dimensions of Medical-Surgical Nursing | 3 | |
| CHAPTER 1 | Medical-Surgical Nursing | 4 | |
| | Core Competencies for Safe and Effective Health Care | 5 | |
| | Framework for Practice: Critical Thinking in the Nursing Process | 6 | |
| | Critical Thinking 6 , The Nursing Process 6 | | |
| | Guidelines for Nursing Practice | 10 | |
| | Codes for Nurses 10 , Standards of Nursing Practice 11 | | |
| | Legal and Ethical Dilemmas in Nursing | 12 | |
| | Roles of the Nurse in Medical-Surgical Nursing Practice | 12 | |
| | The Nurse as Caregiver 12 , The Nurse as Educator 13 , The Nurse as Advocate 14 , The Nurse as Leader and Manager 14 , The Nurse as Researcher 15 | | |
| CHAPTER 2 | Health and Illness in the Adult Client | 18 | |
| | The Health–Illness Continuum and High-Level Wellness | 19 | |
| | Factors Affecting Health 19 , Health Promotion and Maintenance 20 , Disease and Illness 22 | | |
| | Meeting Health Needs of Adults | 24 | |
| | The Young Adult 24 , The Middle Adult 26 , The Older Adult 28 | | |
| | The Family of the Adult Client | 30 | |
| | Definitions and Functions of the Family 31 , Family Developmental Stages and Tasks 31 , The Family of the Client with a Chronic Illness 33 | | |
| CHAPTER 3 | Community-Based and Home Care of the Adult Client | 35 | |
| | Community-Based Nursing Care | 36 | |
| | Factors Affecting Health in the Community 36 | | |
| | Community-Based Healthcare Services | 37 | |
| | Community Centers and Clinics 37 , Day Care Programs 37 , Parish Nursing 37 , Meals-on-Wheels 38 | | |
| | Home Care | 38 | |
| | Brief History of Home Care 38 , Hospice and Respite Care 38 , The Home Care System 38 , The Nursing Process in Home Care 42 , Roles of the Home Care Nurse 43 , Special Considerations in Home Care Nursing 44 , Nursing Interventions to Ensure Competent Home Care 45 | | |
| | Rehabilitation | 47 | |
| Unit 2 | Alterations in Patterns of Health | 52 | |
| CHAPTER 4 | Nursing Care of Clients Having Surgery | 53 | |
| | Settings for Surgery | 54 | |
| | Legal Requirements | 55 | |
| | Perioperative Risk Factors 55 | | |
| | Interdisciplinary Care | 59 | |
| | NURSING CARE | 70 | |
| CHAPTER 5 | Nursing Care of Clients Experiencing Loss, Grief, and Death | 84 | |
| | Theories of Loss and Grief | 85 | |
| | Freud: Psychoanalytic Theory 85 , Bowlby: Protest, Despair, and Detachment 85 , Lindemann: Categories of Symptoms 86 , Caplan: Stress and Loss 86 , Kübler-Ross: Stages of Coping with Loss 86 | | |
| | Factors Affecting Responses to Loss | 87 | |
| | Age 87 , Social Support 87 , Families 88 , Cultural and Spiritual Practices 88 , Rituals of Mourning 88 , Nurses' Response to Clients' Loss 88 | | |
| | End-of-Life Care | 89 | |
| | Nursing Considerations for End-of-Life Care 90 , Settings and Services for End-of-Life Care 91 , Physiologic Changes in the Dying Client 92 , Support for the Client and Family 93 , Death 93 | | |
| | INTERDISCIPLINARY CARE | 94 | |
| | NURSING CARE | 95 | |
| CHAPTER 6 | Nursing Care of Clients with Problems of Substance Abuse | 101 | |
| | Risk Factors | 104 | |
| | Characteristics of Abusers | 105 | |
| | Addictive Substances and Their Effects | 106 | |
| | Caffeine 106 , Nicotine 106 , Cannabis 107 , Alcohol 107 , CNS Depressants 108 , Psychostimulants 108 , Opiates 110 , Hallucinogens 110 , Inhalants 111 | | |
| | INTERDISCIPLINARY CARE | 111 | |
| | NURSING CARE | 114 | |
| | Impaired Nurses | 121 | |
| CHAPTER 7 | Nursing Care of Clients Experiencing Disasters | 125 | |
| | Core Emergency and Disaster Preparedness Competencies for Nurses | 126 | |
| | Definitions | 126 | |
| | Types of Disasters 126 , Terrorism 127 , Nuclear/Radiologic Terrorism 128 | | |
| | Types of Disasters and Common Injuries | 128 | |
| | Hurricane and Tsunami-Related Injuries 128 , Thunderstorm-Related Injuries 130 , Tornado-Related Injuries 130 , Earthquake-Related Injuries 131 , Snowstorm-Related Injuries 131 , Disaster-Related Eye Injuries 131 , Blast Injuries 131 , Radiologic Dispersion Bomb (Dirty Bomb) Blast 131 | | |
| | INTERDISCIPLINARY CARE | 132 | |
| | Disaster Planning, Response, and Mitigation | 132 | |
| | Casualty Management | 133 | |
| | Isolation and Personal Protective Equipment 134 , Recording Victim Data 135 , Crowd Control 135 , Psychosocial Needs 135 | | |
| | NURSING CARE | 137 | |
| Unit 3 | Pathophysiology and Patterns of Health | 146 | |
| CHAPTER 8 | Genetic Implications of Adult Health Nursing | 147 | |
| | Integrating Genetics into Nursing Practice | 148 | |
| | Genetic Basics | 149 | |
| | Cell Division 149 , Chromosomal Alterations 150 , Genes 151 | | |

| | | | |
|---|------------|--|------------|
| Principles of Inheritance | 152 | Calcium Imbalance | 227 |
| Mendelian Pattern of Inheritance 152 , Variability in Classic Mendelian Patterns of Inheritance 155 , Multifactorial (Polygenic or Complex) Disorders 155 | | Overview of Normal Calcium Balance 227 , The Client with Hypocalcemia 227 | |
| INTERDISCIPLINARY CARE | 156 | INTERDISCIPLINARY CARE | 229 |
| NURSING CARE | 158 | NURSING CARE | 230 |
| Visions for the Future | 165 | The Client with Hypercalcemia 231 | |
| CHAPTER 9 Nursing Care of Clients Experiencing Pain | 169 | INTERDISCIPLINARY CARE | 231 |
| Neurophysiology and Theories of Pain | 170 | NURSING CARE | 232 |
| Neurophysiology 170 , Pain Pathway 171 , Inhibitory Mechanisms 171 , Pain Theories 172 | | Magnesium Imbalance | 233 |
| Types and Characteristics of Pain | 173 | Overview of Normal Magnesium Balance 233 , The Client with Hypomagnesemia 233 | |
| Acute Pain 173 , Chronic Pain 174 , Breakthrough Pain 174 , Central Pain 174 , Phantom Pain 174 , Psychogenic Pain 175 | | INTERDISCIPLINARY CARE | 234 |
| Factors Affecting Responses to Pain | 175 | NURSING CARE | 234 |
| Age 175 , Sociocultural Influences 176 , Emotional Status 176 , Past Experiences with Pain 176 , Source and Meaning 176 , Knowledge 177 | | The Client with Hypermagnesemia 235 | |
| Myths and Misconceptions about Pain | 177 | INTERDISCIPLINARY CARE | 235 |
| INTERDISCIPLINARY CARE | 177 | NURSING CARE | 235 |
| NURSING CARE | 186 | Phosphate Imbalance | 236 |
| CHAPTER 10 Nursing Care of Clients with Altered Fluid, Electrolyte, and Acid–Base Balance | 194 | Overview of Normal Phosphate Balance 236 , The Client with Hypophosphatemia 236 | |
| Overview of Normal Fluid and Electrolyte Balance | 195 | INTERDISCIPLINARY CARE | 237 |
| Body Fluid Composition 195 , Body Fluid Distribution 196 , Body Fluid Regulation 200 | | NURSING CARE | 237 |
| Changes in the Older Adult | 202 | The Client with Hyperphosphatemia 237 | |
| Fluid Imbalance | 203 | INTERDISCIPLINARY CARE | 237 |
| The Client with Fluid Volume Deficit 203 | | NURSING CARE | 238 |
| INTERDISCIPLINARY CARE | 205 | Regulation of Acid–Base Balance | 238 |
| NURSING CARE | 206 | Buffer Systems 238 , Respiratory System 239 , Renal System 239 , Assessment of Acid–Base Balance 239 | |
| The Client with Fluid Volume Excess | 209 | Acid–Base Imbalance | 239 |
| INTERDISCIPLINARY CARE | 210 | Compensation 241 , The Client with Metabolic Acidosis 242 | |
| NURSING CARE | 211 | INTERDISCIPLINARY CARE | 244 |
| Sodium Imbalance | 213 | NURSING CARE | 244 |
| Overview of Normal Sodium Balance 213 , The Client with Hyponatremia 214 | | The Client with Metabolic Alkalosis 245 | |
| INTERDISCIPLINARY CARE | 215 | INTERDISCIPLINARY CARE | 246 |
| NURSING CARE | 215 | NURSING CARE | 246 |
| The Client with Hyponatremia 216 | | The Client with Respiratory Acidosis 247 | |
| INTERDISCIPLINARY CARE | 216 | INTERDISCIPLINARY CARE | 248 |
| NURSING CARE | 217 | NURSING CARE | 249 |
| Potassium Imbalance | 217 | The Client with Respiratory Alkalosis 250 | |
| Overview of Normal Potassium Balance 217 , The Client with Hypokalemia 218 | | INTERDISCIPLINARY CARE | 251 |
| INTERDISCIPLINARY CARE | 219 | NURSING CARE | 251 |
| NURSING CARE | 221 | CHAPTER 11 Nursing Care of Clients Experiencing Trauma and Shock | 254 |
| The Client with Hyperkalemia 223 | | The Client Experiencing Trauma | 255 |
| INTERDISCIPLINARY CARE | 224 | Components of Trauma 255 , Types of Trauma 256 , Effects of Traumatic Injury 257 | |
| NURSING CARE | 224 | INTERDISCIPLINARY CARE | 260 |
| NURSING CARE | 224 | NURSING CARE | 265 |
| | | The Client Experiencing Shock | 268 |
| | | Overview of Cellular Homeostasis and Hemodynamics 268 , Pathophysiology 269 , Types of Shock 273 | |

| | | | |
|---|------------|---|------------|
| The Client with Acne | 457 | INTERDISCIPLINARY CARE | 497 |
| Pathophysiology 457 | | NURSING CARE | 505 |
| INTERDISCIPLINARY CARE | 458 | Unit 5 Responses to Altered Endocrine Function | 516 |
| NURSING CARE | 459 | CHAPTER 18 Assessing Clients with Endocrine Disorders | 517 |
| The Client with Pemphigus Vulgaris | 460 | Pituitary Gland 518 , Thyroid Gland 520 , Parathyroid Glands 520 , Adrenal Glands 520 , Pancreas 521 , Gonads 521 | |
| INTERDISCIPLINARY CARE | 460 | An Overview of Hormones | 521 |
| NURSING CARE | 460 | Assessing Endocrine Function | 522 |
| The Client with Lichen Planus | 460 | Diagnostic Tests 522 , Genetic Considerations 527 , Health Assessment Interview 527 , Physical Assessment 527 | |
| The Client with Toxic Epidermal Necrolysis | 460 | CHAPTER 19 Nursing Care of Clients with Endocrine Disorders | 533 |
| Pathophysiology 460 | | The Client with Hyperthyroidism | 534 |
| INTERDISCIPLINARY CARE | 461 | Pathophysiology and Manifestations 534 | |
| The Client with Actinic Keratosis | 461 | INTERDISCIPLINARY CARE | 537 |
| The Client with Nonmelanoma Skin Cancer | 461 | NURSING CARE | 538 |
| Incidence 461 , Risk Factors 461 , Pathophysiology 462 | | The Client with Hypothyroidism | 541 |
| INTERDISCIPLINARY CARE | 463 | Pathophysiology and Manifestations 541 | |
| NURSING CARE | 464 | INTERDISCIPLINARY CARE | 543 |
| The Client with Malignant Melanoma | 465 | NURSING CARE | 543 |
| Incidence 465 , Risk Factors 466 , Pathophysiology 466 | | The Client with Cancer of the Thyroid | 546 |
| INTERDISCIPLINARY CARE | 467 | The Client with Hyperparathyroidism | 547 |
| NURSING CARE | 468 | Pathophysiology and Manifestations 547 | |
| The Client with a Pressure Ulcer | 472 | INTERDISCIPLINARY CARE | 547 |
| Incidence 472 | | NURSING CARE | 547 |
| INTERDISCIPLINARY CARE | 472 | The Client with Hypoparathyroidism | 548 |
| NURSING CARE | 473 | Pathophysiology and Manifestations 548 | |
| The Client with Frostbite | 476 | INTERDISCIPLINARY CARE | 548 |
| The Client Undergoing Cutaneous and Plastic Surgery | 477 | NURSING CARE | 548 |
| Cutaneous Surgery and Procedures 477 , Plastic Surgery 478 | | The Client with Hypercortisolism (Cushing's Syndrome) | 548 |
| NURSING CARE | 479 | Pathophysiology 549 , Manifestations 549 | |
| The Client with a Disorder of the Hair | 481 | INTERDISCIPLINARY CARE | 549 |
| Pathophysiology 481 | | NURSING CARE | 550 |
| INTERDISCIPLINARY CARE | 482 | The Client with Chronic Adrenocortical Insufficiency (Addison's Disease) | 553 |
| NURSING CARE | 482 | Pathophysiology 553 , Manifestations 553 , Addisonian Crisis 553 | |
| The Client with a Disorder of the Nails | 483 | INTERDISCIPLINARY CARE | 554 |
| Pathophysiology 483 | | NURSING CARE | 554 |
| INTERDISCIPLINARY CARE | 483 | The Client with Pheochromocytoma | 557 |
| NURSING CARE | 483 | The Client with Disorders of the Anterior Pituitary Gland | 557 |
| CHAPTER 17 Nursing Care of Clients with Burns | 486 | Pathophysiology and Manifestations 557 | |
| Types of Burn Injury | 487 | INTERDISCIPLINARY CARE | 558 |
| Thermal Burns 487 , Chemical Burns 487 , Electrical Burns 488 , Radiation Burns 488 | | NURSING CARE | 558 |
| Factors Affecting Burn Classification | 488 | The Client with Disorders of the Posterior Pituitary Gland | 558 |
| Depth of the Burn 489 , Extent of the Burn 490 | | Pathophysiology and Manifestations 558 | |
| Burn Wound Healing | 493 | INTERDISCIPLINARY CARE | 559 |
| The Client with a Minor Burn | 493 | NURSING CARE | 559 |
| Pathophysiology 493 | | | |
| INTERDISCIPLINARY CARE | 493 | | |
| NURSING CARE | 493 | | |
| The Client with a Major Burn | 494 | | |
| Pathophysiology 494 | | | |

| | | | |
|--|------------|---|------------|
| CHAPTER 20 Nursing Care of Clients with Diabetes Mellitus | 562 | INTERDISCIPLINARY CARE | 660 |
| Incidence and Prevalence | 563 | NURSING CARE | 661 |
| Overview of Endocrine Pancreatic Hormones and Glucose Homeostasis | 564 | The Client with Gastroesophageal Reflux Disease | 663 |
| Hormones 564 , Blood Glucose Homeostasis 564 | | Pathophysiology 663 , Manifestations 663 | |
| Pathophysiology of Diabetes | 564 | INTERDISCIPLINARY CARE | 664 |
| Type 1 Diabetes 565 , Type 2 Diabetes 566 , Diabetes in the Older Adult 567 | | NURSING CARE | 666 |
| INTERDISCIPLINARY CARE | 568 | The Client with Hiatal Hernia | 667 |
| Complications of Diabetes | 582 | The Client with Impaired Esophageal Motility | 668 |
| Acute Complications: Alterations in Blood Glucose Levels 582 , Chronic Complications 587 | | The Client with Esophageal Cancer | 669 |
| NURSING CARE | 590 | Manifestations 669 | |
| Unit 6 Responses to Altered Nutrition | 603 | INTERDISCIPLINARY CARE | 669 |
| CHAPTER 21 Assessing Clients with Nutritional and Gastrointestinal Disorders | 604 | NURSING CARE | 670 |
| Nutrients | 605 | The Client with Nausea and Vomiting | 671 |
| Carbohydrates 606 , Proteins 606 , Fats (Lipids) 607 , Vitamins 608 , Minerals 608 , The Mouth 610 , The Pharynx 610 , The Esophagus 610 , The Stomach 611 , The Small Intestine 612 , The Accessory Digestive Organs 612 | | Pathophysiology 671 | |
| Metabolism | 613 | INTERDISCIPLINARY CARE | 672 |
| Assessing Nutritional Status and Gastrointestinal Function | 613 | NURSING CARE | 672 |
| Diagnostic Tests 614 , Genetic Considerations 614 , Health Assessment Interview 614 , Physical Assessment 619 | | The Client with Gastrointestinal Bleeding | 674 |
| CHAPTER 22 Nursing Care of Clients with Nutritional Disorders | 629 | Pathophysiology 674 | |
| The Client with Obesity | 630 | INTERDISCIPLINARY CARE | 674 |
| Incidence and Prevalence 630 , Risk Factors 631 , Overview of Normal Physiology 631 , Pathophysiology 631 | | NURSING CARE | 675 |
| INTERDISCIPLINARY CARE | 632 | The Client with Gastritis | 677 |
| NURSING CARE | 638 | Pathophysiology 677 | |
| The Client with Malnutrition | 641 | INTERDISCIPLINARY CARE | 678 |
| Incidence and Prevalence 641 , Pathophysiology 641 | | NURSING CARE | 679 |
| INTERDISCIPLINARY CARE | 642 | The Client with Peptic Ulcer Disease | 680 |
| NURSING CARE | 648 | Risk Factors 680 , Pathophysiology 680 , Manifestations 681 , Complications 681 , Zollinger-Ellison Syndrome 684 | |
| The Client with an Eating Disorder | 650 | INTERDISCIPLINARY CARE | 684 |
| Anorexia Nervosa 650 , Bulimia Nervosa 650 , Binge-Eating Disorder 651 | | NURSING CARE | 685 |
| INTERDISCIPLINARY CARE | 651 | The Client with Cancer of the Stomach | 688 |
| NURSING CARE | 652 | Risk Factors 688 , Pathophysiology 688 , Manifestations 689 | |
| CHAPTER 23 Nursing Care of Clients with Upper Gastrointestinal Disorders | 655 | INTERDISCIPLINARY CARE | 689 |
| The Client with Stomatitis | 656 | NURSING CARE | 691 |
| Pathophysiology and Manifestations 656 | | CHAPTER 24 Nursing Care of Clients with Gallbladder, Liver, and Pancreatic Disorders | 696 |
| INTERDISCIPLINARY CARE | 657 | The Client with Gallstones | 697 |
| NURSING CARE | 658 | Physiology Review 697 , Pathophysiology and Manifestations 697 | |
| The Client with Oral Cancer | 660 | INTERDISCIPLINARY CARE | 698 |
| Pathophysiology and Manifestations 660 | | NURSING CARE | 701 |
| | | The Client with Cancer of the Gallbladder | 703 |
| | | The Client with Hepatitis | 705 |
| | | Pathophysiology and Manifestations 705 | |
| | | INTERDISCIPLINARY CARE | 707 |
| | | NURSING CARE | 709 |
| | | The Client with Cirrhosis | 710 |
| | | Pathophysiology 710 , Manifestations and Complications 711 | |
| | | INTERDISCIPLINARY CARE | 716 |
| | | NURSING CARE | 720 |

| | | | |
|---|------------|---|-----|
| The Client with Cancer of the Liver | 723 | INTERDISCIPLINARY CARE | 767 |
| Pathophysiology 724 , Manifestations 724 | | NURSING CARE | 767 |
| INTERDISCIPLINARY CARE | 724 | The Client with Peritonitis | 769 |
| NURSING CARE | 724 | Pathophysiology 769 , Manifestations 769 , Complications 770 | |
| The Client with Liver Trauma | 724 | INTERDISCIPLINARY CARE | 770 |
| Pathophysiology and Manifestations 725 | | NURSING CARE | 771 |
| INTERDISCIPLINARY CARE | 725 | The Client with Gastroenteritis | 773 |
| NURSING CARE | 725 | Pathophysiology 773 , Manifestations 773 , Complications 774 | |
| The Client with Liver Abscess | 725 | INTERDISCIPLINARY CARE | 776 |
| Pathophysiology and Manifestations 725 | | NURSING CARE | 777 |
| INTERDISCIPLINARY CARE | 725 | The Client with a Protozoal Bowel Infection | 777 |
| NURSING CARE | 725 | Pathophysiology and Manifestations 778 | |
| The Client with Pancreatitis | 726 | INTERDISCIPLINARY CARE | 779 |
| Physiology Review 726 , Pathophysiology 726 | | NURSING CARE | 779 |
| INTERDISCIPLINARY CARE | 727 | The Client with a Helminthic Disorder | 779 |
| NURSING CARE | 729 | Pathophysiology 779 | |
| The Client with Pancreatic Cancer | 731 | INTERDISCIPLINARY CARE | 779 |
| Pathophysiology and Manifestations 731 | | NURSING CARE | 780 |
| INTERDISCIPLINARY CARE | 732 | The Client with Inflammatory Bowel Disease | 782 |
| PART ELIMINATION PATTERNS | 738 | Ulcerative Colitis 784 , Crohn's Disease 785 | |
| III Unit 7 Responses to Altered Bowel Elimination | 740 | INTERDISCIPLINARY CARE | 786 |
| CHAPTER 25 Assessing Clients with Bowel Elimination Disorders | 741 | NURSING CARE | 792 |
| The Small Intestine 742 , The Large Intestine 742 | | The Client with Sprue | 796 |
| Assessing Bowel Function | 743 | Pathophysiology 796 | |
| Diagnostic Tests 743 , Genetic Considerations 745 , Health Assessment Interview 745 , Physical Assessment 746 | | INTERDISCIPLINARY CARE | 797 |
| CHAPTER 26 Nursing Care of Clients with Bowel Disorders | 753 | NURSING CARE | 797 |
| The Client with Diarrhea | 754 | The Client with Lactase Deficiency | 798 |
| Pathophysiology 754 , Manifestations 754 , Complications 754 | | Manifestations 798 | |
| INTERDISCIPLINARY CARE | 755 | INTERDISCIPLINARY CARE | 798 |
| NURSING CARE | 755 | NURSING CARE | 799 |
| The Client with Constipation | 758 | The Client with Short Bowel Syndrome | 799 |
| Pathophysiology 758 , Manifestations 758 | | INTERDISCIPLINARY CARE | 799 |
| INTERDISCIPLINARY CARE | 758 | NURSING CARE | 799 |
| NURSING CARE | 761 | The Client with Polyps | 800 |
| The Client with Irritable Bowel Syndrome | 762 | Pathophysiology 800 , Manifestations 801 | |
| Pathophysiology 762 , Manifestations 762 | | INTERDISCIPLINARY CARE | 801 |
| INTERDISCIPLINARY CARE | 762 | NURSING CARE | 801 |
| NURSING CARE | 763 | The Client with Colorectal Cancer | 801 |
| The Client with Fecal Incontinence | 763 | Pathophysiology 802 , Manifestations 802 , Complications 802 | |
| Pathophysiology 764 | | INTERDISCIPLINARY CARE | 802 |
| INTERDISCIPLINARY CARE | 764 | NURSING CARE | 805 |
| NURSING CARE | 765 | The Client with a Hernia | 809 |
| The Client with Appendicitis | 766 | Pathophysiology 809 , Manifestations 810 , Complications 810 | |
| Pathophysiology 766 , Manifestations 766 , Complications 767 | | INTERDISCIPLINARY CARE | 810 |
| | | NURSING CARE | 810 |
| | | The Client with Intestinal Obstruction | 811 |
| | | Pathophysiology 811 | |
| | | INTERDISCIPLINARY CARE | 812 |
| | | NURSING CARE | 813 |

| | | | |
|---|------------|--|--|
| The Client with Diverticular Disease | 814 | | |
| Pathophysiology 815 | | | |
| INTERDISCIPLINARY CARE | 816 | | |
| NURSING CARE | 817 | | |
| The Client with Hemorrhoids | 818 | | |
| Pathophysiology and Manifestations 818 | | | |
| INTERDISCIPLINARY CARE | 819 | | |
| NURSING CARE | 819 | | |
| The Client with an Anorectal Lesion | 820 | | |
| Anal Fissure 820 , Anorectal Abscess 820 , Anorectal Fistula 820 , Pilonidal Disease 821 | | | |
| NURSING CARE | 821 | | |
| Unit 8 Responses to Altered Urinary Elimination | 827 | | |
| CHAPTER 27 Assessing Clients with Urinary Elimination Disorders | 828 | | |
| The Kidneys 829 , The Ureters 834 , The Urinary Bladder 834 , The Urethra 835 | | | |
| Assessing Urinary System Function | 835 | | |
| Diagnostic Tests 835 , Genetic Considerations 838 , Health Assessment Interview 838 , Physical Assessment 839 | | | |
| CHAPTER 28 Nursing Care of Clients with Urinary Tract Disorders | 845 | | |
| The Client with a Urinary Tract Infection | 846 | | |
| Physiology Review 847 , Pathophysiology and Manifestations 847 | | | |
| INTERDISCIPLINARY CARE | 849 | | |
| NURSING CARE | 851 | | |
| The Client with Urinary Calculi | 855 | | |
| Incidence and Risk Factors 855 , Physiology Review 855 , Pathophysiology 855 , Manifestations 856 , Complications 857 | | | |
| INTERDISCIPLINARY CARE | 857 | | |
| NURSING CARE | 859 | | |
| The Client with a Urinary Tract Tumor | 862 | | |
| Incidence and Risk Factors 862 , Pathophysiology 862 , Manifestations 863 | | | |
| INTERDISCIPLINARY CARE | 863 | | |
| NURSING CARE | 865 | | |
| The Client with Urinary Retention | 869 | | |
| Physiology Review 869 , Pathophysiology 869 , Manifestations 869 | | | |
| INTERDISCIPLINARY CARE | 869 | | |
| NURSING CARE | 869 | | |
| The Client with Neurogenic Bladder | 870 | | |
| Pathophysiology 870 | | | |
| INTERDISCIPLINARY CARE | 870 | | |
| NURSING CARE | 872 | | |
| The Client with Urinary Incontinence | 872 | | |
| Incidence and Prevalence 872 , Pathophysiology 872 | | | |
| INTERDISCIPLINARY CARE | 873 | | |
| NURSING CARE | 876 | | |
| CHAPTER 29 Nursing Care of Clients with Kidney Disorders | 882 | | |
| Age-Related Changes in Kidney Function | 883 | | |
| The Client with a Congenital Kidney Malformation | 883 | | |
| The Client with Polycystic Kidney Disease | 884 | | |
| Pathophysiology 884 , Manifestations 885 | | | |
| INTERDISCIPLINARY CARE | 885 | | |
| NURSING CARE | 885 | | |
| The Client with a Glomerular Disorder | 885 | | |
| Physiology Review 885 , Pathophysiology 886 | | | |
| INTERDISCIPLINARY CARE | 889 | | |
| NURSING CARE | 891 | | |
| The Client with a Vascular Kidney Disorder | 894 | | |
| Hypertension 894 , Renal Artery Occlusion 894 , Renal Vein Occlusion 895 , Renal Artery Stenosis 895 | | | |
| The Client with Kidney Trauma | 895 | | |
| Pathophysiology and Manifestations 895 | | | |
| INTERDISCIPLINARY CARE | 895 | | |
| NURSING CARE | 896 | | |
| The Client with a Renal Tumor | 896 | | |
| Pathophysiology and Manifestations 896 | | | |
| INTERDISCIPLINARY CARE | 896 | | |
| NURSING CARE | 897 | | |
| The Client with Acute Renal Failure | 899 | | |
| Incidence and Risk Factors 899 , Physiology Review 900 , Pathophysiology 900 , Course and Manifestations 902 | | | |
| INTERDISCIPLINARY CARE | 902 | | |
| NURSING CARE | 910 | | |
| The Client with Chronic Renal Failure | 913 | | |
| Pathophysiology 914 , Manifestations and Complications 915 | | | |
| INTERDISCIPLINARY CARE | 918 | | |
| NURSING CARE | 923 | | |
| PART IV ACTIVITY AND EXERCISE PATTERNS | 932 | | |
| Unit 9 Responses to Altered Cardiac Function | 934 | | |
| CHAPTER 30 Assessing Clients with Cardiac Disorders | 935 | | |
| The Pericardium 936 , Layers of the Heart Wall 937 , Chambers and Valves of the Heart 937 , Systemic, Pulmonary, and Coronary Circulation 938 , The Cardiac Cycle and Cardiac Output 939 , The Conduction System of the Heart 941 , The Action Potential 941 | | | |
| Assessing Cardiac Function | 943 | | |
| Diagnostic Tests 943 , Genetic Considerations 943 , The Health Assessment Interview 943 , Physical Assessment 950 | | | |
| CHAPTER 31 Nursing Care of Clients with Coronary Heart Disease | 957 | | |
| The Client with Coronary Heart Disease | 958 | | |
| Incidence and Prevalence 958 , Physiology Review 959 , Pathophysiology 959 , Risk Factors 962 | | | |
| INTERDISCIPLINARY CARE | 965 | | |
| NURSING CARE | 968 | | |

| | | | |
|---|-------------|--|-------------|
| The Client with Angina Pectoris | 969 | INTERDISCIPLINARY CARE | 1051 |
| Pathophysiology 969 , Course and Manifestations 970 | | NURSING CARE | 1052 |
| INTERDISCIPLINARY CARE | 970 | The Client with Valvular Heart Disease | 1053 |
| NURSING CARE | 972 | Physiology Review 1054 , Pathophysiology 1054 | |
| The Client with Acute Coronary Syndrome | 974 | INTERDISCIPLINARY CARE | 1059 |
| Pathophysiology 974 , Manifestations 975 | | NURSING CARE | 1061 |
| INTERDISCIPLINARY CARE | 975 | The Client with Cardiomyopathy | 1063 |
| NURSING CARE | 979 | Pathophysiology 1063 | |
| The Client with Acute Myocardial Infarction | 979 | INTERDISCIPLINARY CARE | 1066 |
| Pathophysiology 982 , Manifestations 984 , Complications 985 | | NURSING CARE | 1067 |
| INTERDISCIPLINARY CARE | 986 | Unit 10 Responses to Altered Peripheral Tissue Perfusion | 1074 |
| NURSING CARE | 991 | CHAPTER 33 Assessing Clients with Hematologic, Peripheral Vascular, and Lymphatic Disorders | 1075 |
| The Client with a Cardiac Dysrhythmia | 994 | Red Blood Cells 1076 , Red Blood Cell Production and Regulation 1076 , Red Blood Cell Destruction 1078 , White Blood Cells 1079 , Platelets 1079 , Hemostasis 1079 , Structure of Blood Vessels 1082 , Physiology of Arterial Circulation 1082 , Factors Influencing Arterial Blood Pressure 1085 | |
| Physiology Review 995 , Pathophysiology 996 | | Assessing Hematologic, Peripheral Vascular, and Lymphatic Function | 1086 |
| INTERDISCIPLINARY CARE | 1004 | Diagnostic Tests 1087 , Genetic Considerations 1088 , Health Assessment Interview 1088 , Physical Assessment 1091 | |
| NURSING CARE | 1013 | CHAPTER 34 Nursing Care of Clients with Hematologic Disorders | 1101 |
| The Client with Sudden Cardiac Death | 1015 | The Client with Anemia | 1102 |
| Pathophysiology 1016 , Manifestations 1016 | | Physiology Review 1102 , Pathophysiology and Manifestations 1102 | |
| INTERDISCIPLINARY CARE | 1016 | INTERDISCIPLINARY CARE | 1110 |
| NURSING CARE | 1018 | NURSING CARE | 1112 |
| CHAPTER 32 Nursing Care of Clients with Cardiac Disorders | 1021 | The Client with Myelodysplastic Syndrome | 1115 |
| The Client with Heart Failure | 1022 | Pathophysiology 1115 , Manifestations 1115 | |
| Incidence, Prevalence, and Risk Factors 1022 , Physiology Review 1023 , Pathophysiology 1024 , Classifications and Manifestations of Heart Failure 1025 , Complications 1027 | | INTERDISCIPLINARY CARE | 1115 |
| INTERDISCIPLINARY CARE | 1027 | NURSING CARE | 1116 |
| NURSING CARE | 1036 | The Client with Polycythemia | 1117 |
| The Client with Pulmonary Edema | 1039 | Pathophysiology 1117 | |
| Pathophysiology 1040 , Manifestations 1040 | | INTERDISCIPLINARY CARE | 1117 |
| INTERDISCIPLINARY CARE | 1040 | NURSING CARE | 1118 |
| NURSING CARE | 1041 | The Client with Leukemia | 1118 |
| The Client with Rheumatic Fever and Rheumatic Heart Disease | 1042 | Physiology Review 1118 , Pathophysiology 1119 , Manifestations 1119 , Classifications 1119 | |
| Incidence, Prevalence, and Risk Factors 1042 , Pathophysiology 1042 , Manifestations 1043 | | INTERDISCIPLINARY CARE | 1122 |
| INTERDISCIPLINARY CARE | 1043 | NURSING CARE | 1125 |
| NURSING CARE | 1044 | The Client with Malignant Lymphoma | 1129 |
| The Client with Infective Endocarditis | 1045 | Incidence and Risk Factors 1129 , Pathophysiology 1129 , Course 1131 | |
| Incidence and Risk Factors 1045 , Pathophysiology 1045 , Manifestations 1045 , Complications 1046 | | INTERDISCIPLINARY CARE | 1131 |
| INTERDISCIPLINARY CARE | 1046 | NURSING CARE | 1133 |
| NURSING CARE | 1047 | The Client with Multiple Myeloma | 1136 |
| The Client with Myocarditis | 1048 | | |
| Incidence and Risk Factors 1049 , Pathophysiology 1049 , Manifestations 1049 | | | |
| INTERDISCIPLINARY CARE | 1049 | | |
| NURSING CARE | 1049 | | |
| The Client with Pericarditis | 1049 | | |
| Pathophysiology 1050 , Manifestations 1050 , Complications 1050 | | | |

| | | | |
|--|-------------|---|-------------|
| Incidence and Risk Factors 1136 , Pathophysiology 1136 , Manifestations 1136 | | Pathophysiology and Manifestations 1182 | |
| INTERDISCIPLINARY CARE | 1137 | INTERDISCIPLINARY CARE | 1182 |
| NURSING CARE | 1137 | NURSING CARE | 1183 |
| The Client with Neutropenia | 1138 | The Client with Acute Arterial Occlusion | 1184 |
| Pathophysiology and Manifestations 1138 | | Pathophysiology 1184 , Manifestations 1184 | |
| INTERDISCIPLINARY CARE | 1139 | INTERDISCIPLINARY CARE | 1184 |
| NURSING CARE | 1139 | NURSING CARE | 1185 |
| The Client with Infectious Mononucleosis | 1139 | The Client with Venous Thrombosis | 1186 |
| Pathophysiology and Manifestations 1139 | | Pathophysiology 1186 | |
| INTERDISCIPLINARY CARE | 1139 | INTERDISCIPLINARY CARE | 1188 |
| NURSING CARE | 1139 | NURSING CARE | 1190 |
| The Client with Thrombocytopenia | 1139 | The Client with Chronic Venous Insufficiency | 1194 |
| Pathophysiology 1140 | | Pathophysiology 1194 , Manifestations 1194 | |
| INTERDISCIPLINARY CARE | 1141 | INTERDISCIPLINARY CARE | 1194 |
| NURSING CARE | 1141 | NURSING CARE | 1195 |
| The Client with Hemophilia | 1142 | The Client with Varicose Veins | 1195 |
| Physiology Review 1142 , Pathophysiology 1142 , Manifestations 1143 | | Incidence and Risk Factors 1195 , Pathophysiology 1196 | |
| INTERDISCIPLINARY CARE | 1144 | INTERDISCIPLINARY CARE | 1197 |
| NURSING CARE | 1144 | NURSING CARE | 1197 |
| The Client with Disseminated Intravascular Coagulation | 1146 | The Client with Lymphadenopathy | 1199 |
| Pathophysiology 1146 , Manifestations 1147 | | The Client with Lymphedema | 1199 |
| INTERDISCIPLINARY CARE | 1148 | Pathophysiology and Manifestations 1200 | |
| NURSING CARE | 1148 | INTERDISCIPLINARY CARE | 1200 |
| CHAPTER 35 Nursing Care of Clients with Peripheral Vascular Disorders | 1153 | NURSING CARE | 1200 |
| Physiology Review 1154 | | Unit 11 Responses to Altered Respiratory Function | 1208 |
| The Client with Primary Hypertension | 1155 | CHAPTER 36 Assessing Clients with Respiratory Disorders | 1209 |
| Incidence and Risk Factors 1156 , Pathophysiology 1157 , Manifestations 1158 , Complications 1158 | | The Upper Respiratory System 1210 , The Lower Respiratory System 1211 | |
| INTERDISCIPLINARY CARE | 1158 | Factors Affecting Ventilation and Respiration | 1213 |
| NURSING CARE | 1163 | Respiratory Volume and Capacity 1214 , Air Pressures 1214 , Oxygen, Carbon Dioxide, and Hydrogen Ion Concentrations 1215 , Airway Resistance, Lung Compliance, and Elasticity 1216 , Alveolar Surface Tension 1216 | |
| The Client with Secondary Hypertension | 1167 | Blood Gases | 1216 |
| The Client with Hypertensive Crisis | 1168 | Oxygen Transport and Unloading 1216 , Carbon Dioxide Transport 1216 | |
| The Client with an Aneurysm | 1170 | Assessing Respiratory Function | 1217 |
| Pathophysiology and Manifestations 1170 | | Diagnostic Tests 1217 , Genetic Considerations 1219 , Health Assessment Interview 1220 , Physical Assessment 1222 | |
| INTERDISCIPLINARY CARE | 1173 | CHAPTER 37 Nursing Care of Clients with Upper Respiratory Disorders | 1228 |
| NURSING CARE | 1173 | The Client with Viral Upper Respiratory Infection | 1229 |
| The Client with Peripheral Vascular Disease | 1176 | Pathophysiology 1229 , Manifestations and Complications 1229 | |
| Incidence and Risk Factors 1176 , Pathophysiology 1176 , Manifestations and Complications 1176 | | INTERDISCIPLINARY CARE | 1230 |
| INTERDISCIPLINARY CARE | 1177 | NURSING CARE | 1231 |
| NURSING CARE | 1178 | The Client with Respiratory Syncytial Virus | 1231 |
| The Client with Thromboangiitis Obliterans | 1180 | | |
| Incidence and Risk Factors 1180 , Pathophysiology and Course 1180 , Manifestations and Complications 1180 | | | |
| INTERDISCIPLINARY CARE | 1182 | | |
| NURSING CARE | 1182 | | |
| The Client with Raynaud's Disease | 1182 | | |

| | | | |
|---|-------------|--|-------------|
| The Client with Influenza | 1231 | CHAPTER 38 Nursing Care of Clients with Ventilation Disorders | 1265 |
| Pathophysiology 1232 , Manifestations 1233 , Complications 1233 | | The Client with Acute Bronchitis | 1266 |
| INTERDISCIPLINARY CARE | 1233 | Pathophysiology and Manifestations 1266 | |
| NURSING CARE | 1234 | INTERDISCIPLINARY CARE | 1266 |
| The Client with Sinusitis | 1235 | NURSING CARE | 1267 |
| Physiology Review 1235 , Pathophysiology 1235 , Manifestations and Complications 1236 | | The Client with Pneumonia | 1267 |
| INTERDISCIPLINARY CARE | 1236 | Physiology Review 1267 , Pathophysiology 1267 | |
| NURSING CARE | 1237 | INTERDISCIPLINARY CARE | 1270 |
| The Client with Pharyngitis or Tonsillitis | 1238 | NURSING CARE | 1274 |
| Pathophysiology and Manifestations 1238 , Complications 1239 | | The Client with Severe Acute Respiratory Syndrome | 1276 |
| INTERDISCIPLINARY CARE | 1239 | Pathophysiology 1276 , Manifestations and Complications 1278 | |
| NURSING CARE | 1239 | INTERDISCIPLINARY CARE | 1278 |
| The Client with a Laryngeal Infection | 1240 | NURSING CARE | 1278 |
| Epiglottitis 1240 , Laryngitis 1241 | | The Client with Lung Abscess | 1280 |
| The Client with Diphtheria | 1241 | INTERDISCIPLINARY CARE | 1280 |
| Pathophysiology and Manifestations 1241 | | NURSING CARE | 1280 |
| INTERDISCIPLINARY CARE | 1241 | The Client with Tuberculosis | 1280 |
| NURSING CARE | 1241 | Incidence and Prevalence 1280 , Pathophysiology 1281 | |
| The Client with Pertussis | 1242 | INTERDISCIPLINARY CARE | 1283 |
| Pathophysiology 1242 , Manifestations 1242 | | NURSING CARE | 1289 |
| INTERDISCIPLINARY CARE | 1242 | The Client with Inhalation Anthrax | 1293 |
| NURSING CARE | 1243 | The Client with a Fungal Infection | 1294 |
| The Client with Epistaxis | 1243 | Pathophysiology 1294 | |
| Pathophysiology and Manifestations 1243 | | INTERDISCIPLINARY CARE | 1294 |
| INTERDISCIPLINARY CARE | 1243 | NURSING CARE | 1295 |
| NURSING CARE | 1244 | The Client with Pleuritis | 1295 |
| The Client with Nasal Trauma or Surgery | 1246 | The Client with a Pleural Effusion | 1295 |
| Pathophysiology and Manifestations 1246 , Complications 1246 | | Pathophysiology and Manifestations 1295 | |
| INTERDISCIPLINARY CARE | 1246 | INTERDISCIPLINARY CARE | 1296 |
| NURSING CARE | 1247 | NURSING CARE | 1296 |
| The Client with Laryngeal Obstruction or Trauma | 1249 | The Client with Pneumothorax | 1297 |
| Pathophysiology and Manifestations 1249 | | Pathophysiology 1297 | |
| INTERDISCIPLINARY CARE | 1249 | INTERDISCIPLINARY CARE | 1299 |
| NURSING CARE | 1250 | NURSING CARE | 1300 |
| The Client with Obstructive Sleep Apnea | 1250 | The Client with Hemothorax | 1302 |
| Risk Factors 1250 , Pathophysiology 1250 , Manifestations 1250 , Complications 1250 | | The Client with a Thoracic Injury | 1302 |
| INTERDISCIPLINARY CARE | 1251 | Pathophysiology and Manifestations 1302 | |
| NURSING CARE | 1251 | INTERDISCIPLINARY CARE | 1303 |
| The Client with Nasal Polyps | 1252 | NURSING CARE | 1304 |
| Pathophysiology and Manifestations 1252 | | The Client with Inhalation Injury | 1305 |
| INTERDISCIPLINARY CARE | 1252 | Pathophysiology and Manifestations 1305 | |
| NURSING CARE | 1252 | INTERDISCIPLINARY CARE | 1306 |
| The Client with a Laryngeal Tumor | 1252 | NURSING CARE | 1307 |
| Risk Factors 1253 , Pathophysiology and Manifestations 1253 | | The Client with Lung Cancer | 1308 |
| INTERDISCIPLINARY CARE | 1254 | Incidence and Risk Factors 1308 , Pathophysiology 1308 , Manifestations 1309 , Complications and Course 1311 | |
| NURSING CARE | 1258 | INTERDISCIPLINARY CARE | 1311 |
| | | NURSING CARE | 1313 |

| | | | |
|---|-------------|---|-------------|
| CHAPTER 39 Nursing Care of Clients with Gas Exchange Disorders | 1320 | CHAPTER 41 Nursing Care of Clients with Musculoskeletal Trauma | 1398 |
| The Client with Asthma | 1321 | The Client with a Contusion, Strain, or Sprain | 1399 |
| Incidence and Risk Factors 1321 , Physiology Review 1322 , Pathophysiology 1322 , Manifestations and Complications 1323 | | Pathophysiology and Manifestations 1399 | |
| INTERDISCIPLINARY CARE | 1324 | INTERDISCIPLINARY CARE | 1399 |
| NURSING CARE | 1326 | NURSING CARE | 1400 |
| The Client with Chronic Obstructive Pulmonary Disease | 1330 | The Client with a Joint Dislocation | 1400 |
| Incidence and Risk Factors 1330 , Pathophysiology 1331 , Manifestations 1332 | | Pathophysiology 1401 , Manifestations 1401 | |
| INTERDISCIPLINARY CARE | 1333 | INTERDISCIPLINARY CARE | 1401 |
| NURSING CARE | 1336 | NURSING CARE | 1401 |
| The Client with Cystic Fibrosis | 1340 | The Client with a Fracture | 1401 |
| Incidence and Prevalence 1340 , Pathophysiology 1341 , Manifestations 1342 | | Pathophysiology 1401 , Fracture Healing 1402 , Manifestations 1402 , Complications 1403 | |
| INTERDISCIPLINARY CARE | 1342 | INTERDISCIPLINARY CARE | 1407 |
| NURSING CARE | 1342 | Fractures of Specific Bones or Bony Areas 1412 | |
| The Client with Atelectasis | 1343 | NURSING CARE | 1416 |
| The Client with Bronchiectasis | 1344 | The Client with an Amputation | 1421 |
| The Client with an Occupational Lung Disease | 1344 | Causes of Amputation 1421 , Levels of Amputation 1421 , Types of Amputation 1421 , Amputation Site Healing 1422 , Complications 1422 | |
| Physiology Review 1344 , Pathophysiology and Manifestations 1345 | | INTERDISCIPLINARY CARE | 1423 |
| INTERDISCIPLINARY CARE | 1346 | NURSING CARE | 1424 |
| NURSING CARE | 1346 | The Client with a Repetitive Use Injury | 1427 |
| The Client with Sarcoidosis | 1346 | Pathophysiology 1427 | |
| The Client with Pulmonary Embolism | 1347 | INTERDISCIPLINARY CARE | 1428 |
| Incidence and Risk Factors 1347 , Physiology Review 1347 , Pathophysiology 1347 , Manifestations 1348 | | NURSING CARE | 1428 |
| INTERDISCIPLINARY CARE | 1348 | CHAPTER 42 Nursing Care of Clients with Musculoskeletal Disorders | 1432 |
| NURSING CARE | 1349 | The Client with Osteoporosis | 1433 |
| The Client with Pulmonary Hypertension | 1352 | Risk Factors 1433 , Pathophysiology 1434 , Manifestations 1435 , Complications 1435 | |
| Pathophysiology 1352 , Manifestations 1352 , Complications 1352 | | INTERDISCIPLINARY CARE | 1435 |
| INTERDISCIPLINARY CARE | 1353 | NURSING CARE | 1437 |
| NURSING CARE | 1353 | The Client with Paget's Disease | 1441 |
| The Client with Acute Respiratory Failure | 1353 | Pathophysiology 1441 , Manifestations 1441 , Complications 1441 | |
| Pathophysiology 1354 , Manifestations and Course 1354 | | INTERDISCIPLINARY CARE | 1441 |
| INTERDISCIPLINARY CARE | 1355 | NURSING CARE | 1443 |
| NURSING CARE | 1361 | The Client with Gout | 1443 |
| The Client with Acute Respiratory Distress Syndrome | 1365 | Pathophysiology 1444 , Manifestations 1444 , Complications 1444 | |
| Manifestations 1366 | | INTERDISCIPLINARY CARE | 1445 |
| INTERDISCIPLINARY CARE | 1366 | NURSING CARE | 1447 |
| NURSING CARE | 1367 | The Client with Osteomalacia | 1447 |
| Unit 12 Responses to Altered Musculoskeletal Function | 1378 | Pathophysiology 1448 , Manifestations 1448 | |
| CHAPTER 40 Assessing Clients with Musculoskeletal Disorders | 1379 | INTERDISCIPLINARY CARE | 1448 |
| The Skeleton 1380 , Muscles 1381 , Joints, Ligaments, and Tendons 1383 | | NURSING CARE | 1449 |
| Assessing Musculoskeletal Function | 1386 | The Client with Osteoarthritis | 1449 |
| Diagnostic Tests 1386 , Genetic Considerations 1388 , Health Assessment Interview 1388 , Physical Assessment 1389 | | Risk Factors 1450 , Pathophysiology 1450 , Manifestations 1450 , Complications 1450 | |
| | | INTERDISCIPLINARY CARE | 1451 |
| | | NURSING CARE | 1455 |

| | | | |
|--|------|--|---|
| The Client with Muscular Dystrophy | 1458 | The Client with Fibromyalgia | 1486 |
| Pathophysiology 1458 , Manifestations 1458 | | Pathophysiology 1487 , Manifestations 1487 | |
| INTERDISCIPLINARY CARE | 1458 | INTERDISCIPLINARY CARE | 1487 |
| NURSING CARE | 1458 | NURSING CARE | 1487 |
| The Client with Rheumatoid Arthritis | 1459 | The Client with Spinal Deformities | 1487 |
| Pathophysiology 1459 , Joint Manifestations 1460 , Extra-Articular Manifestations 1461 , Increased Risk of Coronary Heart Disease 1461 | | Pathophysiology 1488 | |
| INTERDISCIPLINARY CARE | 1461 | INTERDISCIPLINARY CARE | 1489 |
| NURSING CARE | 1466 | NURSING CARE | 1489 |
| The Client with Ankylosing Spondylitis | 1469 | The Client with Low Back Pain | 1490 |
| Pathophysiology 1470 , Manifestations 1470 | | Pathophysiology 1490 , Manifestations 1490 | |
| INTERDISCIPLINARY CARE | 1470 | INTERDISCIPLINARY CARE | 1491 |
| NURSING CARE | 1470 | NURSING CARE | 1491 |
| The Client with Reactive Arthritis | 1470 | The Client with Common Foot Disorders | 1492 |
| Manifestations 1470 | | Pathophysiology 1492 | |
| INTERDISCIPLINARY CARE | 1470 | INTERDISCIPLINARY CARE | 1493 |
| NURSING CARE | 1470 | NURSING CARE | 1493 |
| The Client with Systemic Lupus Erythematosus | 1471 | | |
| Pathophysiology 1471 , Manifestations 1471 | | | |
| INTERDISCIPLINARY CARE | 1473 | | |
| NURSING CARE | 1474 | | |
| The Client with Polymyositis | 1476 | | |
| Manifestations 1476 | | | |
| INTERDISCIPLINARY CARE | 1476 | | |
| NURSING CARE | 1476 | | |
| The Client with Lyme Disease | 1476 | | |
| Pathophysiology 1476 , Manifestations 1477 , Complications 1477 | | | |
| INTERDISCIPLINARY CARE | 1477 | | |
| NURSING CARE | 1477 | | |
| The Client with Osteomyelitis | 1477 | | |
| Pathophysiology 1477 , Manifestations 1478 | | | |
| INTERDISCIPLINARY CARE | 1478 | | |
| NURSING CARE | 1480 | | |
| The Client with Septic Arthritis | 1481 | | |
| Pathophysiology 1481 , Manifestations 1481 | | | |
| INTERDISCIPLINARY CARE | 1481 | | |
| NURSING CARE | 1481 | | |
| The Client with Bone Tumors | 1481 | | |
| Pathophysiology 1482 , Manifestations 1482 | | | |
| INTERDISCIPLINARY CARE | 1482 | | |
| NURSING CARE | 1483 | | |
| The Client with Systemic Sclerosis (Scleroderma) | 1484 | | |
| Pathophysiology 1485 , Manifestations 1485 | | | |
| INTERDISCIPLINARY CARE | 1485 | | |
| NURSING CARE | 1486 | | |
| The Client with Sjögren's Syndrome | 1486 | | |
| Pathophysiology 1486 | | | |
| INTERDISCIPLINARY CARE | 1486 | | |
| NURSING CARE | 1486 | | |
| | | | |
| | | PART V | COGNITIVE AND PERCEPTUAL PATTERNS |
| | | | 1500 |
| | | Unit 13 | Responses to Altered Neurologic Function |
| | | | 1502 |
| | | CHAPTER 43 | Assessing Clients with Neurologic Disorders |
| | | | 1503 |
| | | | Nerve Cells, Action Potentials, and Neurotransmitters 1504 , The Central Nervous System 1505 , The Peripheral Nervous System 1509 , The Autonomic Nervous System 1511 |
| | | | Assessing Neurologic Function |
| | | | 1512 |
| | | | Diagnostic Tests 1512 , Genetic Considerations 1513 , Health Assessment Interview 1513 , Physical Assessment 1516 |
| | | CHAPTER 44 | Nursing Care of Clients with Intracranial Disorders |
| | | | 1527 |
| | | | The Client with Altered Level of Consciousness |
| | | | 1529 |
| | | | Pathophysiology 1529 , Prognosis 1532 |
| | | | INTERDISCIPLINARY CARE |
| | | | 1532 |
| | | | NURSING CARE |
| | | | 1533 |
| | | | The Client with Increased Intracranial Pressure |
| | | | 1535 |
| | | | Pathophysiology 1535 , Manifestations 1536 , Cerebral Edema 1537 , Hydrocephalus 1537 , Brain Herniation 1537 |
| | | | INTERDISCIPLINARY CARE |
| | | | 1538 |
| | | | NURSING CARE |
| | | | 1541 |
| | | | The Client with a Headache |
| | | | 1542 |
| | | | Pathophysiology 1542 |
| | | | INTERDISCIPLINARY CARE |
| | | | 1543 |
| | | | NURSING CARE |
| | | | 1544 |
| | | | The Client with Epilepsy |
| | | | 1547 |
| | | | Incidence and Prevalence 1547 , Pathophysiology 1548 , Manifestations 1548 |
| | | | INTERDISCIPLINARY CARE |
| | | | 1549 |
| | | | NURSING CARE |
| | | | 1551 |
| | | | The Client with a Skull Fracture |
| | | | 1554 |

| | | | |
|---|-------------|---|-------------|
| Pathophysiology 1555 | | Incidence and Prevalence 1618 , Risk Factors and Warning Signs 1618 , Pathophysiology 1618 , Manifestations 1619 | |
| INTERDISCIPLINARY CARE | 1555 | INTERDISCIPLINARY CARE | 1620 |
| NURSING CARE | 1555 | NURSING CARE | 1621 |
| The Client with a Focal or Diffuse Traumatic Brain Injury | 1556 | The Client with Multiple Sclerosis | 1626 |
| Pathophysiology 1556 | | Incidence and Prevalence 1626 , Pathophysiology 1626 , Manifestations 1626 | |
| INTERDISCIPLINARY CARE | 1559 | INTERDISCIPLINARY CARE | 1627 |
| NURSING CARE | 1560 | NURSING CARE | 1632 |
| The Client with a Central Nervous System Infection | 1563 | The Client with Parkinson's Disease | 1635 |
| Pathophysiology 1564 | | Incidence and Prevalence 1635 , Pathophysiology 1635 , Manifestations 1635 , Complications 1637 | |
| INTERDISCIPLINARY CARE | 1566 | INTERDISCIPLINARY CARE | 1637 |
| NURSING CARE | 1566 | The Client with Huntington's Disease | 1642 |
| The Client with a Brain Tumor | 1569 | Pathophysiology 1642 , Manifestations 1642 | |
| Incidence and Prevalence 1569 , Pathophysiology 1569 , Manifestations 1569 | | INTERDISCIPLINARY CARE | 1643 |
| INTERDISCIPLINARY CARE | 1570 | NURSING CARE | 1643 |
| NURSING CARE | 1572 | The Client with Amyotrophic Lateral Sclerosis | 1645 |
| CHAPTER 45 Nursing Care of Clients with Cerebrovascular and Spinal Cord Disorders | 1578 | Pathophysiology 1645 , Manifestations 1645 | |
| The Client with a Stroke | 1579 | INTERDISCIPLINARY CARE | 1645 |
| Incidence and Prevalence 1579 , Risk Factors 1579 , Pathophysiology 1580 , Manifestations 1582 , Complications 1582 | | NURSING CARE | 1646 |
| INTERDISCIPLINARY CARE | 1584 | The Client with Myasthenia Gravis | 1647 |
| NURSING CARE | 1586 | Pathophysiology 1647 , Manifestations 1648 , Complications 1648 | |
| The Client with an Intracranial Aneurysm | 1592 | INTERDISCIPLINARY CARE | 1649 |
| Incidence and Prevalence 1592 , Pathophysiology 1592 , Manifestations 1592 , Complications 1593 | | NURSING CARE | 1651 |
| INTERDISCIPLINARY CARE | 1593 | The Client with Guillain-Barré Syndrome | 1653 |
| NURSING CARE | 1594 | Pathophysiology 1653 , Manifestations 1653 | |
| The Client with an Arteriovenous Malformation | 1595 | INTERDISCIPLINARY CARE | 1653 |
| Pathophysiology 1595 | | NURSING CARE | 1654 |
| INTERDISCIPLINARY CARE | 1595 | The Client with Trigeminal Neuralgia | 1655 |
| NURSING CARE | 1595 | Pathophysiology 1655 , Manifestations 1656 | |
| The Client with a Spinal Cord Injury | 1595 | INTERDISCIPLINARY CARE | 1656 |
| Incidence and Prevalence 1595 , Risk Factors 1595 , Pathophysiology 1596 , Manifestations 1597 , Complications 1598 | | NURSING CARE | 1656 |
| INTERDISCIPLINARY CARE | 1599 | The Client with Bell's Palsy | 1657 |
| NURSING CARE | 1601 | Pathophysiology 1657 , Manifestations 1657 | |
| The Client with a Herniated Intervertebral Disk | 1607 | INTERDISCIPLINARY CARE | 1658 |
| Incidence and Prevalence 1607 , Pathophysiology 1607 , Lumbar Disk Manifestations 1608 , Cervical Disk Manifestations 1608 | | NURSING CARE | 1658 |
| INTERDISCIPLINARY CARE | 1608 | The Client with Creutzfeldt-Jakob Disease | 1658 |
| NURSING CARE | 1610 | Pathophysiology 1659 , Manifestations 1659 | |
| The Client with a Spinal Cord Tumor | 1612 | INTERDISCIPLINARY CARE | 1659 |
| Classification 1612 , Pathophysiology 1612 , Manifestations 1612 | | NURSING CARE | 1659 |
| INTERDISCIPLINARY CARE | 1613 | The Client with Postpoliomyelitis Syndrome | 1659 |
| NURSING CARE | 1613 | Pathophysiology 1659 , Manifestations 1659 | |
| CHAPTER 46 Nursing Care of Clients with Neurologic Disorders | 1616 | INTERDISCIPLINARY CARE | 1659 |
| Dementia | 1617 | NURSING CARE | 1660 |
| The Client with Alzheimer's Disease | 1617 | The Client with Rabies | 1660 |
| | | Pathophysiology 1660 , Manifestations 1660 | |
| | | INTERDISCIPLINARY CARE | 1660 |
| | | NURSING CARE | 1660 |

| | | | |
|---|-------------|--|-------------|
| The Client with Tetanus | 1661 | INTERDISCIPLINARY CARE | 1708 |
| Pathophysiology 1661 , Manifestations 1661 | | NURSING CARE | 1711 |
| INTERDISCIPLINARY CARE | 1661 | The Client with Age-Related Macular Degeneration | 1713 |
| NURSING CARE | 1661 | Pathophysiology 1714 , Manifestations 1714 | |
| The Client with Botulism | 1661 | INTERDISCIPLINARY CARE | 1714 |
| Pathophysiology 1662 , Manifestations 1662 | | NURSING CARE | 1714 |
| INTERDISCIPLINARY CARE | 1662 | The Client with Diabetic Retinopathy | 1714 |
| NURSING CARE | 1662 | Pathophysiology and Manifestations 1715 | |
| Unit 14 Responses to Altered Visual and Auditory Function | 1668 | INTERDISCIPLINARY CARE | 1715 |
| CHAPTER 47 Assessing Clients with Eye and Ear Disorders | 1669 | NURSING CARE | 1716 |
| Extraocular Structures 1670 , Intraocular Structures 1671 , The Visual Pathway 1672 , Refraction 1673 | | The Client with a Retinal Detachment | 1716 |
| Assessing the Eyes | 1673 | Pathophysiology and Manifestations 1716 | |
| Diagnostic Tests 1673 , Genetic Considerations 1674 , Health Assessment Interview 1674 , Physical Assessment of the Eyes and Vision 1674 | | INTERDISCIPLINARY CARE | 1716 |
| The External Ear 1680 , The Middle Ear 1682 , The Inner Ear 1683 , Sound Conduction 1683 , Equilibrium 1683 | | NURSING CARE | 1717 |
| Assessing the Ears | 1683 | The Client with Retinitis Pigmentosa | 1717 |
| Diagnostic Tests 1683 , Genetic Considerations 1684 , Health Assessment Interview 1684 , Physical Assessment of the Ears and Hearing 1686 | | The Client with HIV Infection | 1718 |
| CHAPTER 48 Nursing Care of Clients with Eye and Ear Disorders | 1691 | The Client with an Enucleation | 1718 |
| The Client with Conjunctivitis | 1692 | The Client with Otitis Externa | 1718 |
| Pathophysiology and Manifestations 1692 | | Pathophysiology and Manifestations 1719 | |
| INTERDISCIPLINARY CARE | 1694 | INTERDISCIPLINARY CARE | 1719 |
| NURSING CARE | 1695 | NURSING CARE | 1720 |
| The Client with a Corneal Disorder | 1695 | The Client with Impacted Cerumen or a Foreign Body | 1721 |
| Physiology Review 1696 , Pathophysiology and Manifestations 1696 | | Pathophysiology and Manifestations 1721 | |
| INTERDISCIPLINARY CARE | 1697 | INTERDISCIPLINARY CARE | 1721 |
| NURSING CARE | 1698 | NURSING CARE | 1721 |
| The Client with a Disorder Affecting the Eyelids | 1700 | The Client with Otitis Media | 1721 |
| Pathophysiology and Manifestations 1700 | | Pathophysiology 1721 | |
| INTERDISCIPLINARY CARE | 1701 | INTERDISCIPLINARY CARE | 1722 |
| NURSING CARE | 1701 | NURSING CARE | 1723 |
| The Client with Eye Trauma | 1701 | The Client with Acute Mastoiditis | 1723 |
| Pathophysiology and Manifestations 1701 | | Pathophysiology and Complications 1723 , Manifestations 1724 | |
| INTERDISCIPLINARY CARE | 1702 | INTERDISCIPLINARY CARE | 1724 |
| NURSING CARE | 1703 | NURSING CARE | 1724 |
| The Client with Uveitis | 1703 | The Client with Chronic Otitis Media | 1724 |
| The Client with Cataracts | 1704 | The Client with Otosclerosis | 1725 |
| Incidence and Risk Factors 1704 , Pathophysiology 1704 , Manifestations 1704 | | The Client with an Inner Ear Disorder | 1726 |
| INTERDISCIPLINARY CARE | 1704 | Pathophysiology and Manifestations 1726 | |
| NURSING CARE | 1705 | INTERDISCIPLINARY CARE | 1727 |
| The Client with Glaucoma | 1706 | NURSING CARE | 1727 |
| Incidence and Risk Factors 1706 , Pathophysiology 1706 | | The Client with an Acoustic Neuroma | 1729 |
| | | The Client with Hearing Loss | 1729 |
| | | Pathophysiology and Manifestations 1729 | |
| | | INTERDISCIPLINARY CARE | 1730 |
| | | NURSING CARE | 1732 |
| | | PART VI SEXUALITY AND REPRODUCTIVE PATTERNS | 1740 |
| | | Unit 15 Responses to Altered Reproductive Function | 1742 |

| | | | |
|---|-------------|--|--|
| CHAPTER 49 Assessing Clients with Reproductive System and Breast Disorders | 1743 | | |
| The Breasts 1744 , The Penis 1744 , The Scrotum 1744 , The Testes 1744 , The Ducts and Semen 1745 , The Prostate Gland 1745 , Spermatogenesis 1745 , Male Sex Hormones 1745 | | | |
| Assessing the Male Reproductive System | 1746 | | |
| Diagnostic Tests 1746 , Genetic Considerations 1747 , Health Assessment Interview 1747 , Physical Assessment 1747 | | | |
| The Breasts 1751 , The External Genitalia 1751 , The Internal Organs 1752 , Female Sex Hormones 1753 , Oogenesis and the Ovarian Cycle 1754 , The Menstrual Cycle 1754 | | | |
| Assessing the Female Reproductive System | 1755 | | |
| Diagnostic Tests 1755 , Genetic Considerations 1755 , Health Assessment Interview 1758 , Physical Assessment 1760 | | | |
| CHAPTER 50 Nursing Care of Men with Reproductive System and Breast Disorders | 1767 | | |
| The Man with Erectile Dysfunction | 1768 | | |
| Pathophysiology 1769 | | | |
| INTERDISCIPLINARY CARE | 1769 | | |
| NURSING CARE | 1770 | | |
| The Man with Ejaculatory Dysfunction | 1771 | | |
| The Man with Phimosis or Priapism | 1771 | | |
| Pathophysiology 1771 | | | |
| INTERDISCIPLINARY CARE | 1771 | | |
| NURSING CARE | 1772 | | |
| The Man with Cancer of the Penis | 1772 | | |
| Pathophysiology 1772 | | | |
| INTERDISCIPLINARY CARE | 1772 | | |
| NURSING CARE | 1772 | | |
| The Man with a Benign Scrotal Mass | 1772 | | |
| Pathophysiology 1772 | | | |
| NURSING CARE | 1773 | | |
| The Man with Epididymitis | 1773 | | |
| INTERDISCIPLINARY CARE | 1773 | | |
| NURSING CARE | 1773 | | |
| The Man with Orchitis | 1774 | | |
| INTERDISCIPLINARY CARE | 1774 | | |
| The Man with Testicular Torsion | 1774 | | |
| The Man with Testicular Cancer | 1774 | | |
| Risk Factors 1774 , Pathophysiology 1774 , Manifestations 1774 | | | |
| INTERDISCIPLINARY CARE | 1775 | | |
| NURSING CARE | 1775 | | |
| The Man with Prostatitis | 1776 | | |
| Pathophysiology and Manifestations 1776 | | | |
| INTERDISCIPLINARY CARE | 1777 | | |
| NURSING CARE | 1777 | | |
| The Man with Benign Prostatic Hyperplasia | 1777 | | |
| Risk Factors 1777 , Pathophysiology 1777 , Manifestations 1778 , Complications 1778 | | | |
| INTERDISCIPLINARY CARE | 1778 | | |
| NURSING CARE | 1781 | | |
| The Man with Prostate Cancer | 1782 | | |
| Risk Factors 1783 , Pathophysiology 1783 , Manifestations 1783 , Complications 1784 | | | |
| INTERDISCIPLINARY CARE | 1784 | | |
| NURSING CARE | 1786 | | |
| The Man with Gynecomastia | 1789 | | |
| The Man with Breast Cancer | 1790 | | |
| CHAPTER 51 Nursing Care of Women with Reproductive System and Breast Disorders | 1793 | | |
| Disorders of Female Sexual Function | 1794 | | |
| Pathophysiology 1795 | | | |
| NURSING CARE | 1795 | | |
| The Perimenopausal Woman | 1795 | | |
| The Physiology of Menopause 1795 , Manifestations 1796 | | | |
| INTERDISCIPLINARY CARE | 1796 | | |
| NURSING CARE | 1796 | | |
| The Woman with Premenstrual Syndrome | 1798 | | |
| Pathophysiology 1798 , Manifestations 1798 | | | |
| INTERDISCIPLINARY CARE | 1798 | | |
| NURSING CARE | 1800 | | |
| The Woman with Dysmenorrhea | 1800 | | |
| Pathophysiology 1800 , Manifestations 1800 | | | |
| INTERDISCIPLINARY CARE | 1800 | | |
| NURSING CARE | 1802 | | |
| The Woman with Dysfunctional Uterine Bleeding | 1802 | | |
| Pathophysiology 1802 | | | |
| INTERDISCIPLINARY CARE | 1803 | | |
| NURSING CARE | 1804 | | |
| The Woman with a Uterine Displacement | 1805 | | |
| Pathophysiology 1805 , Manifestations 1805 | | | |
| INTERDISCIPLINARY CARE | 1806 | | |
| NURSING CARE | 1807 | | |
| The Woman with a Vaginal Fistula | 1807 | | |
| The Woman with Cysts or Polyps | 1808 | | |
| Pathophysiology 1808 , Manifestations and Complications 1808 | | | |
| INTERDISCIPLINARY CARE | 1808 | | |
| NURSING CARE | 1809 | | |
| The Woman with Leiomyoma | 1809 | | |
| Pathophysiology 1809 , Manifestations 1809 | | | |
| INTERDISCIPLINARY CARE | 1810 | | |
| NURSING CARE | 1810 | | |
| The Woman with Endometriosis | 1810 | | |
| Pathophysiology 1810 , Manifestations 1810 | | | |
| INTERDISCIPLINARY CARE | 1810 | | |
| NURSING CARE | 1811 | | |
| The Woman with Cervical Cancer | 1812 | | |
| Risk Factors 1812 , Pathophysiology 1812 , Manifestations 1813 | | | |
| INTERDISCIPLINARY CARE | 1813 | | |
| NURSING CARE | 1814 | | |

| | | | |
|--|-------------|--|------|
| The Woman with Endometrial Cancer | 1816 | INTERDISCIPLINARY CARE | 1841 |
| Risk Factors 1816 , Pathophysiology 1816 , Manifestations 1816 | | NURSING CARE | 1841 |
| INTERDISCIPLINARY CARE | 1816 | The Client with a Vaginal Infection | 1842 |
| NURSING CARE | 1817 | Pathophysiology and Manifestations 1842 | |
| The Woman with Ovarian Cancer | 1817 | INTERDISCIPLINARY CARE | 1843 |
| Risk Factors 1817 , Pathophysiology 1818 , Manifestations 1818 , Complications 1818 | | NURSING CARE | 1844 |
| INTERDISCIPLINARY CARE | 1818 | The Client with Chlamydia | 1844 |
| NURSING CARE | 1819 | Pathophysiology 1844 , Manifestations 1844 , Complications 1845 | |
| The Woman with Cancer of the Vulva | 1819 | INTERDISCIPLINARY CARE | 1845 |
| Pathophysiology 1819 , Manifestations 1819 | | NURSING CARE | 1845 |
| INTERDISCIPLINARY CARE | 1819 | The Client with Gonorrhea | 1845 |
| NURSING CARE | 1820 | Pathophysiology 1845 , Manifestations 1845 , Complications 1846 | |
| The Woman with a Benign Breast Disorder | 1820 | INTERDISCIPLINARY CARE | 1846 |
| Pathophysiology and Manifestations 1820 | | NURSING CARE | 1846 |
| INTERDISCIPLINARY CARE | 1822 | The Client with Syphilis | 1846 |
| NURSING CARE | 1822 | Pathophysiology 1847 , Manifestations 1847 | |
| The Woman with Breast Cancer | 1822 | INTERDISCIPLINARY CARE | 1848 |
| Risk Factors 1822 , Pathophysiology 1823 , Manifestations 1823 | | NURSING CARE | 1849 |
| INTERDISCIPLINARY CARE | 1824 | The Client with Pelvic Inflammatory Disease | 1850 |
| NURSING CARE | 1827 | Pathophysiology 1851 , Manifestations 1851 , Complications 1851 | |
| CHAPTER 52 Nursing Care of Clients with Sexually Transmitted Infections | 1836 | INTERDISCIPLINARY CARE | 1851 |
| Incidence and Prevalence 1837 , Characteristics 1837 , Prevention and Control 1838 | | NURSING CARE | 1851 |
| The Client with Genital Herpes | 1838 | Appendix A Standard Precautions | A-1 |
| Pathophysiology 1839 , Manifestations 1839 | | Appendix B 2007–2008 NANDA-Approved Nursing Diagnoses | A-2 |
| INTERDISCIPLINARY CARE | 1839 | Appendix C Test Yourself and Evaluate Your Response Answers | A-3 |
| NURSING CARE | 1840 | Glossary | G-1 |
| The Client with Genital Warts | 1840 | Index | I-1 |
| Pathophysiology 1840 , Manifestations 1841 | | | |