ONLINE COMPANION

Web Resources to Accompany

White: Foundations of Nursing, Second Edition
Part I
Text Support

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Part III
Medical Terminology


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[For purposes of printing, note that part III pages 1-25 are counted as pages 163-187 of the on-line companion.]
SECTION I BASIC NURSING

Unit 1 Foundations
CHAPTER 1 Student Nurse Skills for Success

Case Study

At this point in subsequent chapters, you will be given a client scenario or case study. This activity is designed to give you an opportunity to apply the knowledge and skills you have gained. This means that you will be expected to use critical-thinking skills as you explore selected nursing situations. For this chapter, the scenario is to be written by you and about you.

1. Review the four basic skills of critical thinking: reading, writing, listening, and speaking.

2. Identify specifically the precise skills you want to improve. Write in your own words what you want to accomplish in terms of positive skills you will possess when you have implemented your plan and accomplished your goal. This means that you will identify both specific performance measures for your reading, writing, speaking, and listening skills, and time frames for points at which you will evaluate your performance. For example, if you set a goal of being able to identify the main points of an assigned reading, how would you measure that? In comparison with others in your study group? By your test performance? Write down your evaluation criteria and the time frames for evaluation.

3. When you have clearly stated in writing which basic skills you will work on, review the material in this chapter or from other resources to identify possible ways to work on those skills. Choose the most appropriate methods for you. Write down your plan. Be precise and specific.

4. Your next step is to actually put your plan into action by doing what you have planned to do.

5. Evaluate your actions to see whether they have resulted in the desired outcome. In order to perform a valid evaluation, you must evaluate your performance based on the evaluation criteria and goals you outlined in number 2.

6. Realize that you must know yourself well. If the processes of critical thinking and reasoning are new to you, select only one or two things on which to work. If you feel more adventurous, use the suggested process to explore your thinking in relation to the universal standards of thought and to the traits of a thoughtful person. Assess your problem-solving style in relation to the elements of thought in reasoning.

Review Questions

1. A kinesthetic learner:
   a. learns by using the senses and visual images.
   b. learns by movement and imitation.
   c. learns by hearing and listening.
   d. learns by example.

2. Fundamental to quality thinking is the ability to think:
   a. clearly.
   b. effectively.
   c. quantitatively.
   d. with ambiguity.
3. The person who is concrete or exact when stating or applying a fact is practicing the standard for critical thinking called:
   a. accuracy.
   b. precision.
   c. consistency.
   d. specificity.

4. Ideas or things that are taken for granted are called:
   a. evidences.
   b. inferences.
   c. assumptions.
   d. implications.

5. The person who is willing to take an unpopular position based on reasoning is said to have:
   a. courage.
   b. humility.
   c. integrity.
   d. perseverance.

Web Flash!

- Visit your professional association’s Web site (www.nflpn.org and www.napnes.org) and gather information on your profession.
- Visit one of the learning sites to take a learning-style assessment.
- Search the Web for sites dealing with critical thinking. What date is the oldest entry? What date is the newest entry?
CHAPTER 2 Holistic Care

Review Questions

1. According to many experts, rest is most effective after:
   a. eating.
   b. reading.
   c. exercise.
   d. studying.

2. Regular mouth care and avoiding refined sugars will help control:
   a. acne.
   b. malocclusion.
   c. dental caries.
   d. mononucleosis.

3. The nurse who smokes may have:
   a. mitosis.
   b. meiosis.
   c. halitosis.
   d. arthrosis.

Web Flash!

- How many references do you find on the Web for holistic care?
- Visit the American Holistic Nurses’ Association (www.ahoa.org) on the Web. What information do you find?
- Visit the Web site of the National Center for Complementary and Alternative Medicine (http://nccam.nih.gov). What is the latest information on holistic modalities?
CHAPTER 3 Nursing History, Education, and Organizations

Review Questions

1. The founder of the American Red Cross is:
   a. Lavinia Dock.
   b. Clara Barton.
   c. Linda Richards.
   d. Adelaide Nutting.

2. Staff development includes:
   a. recruitment.
   b. license renewal.
   c. continuing education.
   d. orientation and in-service.

3. The major recommendation of both the Goldmark and Brown reports was to:
   a. recruit more people into the nursing profession.
   b. compensate nurses with higher salaries and more comprehensive benefits.
   c. place nursing education within institutions of higher learning.
   d. increase the amount of clinical practice in nursing education programs.

Web Flash!

❖ Search for nursing history, nursing education, and nursing organizations on the Web. How many resources do you find for each topic?

❖ What type of information is provided about the nursing organizations? Is it enough to make a decision about becoming a member of an organization?
CHAPTER 4 Legal and Ethical Responsibilities

Case Study

Mr. Jones is admitted for congestive heart failure. He is 66 years old, newly diagnosed, and acutely ill at this time. A student LP/VN is assisting the RN with the admission. The student notes that Mr. Jones has a living will. Later, she asks the RN, “Will you have to contact the doctor regarding a No Code status for Mr. Jones? He’s got a living will, so he doesn’t want anything done.”

1. List factors that the nurse should explain to assist the student in understanding the concept of a living will.
2. Describe how a cardiac arrest might affect this situation.

Mr. Jones’ wife speaks privately with the RN, stating, “I want everything possible done to save my husband. I don’t care what it takes.”

3. Describe how Mrs. Jones’ statements may or may not affect the living will requests that Mr. Jones has made.
4. Delineate how the nurse might respond in this situation.

When Mr. Jones refuses a recommended treatment option, Mrs. Jones disagrees and tells the doctor to go ahead with the recommended treatment plan.

5. How does the Patient Self-Determination Act affect Mr. Jones’ refusal of treatment?
6. List the parameters that allow Mrs. Jones to consent to or refuse treatment for her husband.

Jamal Wilkins came to the hospital for outpatient diagnostic testing. Passing an open door, he saw his high school principal, Mr. Jones, lying in a bed. A respiratory therapist was giving Mr. Jones a treatment, and there seemed to be tubes and bags hanging everywhere. Alarmed, Jamal went to the nurses’ station seeking information. He pointed to Mr. Jones’ name and room number, which were listed on the board, and began asking questions.

7. Discuss ways to calm Jamal’s fears without violating Mr. Jones’ right to privacy.
8. Identify those ways that this client’s privacy has already been violated.

Review Questions

1. Immunity for nurses giving care in emergency situations is provided under the:
   a. Care and Good Faith Act of 1937.
   b. Good Samaritan Law.
   c. state nursing practice act.
2. To make the best use of time in the clinical area, the nurse should:
   a. chart events as they happen.
   b. chart in a block at the end of the shift.
   c. have a coworker who is not busy chart for her.
   d. sign off all meds at the beginning of the shift.

3. The responsibility for informed consent rests with the:
   a. nurse.
   b. client.
   c. physician.
   d. unit clerk.

4. If a coworker is suspected of diverting drugs, the nurse should:
   a. approach the coworker and tell him what she thinks.
   b. document dates, times, and observed behavior and report the same to the supervisor.
   c. say nothing; it is none of her business.
   d. tell coworkers what she thinks so that they can help watch for suspicious behavior.

5. Advance directives:
   a. are binding only if written.
   b. cannot be changed once they are notarized.
   c. guide family members through difficult decisions.
   d. prevent clients from determining the course of their health care.

6. The health care representative or durable power of attorney for health care:
   a. is appointed by hospital administrators to make medical decisions for the client.
   b. can give or withhold consent for treatment.
   c. is contacted to override the decisions the client makes for himself.
   d. is the client’s physician or health care provider.

7. Which of the following situations reflects inappropriate use of an incident report? An incident report is filled out when …
   a. Mrs. Khamel falls in the hall while visiting her daughter.
   b. A student nurse gives Losec instead of Lasix.
   c. The safety committee reviews incident reports regarding falls on the 3–11 shift on A-wing.
   d. An instructor, frustrated with a disorganized student nurse, fills out an incident report because the student gave a 9 a.m. medication at 9:25.

8. Values influence the nurse-client relationship because:
   a. the client’s values take precedence over the nurse’s values.
   b. every individual has a personal value system that helps determine actions.
   c. the nurse must help the client clarify his values in order to ensure effective nursing care.
   d. the nurse cannot effectively care for a client who has values that differ from those of the nurse.

9. Values clarification is a useful exercise for the nurse to perform because it helps the nurse:
   a. make ethically sound decisions.
   b. stay informed of new developments.
   c. avoid conflicts with clients and coworkers.
   d. establish policies about proper and improper client care.
10. Active euthanasia means a person:
   a. helps a client to die.
   b. has an advance directive.
   c. limits the amount of care.
   d. chooses to stop pain therapy.

Web Flash!

- Search for nursing history, nursing education, and nursing organizations on the Web. How many resources do you find for each topic?
- What type of information is provided about the nursing organizations? Is it enough to make a decision about becoming a member of an organization?
Unit 2 The Health Care Environment
CHAPTER 5 The Health Care Delivery System

Review Questions

1. Cost, access, and quality of health care services are the three critical issues that must be addressed by:
   a. schools.
   b. hospitals.
   c. health care reform.
   d. managed care plans.

Web Flash!

❖ Search the Web for information regarding Oregon’s plan for allocating resources. What are the main points of the plan?

❖ Research health care reform on the Web. What is its status? What are the future plans for health care reform?
CHAPTER 6 Arenas of Care

Case Study

Mrs. Emma Garza, 72 years old, was admitted to Community Hospital for a left below-knee amputation. Mrs. Garza has been an insulin-dependent diabetic for 35 years. The amputation follows a long and unsuccessful period of treatment for venous stasis ulcers. Mrs. Emma Garza transferred from the hospital to a rehabilitation hospital on her fourth postoperative day. After 2 weeks at the rehabilitation hospital, she was transferred to a skilled care facility near her home for additional rehabilitation and regulation of the diabetes. She is now ready to be discharged to her home. Mrs. Garza has a prosthesis and is able to ambulate with a walker. She can perform her ADLs with minimal assistance. She was on a sliding scale and blood glucose monitoring four times a day while in the long-term care facility. Her physician has now placed her on insulin twice a day with daily blood glucose checks. Her vision is somewhat impaired by the diabetes. Mrs. Garza lives alone in a one-story home in a safe residential area. The discharge planner at the skilled care facility has arranged continuing care for Mrs. Garza through a local home health agency.

The following questions will guide your development of a nursing care plan for the case study:

1. Identify the assessment factors that are most important in planning Mrs. Garza’s care.
2. List the nursing diagnoses that would be applicable to Mrs. Garza’s assessment.
3. Describe the complications for which Mrs. Garza is at risk.
4. Describe nursing interventions for preventing the complications.
5. What specific actions would you take to prevent a recurrence of venous stasis ulcers?
6. What additional community services does Mrs. Garza need?
7. What nursing services (frequency of nurse visits, services from a nursing assistant, other home health services) would you plan to meet her needs? Which services would each person provide?
8. Describe the outcomes you would expect for Mrs. Garza.

Review Questions

1. One reason for the growth in nonacute-care health services is:
   a. the diminishing supply of physicians.
   b. an increase in the number of hospitals in the country.
   c. the cost of acute care.
   d. the increase in Medicare reimbursement.

2. Medicare is a reimbursement system for health care providers that:
   a. is based upon the client’s personal financial resources.
   b. is available to persons 65 years of age and over or who have been disabled for 2 or more years.
   c. pays the full cost of all medical care.
   d. is managed by each state.
3. Which of the following is a legal requirement for health care facilities that is controlled by each state?
   a. accreditation
   b. certification
   c. licensure
   d. provision of free care

Web Flash!

- Check the Web sites for the resources at the end of this chapter. What information is available? Is it focused for consumer or provider?
Unit 3 Communication
CHAPTER 7 Communication

Case Study
Sue, a 21-year-old female, is admitted with severe abdominal pain. Sue clings to her mother’s arm when the nurse asks the mother to leave the room during the admission procedure. The mother asks to stay in the room. The nurse looks at Sue, who smiles but says nothing.

Consider the following:
1. What may be the cause of Sue clinging to her mother?
2. How should the nurse communicate with Sue?
3. What data is important for the nurse to gather?

Review Questions
1. Nurses know that the best method for communication is:
   a. verbal communication.
   b. nonverbal communication.
   c. depends on what the message is.
   d. verbal and nonverbal communication together.
2. The nurse is aware that the initial client assessment related to communication would include:
   a. vital signs.
   b. visual ability.
   c. ambulatory ability.
   d. a complete physical examination.
3. When providing any nursing care, the nurse should:
   a. only listen to what the client says.
   b. be aware of her own nonverbal messages.
   c. always have someone witness the procedure.
   d. tell the client how fortunate he is to be the nurse’s client.
4. The nurse knows that most nursing procedures are performed in this spatial comfort zone:
   a. social.
   b. public.
   c. intimate.
   d. personal.
5. The statement “I’m sure you’ll feel much, much better after your surgery” is an example of:
   a. advice.
   b. false reassurance.
   c. a judgment.
   d. excessive emotionalism.
6. That phase of an interview during which goals and objectives are identified is called the:
   a. working phase.
   b. interview phase.
   c. termination phase.
   d. introduction phase.

7. The most effective technique the nurse can use to facilitate communication is:
   a. giving.
   b. focusing.
   c. listening.
   d. questioning.

8. One of the best ways for a nurse to show caring is by:
   a. constantly staying with the client.
   b. doing everything for the client.
   c. assisting the client in learning self-care.
   d. relaying to the physician everything the client says.

9. The nurse knows that therapeutic communication is used to:
   a. cure the client of fear.
   b. discuss personal problems.
   c. obtain or provide information.
   d. relieve the client of all concerns.

10. The nurse is aware that communication among health care team members is necessary because it:
    a. provides for continuity of care.
    b. identifies who provides better care.
    c. allows team members to be friends.
    d. promotes competition between units.

Web Flash!

- Search for information on the Web about the Telemedicine Research Center. What are the latest reports?
- How much information about telemedicine is available on the Web?
- What current information can you obtain about computerized client records?
CHAPTER 8 Nursing Process/Documentation

Case Study

Mr. Jona is a client on your unit. A 70-year-old widower, he was admitted 2 days ago with a broken left hip. While bowling with his church bowling league, Mr. Jona tripped, fell, fractured his hip, and sprained his right wrist. He recently retired from an administrative position with a large company and moved to Florida from his home in Iowa. He has two children: one son who lives in Shumak, Washington, and a daughter who lives in Ono, New York. Mr. Jona lives alone in a one-bedroom apartment approximately 10 blocks from the hospital. In 4 days, Mr. Jona will be discharged and referred to the home health division for follow-up care.

The following questions will guide your development of a nursing care plan for the case study.

1. What assessments must be done with regard to Mr. Jona’s going home?
2. Which three nursing diagnoses may apply to Mr. Jona?
3. What goals and outcomes may be appropriate for Mr. Jona?
4. What nursing interventions may be appropriate to meet the goals?

Review Questions

1. Which of the following statements would describe the nursing process?
   a. It is a linear, static procedure.
   b. It is a circular, dynamic process.
   c. It is a hierarchy of steps to plan client care.
   d. It is a long, detailed form to be filled out for each client.

2. When establishing priorities for a client’s plan of nursing care, the nurse should rank life-threatening diagnoses as the highest priorities and which as the lowest priorities?
   a. safety-related needs
   b. client needs regarding referral agencies
   c. the client’s social, love, and belonging needs
   d. needs of family members and friends who are involved in the plan of care

3. What are the essential components of an expected outcome?
   a. nursing diagnosis, interventions, and expected client behavior
   b. target date, nursing action, measurement criteria, and desired client behavior
   c. nursing client behavior, target date, and conditions under which the behavior occurs
   d. client behavior, measurement criteria, conditions under which the behavior occurs, and target date

4. Which guideline is most appropriate when developing nursing interventions?
   a. Make intervention statements specific to ensure continuity of care.
   b. Choose actions that a nurse can perform without leaving the unit or consulting with medical staff.
   c. Make sure that nursing care activities receive priority over other aspects of the treatment regimen.
   d. Write interventions in general terms to allow maximum flexibility and creativity in delivering nursing care.
5. The two primary reasons for health care documentation are:
   a. education and research.
   b. research and reimbursement.
   c. accountability and responsibility.
   d. fulfillment of legal and practice standards.

6. The legal issues of documentation require the use of:
   a. black ink pens.
   b. legible, neat writing.
   c. short, descriptive phrases.
   d. hourly recording of client status.

7. The person responsible for obtaining a client’s informed consent is the:
   a. physician.
   b. staff nurse.
   c. admissions clerk.
   d. nurse supervisor.

8. A medication error is documented on the:
   a. graphic sheet.
   b. nursing plan of care.
   c. health care team record.
   d. medication administration record.

9. When a documentation error has been made, it should:
   a. be erased.
   b. be scratched out.
   c. have one line drawn through it.
   d. be covered with correction fluid so as to keep the record neat.

Web Flash!

- Can you find specific Web sites or resources dealing with the nursing process?
- Do the resources listed for this chapter also have Web sites? What types of information do they provide?
- Research what the Web has to offer about computerized documentation.
- What can you find about NIC, NOC, and NMDS?
CHAPTER 9 Client Teaching

Case Study

Mr. Martinez, a 65-year-old widower from Mexico, recently moved in with his daughter and her family. He has just been diagnosed with diabetes. The physician orders dietary modifications. Mr. Martinez just sits and shakes his head, saying, “I don’t understand.”

The following questions will guide your development of client teaching for Mr. Martinez.

1. What other data should be collected about Mr. Martinez?
2. Which domain(s) of learning should be considered?
3. What barriers to learning might be pertinent?
4. Identify a nursing diagnosis related to client teaching for Mr. Martinez.
5. Determine the why, who, what, when, where, and how of a teaching plan for Mr. Martinez.
6. What goals might be set with Mr. Martinez?
7. How will the effectiveness of teaching be evaluated?

Review Questions

1. Kinesthetic learners learn by:
   a. doing.
   b. seeing.
   c. hearing.
   d. listening.

Web Flash!

- Search the Web for topics such as client teaching, teaching elders, teaching children, and teaching adolescents. Can you find information specific to nursing?
- What organizations are available for help with teaching methods?
- What resources can you locate that provide teaching aids and materials?
Unit 4 Developmental and Psychosocial Concerns
CHAPTER 10 Life Cycle

Case Study
Mary Jo, age 32, and her two daughters, Sara, age 14, and Katie, age 8, live with Mary Jo’s grandmother, age 85. Mary Jo is having difficulty dealing with her daughters and her grandmother.

Consider the following:
1. At what stage of psychosocial development is each household member?
2. Compare the cognitive dimensions of these four people.
3. What should be the focus for enhancing wellness for each person?
4. What are the safety concerns for each person?

Review Questions
1. The task to be achieved in Erikson’s stage of industry versus inferiority is to:
   a. learn self-control.
   b. develop necessary social skills.
   c. develop commitments to others and to a career.
   d. view one’s life as meaningful and fulfilling.
2. Piaget’s theory relates to a child’s:
   a. moral development.
   b. cognitive development.
   c. interpersonal development.
   d. spiritual development.
3. The time for parents to begin teaching (by role modeling) the difference between “right” and “wrong” is during:
   a. infancy.
   b. childhood.
   c. toddler stage.
   d. preschool stage.
4. The focus of wellness promotion during middle adulthood should be to:
   a. maintain functional independence.
   b. encourage use of fewer risk-taking behaviors.
   c. encourage client to assume responsibility for own health.
   d. teach about hygiene, nutrition, and substance abuse prevention.
5. The older adult has an increased risk of falls, burns, and other injuries because of:
   a. slower metabolism.
   b. diminished hearing.
   c. decreased ability to see colors.
   d. slower response to environmental changes.
Web Flash!

- Visit the American Academy of Pediatrics at www.aap.org. What information do they offer on such topics as nutrition, safety, discipline, and growth and development?
- What Web sites are available for information on elders, adolescents, or middle-age adults?
- What information related to immunizations does the Centers for Disease Control and Prevention (CDC) (www.cdc.gov) offer on the Web?
CHAPTER 11 Cultural Considerations

Case Study

Isabel Arriaga brings her Catholic, 18-year-old sister, Maria, to the hospital emergency room. Maria has fever, chills, nausea, vomiting, and complains of abdominal pain. Isabel also brings her three children, ages 4, 3, and 2, with her. Isabel understands and speaks broken English, but Maria speaks Spanish only. Isabel is directed to the waiting room with her children, and Maria is taken to the exam room. A male nurse examines Maria. He grumbles at the nurses’ station about how uncooperative she was during the assessment. Maria is admitted with a diagnosis of appendicitis requiring emergency surgery. In the waiting room, Isabel is unaware of the communication difficulties between the nursing staff and Maria. Maria is taken to a room to await her surgical preparation. Isabel is notified that she can see her sister for a few minutes and then must leave because her children are not old enough to visit. Isabel finds Maria crying hysterically. The physician informs Isabel that Maria’s appendix was close to rupturing and asks Isabel why she waited so long to bring her sister in. Isabel tells him that she had taken Maria to a curandero, who gave her some herbal tea to drink. When that did not help, she brought Maria to the hospital.

The following questions will assist you in providing culturally sensitive care.

1. In what ways was communication a concern among Isabel, Maria, and the health care professionals?
2. What Mexican American cultural aspects were not addressed by the health care professionals?
3. What needs of Isabel and Maria were ignored by the health care professionals?
4. What questions should be asked by the health care professionals to give them a better understanding of this situation?
5. Identify two culturally sensitive nursing diagnoses and goals for Maria.
6. Formulate pertinent nursing interventions for the diagnoses and goals identified in question 5.
7. What resources could the nurses use to assist Maria in her recovery?
8. List at least two successful client outcomes for Maria.

Review Questions

1. The Sabbath is observed from sunset Friday until sunset Saturday by:
   b. Muslims.
   c. Mormons.
   d. Presbyterians.
2. The nurse should know the client’s religion in order to:
   a. provide holistic care.
   b. record it on the chart.
   c. meet his physical needs.
   d. know how to pray for him.
3. A characteristic of culture is that it:
   a. is learned.
   b. stays the same.
   c. is biologically inherited.
   d. is individually determined.

4. Members of the Hispanic culture:
   a. are culturally homogeneous.
   b. are seldom religious.
   c. always seek Western medical intervention.
   d. view illness as a punishment from God.

5. It is important for the nurse to be aware of cultural aspects of health and disease because:
   a. reimbursement is related to cultural group.
   b. members of different cultural groups respond differently to illness.
   c. differences in care should not be based on cultural aspects.
   d. some cultural groups have more members than others.

Web Flash!

- Search “cultural diversity” on the Web. What related topics do you find?
- Can you locate health-related Web sites specific to European Americans, African Americans, Hispanic Americans, Asian Americans, and Native Americans?
CHAPTER 12 Stress, Adaptation, and Anxiety

Case Study

Miguel, a 35-year-old lawyer, comes to the emergency medical facility and describes vomiting small amounts of blood for the past several days. He also says that he has been having heartburn and epigastric pain for 3 weeks and that his wife asked for a divorce 6 weeks ago because of his long hours at work, which keep him away from the family. He states that he is working on a very difficult case.

Vital signs are T 98.6 °F, P 90, R 24, and BP 136/82. A complete blood count and upper GI exam are ordered. He is scheduled to see a clinical specialist to discuss the stressors in his life. At the initial screening, Miguel relates that he has been experiencing frequent headaches and is having difficulty concentrating on his court case, symptoms of moderate to severe anxiety.

(Adapted from Mental Health Concepts, by C. Waughfield, Albany, NY: Delmar, 2002.)

The following questions will guide your development of a nursing care plan for the case study.

1. What clinical manifestations indicate that Miguel is experiencing moderate to severe anxiety?
2. What two nursing diagnoses might be appropriate for Miguel?
3. What goal for each nursing diagnosis might be desirable?
4. What nursing interventions would be helpful to Miguel in meeting the goals?
5. How will the evaluation be determined?

Review Questions

1. Physiologic indicators of anxiety include:
   a. warm, dry skin.
   b. constricted pupils.
   c. increased pulse rate.
   d. decreased blood pressure.

2. A major component of mental health disturbances is:
   a. worry.
   b. stress.
   c. anxiety.
   d. adaptation.

3. Most defense mechanisms are used unconsciously. The one that is consciously used is:
   a. projection.
   b. regression.
   c. repression.
   d. suppression.
4. Symptoms associated with the response to stress are the result of the body’s attempt to:
   a. conserve energy.
   b. run from the impending threat.
   c. identify the impending danger.
   d. shield the person from an unpleasant experience.

Web Flash!

- Search the Web for information on stress and anxiety. What sites might you recommend to clients and families who are experiencing anxiety and looking for self-help and information sources?
- What resources are listed for caregivers and health care professionals?
- What organizations or professional journals might you search for information on anxiety or stress?
CHAPTER 13 Loss, Grief, and Death

Case Study

Mrs. Prince, an 86-year-old with a history of heart failure, was hospitalized in critical condition three times within the last year. Each time she went back to her home. A home health nurse and a nursing assistant visit to monitor her condition and to help with her activities of daily living. Her husband tries to manage the household chores. Mrs. Prince’s condition is deteriorating, as her shortness of breath is becoming more severe. Her energy level is easily depleted, and she is having increasing difficulty getting out of bed. The family is concerned because Mrs. Prince does not have any advance directives. Attempts to bring up the subject are met with avoidance and a change of subject.

The following questions will guide your development of a nursing care plan for the case study.

1. What clinical manifestations would you expect Mrs. Prince to experience?
2. Which four nursing diagnoses are appropriate in planning her care?
3. What nursing interventions could implement palliative care?
4. What interactions might ease the family’s concerns?
5. Why might Mrs. Prince and her family benefit from hospice services?

Review Questions

1. Knowing that a loved one is terminally ill allows family members to begin the grieving process. This is called:
   a. complicated grief.
   b. anticipatory grief.
   c. dysfunctional grief.
   d. disenfranchisement.

2. Nursing interventions for a client who has experienced a loss are based on an understanding of:
   a. the degree of the client’s depression.
   b. the anger expressed by the client.
   c. the significance of the loss to the client.
   d. the number of support groups available for the loss experienced by the client.

3. The nurse must use caution when removing tape from a body because of:
   a. liver mortis.
   b. rigor mortis.
   c. algor mortis.
   d. rimas mortis.
Web Flash!

- What key terms related to loss and death might you search for on the Web (e.g., grief, bereavement)?
- What Web sites can you find that offer information on hospice care?
- Search the Web for “symptoms of terminal illness”; what can you find?
- On the Web, check out the resources for this chapter. What information do they provide? Is it helpful to you? Is it appropriate for clients or families?
Unit 5 Health Promotion
CHAPTER 14 Wellness Concepts

Case Study
An individual has a mid-level administrative position at a large corporation. He must attend many luncheon and dinner meetings where alcohol is freely served. Free time is spent reading novels or watching television.

Consider the following:
1. Identify the health problems the individual may possibly encounter.
2. List the lifestyle changes the individual should make to lower his risk of health problems.
3. Identify secondary preventive measures the individual should take.
4. Identify the health problems his children may possibly encounter.
5. List ways the children can lower their risk for the health problems identified in statement 4.
6. Identify the secondary preventive measures his children should be taking.

Review Questions
1. The nurse knows that one goal for the Healthy People 2010 objectives is:
   a. protecting health.
   b. increasing life span.
   c. immunizations for all.
   d. increasing years of healthy life.
2. The prevention health care team members are:
   a. nurses, dietitian, and pharmacist.
   b. physician, individual, and nurses.
   c. pharmacist, physician, and laboratory.
   d. laboratory, radiology, and individual.
3. An individual should have a physical exam:
   a. every year.
   b. every 2 years.
   c. every 3 years.
   d. it depends on the person’s age.

Web Flash!
- What do you find on the Web about Healthy People 2010?
- What information/resources can be found about wellness?
CHAPTER 15 Complementary/Alternative Therapies

Case Study
Mr. Vincent, who is receiving chemotherapy for colon cancer, tells the nurse that he is seeing both an aromatherapist to relieve his pain and nausea and a practitioner of healing touch to cure his cancer. He also says that he does not know whether he will come back for his next chemotherapy session because it makes him feel bad. The other therapies make him feel better.

Consider the following:
1. What should the nurse do with this information?
2. How should the nurse respond?
3. What assessments should the nurse make?
4. Identify a nursing diagnosis and goal for Mr. Vincent.
5. List three nursing interventions for this nursing diagnosis.
6. Identify sources for information about the therapies.

Review Questions
1. Healing is:
   a. curing a disease.
   b. treating a disease.
   c. making a client well.
   d. a process that activates internal forces.
2. Imagery is a:
   a. balancing of life forces.
   b. relaxation technique using the five senses.
   c. measurement of physiological responses when dreaming.
   d. blocking of the body’s energy fields with unhappy thoughts.
3. Learning about herbal treatments can be compared to learning about:
   a. hypnosis.
   b. nutrition.
   c. reflexology.
   d. pharmacology.
4. Clients using animal-assisted therapy:
   a. play with a cat.
   b. have no other companions.
   c. experience a decrease in blood pressure.
   d. show an increase in physical limitations.
Web Flash!

- Search the Web for the organizations listed as resources for this chapter. What information do they provide?
- What resources (books, videos, discussion forums) are available through the Web for clients interested in a specific C/A therapy?
CHAPTER 16 Basic Nutrition

Case Study
Tom, age 27, has been HIV positive for 4 years. He is admitted to the hospital complaining of diarrhea and cramping for 3 weeks and a burn wound on his right forearm that will not heal. He states, “I do not have the energy to eat or get dressed. For the past month, I have eaten mainly bread, cereal, milk, and potatoes.”

The following questions will guide your development of a nursing care plan for the case study.

1. What subjective and objective data should the nurse gather?
2. Which nursing diagnoses and goals would be appropriate for Tom?
3. List appropriate nursing interventions for helping Tom meet the goals.
4. List the teaching that Tom will need before leaving the hospital.

Review Questions
1. What is the main function of carbohydrates?
   a. build and repair tissue
   b. provide the body with energy
   c. provide a source of dietary fiber
   d. insulate the body to prevent heat loss
2. What is the fuel value of protein?
   a. 3 kcal/g
   b. 4 kcal/g
   c. 8 kcal/g
   d. 9 kcal/g
3. Which of the following is a complete protein?
   a. milk
   b. gelatin
   c. pinto beans
   d. peanut butter
4. A female client is 5 ft. 5 in. tall and weighs 180 lb. What would be her desired weight?
   a. 115 lb
   b. 120 lb
   c. 125 lb
   d. 130 lb
5. Where is most of the water in the body found?
   a. inside the cells
   b. in the intestines
   c. in the blood and lymph
   d. in the kidneys and bladder
Web Flash!

- Check out food-borne diseases, their pathogens, and toxins at www.cdc.gov.
- For more information about the proper cooking of food, go to www.fsis.usda.gov.
- Identify the nutrient content in what you ate in the past 24 hours at www.nal.usda.gov. Click on “Search Our Web Site” and enter “fnic” in the search box. Then click on the link for the “Food and Nutrition Information Center.”
CHAPTER 17 Rest and Sleep

Case Study

Mr. Leis, age 74, is hospitalized with deep-vein thrombosis. His left thigh hurts when he moves. An intravenous line has been started in his right arm. Mr. Leis reports that it is difficult to fall asleep because of the pain in his leg. Hallway noises and nurses checking on him have awakened him the past two nights. He usually goes to bed at 9:30 p.m. but has not been able to fall asleep until 11:30 p.m. He states that he is tired and has been unable to take a nap.

The following questions will guide your development of a nursing care plan for the case study.

1. What other assessments should be done?
2. What nursing diagnosis is appropriate for Mr. Leis?
3. Identify three goals for Mr. Leis.
4. What nursing interventions would be appropriate to meet the goals?

Review Questions

1. The first phase of sleep is called:
   a. REM sleep.
   b. deep sleep.
   c. NREM sleep.
   d. light sleep.

2. Irregular sleeping habits often become the norm during:
   a. school-age years.
   b. older adulthood.
   c. adolescence.
   d. young adulthood.

3. Mitra is waking frequently at night and wakes very early in the morning. She may have:
   a. insomnia.
   b. parasomnia.
   c. narcolepsy.
   d. sleep apnea.

4. Jorge frequently falls asleep while sitting on the couch talking to his wife. He may have the sleep disturbance called:
   a. bruxism.
   b. narcolepsy.
   c. sleep apnea.
   d. hypersomnia.
Web Flash!

- Search the Web for the topics “sleep” and “sleep disturbances.” What information is available to clients and families?
- Search for specific sleep disturbances on the Web. Is this information helpful to you?
CHAPTER 18 Safety/Hygiene

Case Study
Manuela, age 30, received a broken right arm and a broken right leg in a car accident. The arm and leg are each in a cast.

The following questions will guide your development of a nursing care plan for the case study.

1. What assessment information should be gathered?
2. Identify three nursing diagnoses for Manuela.
3. Formulate possible goals for each nursing diagnosis.
4. Plan nursing interventions for each nursing diagnosis.

Review Questions
1. The water (type A) fire extinguisher is to be used on:
   a. paper.
   b. flammable gases.
   c. electrical fires.
   d. flammable liquids.

2. If a client receives an electrical shock, the first thing the nurse should do is:
   a. call for help.
   b. unplug the equipment.
   c. check the client’s pulse.
   d. move the client out of the room.
Unit 6 Infection Control
CHAPTER 19 Infection Control/Asepsis

Case Study

Mrs. Glassel has an open-wound ulcer on her right lower leg.

The following questions will guide your development of a nursing care plan for the case study.

1. What other assessment data should be gathered?
2. What nursing diagnosis is appropriate?
3. Identify two goals for Mrs. Glassel.
4. Identify appropriate nursing interventions.

Review Questions

1. The microorganisms that are always present on a person are called:
   a. resident flora.
   b. colonized flora.
   c. transient flora.
   d. communicable flora.

2. A client with the flu is vulnerable to infection and is called a:
   a. susceptible host.
   b. infectious agent.
   c. compromised host.
   d. anthropogenic agent.

3. Fomites are an example of which type of transmission?
   a. contact
   b. vehicle
   c. airborne
   d. vectorborne

4. Lyme disease and malaria are examples of diseases spread by:
   a. contact transmission.
   b. vehicle transmission.
   c. airborne transmission.
   d. vectorborne transmission.

5. Vaccination provides which type of immunity?
   a. humoral
   b. acquired
   c. antibody
   d. lymphokine
CHAPTER 20 Standard Precautions and Isolation

Case Study

Joe Spanutius is admitted with a diagnosis of influenza. After 24 hours, the nurses question whether he may also have pediculosis. The physician is out of town for the day.

The following questions will guide your development of a nursing care plan for this case study.

1. On admission, what precautions should be followed for Mr. Spanutius?
2. What additional precautions, if any, should the nurses follow until the physician sees Mr. Spanutius again?
3. What equipment is required and should be available for persons entering Mr. Spanutius’ room right after admission?
4. What equipment is required and should be available for persons entering Mr. Spanutius’ room after 24 hours?

Review Questions

1. Contact Precautions require:
   a. a private room.
   b. the wearing of a mask.
   c. the wearing of a gown.
   d. the wearing of gloves.

Web Flash!

- What information is available on the Web about Standard Precautions?
- Check the CDC Web site (www.cdc.gov) for Guideline for Hand Hygiene in Health Care Settings. How does this guideline affect your care of clients? How does this guideline protect you? Check this Web site often for the latest information on new health care topics.
Unit 7 Fundamental Nursing Care
CHAPTER 21 Fluid, Electrolyte, and Acid-Base Balance

Case Study

Mrs. Meisenbach is a 75-year-old woman with diabetes who has been experiencing flu-like symptoms of vomiting and diarrhea for 5 days. She lives alone and does not like to cook. When she got up this morning, she felt weak and dizzy. She called 911 to take her to the clinic. The emergency medical technicians called the practitioner en route, and Mrs. Meisenbach was taken directly to the infusion center, where 1,000 mL of lactated Ringer’s solution was started. Later, she was given Gatorade to drink.

Assessment data revealed:
  ● Marked thirst
  ● Temperature 99°F
  ● BP 94/74, Resp. 30
  ● Wt 157 lb (loss from 165)
  ● Dry mucous membranes
  ● Apical pulse 108/min
  ● Increased Hct, Hgb, and BUN

The following questions will guide your development of a nursing care plan for the case study.

1. What other data would you collect?
2. What is the primary nursing diagnosis for Mrs. Meisenbach?
3. What goals would be appropriate for this nursing diagnosis?
4. Identify the nursing interventions and rationale to meet the goals.
5. Ascertain the fluid intake replacement needed. Include the IV and oral fluids.
6. On the basis of the intake, what should have been her output prior to discharge?

Review Questions

1. The basic unit of an element is:
   a. an atom.
   b. the nucleus.
   c. an electron.
   d. small groups of atoms called molecules.

2. When blood flows into a capillary bed, the pressure of the blood is:
   a. high in the venule.
   b. low in the arteriole.
   c. high in the arteriole.
   d. low but increases to high.
CHAPTER 22 Medication Administration and IV Therapy

Case Study

Mrs. Cheng is a 76-year-old client who was discharged from the hospital with cancer of the lungs. Mrs. Cheng elected not to have surgery and was given her first chemotherapy before discharge. She is not accustomed to taking medications. Before the onset of symptoms that necessitated her admission to the hospital, Mrs. Cheng considered herself in good health, only bothered with the discomfort of arthritis in her hands. She is being discharged on the following medications:

- sulfamethoxazole (Gantanol), a sulfonamide anti-infective, 500 mg/5 mL susp po b.i.d.
- granisetron (Kytril), an antiemetic, 1 mg po q12h
- morphine sulfate 30 mg po q4h, prn for pain

The following questions will guide your development of a nursing care plan for the case study.

1. What other assessments would you make about Mrs. Cheng?
2. What two nursing diagnoses with a goal for each might be appropriate for Mrs. Cheng?
3. What nursing interventions might help Mrs. Cheng meet the goals?

Review Questions

1. The law that began the regulation of habit-forming drugs is called the:
   c. Controlled Substance Act.

2. The only household measure used in calculating dosages is the:
   a. drop.
   b. pound.
   c. ounce.
   d. teaspoon.

3. The method considered to be one of the most accurate for calculating medication dosages for infants and children up to 12 years of age is:
   a. Clark’s rule.
   b. Young’s rule.
   c. weight and height.
   d. body surface area.

4. Sublingual medications are to be:
   a. chewed.
   b. placed under the tongue.
   c. placed between the cheek and teeth.
   d. swallowed with 8 ounces of water.
5. An intravenous solution of sodium chloride (0.45) is:
   a. isotonic.
   b. iso-osmolar.
   c. hypertonic.
   d. hypotonic.

Web Flash!

- Visit the Web for sites related to IV therapy, medication administration, and medication errors. What type of information is available?
CHAPTER 23 Assessment

Case Study

Tom Turner, age 40, has been admitted to the hospital with pneumonia. He has never been hospitalized before. His wife and three children are at home. Because his wife has just given birth to their third child, Tom’s wife cannot drive the other two children to school. Tom provides the sole income for the family, and he has only three more sick days to use at work before he will be off without pay.

Tom’s vital signs are BP 120/72, P 100, R 34, T 100.6°F. His breath sounds show sonorous wheezes throughout, cleared by coughing. His cough is frequent and productive of foamy, cloudy, yellow secretions. His apical pulse is 102 and regular, but distant heart tones were noted. The abdomen is firm and distended with hypoactive bowel sounds noted in all four quadrants. He moves all extremities slowly but by himself and with purpose.

Tom is oriented to person, place, and time. His pupils are PERRLA. Hand grips are strong and equal bilaterally, as are foot pushes. He speaks only when spoken to, and his eye contact with staff is minimal. Whenever his wife visits, his voice raises and his heart rate increases about 2–5 beats. At one point, Tom stated, “How much more of this can we take?” Tom’s wife mentions that their church would love to help, but Tom refuses to take charity. Tom states, “Any income for this family has to come from me.”

Other added information acquired during the assessment includes the fact that Tom has a history of drinking one to two beers daily and has not performed testicular self-exams. He eats and drinks what he likes, and he states he really hates seafood. Usually he bathes daily in the early morning and helps bathe two of their children each evening. He works 9 a.m. – 5:30 p.m., five days per week, and also some Saturday mornings. Tom pays all of the household bills and is the sole decision maker of the family.

The following questions will guide your development of a nursing care plan for the case study.

1. List the functional assessment data collected from Mr. Turner that identify psychosocial concerns.
2. What are two possible reasons for identifying the added information about Mr. Turner in the last paragraph?
3. Write two nursing diagnoses that are supported by the health history and physical assessments documented about Mr. Turner.
4. Write goals and nursing interventions for each nursing diagnosis.

Review Questions

1. Jim’s apical pulse is 102. He states to the nurse that he can feel his heart pounding. Which of the following charting terms would accurately describe Jim’s statement of concern regarding his heart rate?
   a. bradycardia
   b. changing of rhythm
   c. palpitation
   d. tachycardia
2. Which of the pulses should be palpated when assessing circulation to the lower extremities?
   a. dorsalis pedis  
   b. femoral 
   c. temporal 
   d. popliteal

Web Flash!

- Search the Web for information regarding physical examination (assessment). What type of information is available?
- Check the American Heart Association Web site for information about blood pressure determination at http://216.185.112.5.
- Review Appendix A for Common Problems in Measuring Blood Pressure.
CHAPTER 24 Pain Management

Case Study

Johnny Prince, a 27-year-old male, is admitted to the medical unit diagnosed with hemophilia and septic arthritis in his left ankle. He has a history of epilepsy, arthritis, artificial knee joints (bilateral), and two hip surgeries. Medications taken at home include factor VIII, phenobarbital 100 mg hs, and Naprosyn 5 mg tid. His chief complaint is swelling and severe pain in his left ankle.

Current RX: Colace, milk of magnesia, ceftriaxone sodium (Rocephin) IV piggyback, phenobarbital 100 mg qhs, FeSO, multivitamins, vitamin C, oxacillin (Bactocill), factor VIII 20,000 IVP q12h, hydromorphone HCl (Dilaudid) 8 mg po q8h (hold SBP, 90, resp.,12), MS 4 mg IVP q4h prn, flurazepam HCl (Dalmane) 30 mg po qhs prn.

The following questions will guide your development of a nursing care plan for the case study.

1. What will you include in assessing Mr. Prince’s pain?
2. What factors in his history will influence his pain perception?

Your pain assessment gives you the following information:

- Location: through center of ankle.
- Intensity: pain at time of assessment is 5 (medicated 30 minutes before interview) on scale of 0 to 10; worst is 25, best is 3.
- Quality: describes pain as throbbing at times, a jabbing pain. It hurts worse between 9 and 10 in the morning and between 9 and 12 at night. Mainly worse when medicine wears off.
- Effects of pain: only gets 2 or 3 hours of sleep, often dreaming about it. Pain makes him avoid activity; get grumpy and snappy. Concentration turns totally to pain.
- Behaviors: he yells at times, but does not like to. He would prefer to sweat it out. Also grimaces, grips hands, and tries repositioning.

3. Why did the physician order the analgesics on that schedule?
4. Mr. Prince requests a dose of morphine. The narcotic drawer has the following available in prefilled syringe cartridges: 2 mg per cc and 8 mg per cc. Which cartridge(s) should the nurse select?
5. Why is the morphine ordered IVP, not IM?
6. Why did the physician order Colace and milk of magnesia?
7. What are some noninvasive relief measures that might be tried with Mr. Prince?
8. Write two individualized nursing diagnoses and goals for Mr. Prince.
9. What teaching will Mr. Prince need before discharge?
Review Questions

1. One of the general principles of pain management is:
   a. anticipated or mild pain is easier to relieve than severe pain.
   b. the more experience a person has with pain, the better that person will be able to tolerate it.
   c. no pain, no gain.
   d. the cause of pain must be identified in order to relieve it.

Web Flash!

- Search the Web for the organizations listed in the resources at the end of this chapter. What kind of information is available for clients, families, and health care professionals?
- Search for the word "pain" on the Web. What information is available?
CHAPTER 25 Diagnostic Tests

Review Questions

1. The most commonly used site for capillary puncture in neonates and infants is the:
   a. heel.
   b. tip of the toe.
   c. earlobe.
   d. fingertip.

Web Flash!

❖ Search the Web for diagnostic tests. How many sites can you find? What type of information is available?
❖ Search the Web for the specific diagnostic tests discussed in this chapter. How many tests have Web sites devoted to them? Is the information for health professionals or the general public?
Unit 8 Nursing Procedures
CHAPTER 26 Basic Procedures

Web Flash!

- Check the Centers for Disease Control and Prevention Web site (www.cdc.gov) for the latest update on hand hygiene.
CHAPTER 27 Intermediate Procedures

Review Questions

1. The most common site for placement of a pulse oximetry sensor is:
   a. a toe.
   b. the nose.
   c. a finger.
   d. an earlobe.

2. The initial teaching and ongoing assessment of a client’s proper use of an assistive device can be delegated to ancillary personnel. True or false?
   a. true
   b. false
CHAPTER 28 Advanced Procedures

Web Flash!

✔ Visit the Centers for Disease Control and Prevention Web site at www.cdc.gov/ncidod for the latest on Airborne, Contact, and Droplet Precautions.
CHAPTER 29 Anesthesia

Case Study
Mrs. Pinkerton is in the recovery room following outpatient surgery. She received a general anesthetic and is now awake, breathing deeply, and talking to the staff. She has received meperidine (Demerol) intravenously and is quite comfortable. Before being discharged home from the surgery center, Mrs. Pinkerton rests in an easy chair in the transitional recovery area. The nurse taking care of her notices that she asks questions about things that have already been discussed and has even asked one question three times.

The following questions will guide your development of a nursing care plan for the case study.

1. After making these observations, what nursing diagnoses and goals might the nurse identify for Mrs. Pinkerton?
2. List the nursing interventions to be performed in caring for Mrs. Pinkerton.
3. Identify teaching approaches.

Review Questions
1. Persons qualified to explain anesthesia and its risks and benefits in a manner sufficient to secure an informed consent from a client or legal guardian are:
   a. medical surgical staff nurses.
   b. an anesthesia provider or surgeon.
   c. operating room nurses.
   d. nursing supervisors.
2. In addition to keeping the client unconscious, preventing the sensation of pain, and relaxing muscles to hold the client still and allow for surgical exposure, an anesthesia provider:
   a. controls vital functions such as breathing and heart rate.
   b. records the amount of anesthetic drug used.
   c. monitors the length of surgery.
   d. administers prophylactic antibiotics.

Web Flash!

❖ What organizations are identified from which a person could get information about anesthesia?
❖ How many types of anesthesia can you find discussed on the Web?
❖ Go to the American Society of Peri-Anesthesia Nurses Web site (www.aspan.org). Click on “Information for Patients.” How is this information helpful for you?
CHAPTER 30 Surgery

Case Study
Mr. Glen Stone, a 74-year-old retired schoolteacher who is married and the father of four and the grandfather of sixteen, weighs 275 lb. He has undergone a right hemicolectomy, wherein the right side of his colon was removed because of cancer. He has a history of smoking but has no other health problems. The surgery was uncomplicated, and he is in the PACU. He has a midline incision with a Penrose drain; a stab wound with a Jackson Pratt drain is adjacent to the incision. He also has a nasogastric tube attached to low intermittent suction. He is alert and oriented, and he can move all four extremities. His blood pressure is normal for him in comparison to his preoperative levels. He is breathing regularly and easily at a rate of 16 breaths per minute, and his skin color is normal. His oxygen saturation, however, is 86 with additional oxygen being given via mask.

The following questions will guide your development of a nursing care plan for the case study.

1. What risk factors for developing postoperative complications can you identify for Mr. Stone?
2. What is his Aldrete Score at this point?
3. What nursing measures can you institute to promote oxygenation?
4. What type of drainage is expected from the incision and the drains during the first 1 to 2 days?
5. What nursing observations can be made and reported to indicate to the surgeon that the nasogastric tube can be removed?

Review Questions
1. When performing client teaching, the nurse:
   a. assesses barriers to learning.
   b. completes teaching in a single time frame.
   c. provides information in one mode of learning.
   d. allows little time for questions.
2. The use of drains will:
   a. increase postoperative pain.
   b. prevent tissue healing.
   c. increase scarring.
   d. eliminate fluid accumulation.
3. The surgical skin preparation will:
   a. sterilize the skin.
   b. cleanse the skin and inhibit bacterial growth.
   c. prevent fingernails from growing.
   d. remove the dermis.
4. Surgical risk increases in the elderly client based on:
   a. type of surgery.
   b. physiologic changes of aging.
   c. exposure to infectious processes.
   d. number of children.
Web Flash!

- Research incision glue on the Web. What information is available on this topic?
- What sites could a client access for information on a particular surgery (e.g., coronary bypass)?
CHAPTER 31 Oncology

Review Questions

1. The cancer that causes the most deaths each year is:
   a. skin.
   b. lung.
   c. prostate.
   d. colorectal.

Web Flash!

Check the Web sites for the resources in this chapter.

- What new treatments for cancer can you find?
- What resources are available for cancer clients and their families?
Unit 10 Nursing Care of the Client: Oxygenation and Perfusion
CHAPTER 32 Respiratory System

Review Questions

1. Bronchodilators are used to treat bronchiectasis in order to dilate airways that:
   a. are in bronchospasm due to an antigen antibody reaction.
   b. have lost their elasticity.
   c. are clogged with secretions.
   d. are chronically narrowed.

Web Flash!

- Search for *tuberculosis* on the Web. What type of information is available? How can this information be used by clients and families?
- Web sites are listed in the chapter resources. What information do they provide?
CHAPTER 33 Cardiovascular System

Review Questions

1. The nurse may assist in relieving the chest pain of a client with pericarditis by having the client:
   a. lie flat and turn on the right side.
   b. lie flat and turn on the left side.
   c. sit in a semi-Fowler’s position.
   d. sit erect and lean forward.

2. A diagnostic test for a myocardial infarction is:
   a. cardiac enzymes.
   b. arterial blood gases.
   c. cardiac biopsy.
   d. pulse oximetry.

3. A client with the diagnosis of a myocardial infarction has just been admitted to the ER. To relieve chest pain, the physician will probably order:
   a. amoxicillin (Amoxil).
   b. ibuprofen (Motrin).
   c. digoxin (Lanoxin).
   d. morphine sulfate.

4. A cardiac dysrhythmia that has an erratic electrical activity of the atria resulting in a rate of 350 beats per minute to 600 beats per minute is:
   a. atrial fibrillation.
   b. bradycardia.
   c. ventricular asystole.
   d. third-degree AV block.

5. The most appropriate nursing diagnosis for a client with coronary artery disease is:
   a. decreased cardiac output.
   b. social isolation.
   c. fatigue.
   d. altered nutrition.

6. When assessing a client with a possible DVT, the nurse:
   a. routinely does a Homans’ sign.
   b. massages the calf of the leg.
   c. gently touches the affected area and checks for warmth.
   d. calls the physician immediately.

7. A nurse is assigned to care for a client who has just had a hysterectomy. To prevent the formation of a thrombus, the nurse:
   a. encourages the client to lie in bed with the knee gatch activated.
   b. encourages the client to ambulate with assistance according to the physician’s orders.
   c. assesses Homans’ sign as part of the routine post-op assessment.
   d. checks peripheral pulses every 4 hours.
8. A client, admitted with the diagnosis of AAA, states he can feel a pulsation when he lies flat in bed. To assess the pulsation, the nurse would palpate:
   a. the epigastric area.
   b. the right lower quadrant.
   c. 1 inch above the symphysis pubis.
   d. left of the umbilicus.

9. The symptoms that a client with an aneurysm pressing on the inferior vena cava would most likely experience are:
   a. dull low back pain and a pulsating mass in the abdomen.
   b. dyspnea, wheezing, and hoarseness.
   c. bloating, nausea, and vomiting.
   d. edema in the extremities and possible cyanosis.

Web Flash!

- Search the Web for information about the disorders covered in this chapter. What information is available? For whom is the information suitable?
- What Web information do the chapter resources at the end of the chapter provide?
- Check the new Web site sponsored by the American Heart Association (www.myamericanheart.org).
CHAPTER 34 Hematologic and Lymphatic Systems

Review Questions

1. The diagnostic test for sickle-cell anemia is the:
   a. d-dimer.
   b. Sickledex.
   c. hemoglobin electrophoresis.
   d. Schilling test.

2. A nursing action for a client with pernicious anemia is to:
   a. inquire about exposure to radiation and chemicals.
   b. administer cyanocobalamin (vitamin B12) as ordered.
   c. teach the importance of increasing iron in the diet.
   d. administer oral vitamin B12 as ordered.

3. Nursing care for a client with polycythemia vera includes:
   a. doing a Homans’ sign to check for blood clots.
   b. administering folic acid as ordered.
   c. observing for blood in the stool and urine.
   d. observing for petechiae and ecchymotic spots.

4. A client with hemophilia is taught to:
   a. administer clotting factors as needed.
   b. administer cyanocobalamin (vitamin B12) as needed.
   c. maintain a high-calorie, high-protein diet.
   d. report night sweats.

Web Flash!

- Search the Web for the various disorders discussed in this chapter. What new or experimental treatments are discussed?

- What Web information do the resources at the end of this chapter provide? For whom is this material intended?
Unit 11 Nursing Care of the Client: Digestion and Elimination
CHAPTER 35 Gastrointestinal System

Review Questions

1. Changes in the gastrointestinal system caused by aging:
   a. are minimal and have little impact on clients.
   b. include an increase in digestive enzymes leading to an increase in the occurrence of ulcers.
   c. require clients to eat larger, fewer meals.
   d. may require the client to swallow two to three times with each bite.

Web Flash!

- Locate support groups or resources on the Web for clients with GI disorders and their families. What resources are available for purchase?
- Visit the CDC’s Web site. What information do they offer on the infectious disease hepatitis?
- What sites can you locate that specialize in GI cancer?
CHAPTER 36 Urinary System

Review Questions

1. A client states that for 3 days she has had pain when urinating. This would be documented as:
   a. polyuria.
   b. dysuria.
   c. hematuria.
   d. oliguria.

2. A client has glomerulonephritis. This condition affects the:
   a. kidney.
   b. ureter.
   c. bladder.
   d. urethra.

3. A male client, age 76, has had hematuria for several years and has been diagnosed with cancer of the kidney. His prognosis is poor. He told the nurse that he was too dizzy to go to the bathroom alone. Which of the following shows he needs further teaching?
   a. putting his bathroom call light on for assistance
   b. holding on to the nurse’s arm while walking
   c. refusal to wait for the nurse to lower the side rail
   d. saving his urine to be measured and tested

Web Flash!

- Search the Web for information about the various diseases discussed in this chapter. What information would assist you in client care?
- Find the resources listed for this chapter on the Web. What services do they have available for clients?
Unit 12 Nursing Care of the Client: Mobility, Coordination, and Regulation
CHAPTER 37 Musculoskeletal System

Review Questions

1. A fracture caused by forceful twisting is known as a:
   a. comminuted fracture.
   b. spiral fracture.
   c. transverse fracture.
   d. greenstick fracture.

2. A closed reduction of a fracture:
   a. requires surgery.
   b. is completed by manual manipulation.
   c. sometimes requires a cast.
   d. requires the use of immobilizing plates.

Web Flash!

❖ Search the Web for information about the disorders in this chapter. What new diagnostic tests or treatments are being tested?

❖ Share the Web information focused on clients’ use with your classmates.

CHAPTER 38 Neurological System

Review Questions

1. Cranial nerves III, IV, and VI all have functions affecting:
   a. special senses.
   b. facial movement.
   c. eye movement.
   d. gag reflex.

Web Flash!

❖ Try to locate two or three of the disorders in this chapter on the Web. Share information on new medications, diagnostic tests, treatments, or nursing care found on the Web sites.

❖ What sites could you recommend to families and individuals coping with any of these disorders?

❖ List books, videos, or other media on these disorders found on the Web.
CHAPTER 39 Sensory System

Review Questions

1. The three bones of the middle ear are the:
   a. hammer, nail, and stirrup.
   b. malleus, incus, and cochlea.
   c. malleus, humorous, and stapes.
   d. malleus, incus, and stapes.

2. Persons with hearing impairment or loss may benefit from:
   a. sitting in the middle of a crowded room so as to listen to all conversations at once.
   b. learning to lip read with family members.
   c. using a poorly fitted hearing aid with proper amplification.
   d. cupping the ear and turning the head toward the person speaking to them.

3. Increased ocular pressure is indicated by a reading of:
   a. 0 to 5 mm Hg.
   b. 6 to 10 mm Hg.
   c. 11 to 20 mm Hg.
   d. 21 to 32 mm Hg.

Web Flash!

- What sites can you locate on the Web that provide resources for individuals with sensory alterations? List self-help groups, books, media products, or other resources suggested at these sites.
- Identify Web addresses that are specifically designed to help the elderly and their families manage the sensory alterations that are a normal part of aging.
CHAPTER 40 Endocrine System

Review Questions

1. Ms. Perez, who has type 1 diabetes, complains of weakness and shakiness. She is pale, diaphoretic, and her pulse rate is increased. The nurse should recognize these symptoms as indications of:
   a. hyperglycemia.
   b. hypoglycemia.
   c. ketoacidosis.
   d. potassium excess.

2. Mrs. Lally, age 24, is newly diagnosed with type 1 diabetes. If Mrs. Lally’s husband comes home and finds her unconscious, the first thing he should do is:
   a. place some easily absorbed glucose under her tongue (e.g., monogel) or give glucagon SC or IM.
   b. call the doctor.
   c. administer 20U regular insulin.
   d. add sugar to orange juice and administer orally.

3. Explanations before diagnostic tests for an endocrine disorder are most important to:
   a. enable the client to collect a 24-hour urine specimen.
   b. ensure client compliance with test instructions.
   c. prevent taking medications that interfere with test results.
   d. reduce stress that can interfere with test results.

4. The nurse knows to assess the client with hypothyroidism for the clinical manifestations of:
   a. hypertension, diaphoresis, nausea, and vomiting.
   b. tetany, irritability, dry skin, and brittle nails.
   c. unexplained weight gain, energy loss, and cold intolerance.
   d. water retention, moon-faced, hirsutism, and purple striae.

5. The client with hyperparathyroidism should have extremities handled gently because:
   a. decreased calcium bone deposits can lead to pathologic fractures.
   b. edema causes stretched tissue to tear easily.
   c. hypertension can lead to a stroke with residual paralysis.
   d. polyuria leads to dry skin and mucous membranes that can break down.

6. Which of the following assessments would the nurse expect to observe in the client with pheochromocytoma?
   a. bradycardia and tetany
   b. nausea, vomiting, and diarrhea
   c. personality changes
   d. systolic pressure up to 300 mm Hg
Web Flash!

- After searching the Web, share new information about lab tests or treatments for endocrine disorders discussed in this chapter. What new information was found that could be shared with a client?
- What information is available on the Web from the various resources listed for the endocrine system at the end of the book?
- Check the National Diabetes Education Program Web site (http://ndep.nih.gov).
Unit 13 Nursing Care of the Client: Reproductive and Sexual Health
CHAPTER 41 Reproductive System

Review Questions

1. The best method of screening for cervical cancer is:
   a. genitourinary cultures.
   b. cervical biopsy.
   c. Pap smear.
   d. ultrasound.

2. Bowel and bladder complications that may follow pelvic radiation therapy for uterine cancer are often caused by:
   a. dehydration.
   b. lack of mobility.
   c. damage to the tissue from radiation effects.
   d. damage to tissues during surgery.

3. The most common cancer of the female reproductive system is:
   a. breast.
   b. ovarian.
   c. cervical.
   d. uterine.

4. The primary microorganism associated with the occurrence of toxic shock syndrome is:
   a. Escherichia coli.
   b. Streptococcus aureus.
   c. Staphylococcus aureus.
   d. Pseudomonas.

5. Which of the following self-examinations should a young man be taught to do?
   a. rectal
   b. scrotal
   c. prostate
   d. testicular

6. Which of the following complications may occur after a TURP?
   a. water intoxication
   b. difficulty voiding
   c. constipation
   d. hypertension

7. The purpose of post-TURP continuous bladder irrigation is to:
   a. decrease urinary output.
   b. reduce clot formation.
   c. decrease bleeding.
   d. increase urinary output.
Web Flash!

- Search the Web for the disorders discussed in this chapter. Are there any new treatments discussed for any of the disorders?
- Visit the Web sites for the resources listed at the end of this chapter. What type of information do these organizations have available for the client and family? For health care providers?
- Check out the new guidelines for the management of women with cervical cytologic abnormalities at www.asccp.org.
CHAPTER 42 Sexually Transmitted Diseases

Web Flash!

- Search the Web for information about sexually transmitted diseases. What type of information is available? For whom is it intended?

- What information do you find about syphilis and gonorrhea specifically? How can a client become part of a clinical trial?

- Check out the new STD Guidelines. They may be viewed at www.cdc.gov/std.
Unit 14 Nursing Care of the Client: Body Defenses
CHAPTER 43 Integumentary System

Review Questions

1. Which of the following is a malignant tumor?
   a. angioma
   b. lipoma
   c. melanoma
   d. sebaceous cyst

Web Flash!

- Search the Web for information on new medications or treatments for the disorders in this chapter. Share the information with classmates.
- What type of information do the resources for this chapter have on the Web? How can the information benefit a student nurse, client, family, or professional caregiver?
CHAPTER 44 Immune System

Review Questions

1. Which of the following is a potentially life-threatening transfusion reaction?
   a. acute hemolytic reaction
   b. allergic urticarial reaction
   c. delayed hemolytic reaction
   d. febrile nonhemolytic reaction

2. Sensitivity to sunlight, a butterfly rash, and renal failure are symptoms of which of the following conditions?
   a. anaphylaxis
   b. myasthenia gravis
   c. rheumatoid arthritis
   d. systemic lupus erythematosus

3. Rheumatoid arthritis is:
   a. an autoimmune disease characterized by abnormal IgG antibodies.
   b. associated with abnormal B-cell lymphocytes.
   c. curable if the client takes large doses of Plaquinil Sulfate.
   d. the results of a hypersensitivity reaction.

4. Increased muscle weakness, difficulty chewing or swallowing, and shortness of breath in clients with myasthenia gravis are signs of:
   a. cholinergic crisis.
   b. myasthenia crisis.
   c. both cholinergic crisis and myasthenic crisis.
   d. reaction to plasmapheresis.

5. The drug of choice for treating Pneumocystis carinii pneumonia (PCP) is:
   a. co-trimoxazole (Septra).
   b. ganciclovir (Cytovene).
   c. megestrol acetate (Megace).
   d. fluconazole (Diflucan).

Web Flash!

❖ Search the Web for the disorders discussed in this chapter. Can information be found for all of them? What type of research is being performed for these disorders? What type of drugs are available? Diagnostic tests? Other treatments?
❖ Search the Web for the resources listed for this chapter. What information is provided?
Unit 15 Nursing Care of the Client: Physical and Mental Integrity
CHAPTER 45 Mental Illness

Review Questions

1. Clients receiving MAOIs must avoid foods containing:
   a. thiamine.
   b. tyramine.
   c. tryptophan.
   d. Thorazine.

2. Schizophrenia is usually treated with:
   a. antidepressants.
   b. antipsychotics.
   c. mood stabilizers.
   d. CNS stimulants.

3. The drug of choice for treating bipolar disorder is:
   a. Librium.
   b. Valium.
   c. Thorazine.
   d. Lithium.

4. A client with bipolar disorder may manifest symptoms of:
   a. mood fluctuations alternating between mania and depression.
   b. an addiction to drugs and alcohol.
   c. overwhelming feelings of fear and dread.
   d. an overexaggeration of physical symptoms.

5. The child with ADHD will probably be prescribed a medication from the classifications:
   a. antipsychotics.
   b. antianxiety medications.
   c. mood stabilizers.
   d. CNS stimulants.

Web Flash!

△ What resources can you find on the Web to help clients or families cope with schizophrenia?

△ Search the Web using electroconvulsive therapy as a keyword. What information do you find?

△ What research related to new drug treatments and psychiatric disorders can you find by searching the Web?

△ Go to www.dvsheltertour.org to take a quiz on domestic violence.
CHAPTER 46 Substance Abuse

Review Questions

1. Substance use and abuse are:
   a. influenced by advertising.
   b. caused by a lack of education.
   c. rejected by all religious groups.
   d. caused by a chromosomal abnormality.

2. Drug screening tests:
   a. are very accurate.
   b. indicate the level of abuse.
   c. indicate exposure to a substance.
   d. can test for all substances of abuse.

3. Urinary acidifiers are used in the treatment of:
   a. opioids and LSD.
   b. amphetamines and PCP.
   c. alcohol and CNS stimulants.
   d. inhalants and benzodiazepines.

Web Flash!

❖ Search the Web for information about the various illicit substances. What type of information do you find? Will it be helpful in caring for a client with a substance abuse problem?

❖ Visit the resources for this chapter on the Web. What type of information or services do they provide?
Unit 16 Applications
CHAPTER 47 Responding to Emergencies

Review Questions

1. A client is brought to the ED after having run a marathon. His blood pressure is 128/78, pulse is 120, respirations are 26, and rectal temperature is 105°F. This is an example of:
   a. septic shock.
   b. runner’s cramps.
   c. heatstroke.
   d. abdominal pain.

2. A method of assessing a client’s neurological status is called:
   a. vital signs.
   b. pupillary response.
   c. Glasgow Coma Scale.
   d. cardiac monitor.

Web Flash!

- Compare and contrast available information on legal and ethical issues relating to emergency care found on the Web sites of various state boards of nursing.
- Locate the Emergency Nurses Association on the Web. Share one new concept found on this Web site that was not presented in this chapter.
CHAPTER 48 The Older Adult

Web Flash!

- Search federal sites for some of the legislation and policies that are discussed in this chapter and affect elder care (e.g., OBRA and BBA).
- What clinical guidelines are available on the Web from the government or other sources for the care of elderly clients (e.g., for urinary incontinence or pain treatment)?
CHAPTER 49 Integration

Web Flash!

- Peruse the following Web sites for information and treatment related to the various exercises in this chapter.
  - American Heart Association: www.americanheart.org
  - National Heart, Lung, and Blood Institute: www.nhlbi.nih.gov
  - American Diabetes Association: www.diabetes.org
  - American Dietetic Association: www.eatright.org
  - American Association of Diabetes Educators: www.aadenet.org
  - American Association of Kidney Patients: www.aakp.org
  - National Kidney Foundation: www.kidney.org
  - National Kidney and Urologic Diseases Information Clearinghouse (NKUDIC):
  - National Institute of Neurological Disorders and Stroke: www.ninds.nih.gov
  - National Parkinson’s Foundation, Inc.: www.parkinson.org
  - Parkinson’s Disease Foundation: www.pdf.org
SECTION III MATERNAL & PEDIATRIC NURSING

Unit 17 Nursing Care of the Client: Childbearing
CHAPTER 50 Prenatal Care

Review Questions

1. A prenatal client asks how the sex of her baby is determined. The nurse correctly explains that the sex is determined by a:
   a. gene in the ovum.
   b. gene in the sperm.
   c. chromosome in the ovum.
   d. chromosome in the sperm.

2. The nurse is aware that which of the following statements made by a pregnant couple indicates a correct understanding of sexual activity during pregnancy?
   a. There are no restrictions on sexual activity during an uncomplicated pregnancy.
   b. Sexual activity should be avoided from the beginning of the second trimester.
   c. Sexual activity on a limited basis is permitted until the last 6 weeks of pregnancy.
   d. All sexual activity should be omitted during the time that the regular menstrual period would have occurred.

3. Which of the following hormones plays the most important role in preparing the uterus for pregnancy?
   a. prosecretin
   b. progesterone
   c. human growth hormone
   d. follicle-stimulating hormone

4. The union of a sperm and an ovum is termed:
   a. gestation.
   b. reception.
   c. fertilization.
   d. ligamentation.

Web Flash!

- Search the Web for information about pregnancy, prenatal care, prenatal education, Lamaze and psychoprophylaxis. What information is available?
- Is the information on the Web for health care professionals or the general public?
CHAPTER 51 Complications of Pregnancy

Review Questions

1. The nurse appropriately documented that client teaching for a client with PIH included:
   a. the date of her next visit.
   b. the importance of pushing fluids throughout the day.
   c. review of the basic food groups and recommended daily allowances.
   d. the importance of resting on her side in a quiet, stress-free environment.

2. The diabetic woman who becomes pregnant experiences complications in terms of her own control and in terms of fetal welfare. What accounts for both areas of difficulty?
   a. uterus
   b. pancreas
   c. placenta
   d. vascular system

3. After delivery by the diabetic mother, the baby is usually placed in the neonatal intensive care unit for close observation because the nursing assessment is most likely to reveal which of the following complications?
   a. anemia
   b. Rh problems
   c. hypoglycemia
   d. hyperglycemia

4. What is the primary purpose of an oxytocin stress test for the diabetic mother?
   a. detect genetic defects in the fetus
   b. estimate the size of the fetal skull
   c. find the area of placental attachment in the uterus
   d. determine how well the fetus will tolerate the stress of labor

5. Pregnant women should avoid eating raw or improperly cooked meat to prevent:
   a. rubella.
   b. candidiasis.
   c. toxoplasmosis.
   d. cytomegalovirus.

Web Flash!

❖ Search the Web for information about the various conditions covered in this chapter. Are all of the Web sites accessible to you? Is the information for the general public or professionals?
CHAPTER 52 The Birth Process

Review Questions

1. Fetal lie is:
   a. how deep the fetus’s head had dropped into the pelvis.
   b. how long it takes for the fetus to move down the birth canal.
   c. the fetus’s head being on the right or left side of the mother.
   d. the relation of the long axis of the fetus to that of the mother.

2. A client has an intravenous infusion running, to which oxytocin (Pitocin) has been added. Which of the following conditions would warrant immediate discontinuation of the intravenous infusion of Pitocin?
   a. increase in bloody show
   b. rupture of the membranes
   c. a contraction of 90 seconds’ duration
   d. a fetal heart rate of 120 during a contraction

3. When monitoring the FHR during IV Pitocin induction, which of the following should be reported to the RN or CNM/physician?
   a. FHR consistently between 120 and 160
   b. slowing of FHR to 118 during a contraction
   c. FHR of 172 during three consecutive contractions
   d. increase in FHR from 132 to 140 during most contractions

4. The client in labor is encouraged to position herself on her side or with the head of the bed elevated to:
   a. prevent maternal hypotension.
   b. prevent maternal hypertension.
   c. reduce chance of nausea and backache.
   d. reduce the discomfort of the contractions.

5. Which of the following nursing observations would indicate the client was in the transitional phase of labor?
   a. drowsiness, slow pulse, decrease in contractions
   b. irritability, nausea/vomiting, perspiration on upper lip
   c. more frequent hypertonic contractions, severe pain, hypertension
   d. contractions become intermittent with a longer relaxation phase, quietness

Web Flash!

- Search the Web for organizations providing information about the labor and birth process. What type of information is available?
- Look on the Web for alternative/complementary approaches to labor and delivery. What techniques can you find?
CHAPTER 53 Postpartum Care

Review Questions

1. When checking the height of the uterine fundus on the second postpartum day, the nurse would expect to find the fundus:
   a. at the umbilicus.
   b. at the ischial spines.
   c. two finger widths above the umbilicus.
   d. two finger widths below the umbilicus.

2. Six hours postpartum, a client is placed on the bedpan to void. After trying for a period of time, she states that she is unable to void. Her bladder is distended. The best measure for the nurse to use is:
   a. pour warm water over the client’s vulva.
   b. encourage the client to drink more fluids.
   c. apply gentle manual pressure to the client’s bladder.
   d. explain to the client that she will have to be catheterized if she does not void.

3. When massaging the fundus, the most appropriate nursing action is to:
   a. put firm pressure on the fundus in a downward direction.
   b. rub the low abdomen vigorously while simultaneously exerting downward pressure.
   c. rub the low abdomen vigorously and continuously for at least 10 minutes each time.
   d. place one hand over the fundus and the other just above the pubic bone and gently massage the fundus in a circular motion.

4. The postpartum client usually experiences diuresis:
   a. immediately after the birth.
   b. the first few days after the birth.
   c. after the client has had sufficient oral intake.
   d. when the infant has been breastfeeding for 10 minutes.

5. The nurse knows that the action that will help suppress lactation is:
   a. breast pumping.
   b. restricting oral fluids.
   c. wearing a firm, supportive bra and applying ice packs.
   d. applying warm, moist compresses to the breasts.

Web Flash!

❖ Search the Web for information about postpartum depression and postpartum psychosis. Would this information be appropriate for or helpful to clients? What organizations are available to help clients?

❖ What information is available on the Web about the various complications that can affect a client during the postpartum period?
CHAPTER 54 Newborn Care

Review Questions

1. The mother touches her infant’s cheek gently with her finger and exclaims, “Look! He turns his head toward my finger.” The nurse explains that this response to a touch on the cheek is called the:
   a. grasp reflex.
   b. sucking reflex.
   c. rooting reflex.
   d. startle reflex.

2. A new mother feels the soft spot on her baby’s head and asks when it will close. The nurse responds that the anterior fontanelle normally is closed by the time the infant reaches the age of:
   a. 3 months.
   b. 6 months.
   c. 12 months.
   d. 18 months.

3. The nurse understands that vitamin K is administered shortly after birth primarily to help:
   a. peristaltic movements.
   b. stimulate respirations.
   c. improve blood coagulation.
   d. increase calcium absorption.

4. Following a circumcision, the newborn should be observed for complications. The most likely complication is:
   a. bleeding.
   b. retention of urine.
   c. blood in the urine.
   d. hematoma of the scrotum.

5. Blood between the periosteum and the skull bone of the newborn is called:
   a. melanoma.
   b. hemangioma.
   c. cephalohematoma.
   d. caput succedaneum.

Web Flash!

❖ Check the Web for the most recent immunization schedule for children. Are there any changes from the previous year?

❖ What resources are available on the Web for parents with new infants?
Unit 18 Nursing Care of the Client: Childrearing
CHAPTER 55 Basics of Pediatric Care

Web Flash!

- Search the Web for support groups for children with specific health conditions such as asthma or cancer. What do you find? Are resources available for families, parents, and siblings?
- Can you locate a hospice network on the Web devoted to children? Is there a local chapter in your town?
CHAPTER 56 Infants with Special Needs: Birth to 12 Months

Review Questions

1. An early clinical manifestation of CF is:
   a. meconium ileus.
   b. foul-smelling, frothy, greasy stools.
   c. a history of poor intestinal absorption.
   d. recurrent pneumonia and lung infections.

2. When caring for an infant with eczema, the priority nursing intervention is:
   a. relieving pruritus.
   b. keeping lesions dry.
   c. keeping the infant content.
   d. maintaining adequate nutrition.

3. After an infant’s myelomeningocele has been repaired, the major long-term threat to life will be:
   a. renal disease.
   b. heart disease.
   c. endocrine problems.
   d. reparative problems.

Web Flash!

- Find the Web site for updated immunization practices.
- Search under some of the disorders covered in this chapter, such as cystic fibrosis and Down syndrome. Are there Web sites offering information specific to infants? Families? Nurses?
- What resources (books, video, chat rooms) can you locate on the Web that are developed to help families caring for infants with specific disorders?
CHAPTER 57 Common Problems: 1–18 Years

Review Questions

1. The safest option for treating pediculosis is to:
   a. detect early and spray with insecticides.
   b. wash with regular shampoo.
   c. wash with treated shampoo.
   d. detect early and remove manually.

2. The best way to prevent allergic rhinitis and asthma is to:
   a. force fluids.
   b. take antibiotics.
   c. control allergens.
   d. take antihistamines.

3. Intestinal parasitic infections are more prevalent among children than among adults because:
   a. children are not toilet trained.
   b. adults maintain better hygiene.
   c. adults eat more nutritious meals.
   d. children put their hands in their mouths more often.

Web Flash!

- Search the Web for current legal and ethical issues related to pediatric health care.
- What Web resources can you find directed toward parents on the subject of communicable diseases? Are prevention guidelines included? What hotline numbers can you locate?
CHAPTER 1 Student Nurse Skills for Success
1. b
2. a
3. d
4. c
5. a

CHAPTER 2 Holistic Care
1. c
2. c
3. c

CHAPTER 3 Nursing History, Education, and Organizations
1. b
2. d
3. c

CHAPTER 4 Legal and Ethical Responsibilities
1. b
2. a
3. c
4. b
5. c
6. b
7. d
8. b
9. c
10. a

CHAPTER 5 The Health Care Delivery System
1. c

CHAPTER 6 Arenas of Care
1. c
2. b
3. c
CHAPTER 7 Communication
1. c
2. b
3. b
4. c
5. b
6. d
7. c
8. c
9. c
10. a

CHAPTER 8 Nursing Process/Documentation
1. b
2. c
3. d
4. a
5. c
6. b
7. a
8. d
9. c

CHAPTER 9 Client Teaching
1. a

CHAPTER 10 Life Cycle
1. b
2. b
3. a
4. c
5. d

CHAPTER 11 Cultural Considerations
1. a
2. a
3. a
4. d
5. b

CHAPTER 12 Stress, Adaptation, and Anxiety
1. c
2. c
3. a
4. a
CHAPTER 13 Loss, Grief, and Death
1. b
2. c
3. c

CHAPTER 14 Wellness Concepts
1. d
2. b
3. d

CHAPTER 15 Complementary/Alternative Therapies
1. d
2. b
3. d
4. c

CHAPTER 16 Basic Nutrition
1. b
2. b
3. a
4. c
5. a

CHAPTER 17 Rest and Sleep
1. c
2. c
3. a
4. b

CHAPTER 18 Safety/Hygiene
1. a
2. b

CHAPTER 19 Infection Control/Asepsis
1. a
2. c
3. a
4. d
5. b

CHAPTER 20 Standard Precautions and Isolation
1. d
CHAPTER 21 Fluid, Electrolyte, and Acid-Base Balance
1. a
2. c

CHAPTER 22 Medication Administration and IV Therapy
1. b
2. b
3. d
4. b
5. a

CHAPTER 23 Assessment
1. c
2. a

CHAPTER 24 Pain Management
1. a

CHAPTER 25 Diagnostic Tests
1. a

CHAPTER 27 Intermediate Procedures
1. c
2. b

CHAPTER 29 Anesthesia
1. b
2. a

CHAPTER 30 Surgery
1. a
2. d
3. b
4. b

CHAPTER 31 Oncology
1. b

CHAPTER 32 Respiratory System
1. b
CHAPTER 33 Cardiovascular System
1. d
2. a
3. d
4. a
5. a
6. c
7. b
8. d
9. d

CHAPTER 34 Hematologic and Lymphatic Systems
1. c
2. b
3. a
4. a

CHAPTER 35 Gastrointestinal System
1. d

CHAPTER 36 Urinary System
1. b
2. a
3. c

CHAPTER 37 Musculoskeletal System
1. b
2. b

CHAPTER 38 Neurological System
1. c

CHAPTER 39 Sensory System
1. d
2. d
3. d

CHAPTER 40 Endocrine System
1. b
2. a
3. d
4. c
5. a
6. d
CHAPTER 41 Reproductive System
   1. c
   2. c
   3. a
   4. c
   5. d
   6. a
   7. b

CHAPTER 43 Integumentary System
   1. c

CHAPTER 44 Immune System
   1. a
   2. d
   3. a
   4. c
   5. a

CHAPTER 45 Mental Illness
   1. b
   2. b
   3. d
   4. a
   5. d

CHAPTER 46 Substance Abuse
   1. a
   2. c
   3. b

CHAPTER 47 Responding to Emergencies
   1. c
   2. c

CHAPTER 50 Prenatal Care
   1. d
   2. a
   3. b
   4. c
CHAPTER 51 Complications of Pregnancy
1. d
2. c
3. c
4. d
5. c

CHAPTER 52 The Birth Process
1. d
2. c
3. c
4. a
5. b

CHAPTER 53 Postpartum Care
1. d
2. a
3. d
4. b
5. c

CHAPTER 54 Newborn Care
1. c
2. d
3. c
4. a
5. c

CHAPTER 56 Infants with Special Needs: Birth to 12 Months
1. a
2. a
3. a

CHAPTER 57 Common Problems: 1–18 Years
1. d
2. c
3. d
LEADERSHIP

LEARNING OBJECTIVES

Upon completion of this chapter, you should be able to:

• Define key terms.
• Describe the five leadership styles.
• Outline the skills needed for effective management.
• Summarize the five rights of delegation.
• Explain factors that must be assessed in establishing priorities of care.
• Compare and contrast the roles of the registered nurse, licensed practical/vocational nurse, and unlicensed assistive personnel.

KEY TERMS

accountability  delegation  management
assertiveness  democratic  participative
assignment  laissez-faire  situational
autocratic  leadership  time management

INTRODUCTION

By now you may have mastered the nursing process and demonstrated competency in many of the technical skills you will be required to perform on a daily basis. There are still other skills you will need in order to become competent in practice. These are the leadership skills that will allow you to manage yourself and others, delegate and prioritize tasks, and resolve conflicts and problems that may arise in the workplace. As a new graduate, you will not be expected to have yet mastered these skills; rather, they will develop as you progress in your career. This chapter introduces these leadership skills and provides insight into the working environment.
LEADERSHIP

Leadership is the ability to influence or motivate others to set and achieve goals. Many qualities are associated with leaders, such as creative thinking, self-direction, flexibility, excellent communication skills, and assertiveness. Leaders are considered critical thinkers, responsible decision makers, and role models. Leaders have a vision that directs a group and elicits the group's best efforts (Figure 1-1). Nursing leaders critically examine the way nursing care is delivered and use their power to effect change. Florence Nightingale, the prime example of a nursing leader, had a vision of what nursing should be, and her vision still guides nursing to this day.

Leadership Theories

Over many years, study and research have led to theories of leadership. These theories form the basis of thought about how a leader accomplishes work through the efforts of other people. The most commonly held theories include trait, contingency, path-goal, human relations, and transformational.

Trait Theory

The trait theory of leadership is the oldest. Leaders in government, the military, and industry were studied, and their traits were identified. Trait theory proposes that leaders are born with such traits as intelligence, initiative, drive, aggressiveness, and ambition and that these traits are related to being a successful leader.

Contingency Theory

The contingency theory of leadership looks at not only the leader but also the followers and the organizational perspectives (goals and objectives). The leader's effectiveness depends on the leader's style and the degree to which the leader con-
trols and influences the outcomes. When the leader is matched with the organization's perspectives and the followers, the leader is very effective. When there is a mismatch among these three, leadership often is ineffective.

**Path-Goal Theory**

The path-goal theory describes an effective leader as one who assists the follower along the path toward a goal. This leader leads by coaching, providing guidance, and giving incentives that may not be customarily available. The leader reduces obstacles in the path of the follower toward the goal.

**Human Relations Theory**

Human relations theory focuses both on the leader and the followers with whom the leader interacts. The leader who understands the human element—needs, motives, and aspirations of others—and recognizes the other individuals' input is a successful leader.

**Transformational Theory**

Transformational theory applies to the leader who is able to bring out the best in others. Interactions between this leader and others are mutually uplifting and encouraging. Each party (leader and followers) inspires the others to greater achievement. This leader has charisma, provides idealized influence, intellectual stimulation, and inspiration and considers followers individually.

**Leadership Styles**

Several leadership styles are recognized. The style varies with the personality of the leader. Most often, a leader exhibits some characteristics of each style of leadership, though one style will typically be more dominant.

It is important to understand the various styles of leadership so you can identify and understand the approach of leaders and determine how to work most effectively with them. Also, it is important for you to have an understanding of your own predominant style of leadership. Knowing your style allows you to reinforce or alter it to enhance its effectiveness. Self-awareness about your predominant leadership style is the first step to being an effective leader.

Not all leadership styles are effective in all situations. Five styles of leadership are autocratic, democratic, laissez-faire, participative, and situational.

**Autocratic**

Autocratic leadership is task oriented and is based on the premise that the leader knows best. This leader is often viewed as controlling and inhibiting of the creativity and autonomy of workers. The leader solves problems and makes decisions without consulting the parties involved. All information is directed downward from leader to workers. The leader exercises responsibility for ensuring the work is done by issuing commands or orders to direct the work force and motivates others through praise, blame, and reward.
This leadership form is especially effective in crisis situations, in situations requiring a quick response, or when leading a group with limited knowledge. When workers have a certain degree of knowledge and teamwork is important, this style of leadership is not effective.

When working with an autocratic leader:
- Both praise and criticism are given.
- Instructions are clear and precise.
- Emergencies are taken care of quickly and efficiently.
- Workers seldom move beyond Maslow’s level of safety in the work setting.
- Never get into a power struggle with this person.
- Participation in decision making does not occur.
- Qualities of caring are seldom exhibited. (Anderson, 2001)

**Democratic**

The underlying belief of the **democratic** style of leadership is that every member of the team should have input. Although democratic leadership is time consuming, the benefit is seen in increased cooperation and teamwork. This leader focuses on the individual characteristics and abilities of the workers and keeps in mind the commitment to whatever is best for the group. Individual workers are encouraged to participate in decision making and to express their viewpoints. The leader acts as a resource person and facilitator. This approach may not be effective when there is conflict within the group or when time is short. Problems occur when there is an emergency and there is no time for the group to process the information and come to a decision.

When working with the democratic leader:
- Each person is viewed as a unique individual.
- Individual needs are met when they do not interfere with the needs of the group.
- A time commitment is needed for the group process.
- Information and suggestions are freely shared with the group.
- Emergencies are stressful situations.
- Workers often move to the social and self-esteem levels on Maslow’s hierarchy.
- Qualities of caring are exhibited. (Anderson, 2001)

**Laissez-Faire**

The **laissez-faire** leadership style is a passive, nondirect approach that gives leadership responsibilities to the group rather than to one person. Workers are without direction, supervision, or coordination. Praise, criticism, feedback, or information is not provided. The dissatisfaction level, which often is high, is caused by the lack of guidance, caring, and instructions. The group is often out of synchrony with the rest of the organization because information is not passed on to them. This style allows optimal autonomy and creativity for group members.

Task achievement is difficult under this leadership form, so it is not a style of leadership used frequently in health care. The leader is almost unidentifiable, relying on the group’s strengths and initiative to accomplish tasks.
When working with the laissez-faire leader:

- Guidance, information, or individual attention is not provided.
- Autonomy and creativity are encouraged.
- Chaos is prevalent owing to lack of information.
- Synchrony with the organization is not present because information is not shared.
- Resentment toward the leader is evident.
- Workers seldom move beyond Maslow’s level of safety in the work setting.
- Qualities of caring are not exhibited. (Anderson, 2001)

**Participative Leadership**

Participative leadership is a mix of autocratic and democratic styles. The participative leader makes proposals to the group, invites group criticism and comments, and then uses the feedback to make the final decision. Emergencies are handled immediately. Employees may freely share their ideas and contribute to the goal-setting process. This leader is confident in his or her own abilities and allows control and power to spread throughout the group.

When working with a participative leader:

- The work group has an active role in decision making.
- Information is shared with the group.
- There is a free exchange of ideas.
- Workers feel empowered.
- Workers are encouraged to function at the social and self-esteem levels of Maslow’s hierarchy.
- Qualities of caring are generally exhibited. (Anderson, 2001)

**Situational Leadership**

Situational leadership depends on the situation, that is, the circumstances and people involved. Any or all of the previously described leadership styles may be needed in a particular situation. The effective leader identifies which style to use in the specific circumstance and which style to use with the individual persons involved.

**Leadership Skills**

Many theories of leadership cite several skills needed for effective leadership. These skills include communication, assertiveness, critical thinking, self-evaluation, and time management.

**Communication**

Strong communication skills foster trusting relationships with peers, subordinates, superiors, and clients, thus facilitating the leader’s ability to motivate others. In addition, leaders must be able to convey ideas and information clearly, concisely, and persuasively to effectively implement changes in the delivery of nursing care.
Assertiveness

Assertiveness is a way of expressing oneself without insulting others (Hill & Howlett, 2001). Leaders communicate respect for the other person but not necessarily for the other person’s behavior. The assertive leader is not aggressive toward other persons. By being assertive, a person claims responsibility for his or her own feelings, thoughts, and actions. Using *I* in statements shows that the person accepts responsibility for feeling, thinking, and doing.

Hill and Howlett (2001) suggest three rules for being assertive:

- Own your feelings. Do not blame others for the way you feel.
- Be direct in making your feelings known. Begin your statements with *I*.
- Be sure your nonverbal communication matches your verbal message.

Critical Thinking

Critical thinking skills incorporate the ability to analyze all aspects of a problem, explore options, find solutions, and implement changes. Critical thinking is a careful, deliberate process. Leaders seek information, consult experts, and use available resources to address problematic situations and to enhance care.

Self-Evaluation

The self-evaluation skills necessary for effective leadership involve an honest assessment of personal strengths and weaknesses. After such an assessment, efforts are made to enhance personal growth and development. An unwillingness to critically examine oneself hampers the leader’s ability to critically examine situations, solve problems, and effect change in the workplace.

Time Management

Time management is a technique to help individuals get things done efficiently and effectively. It puts the individual in control. Leaders set goals, both long term and short term, to keep them focused. They set priorities for tasks to be completed and then see that the tasks are done the best way possible.

MANAGEMENT

Management and leadership are closely related concepts. Management is the accomplishment of tasks through the effective use of people and resources. Management involves the practical “nuts and bolts” of getting the job done with the available resources.

Nurses are in positions that require them to manage people and resources used to deliver quality client care. Managing the needs of a group of clients or managing the activities of a group of nursing assistants requires the same skills. Practice and education can help develop the management skills and, potentially, the leadership skills of every nurse.
As managers, nurses are expected to plan, organize, supervise, and monitor the care that is provided to a group of clients. The actual care may be accomplished by the nurse or by others, typically certified nurse assistants (CNAs) or some other type of unlicensed assistive personnel (UAP). Each aspect of management encompasses several components.

- **Planning:** identifying tasks to be accomplished, determining available resources, assessing skill level of workers, identifying problems, and setting priorities
- **Organizing:** making client assignments, ensuring availability of resources, sharing pertinent information, and determining time tables (e.g., of breaks, lunch, completion of certain tasks)
- **Supervising:** directing care provided by others, investigating problems, communicating information, reallocating people and resources as needed, and educating staff as needed
- **Monitoring:** determining whether tasks have been accomplished, assessing need for further action, and ensuring that appropriate documentation is completed

**TASK ASSIGNMENT**

An array of activities is involved in caring for clients, and all personnel have specific tasks they can facilitate. The ability of a specific staff member to perform a specific task is based on level of education and experience. Overlap exists, however, and determining who can legally do what is often confusing.

**Tasks of the LP/VN**

Registered nurses (RNs) and licensed practical/vocational nurses (LP/VNs) are individually licensed. Although some overlap exists in the scopes of practice of the LP/VN and the RN, there are also some significant differences. Licensed practical/vocational nurses are dependent practitioners, meaning that an RN, doctor, dentist, or some other health care provider must supervise them. Most often the supervisor is an RN.

In addition to a scope of practice, LP/VNs and RNs have given scopes of competence. Within the scope of practice, there are tasks and responsibilities the individual may or may not be competent to implement. For example, it is within the scope of practice for the LP/VN to perform phlebotomy, but this task does not fall within the scope of competence of every LP/VN. The scope of competence expands as new skills are acquired, but all skills must fall within the scope of practice.

Licensed practical/vocational nurses are qualified to care for clients with common illnesses and to provide basic and preventive nursing procedures. Licensed practical/vocational nurses can participate in data collection, planning, implementation, and evaluation of nursing care in all settings. In most states, some specific activities are considered beyond the scope of practice of the LP/VN. These activities, with some variances by state, include the following:
• Client assessments (can collect data but not perform physical assessments)
• Independent development of the nursing care plan
• Triage, case management, or mental health counseling
• Intravenous chemotherapy
• Administration of blood and blood products
• Administration of initial doses of any intravenous medication
• Any procedures involving central lines

PROFESSIONAL TIP

LP/VN Services
Any time nursing services are provided by an LP/VN, the supervising RN must be on the premises or immediately available by telephone. Being available by an answering machine or service does not fall within the definition of “immediately available.” The amount of supervision is a function of the setting. In home health care or long-term care settings, it is common practice for the supervising RN to be available by telephone rather than on the premises.

SUMMARY

• Common theories of leadership are trait, contingency, path-goal, human relations, and transformational.
• Leadership styles are typically classified as autocratic, democratic, laissez-faire, situational, or participative.
• Skills necessary for effective leadership include communication, assertiveness, critical thinking, self-evaluation, and time management.
• A good manager knows how and when to assign tasks, delegate duties, prioritize care, and resolve conflict.
• The decision to delegate a task should be based on the potential for harm, the complexity of the task, the problem solving required, the unpredictability of the outcome, and the required coordination of care.
• The five rights of delegation are the right task, the right circumstance, the right person, the right direction/communication, and the right supervision.
• Factors to assess when establishing priorities of care include safety, the timing of tests and other tasks, the interdependence of events, client requests, the availability of help, the client’s status, and the availability of resources.
Review Questions

1. Pauline, an LP/VN, is the evening-shift charge nurse on 3B, a 40-bed unit in a long-term care facility. Christine is a CNA from another floor sent to work on 3B for the evening. She asks Pauline when she and the other three CNAs should take their lunch break. Pauline tells her to “work it out among yourselves.” Pauline is using a style of leadership called:
   a. autocratic.
   b. situational.
   c. laissez-faire.
   d. participative.

2. The charge nurse discussed with all employees a proposed change for making lunchtime assignments and then, considering everyone’s input, made the decision to keep things as they had been. This charge nurse was using a style of leadership called:
   a. participative.
   b. laissez-faire.
   c. democratic.
   d. autocratic.

3. The five rights of delegation include the right:
   a. person, task, time, and direction.
   b. time, task, person, and supervision.
   c. supervision, task, person, and direction.
   d. task, time, circumstance, and supervision.

Critical Thinking Questions

1. Nancy works in a long-term care facility as the evening-shift charge nurse on 4 West. One of her duties is to assign the CNAs to the clients. She also monitors their work and intervenes when necessary to ensure that clients receive safe and appropriate care. Lately, Nancy observes that Martha, a CNA, is not completing all her assigned responsibilities. How should Nancy address this problem?
WEB FLASH!

- Search the Web under broad categories such as *leadership*, *management*, *delegation*, and *employment*. What kind of sites do you locate?
- How is your search enhanced when you add qualifiers to narrow the search, such as *nursing*, *RN*, *LPN*, *LVN*, or *UAP*?
- Go to www.ncsbn.org; find and go to your state board’s Web address. What do you find under delegation or nursing practice act?

References/Suggested Readings


LEARNING OBJECTIVES

Upon completion of this chapter, you should be able to:

- Define key terms.
- Explain computerized adaptive testing.
- Outline the steps to follow to take the NCLEX®.
- Compare and contrast various employment opportunities.

KEY TERMS

- computerized adaptive testing (CAT)
- National Council Licensure Examination (NCLEX)

INTRODUCTION

You have completed the nursing educational program (Figure 2-1). Through formal education and clinical supervision, you have studied and learned the skills necessary to become competent in providing client care. Now you are ready to graduate and begin your career as a nurse.

Your first task as a graduate nurse is to take and pass the National Council Licensure Examination (NCLEX®), an examination developed by the National Council of State Boards of Nursing that boards of nursing use in their licensure.

PROFESSIONAL TIP

Temporary Permits

Although it may be possible to work during the period between NCLEX® testing and licensure, most employers will postpone hiring until after you have received your permanent nursing license. Therefore, do not be discouraged if you are unable to obtain employment as a graduate nurse during this period.
decision making. The NCLEX-PN® is given to LP/VN candidates, and the NCLEX-RN® is given to RN candidates. There are many tasks to complete and skills to master to land your first job.

EXAMINATION AND LICENSURE

Examination and licensure are two separate processes that are usually applied for at the same time. The examination must be passed before licensure is granted. The examination uses computerized adaptive testing.

Computerized Adaptive Testing

Computerized adaptive testing (CAT) is a methodology for determining, by computer, a candidate’s competence in the subject for which the candidate is being tested. The National Council of State Boards of Nursing (NCSBN) has identified the standard of competence for passing. All questions on the examination are classified by test plan area and level of difficulty. Questions are all multiple choice.

The test begins with a relatively easy question. If this is answered correctly, the next question the computer selects is more difficult. As long as the questions are answered correctly, the next question the computer selects is more difficult. When a question is answered incorrectly, the next question the computer selects is less difficult. Questions continue getting easier until a question is answered correctly, then the questions again become a little more difficult. This zigzag pattern continues until the candidate answers about 50% of the questions correctly (Figure 2-2).
This represents the candidate’s competence level. The computer selection of questions gives each candidate the best opportunity to demonstrate competence. A minimum number of questions must be answered.

Because everyone answers about 50% of the questions correctly, the difficulty of the questions answered correctly makes the difference in determining whether that candidate passes or fails. The pass/fail decision is based on the competence level corresponding to the difficulty of the questions, not on a percentage of questions answered correctly (NCLEX®, 2001).

Each candidate has a unique test (different questions and a different number of questions) based upon the answers given to the questions. The CAT is fair to each candidate, since all examinations follow the NCLEX-PN® or NCLEX-RN® test plan.

Knowledge, skills, and abilities essential for the safe, effective practice of nursing at the entry level for both LP/VN and RN candidates are tested on the NCLEX-PN® and NCLEX-RN®, respectively. Results of the NCLEX® are an important factor used by the various boards of nursing to make decisions about licensure. The NCLEX® is administered in all 50 states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, and the Virgin Islands. Licensure endorsement from one board of nursing to another is facilitated because all boards of nursing use the same examination.

Figure 2-2 Zigzag Pattern of Answers on NCLEX®
Updated information can be found on NCSBN’s World Wide Web site, www.ncsbn.org.

Results are mailed to the candidate by the state board of nursing 1 month or less after the examination. Candidates may retake the examination; however, the National Council requires a wait of at least 91 days between testings. Your state board of nursing may have other policies related to retaking the exam.

The NCLEX-PN®

The examination that all practical/vocational nurse candidates must pass in order to be licensed is the NCLEX-PN®. It follows a test plan based on the categories of Client Needs, which are:

- **Safe, Effective Care Environment**
  - Coordinated care
  - Safety and infection control
- **Health Promotion and Maintenance**
  - Growth and development through the life span
  - Prevention and early detection of disease
- **Psychosocial Integrity**
  - Coping and adaptation
  - Psychosocial adaptation
- **Physiological Integrity**
  - Basic care and comfort
  - Pharmacological therapies
  - Reduction of risk potential
  - Physiological adaptation

Integrated throughout the categories of Client Needs are concepts and processes fundamental to the practice of nursing. These concepts and processes are nursing process, caring, communication, cultural awareness, documentation, self-care, and teaching/learning.

This test plan looks very similar to the test plan for the NCLEX-RN®. They are both based on Client Needs. However, some of the subcategories are different, and the content included under each subcategory is different. For the entire test plan, go to www.ncsbn.org.

Candidates answer a minimum of 85 questions and a maximum of 205 questions during the maximum 5-hour testing period (National Council of State Boards of Nursing, 2003).

This test plan looks very similar to the test plan for the NCLEX-PN®. Some of the subcategories are different, and the content included under each subcategory is different. For the entire test plan, go to www.ncsbn.org.

Registered nurse candidates answer a minimum of 75 questions and a maximum of 265 questions during the maximum 5-hour testing period (National Council of State Boards of Nursing, 2001).
Studying for the NCLEX®

You have been preparing for this exam throughout your nursing program. Some review will probably be helpful. There are many review books on the market. The faculty may suggest one or two that they think are helpful. Several are listed in the References/Suggested Readings at the end of this chapter.

Most review books explain about the NCLEX® and computerized adaptive testing. The major part of the review book is made up of multiple choice questions covering all areas of the test plan. Correct answers and the rationale for each answer are usually provided. Some review books come with a computer disk or CD-ROM, so practice with a computer is also available. Many schools have computer lab times open for all students.

Be sure to read each question and all four answers carefully before choosing an answer. Try to eliminate one or two of the answers as incorrect. Then, if you have to, guess. By eliminating one or two of the answers, you will have a better chance of choosing the correct answer. Answer each question as it is presented. Do not skip a question and plan to come back to it. This strategy cannot be used on the NCLEX®, so practice now.

Plan the number of questions to answer during each study time so that all will be completed a day or two before you are scheduled to take the exam. Meeting this goal takes a great deal of self-discipline. Keep to your usual routine. Save the partying until after you have taken the NCLEX®.

Some schools have study groups to prepare for the NCLEX® that are facilitated by an instructor. Other schools may offer a short course on preparing for the NCLEX®. Commercial programs are also available, but these can be expensive. Choose the method for review that best fits into your schedule and way of studying.

Your License

After you have successfully passed the NCLEX®, you will be issued your nursing license from your state board of nursing. It is your responsibility to maintain your license according to your state’s standards and to inform your state board of nursing of any changes in name, address, and employment. Once licensed, you are ready to practice.

PROFESSIONAL TIP

Taking the NCLEX®

- You must answer all questions as they are presented. You may not skip questions.
- If unsure of an answer, make your best guess and go on to the next question.
- Spend approximately 1 minute on each question.
EMPLOYMENT OPPORTUNITIES

A wide variety of employment opportunities exist, ranging from employment in the traditional settings of hospital and nursing home to less traditional settings such as home health care, residential care facilities, schools, government agencies, physicians’ offices, or public health. In 1998, 692,000 LP/VNs were employed, with 32% in hospitals, 28% in nursing homes, and 14% in doctors’ offices and clinics (Bureau of Labor Statistics, 2000a).

Employment in all settings for the LP/VN is expected to grow as fast as the average for all occupations through 2008. Physicians’ offices, clinics, ambulatory surgical centers, and emergency medical centers are performing an increasing proportion of sophisticated procedures once performed only in hospitals. As health care generally expands, employment for the LP/VN is projected to grow much faster than average in these settings (Bureau of Labor Statistics, 2000a).

Although most LP/VNs are employed in traditional settings, increasing opportunities are arising in the nontraditional settings because of changes in health care delivery and nursing shortages.

An overview of various employment settings follows. As a graduate, it is your task to determine the setting that constitutes the best fit for you.

Hospitals

Although most LP/VNs work in the hospital setting, it is projected that the number of jobs for LP/VNs in hospitals will decline (Bureau of Labor Statistics, 2000a). Therefore, LP/VNs seeking to enter this setting will meet more competition than in the past. LP/VNs will typically find work outside of the client care unit, such as in hospital-based clinics, outpatient care units, and hospital-based long-term care units. Registered nurses will always be needed in the hospital. The area of growth for employment in the hospital will be in outpatient facilities such as same-day surgery, rehabilitation, and chemotherapy (Bureau of Labor Statistics, 2000b).

Long-Term Care Facilities/Rehabilitation Centers

Employment for LP/VNs in long-term care and rehabilitation settings is projected to grow faster than average (Bureau of Labor Statistics, 2000a). Long-term care will offer the greatest number of new jobs for LP/VNs because of the growing elderly population. Nurses in this setting will also provide care to clients who have been released by the hospital but who are not yet well enough to go home and who need additional rehabilitative services (Figure 2-3). Employment for RNs will also grow faster than average in this area (Bureau of Labor Statistics, 2000b). Most RNs are employed in administrative or supervisory positions.

Community Health Agencies

In the community health setting, care is provided to clients through established health care programs. These programs are generally funded by the local, state, or
federal government or by voluntary agencies. Nurses in this setting generally work in a community clinic or travel to clients’ homes to provide care and education.

**Private Duty**

Private duty nurses are self-employed, meaning the nurse is hired and paid directly by the client. Nurses work under the direction of a physician but must rely on their own knowledge and judgment to provide care. Private duty nurses are responsible for handling all matters of licensing and finances on their own.

**Home Care Agencies**

In the home care setting, care is provided to clients in their own homes. The nurse is generally employed by an agency but will work in the home of an assigned client. A much faster than average growth is expected in this area of nursing owing to both a consumer demand for home care and the lower costs of caring for an individual in the home (Figure 2-4).

**Hospice**

Hospice nursing care consists of providing comfort to dying clients and their families. The role of the nurse is to alleviate pain and other symptoms but not to provide curative care. The clients in the hospice setting are terminally ill and typically have fewer than 6 months to live. Hospice services are most often rendered in the home, but services can also be offered in other settings.

**Occupational Health**

Occupational health nursing serves to provide safe working environments in industrial workplaces. Occupational health nurses work within industries and cor-
corporations and collaborate with corporate administration to provide health education and promotion to employees in the workplace.

**Correctional Facilities**

Correctional nursing is the branch of nursing that provides care within prisons, youth detention centers, and probation divisions. Care provided ranges from ambulatory care to emergent care to comprehensive health care.

**Schools**

School nursing focuses on providing care to the school-age child. The school nurse serves to promote wellness and to identify or prevent problems. Both public and private schools offer opportunities for school nursing.

**Parishes**

Parish nurses provide health care education and support to a congregation. The care is designed to meet the common needs and beliefs of a specified group of people (Palmer, 2001).
Insurance Companies

Nurses working in the insurance setting are often responsible for coding treatments, providing physical examinations for insurance policies, and reviewing medical records.

SUMMARY

- Examination and licensure are two separate processes. The examination must be passed before licensure is granted.
- Each candidate receives a unique test based on whether the previous question is answered correctly or incorrectly.
- The NCLEX® test plan is the basis for all examinations. There are separate test plans for the NCLEX-PN® and the NCLEX-RN®.
- There are many employment opportunities for nurses.

Review Questions

1. On the NCLEX®, every candidate:
   a. answers 205 questions.
   b. spends 5 hours taking the test.
   c. receives test results within 1 hour.
   d. answers about 50% of the questions correctly.

2. The candidate who answers the minimum number of questions:
   a. failed the test.
   b. passed the test.
   c. either failed or passed the test.
   d. pushed an incorrect key on the computer.

3. Employment opportunities for the LP/VN are expected to decline in:
   a. hospitals.
   b. home care agencies.
   c. long-term care facilities.
   d. physicians’ offices and clinics.

4. Employment opportunities for the RN are expected to:
   a. decline in hospitals.
   b. increase in home care agencies.
   c. decline in physicians’ offices and clinics.
   d. remain the same in long-term care facilities.
Critical Thinking Question

1. The day before you are scheduled to take the NCLEX® there is a death in your family. How should you proceed?

WEB FLASH!

- Search the National Council of State Boards of Nursing Web site (www.ncsbn.org). What information do you find? How can this be helpful to you?

References/Suggested Readings


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**Resource**

National Council of State Boards of Nursing (NCSBN). 676 North Saint Clair Street, Suite 350, Chicago, IL 60611-2921; 312-787-6555; www.ncsbn.org
Seeking employment, for many people, is synonymous with scanning the Sunday want ads. This is not necessarily a bad place to identify potential employers; after all, an organization that is advertising is probably hiring. The problem with relying solely on this approach is that it limits you to the jobs that are available rather than the job you want. Many job openings are not advertised in the newspaper. Job vacancies exist well before they are advertised. Remember, using this method, you are in competition with all the other job seekers who are relying on want ads to identify employment options.

Other options exist for identifying potential employers. The telephone directory is a great place to identify health care facilities in your area. You are likely to find far more health care facilities in your local area than you ever imagined. All these facilities represent potential employers. Job counselors disagree on the usefulness of telephoning the employers to determine whether job vacancies exist: Some claim that a telephone call is a quick method of determining vacancies, whereas others believe a face-to-face visit to the facility yields better results.
A job club, perhaps formed with your nursing school classmates, is often an effective method of sharing information about employers, vacancies, job requirements, and the like. In addition, a job club can be a morale booster. Your colleagues in the club may also offer insights into those areas of nursing for which they believe you are most suited.

After you have identified potential employers, be persistent in your job hunt. Most important, go after any job that looks interesting to you regardless of whether there is a known vacancy. But don't stop there. Apply at many different organizations. Apply not just at different facilities but at many facilities. Concentrate on small employers. Every health care job seeker has heard about the local large medical center. However, right around the corner from your home may be the less well-known school for developmentally disadvantaged children, and waiting there may be your ideal job!

Potential employers can be identified in several other ways. Nursing journals typically advertise positions. Sometimes, your instructors know of positions. The state or local employment office may offer assistance. Professional job placement services are also available, but they usually charge a fee. Corporate Web sites often post job openings along with job-seeking information and tips (Smith, 2000). Try using your favorite search engine to find employment opportunities. Nursing jobs may be found at virtualnurse.com. Many places of employment are looking for and accepting electronic résumés.

You graduated, passed the NCLEX®, and were issued a license to practice. Now it is time to begin seeking employment. The job search requires up-front preparation on your part to organize and pinpoint the areas where you would like to concentrate your efforts. After graduation, take the following steps to secure a job:

1. Identify your objective.
2. Prepare a résumé.
3. Prepare a cover letter.
4. Prepare a list of references.
5. Prepare a telephone call script.
6. Complete a job application.
7. Prepare for the interview.
8. Prepare a thank you note.

**IDENTIFY YOUR OBJECTIVE**

A common mistake among persons seeking employment is identifying potential employers as a first step. Most employment counselors advise beginning the job search with you. Identify your job target or objective first. If you cannot envision yourself as a medication nurse in a long-term care facility, there is very little reason to apply for such employment in that setting.

Identifying your objective accomplishes two important things. First, once you know your objective, you will know where to focus your efforts in identifying potential employers. Second, you will have a reference point for deciding what to
say about yourself on a résumé or during a job interview. You will be prepared to
tell prospective employers precisely the ways that you can be of benefit to them.

If you are having difficulty pinpointing your objective, think back to other jobs
or volunteer projects in which you have been involved. What skills did you use?
What did you like about the job or project? List your strongest four to six skills:
These are the skills that you want to use in your new job and that will be valuable
in identifying your objective. Ascertain which jobs call for those skills. The skills
needed for a particular job can be identified in a number of ways, including the
following:

• Talking to people in nursing positions and asking them what they like and do
not like about their jobs. During clinical in nursing school, you may have already
talked to nurses and have more information than you realize.
• Reading the job descriptions in the classified ads.
• Calling places that employ nurses and asking them to send you a job description.

Once you have matched your skills to the skills required in a particular job, you
have effectively identified your job objective.

PREPARE A RÉSUMÉ

The résumé is a job-hunting tool that summarizes your employment qualifica-
tions. The content of the résumé should be factual, accurate, and honest. The focus
should be on verifiable skills or accomplishments that suggest what you can do for
an employer who hires you. The résumé may be targeted toward a specific job,
a specific career field (e.g., licensed practical/vocational nursing), or a specific
person. Some employers want a résumé; others rely on job applications; and still
others ask for both a résumé and a job application.

Essential Elements

Regardless of the format selected, the essential elements of a résumé include the
following:

• **Heading**: name, address, telephone number, e-mail address (if you have one)
• **Objective**: the type of position you are seeking
• **Work experience**: job title, dates of employment, employer (with city and state),
responsibilities, special projects, accomplishments; listed in reverse chronologi-
cal order (most recent job first)
• **Education**: schools (with city and state), major (area of concentration), certifi-
cate or degree earned and date; listed in reverse chronological order; include
high school if you did not attend college

In the course of developing your résumé, make a list of all your past jobs. A sam-
ple worksheet is provided in Figure 3-1.
## WORK EXPERIENCE

### Job One
- **Job Title**: 
- **Dates**: 
- **Employer**:
- **City, State**:
- **Major Duties**:
- **Special Projects**:
- **Accomplishments**:

### Job Two
- **Job Title**:
- **Dates**:
- **Employer**:
- **City, State**:
- **Major Duties**:
- **Special Projects**:
- **Accomplishments**:

---

**Figure 3-1** Sample Worksheet for Work Experience
Having significant gaps in your employment history may give the impression that you are an unstable worker. Employment gaps can be explained in a number of ways. If the gap resulted because you were in school, include that information. If you did significant volunteer work during that period, describe those activities. Being a full-time parent or a full-time caregiver to a family member is a respectable activity that sufficiently explains gaps in paid employment.

Similarly, make a list of your education. You certainly want to include training and education you have completed. A sample worksheet is provided in Figure 3-2. If you have completed only a portion of training, list the courses that are directly related to your objective. The same idea applies to college courses you may have taken. It is usually not necessary to mention a high school diploma, unless the position you seek calls for one or you have no other higher education.

**EDUCATION**

School ____________________________
City, State _________________________
Degree ____________________________
Major or Area of Concentration ______________

School ____________________________
City, State _________________________
Degree ____________________________
Major or Area of Concentration ______________

School ____________________________
City, State _________________________
Degree ____________________________
Major or Area of Concentration ______________

**Figure 3-2** Sample Worksheet for Education
Optional Elements

Other information may be important to include on a résumé. Worksheets similar to those in Figures 3-1 and 3-2 can be made to organize these optional elements. The optional elements of a résumé include the following:

- **Honors**: the name of the organization bestowing the honor, if not self-evident, and the date (e.g., dean’s list, 2001)
- **Activities**: the organization or activity and accomplishments
- **Reference phrase**: References available upon request
- **Certificates and licenses**: the name of the license or certificate, licensing agency or organization, and date issued. License numbers are not to be included. (License numbers with the name make for easy fraudulent use. When you are actually considered for employment, the employer will ask to see your license so it can be checked with the state board of nursing.)
- **Professional memberships**: the name of the organization, dates of membership, offices held, and special activities
- **Special skills**: for example, languages, computer charting

Format

The next step in creating a résumé is to select a format. The three most common résumé formats are chronological, functional, and a combination of the two. The three formats contain the same basic information about you but are organized in different ways. Your background and job objective will determine the format you use.

The chronological format highlights work experience and education (Figure 3-3). It arranges your work experience in order by dates of the jobs you have had. The most recent job is usually listed first. The functional format is organized around your work experience and the skills involved. For example, you may have provided respite care for your aunt, who has sole responsibility for her invalid mother. In addition, you may have done volunteer work providing respite care for a local hospice, or you may have provided frequent care to your nephew with Down syndrome. These activities could all be listed under one heading that captures the skill of respite care (Figure 3-4). The résumé style that combines both the chronological and functional format is referred to as the combination format (Figure 3-5). The combination format is the one most commonly used for health care résumés. Additional résumé samples are found in Appendix A.

Numerous references are available to help you write a résumé. Tips on effective action words, examples of complete résumés, layout options, and other advice on résumé writing can help you create a high-quality résumé. Ask a friend, a teacher, a coworker, a classmate, or someone else to give you feedback on your résumé. Even after you have revised your résumé 10 times, you will be amazed at the degree to which you can still refine it.

The appearance of your résumé is as important as the content. After all, your résumé may provide employers with their first impression of you. Use direct language. Verbs are to be in the past tense. The résumé should be concise enough to
Anita Jones
1234 Pleasant Street
Chicago, IL 60000
Telephone: (123) 456-7890

OBJECTIVE: Position as an LPN in long-term care setting

LICENSE: Practical Nurse, Illinois Department of Professional Regulation, Issued June 2004

CERTIFICATE: Certified Nursing Assistant (CNA), Illinois Department of Health, Issued May 2001
Certified in CPR, American Red Cross, Issued April 2004

PROFESSIONAL EXPERIENCE:
2001–Present General Hospital and Medical Center, Chicago, Illinois
Position: Certified Nursing Assistant
Provide personal care as a team member on a 38-bed unit

1999–2001 Heartland Nursing Center, Freeport, Illinois
Position: Volunteer activity helper

EDUCATION: Highland Community College, Freeport, Illinois
Practical Nurse, May 2004
Student representative to hospital committee establishing new procedures and protocols for medication administration

REFERENCES: Available on request

Figure 3-3 Sample Chronological Résumé
Wong Wu
2686 West Layer
Bismarck, ND 58501
(701) 255-3100

LICENSE:
Registered Nurse, North Dakota Board of Nursing, July 2004

Seeking RN position utilizing the following experience:
• graduating and working as a nurse in Taiwan
• working in the community blood bank while going to school in Bismarck
• graduating from Bismarck Community College, Registered Nurse Program

Taiwan
Provided care to surgical patients
Administered medications and IVs as ordered

Blood Bank
Interviewed potential donors
 Obtained vital signs
Performed venipuncture to obtain the blood

Bismarck Community College
Volunteered to perform BP screening at senior citizen center

EDUCATION:
University of North Dakota, Bismarck, North Dakota
Currently enrolled in 6 hours of BSN prerequisites

Bismarck Community College, Bismarck, North Dakota
Registered Nurse Program, Diploma May 2004

REFERENCES:
Available on request

Figure 3-4 Sample Functional Résumé
Ludmila Keliehor, RN
796 7th Avenue, Los Angeles, CA 92800 (714) 555-0000

Strengths: • Supervision
          • Role model and mentor
          • Recognize needs of client and family
          • Discharge planning/teaching

Experience: Medical Center of Southern California, Los Angeles, California
Registered Nurse, Medical-Surgical, Relief Charge Nurse, August 1999 to present
Care for medical-surgical clients with diabetes, cardiac, respiratory, and surgical diagnoses. Assumed charge nurse role for 38-bed unit.

Selected Accomplishments:
• Wrote and presented classes for diabetic clients
• Preceptor/mentor for new graduates
• Hospital creativity award, 1999, for diabetic classes
• Committees: Quality Assurance

Prior Experience, 1989–1999:
Staff nurse advancing to charge nurse in 26-bed short-stay surgical unit, staff nurse in adult medical-surgical unit

Education: Associate Degree in Nursing, 1989, Southern California Community College, Los Angeles, California

Other Professional Education:
Critical care course
Yearly conferences on diabetes care

References: Available on request
fit on one page. Four pages should be the upper limit. In addition to your qualifications and experiences, what you include on your résumé can be determined by other factors such as the requirements of the job and the interests and pet peeves of the interviewer (recruiter, personnel manager) if you know them (Noble, 2000). The résumé must be typed in a neat, readable typeface (e.g., Times Roman). Your final résumé must be absolutely free of typographical or grammatical errors, erasures, grease smudges, and fingerprints. Good-quality résumé paper should be used: White paper is preferred, although ivory can also be used. Avoid using pastel papers and fancy script typefaces. In addition, avoid logos of any kind. You want to convey competence through a résumé that is professional looking and easy to read.

**PREPARE A COVER LETTER**

You should prepare a cover letter, a letter to accompany a résumé that introduces you and your résumé for the purpose of getting a potential employer’s attention. Attach a cover letter to your résumé that is tailored for a specific position. The letter should be one page long, refer to the position you are applying for, explain the way you found out about the position, and briefly describe one of your skills that is pertinent to the position. You should also establish a time frame for contacting the prospective employer to follow up on your résumé. Be sure that you do follow up with a call to track the progress of your application. The letter should follow the standard format of a business letter, contain no grammatical or spelling errors, and be on the same quality paper as your résumé. Always use the full name and title of the person to whom you are sending the letter and résumé. You should not use a stock cover letter for all of the positions for which you are applying. The cover letter should always be individualized to the position and the company to which you are applying. Figure 3-6 shows a sample cover letter.

**PREPARE A LIST OF REFERENCES**

References are people, such as colleagues, instructors, or employers, who can verify and support your professional and educational background claims.

Through the use of references, prospective employers attempt to verify information you have provided on a job application or your résumé. Employers also use references to gather more information about you. Do not provide references unless the prospective employer requests them. If you must supply references, be sure the list is typed and includes all pertinent information (name, title, employer, address, and telephone number).

Given the likelihood that a potential employer will ask for references, it is a good idea to always be prepared to provide them. Contact the people you intend to list as references and ask whether they are willing to be references for you. Remember, however, that the willingness of a person to serve as a reference does not guarantee that the information provided will be positive; therefore, ask any prospective references how they may respond to questions that you anticipate from a prospective employer. For example, if the employer asks your nursing school instructor
something about your record of tardiness, will the instructor focus on the three times you were late for clinical, or will the instructor comment favorably that you are prompt and efficient in completing your responsibilities?

Choose references who are prepared to comment on the skills you possess and need for the job in question. Provide all references with information about the position for which you applied and the job expectations. This information allows your references to tailor their comments to the demands of the prospective job.

PREPARE A TELEPHONE CALL SCRIPT

A telephone call script outlines the information you want to learn or share with prospective employers. Preplanning the telephone call helps you organize the call, ensures that crucial information is learned or given, and generally helps you sound efficient and competent. Consider having several scripts. One script may address a request for information such as job descriptions and vacancies; another may be an introduction about you and an inquiry about the application process; and yet another may focus on the status of your application after you have had an interview. The key is to prepare for any contact with a potential employer, whether it be by phone or in person.
COMPLETE A JOB APPLICATION

Many employers will simply ask you to complete a job application. The job application should be completed totally and neatly. Most employers balk at job applications that say “see attached résumé” rather than provide the information as requested. Preparation is key. Come with the information you may need to complete an application. Such information typically includes a list of past employers, including addresses, telephone numbers, supervisors’ names, and dates of employment. Information about schools you have attended is also generally asked for on a job application. If you are nervous about completing an application “cold,” ask the employer to send you a form. Practice completing it at home so that you are certain you have all the information requested; then throw the practice application in the trash, and visit the employer to complete the form in person. Figure 3-7 shows a sample job application.

PREPARE FOR THE INTERVIEW

The interview is a crucial part of the job-search process. An interview is best thought of as an opportunity for you and the interviewer to exchange information. Your task is to convey pertinent information about your skills, abilities, education, and experience. The interviewer’s task is to relay information about the particular job and the employer and to evaluate your qualifications. If both parties have fulfilled their responsibilities, appropriate decisions follow. The interviewer decides whether you are the most desirable candidate for the job—and you decide whether you want the job.

Preparation is the key to a successful interview. Well before the actual interview, the stage for a meeting is set. You have determined your objective, identified a potential employer, and filled out a job application or provided a résumé. The prospective employer has screened your information and selected you for an interview. But you still have work to do before the actual interview.

Research the Employer

Part of preparing for an interview involves researching the employer. You want to learn everything you can about the employer. Showing such initiative gives the interviewer the impression that you have a sincere interest in employment with the organization. Information you learn may also help you develop questions to ask the employer or anticipate questions that the employer may ask you.

Anticipate Questions

Try to anticipate questions the employer may ask you. For example, if, after investigating an outpatient clinic, you learn that electrocardiogram and phlebotomy are performed on site, you can be fairly certain that the employer will ask whether you have performed these skills. Typical questions asked by an employer focus on strengths and weaknesses, interest in the position, past experience, future plans, and potential contributions to the open position.
CHAPTER 3  ▶ Seeking Employment

Application for Employment
(pre-employment questionnaire) (an equal opportunity employer)

Personal Information

Name: Anita Jones
Social security number: 987-65-4321

Present address: 1234 Pleasant Street, Chicago, IL 60000
Permanent address: same

Phone No.: (123) 456-7890
Are you 18 years or older? yes X no
Are you either a U.S. citizen or an alien authorized to work in the United States? yes X no

Position: medication nurse
Date you can start: October 15
Salary desired: open

Are you employed now? yes If so may we inquire of your present employer? Yes
Ever applied to this company before? No where? when?
Referred by: Ken Jenkins

Education

Name and location of school attended
No. of years
Did you graduate?
Subjects studied

Grammar school
Camden Elementary School District #95
8
yes
general curriculum

High school
Camden High School
4
yes
vocational curriculum, nursing

College
Highland Community College
1
yes
LPN

Trade, business or correspondence school
Highland Community College
6 mo.
yes
CNA

Former Employers (list below the last three employers, starting with the last one first)

Date, month and year
Name and address of employer
Salary
Position
Reason for leaving

from 1998 to present
General Hospital and Medical Center
5.90 hr.
CNA
currently employed

Which of these jobs did you like best? geriatrics
What did you like most about this job?

References: give the names of the three persons not related to you, whom you have known at least one year

Name
Denise Thompson
Phylis Hunter
Frank Hopkins

friend
General Hospital and Medical Center
Highland Community College - Freeport, IL

10
head nurse
nursing instructor

Figure 3-7  Sample Job Application
As a general rule, law forbids the employer to ask personal questions. For instance, questions about child care arrangements, plans to have a family, height, weight, and religion are not allowed. With severe limitations, the employer can ask about age (e.g., "Are you over 18 or under 70?") and disabilities or illnesses (e.g., "Is there anything that would interfere with your performance of the job?").

**Be Prepared**

Anticipate questions and plan your responses. Examine your résumé again. Reflect on your goals. Assess your skills and knowledge. Decide what information you want to convey to the interviewer. Develop complete but concise answers to anticipated questions. Employers have a limited amount of time for interviews and want you to get to the point as quickly as possible.

Bring your résumé and references, even if you have already provided them. You want to be certain the interviewer has information about you at hand as you talk.

Be prompt for the interview. An overly early arrival will tend to increase your nervousness; a late arrival is simply unacceptable. Plan your route to the facility ahead of time. Anticipate traffic delays or parking problems. Allow time to compose yourself before the interview.

During the interview you want to make a positive impression. Your physical appearance is probably the first thing the interviewer will notice. Dress conservatively and neatly. You want to project confidence and competence. Excessive jewelry or makeup, trendy body piercing or hairstyle, casual or dirty attire, and overdressing tend to detract from the image you want to present. Examples of professional, conservative dress for a female include a solid-color suit or pantsuit and shoes having flat or small heels. A simple dress is also appropriate. For a male, a solid-color suit with shirt and tie and leather dress shoes or dress pants and sport coat may be worn. Jeans, shorts, T-shirts, sandals, and athletic shoes are not appropriate.

Attempt to present a balanced demeanor: friendly but not too familiar, professional but not too aloof. Greet the interviewer by shaking hands, and wait for the interviewer to offer you a seat. Do not smoke or chew gum. Answer questions directly and honestly, but do not ramble on or offer extraneous information (Figure 3-8).

A common tendency is to view the interview as a one-sided interaction—as the employer's opportunity to scrutinize prospective employees. The interviewer's task is to confirm the information you have provided on your job application or résumé. In addition to gathering more detailed information about you, the interviewer is interested in the way you handle yourself and whether you are a good match for the job and the employer. After a screening and selection process, the employer offers employment to the most desirable candidate. But remember, securing employment is a two-sided process: You also are interviewing the interviewer to gather information about the employer, to ascertain whether the job opportunity is the right fit for you.

Any offer of employment you receive can be accepted or rejected. You should already have obtained information about the employer that was enticing enough to cause you to apply for employment. The interview is, however, your opportunity
to gather more information about the employer. This information serves as the basis for determining whether you really want the job. Go to the interview with a written list of questions you have for the employer.

Your questions can address a number of topics, including orientation, organization of the nursing staff, working conditions, and educational opportunities. For example: How long is the orientation? How often is overtime or floating required? On which unit will I be assigned to work? What are the five most common diagnoses on that unit? What is the ratio of RNs to LP/VNs to UAP? What is the schedule of a normal work week? The list of potential questions is endless.

The advice is often given not to ask about salary and benefits during the first interview. At some point, however, this information becomes crucial to your decision making. If the interviewer does not volunteer information about salary and benefits, at the very least wait until the end of the interview to discuss these matters. Employers want to know you are interested in the work, not just the pay. Thus, you may want to consider waiting to learn about salary and benefits until a job offer has been made.

At the end of the interview, you may be offered employment. If you are confident that you want the position, accept the offer. If you have any hesitation, however, inform the employer that you will respond in a day or two. Do not turn the offer down at the interview. Go home, review the information you have available, discuss the offer with relevant people, and then notify the employer. Whether you decide to accept or decline the offer of employment, you should respond to the employer’s offer. Even in declining an employment offer, you want to leave a positive impression. You never know when you may encounter that recruiter in the future.
At the end of the interview, shake hands with the interviewer and offer thanks for the interviewer's time and consideration. If you believe you want the job, say so. Statements such as “After our discussion, I am very interested in working here” or “I really want to work with your client population” indicate your strong interest to the prospective employer.

**PREPARE A THANK YOU NOTE**

The thank you note is critical to a successful job search. Always follow up an interview with a thank you note. Some employment counselors suggest you send a thank you note to everyone involved in the interview process. These people may include the person who suggested the employer, the receptionist, and, certainly, the person who conducted the interview.

A thank you note can be handwritten or typed. The key is to send it the same day as the interview. The thank you note should be personal: Say something about the way the person treated you, the highlights of the interview, or something you forgot to mention during the interview. If the interview confirmed your interest in employment, say so. Even if you decide that the employment setting is not for you, write a thank you note. Your career interests may change at some point. Further, employers talk to each other; therefore, you want to leave a good impression any place you seek employment. Figure 3-9 shows a sample thank you note.

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**Figure 3-9** Sample Thank You Note

1234 Pleasant Street
Chicago, IL  60000
June 26, 2004

Thomas DiNapoli
Human Resources Manager
St. Anne’s Medical Center
P.O. Box 9876
Pittsburgh, PA  15230

Dear Mr. DiNapoli:

Thank you for taking the time to speak with me today about the position of medication nurse at St. Anne’s Medical Center. I was very impressed with your company, and the job sounds wonderful. I’m more than ever convinced that my experience can benefit your company.

I appreciated the opportunity to meet you and learn about St. Anne’s.

Sincerely,

Anita Jones, LPN
A FINAL WORD ABOUT EMPLOYMENT

As a new graduate, you may find that your job search is influenced by financial pressures or a seemingly limited pool of available jobs. You also may be considerably swayed by the advice that you should “get a year of experience in general medical-surgical nursing” before moving on to the job you really want. Financial pressures and the job market may indeed pose some limitations. Further, a year of medical-surgical experience is helpful. But resist taking a job for just these reasons.

As an occupation, nursing offers much variety with regard to employment setting, client age, type of work, number of hours available to work, availability of days and shifts, amount of supervision, and a host of other factors. Such variety will become evident as you investigate available employment options.

A poor fit between the job and your interests, needs, or abilities is a setup for failure. As a newly employed nurse, you want to establish an employment record of success and increasing growth in your skills and knowledge. You want to build on your newfound confidence and competence. A thorough and honest evaluation of your strengths and weaknesses, a clearly identified objective, and a careful review of employment options will help ensure satisfying and rewarding employment.

SUMMARY

- The steps involved in securing a job include identifying your objective, preparing a résumé, preparing a cover letter, preparing a list of references, preparing a telephone call script, completing a job application, preparing for the interview, and preparing a thank you note.
- The format of a résumé may be chronological, functional, or a combination of the two.
- Contact the persons you intend to list as references and ask whether they are willing to provide a reference for you. Ask how they may respond to questions that you anticipate from a prospective employer.
- Prepare for the interview by doing research about the employer and by thinking about the questions the employer may ask.
- For the interview, dress conservatively and neatly; be clean; be prompt; bring your résumé and references; wait for the interviewer to offer you a seat; do not smoke or chew gum.
- Always follow up an interview with a thank you note, sent on the same day as the interview.

Review Questions

1. The following information should be included on a résumé:
   a. Name, address, telephone number, job objective
   b. Information about previous employment, name, family information
   c. Job objective, references, education, work experiences
   d. Name, address, job objective, availability for interview
2. The persons you provide as references should be able to:
   a. verify your membership in professional organizations.
   b. verify and support your professional and educational claims.
   c. answer questions about what you have done during your life.
   d. meet with the prospective employer for a discussion about you.

3. Send a cover letter:
   a. with the résumé.
   b. when declining a job offer.
   c. when accepting a job offer.
   d. to inquire about a job opening.

Critical Thinking Questions

1. After a lengthy job search, Alicia secures employment at a long-term care facility. The facility residents are all retired nuns. Alicia enjoys geriatrics; management seemed fair and reasonable; the environment is clean and attractive; and financial benefits are competitive. However, Alicia finds the nuns to be demanding and unappreciative. In addition, the religious underpinnings of the facility influence her work more than she anticipated. After 2 months, she now dreads going to work. What should she do?

2. Compare the chronological résumé in Figure 3-10 with the one in Figure 3-3. Which one is better? Why?

WEB FLASH!

- Search the Web under broad categories such as job hunting, seeking jobs, or finding jobs. What kind of sites do you locate?
- Now search for résumés, cover letters, and interviewing. Are the sites the same as for above? Which sites are most helpful?
- Check the major search engines such as www.yahoo.com and www.altavista.com for jobs, résumés, and so on.

References/Suggested Readings

Anita Jones
1234 Pleasant Street
Chicago, IL 60000
Telephone: (123) 456-7890

OBJECTIVE: Position as an LPN in long-term care setting

LICENSE NUMBER: State of Illinois #______________

PROFESSIONAL EXPERIENCE:
1995–Present
General Hospital and Medical Center
Chicago, Illinois
Position: LPN, medication nurse
Provide direct care as a team member on a 38-bed unit. Distribute and maintain medications. Work in cooperation with nonlicensed team members. Manage nursing outcomes using assistive personnel. Received three letters of commendation for patient care delivery.

1991–1995
City Teaching Medical Center
Chicago, Illinois
Position: LPN, general medical unit
Provided direct patient care on a 25-bed unit. Gained experience caring for geriatric patients. Helped develop unit procedures for shift rotation. Participated in an average of 12 hours of continuing-education contact hours per year.

EDUCATION: Chicago State University, Chicago, Illinois
Completed 24 credit hours of course work in BSN prerequisites, focus on physiology and psychology

Highland Community College, Freeport, Illinois
Licensed Practical Nurse, 1990
Class representative to faculty council

RELATED EXPERIENCE: Lectured 25 preschool students on keeping healthy, repeated program four times

AFFILIATIONS: Member, NFLPN

REFERENCES: Available upon request

Figure 3-10 Chronological Résumé
144 CHAPTER 3 ◗ Seeking Employment


INTRODUCTION

A successful employment experience depends on more than nursing knowledge and technical competence. Success requires competence in the particular job position. Success also depends on the nurse’s integration into the health care team and the nurse’s understanding of the overall health care organization.

JOB EXPECTATIONS AND RESPONSIBILITIES

Employees are hired to work at a specific site, for example, the fifth floor of the hospital or the internal medicine clinic at the outpatient health facility. The employer’s expectations are summarized in job descriptions and in the policy and procedure manual. Although reading these papers is often viewed as boring and a waste of time, successful employment depends on understanding job expectations and the employer’s policies.

LEARNING OBJECTIVES

Upon completion of this chapter, you should be able to:

• Define key terms.
• Describe the roles, level of education, skills, level of independence, and length of education for the various members of the nursing staff.
• Compare and contrast policies and procedures.
• Explain an organizational chart.

KEY TERMS

| competencies | evaluation | policies |
| conflict | job description | procedures |
| confrontation | organizational chart | |

CHAPTER 4

WORKPLACE TRANSITION
Job Descriptions

A job description is a written outline of job responsibilities. Job responsibilities vary from employer to employer. For example, in long-term care facilities, LP/VNs are not routinely expected to bathe clients, as this task is performed by CNAs. In a hospital setting, however, job responsibilities of an LP/VN or RN may include bathing clients. All the job expectations should fall within the scope of practice of the nurse.

In addition to summarizing job responsibilities, a job description frequently outlines requirements for the position (e.g., LP/VN, experience preferred), supervisor’s title, supervisory responsibilities, and frequency and method of evaluation. A job description may also include a list of competencies, the specific skills or tasks (e.g., blood glucose monitoring) needed for a particular position. Employers are expected to assess competencies at the time of employment and periodically thereafter, usually annually.

A clear understanding of one’s own job description is critical to the safe, effective practice of nursing in the specific employment setting. Failure to meet the job responsibilities as outlined in the job description can result in termination of employment. Familiarity with the job descriptions of supervisors and of persons who you may supervise is also very helpful in ensuring that you have a clear understanding of your role and what you can expect of others.

Policies and Procedures

The employer’s policies and procedure manual is also a very important reference document.

An employer’s policies are written descriptions of the employer’s expectations for handling various situations. Policies often are applicable to everyone working in the facility, rather than being nursing specific. Policies addressing confidentiality, dissemination of client information, handling of suspected cases of abuse, management of client valuables, and so on are common. A review of the policies and procedures manual is often required at the start of employment. A periodic self-initiated review of the manual is useful in ensuring that work performance meets the employer’s expectations.
**Hierarchy**

As defined in the Nursing Practice Acts, or in the state nursing board’s rules and regulations, an LP/VN works under the direction of an RN, physician, or dentist. These are the professionals who will directly supervise your work. In some states, the language of the law indicates that “other health care providers” can supervise you. The question is, Who are the other health care providers? In your state, must you follow orders written by a physician’s assistant? A nurse practitioner? A physical therapist? The answers vary by state. It is critical that you know who can direct your nursing activities.

**Procedures** are step-by-step instructions describing the processes for performing various nursing tasks. Although these nursing procedures will likely be familiar to you, it is important that you perform tasks as directed by your employer. There are usually several correct, safe methods for performing a procedure; the way you were taught in school may vary from your employer’s procedure. This difference may require altering the way you perform certain procedures.

**Evaluation**

**Evaluation**, the act of examining and judging the quality and degree to which a person performs the expected duties, is very familiar to new nursing graduates. During the nursing program, instructors frequently evaluate each student. Once you have become an employed nurse, evaluations will continue. Now, however, the criteria for evaluation will be your job description and the agency’s policies and procedures rather than course and clinical objectives.

**Job Evaluation**

Constructive evaluation is directed toward the person’s behavior and has no bearing on the person’s value. Although new graduates are seldom, if ever, responsible for formally evaluating others, a new graduate may decide to give feedback (another word for evaluation) to a coworker regarding specific behavior observed. It is important to be sensitive to personality differences between you and the person receiving the feedback. Feedback should be given privately, soon after the behavior is observed. Try to begin with something positive and then focus on what could be improved. Listen actively to the other person to avoid misunderstandings. On occasion, give only positive feedback.

When you are the recipient of feedback, try to remain objective. The feedback is about your behavior, not about your value as a person. If the feedback is about some way in which you need to improve in carrying out your professional responsibilities, think if you have heard the same feedback from anyone else. If you have,
the feedback probably has some merit. Acknowledge the feedback; plan how you can do things differently; then carry out your plan. Above all, do not make excuses and do not react defensively. Try to see the benefits of the feedback.

Self-Evaluation

As you begin your career, and throughout your work life, it is beneficial to evaluate yourself. At the end of each day, take a few minutes to think about your behaviors in carrying out your duties. Did you always perform procedures safely? Did you perform the procedures according to the procedure manual, or did you take shortcuts that may have adversely affected the client? Were you courteous to your coworkers and helpful to others?

At the end of the day, list one or two professional traits that you intend to improve on the next day. Each day, look at the list as you evaluate yourself. On some days you may add to the list; on others, you may mark off some items.

Do not be afraid to ask for help from an experienced nurse. Discussing your duties with an experienced nurse often provides a wealth of information that is helpful in providing quality care to your clients.

Conflict and Confrontation

Most persons hope for situations in which everyone gets along and all goes smoothly. However, conflict is a normal aspect of relationships. Conflict, a clash, competition, or mutual interference of opposing forces or qualities (e.g., ideas, interests), can be severe (sharp disagreement or fighting) or mild (subtle or unconscious opposition to an idea or action). Conflict is often thought about negatively. Thinking critically about conflict provides an opportunity to achieve realistic outcomes and to gain personal growth.

It is wise to be aware of your natural style of dealing with conflict. Five styles used in managing conflict have been identified (Alfaro-LeFevre, 1999):

- **Avoiders** ignore the situation or persons believed to be causing the conflict. Problems are allowed to continue.
- **Accommodators** try to make others feel better. They may explode when things get too bad.
- **Forcers** work to have their way. They are indifferent about whether they are liked.
- **Compromisers** try to persuade everyone to give a little. Their solutions generally are minimally acceptable, and conflict often continues.
- **Collaborative problem solvers** work to face issues together. They address both the situation and relationships involved. They seek solutions by finding areas of agreement and differences, evaluating alternatives, and choosing solutions supported by all parties involved.

When conflict occurs, many people criticize, betray confidences, or gossip. It takes courage to confront a situation or person. **Confrontation** is the act of facing an unpleasant situation or a person who has opposing views. The person who deals with confrontation in an honest, open, and kind manner is trusted and respected.
ORGANIZATIONAL CHART

An organizational chart is a visual representation of the relationships of one department to another within the facility or the relationship of the facility to other facilities in a health care network. Included in the organizational chart are the titles of department leaders and the lines of authority. This information provides an understanding of the way a department fits into the larger organization (Figure 4-1).

All employees within a health care facility are part of a large organization. Every organization has a unique organizational culture of commonly held values, beliefs, and expectations directing the work force in the provision of services. For example, the organizational culture of a for-profit freestanding kidney dialysis center will be different from that of a free health clinic. Insights into the organizational culture of any health care facility can be garnered from the organization statement sum-

![Figure 4-1 Sample Organizational Charts: A. Entire Facility; B. Nursing Unit](image-url)
marizing the facility’s mission, vision, values, and goals. Although such statements often seem theoretical and far removed from job responsibilities, they do guide the organization in its provision of services.

**SUMMARY**

- The nursing team includes nurse practitioners (NPs), registered nurses (RNs), licensed practical/vocational nurses (LP/VNs), certified nursing assistants (CNAs), and unlicensed assistive personnel (UAP).
- A job description is a written outline of job responsibilities.
- An organization’s policies are written descriptions of the employer’s expectations for handling various situations.
- Procedures are step-by-step instructions for performing various nursing tasks.
- Conflict can be a growth-producing experience.
- The organizational chart shows the relationship of one department to another within a facility and the relationships within a department.

**Review Questions**

1. The LP/VN may supervise:
   a. two-year RNs.
   b. only other LP/VNs.
   c. only CNAs and UAP.
   d. other LP/VNs, CNAs, and UAP.

2. It is important to understand your job description because it:
   a. states what you can and cannot do.
   b. is the reason for employment termination.
   c. outlines job responsibilities and requirements.
   d. clearly outlines instructions describing the processes for performing nursing care.

3. Evaluation:
   a. is often done in groups.
   b. always has the same criteria.
   c. is directed toward a person’s behavior.
   d. is not needed once the student has graduated.

4. Conflict:
   a. is a normal aspect of relationships.
   b. has no place in nursing because it disrupts client care.
   c. always has negative outcomes on the persons involved.
   d. is to be avoided at all costs because some people become very angry.
5. Understanding the organizational chart is important because the chart:
   a. shows how you personally fit into the organization.
   b. diagrams the relationship of the departments in a facility.
   c. summarizes the facility’s mission, vision, values, and goals.
   d. identifies the values, beliefs, and expectations of the organization.

Critical Thinking Questions

1. You are asked to do something that is not in your job description. How will you handle the situation?
2. How often should you read the policies of the facility where you are working?

WEB FLASH!

- Search the Web for the home page of the facility where you are working. Does it have one? What information is available there? How is this information valuable to you?

Reference

APPENDIX

Sample Résumés
CHRONOLOGICAL RÉSUMÉ

Andra Visosky
6754 West Seventh Street
Oak Park, IL 60430
(630) 904-8208

CAREER OBJECTIVE
To obtain a Licensed Practical Nurse position with a hospital or long-term care facility

EDUCATION
College of DuPage, Lombard, Illinois
Licensed Practical Nursing Program, Certificate, 2004
GPA 3.8/4.0, Dean’s List
Member: Phi Theta Kappa, National Honor Society
Triton College, River Grove, Illinois
Nurse Assistant Program, CNA Certificate, 1998

EXPERIENCE
Home Health Aide
Employed part time while in school

Home Health Aide

Sept. 2000–April 2001 Park Community Hospital, Aurora, Illinois
CNA–Critical Care

Experience Summary
CNA
South Shore Nursing Home, Blue Island, Illinois
Activity Assistant, Dietary Assistant

REFERENCES
Available on request
FUNCTIONAL RÉSUMÉ

James Olivarez 3813 Yorktown Road
(361) 992–7890 Corpus Christi, TX 78400

LICENSE: Vocational Nurse, Texas Board of Vocational Nurse Examiners, June 2004

Seek LP/VN position utilizing the following experience

• Providing respite care monthly for my aunt who cares for my grandmother
• Providing respite care as volunteer through a local hospice
• Graduating recently from Del Mar College, Vocational Nursing Program
• Speaking Spanish fluently

RESPITE CARE

Provided personal hygiene and grooming.
Assisted client in performing range-of-motion exercises.
Prepared meals and assisted client with food intake.
Kept accurate intake and output records.
Toileted client every three hours.
Assisted client to ambulate or sit in chair three times a day.
Administered medications as ordered.
Participated in diversional activities (e.g., playing games, listening to music, reading to client) as suggested by family or requested by client.

EDUCATION: Del Mar College, Corpus Christi, Texas, currently enrolled in 6 hours of ADN prerequisites

Del Mar College, Corpus Christi, Texas, Vocational Nurse Program, Certificate, May 2004

REFERENCES: Available on request
COMBINATION RÉSUMÉ

Lyvonne Selvera, RN
1010 Coble Glen Court
Durham, NC 27700
(919) 544–7317

PROFILE

Efficient, caring registered nurse with well-rounded experience attained through increasingly responsible positions in clinical health settings. Skills include direct client care and IV proficiency. Knowledge and skills updated regularly through continuing education workshops. Currently working on gerontological nursing certification.

HIGHLIGHTS OF QUALIFICATIONS

• 8 years of nursing experience
• Recognized by a previous employer for writing client-teaching guides, and complimented by supervisors for concise, quality documentation
• Excellent organizational and time-management skills
• Familiar with policies and adhere to them

PROFESSIONAL EXPERIENCE

1999–Present  Rex Hospital, Durham, North Carolina

Staff Nurse
• Work with 4 other nurses on 36-bed unit.
• Establish appropriate care plans for clients and their families.
• Provide teaching to client and family: diseases, precautions and restrictions, proper medication use, medication side effects, and diet.
• Provide direct client care for cardiac and stroke clients; care includes performing physical and disease process assessments, administering medications including IV therapy, performing cardiac monitoring, and changing dressings.
• Precept student nurses and new employees.

(continued)
Lyvonne Selvera, RN
(919) 544–7317
Page 2

1995–1999 Durham Community Hospital, Durham, North Carolina

Staff Nurse (1998–1999)

- Performed client care. Taught care to clients and families, including discharge teaching on 24-bed respiratory unit. Assisted physicians with bedside procedures.
- As Staff Nurse, filled in as evening charge nurse and accepted the role of resource person for students and orientees.
- Wrote client teaching guide: Use of incentive spirometry.

EDUCATION

Associate Degree in Nursing, Durham Technical College, Durham, North Carolina, 1998

Honors: Dean’s list, Graduated cum laude

Practical Nurse Diploma, Durham Technical College, Durham, North Carolina, 1995

CPR certified (current)

Continuing Education
Workshops include respiratory care, gerontology (preparing for certification), wound care, HIV, and AIDS

ACTIVITIES

National Federation of Licensed Practical Nurses (NFLPN), local board member

Volunteer for American Heart Association
COMBINATION RÉSUMÉ

Elmon Hendi

431 Rightway Drive                             Telephone/Message
Birmingham, AL 35200                            (205) 995-3151

OBJECTIVE Seeking position as Licensed Practical Nurse

OVERVIEW
- Highly motivated new graduate, compassionate, dedicated to quality client care
- Organized and efficient
- Very capable in performing client assessments and client care, administering medications, documentation including computer charting

EDUCATION
- Licensed Practical Nurse, Diploma June 2004, Birmingham Technical College, Birmingham, Alabama, Graduated with honors
- Received clinical experience at the following health care facilities:
  - Webb County Hospital: Psychiatric unit
  - Kirby Community Hospital: OB/GYN & Medical/Surgical
  - Alabama Children’s Hospital: Pediatrics

EXPERIENCE
XYZ Company
- Called on physicians at their offices, receiving feedback about medications
- Made presentations to physician organizations regarding new medications

Salesperson, 2001–2004
Part time while in school 2003–2004
ABC Car Parts, Birmingham, Alabama
- Assisted customers in determining correct parts for their make and model of vehicle
- Kept inventory neatly stocked

Received commendation from company for having many customer appreciation letters.

LICENSE
Alabama Board of Nursing, Licensed Practical Nurse, July 2004

REFERENCES Available on request
COMBINATION RÉSUMÉ

Selina Duperier, LPN
4205 Waite Street
Bellevue, WA 98000
(425) 321-5689

EDUCATION
Bellevue Community College
Practical Nurse Diploma, May 2004

CURRENT CERTIFICATION
CPR 4/04–4/05

EMPLOYMENT HISTORY
5/03–4/04 Picks Grocery, Bellevue, Washington
Cashier—Part time while going to school

8/93–4/03 Smith Elementary School, Seattle, Washington
Secretary—Liaison to parents. Routed telephone calls.
Drafted and typed correspondence. Administered first aid.
Maintained accurate student records. Performed light bookkeeping.

Fundraiser—Gave presentations to large and small groups to elicit support for organization-sponsored programs. Helped plan and organize fundraising events.

LICENSE
Washington State Nursing Care Quality Assurance Commission
Licensed Practical Nurse, June 2004

REFERENCES AVAILABLE ON REQUEST
COMBINATION RÉSUMÉ

Akiko Kiona
6558 East Boston Street
Bryan, OH 43500
(419) 746-3191

OBJECTIVE: To obtain a rewarding position as a Registered Nurse

HIGHLIGHTS OF QUALIFICATIONS
• Current Licensed Registered Nurse in the State of Ohio
• Genuine concern for clients
• Manage time efficiently and effectively
• Reliable self-starter
• Remain focused under stress

EDUCATION
Associate of Science Degree in Nursing, May 2004
Cleveland Community College, Cleveland, Ohio
GPA 3.7/4.0

High School Diploma, May 2003
Bryan Consolidated School, Bryan, Ohio
GPA 3.8/4.0

SUMMARY OF EXPERIENCE
• Excellent clinical evaluations throughout nursing program
• Drill team captain in high school
• Member of high school debate team; received top state honors

LICENSE/CERTIFICATION
Licensed Registered Nurse, Ohio Board of Nursing, June 2004
CPR certified (current)

References Provided on Request
COMBINATION RÉSUMÉ

Wade Boedeker
10910 Cypress Creek Drive
Roswell, NM 88200
(505) 853-2171

OBJECTIVE:
To gain valuable experience as a Registered Nurse in the medical-surgical unit of a major hospital

SUMMARY OF QUALIFICATIONS:
• Received A.D. in Nursing from Santa Fe Community College, May 2004
• Motivated and dedicated to providing professional, quality client care
• Maintain excellent relationships with clients, family, staff, and administration
• Effective time management skills

EDUCATION:
A.D. Nursing—May 2004
Santa Fe Community College—Santa Fe, New Mexico
CPR certified (current)
Scheduled to take NCLEX-RN June 2004

HEALTH CARE EXPERIENCE:
Nurse Technician—June 2003–present
County Hospital—Santa Fe, New Mexico
• Provide client care
• Remove sutures, dress wounds, give injections, and administer other treatments as required

References and Additional Information Available on Request
Introduction to Medical Terminology

Overview of Introduction to Medical Terminology

**Word Parts Are the Key!** Introduction to word parts and how they create complex medical terms.

**Word Roots** The word parts that usually, but not always, indicate the part of the body involved.

**Combining Forms** Word roots plus a vowel (usually the letter o) added to the end. This form is used when connecting word roots or when the word root is joined to a suffix that begins with a consonant.

**Suffixes** The word parts that usually, but not always, indicate the procedure, condition, disorder, or disease.

**Prefixes** The word parts that usually, but not always, indicate location, time, number, or status.

**Determining Meanings on the Basis of Word Parts** Use knowledge of word parts to decipher medical terms.

**Medical Dictionary Use** Guidelines to make the use of a medical dictionary easier.

**Pronunciation** Learn the easy-to-use “sounds-like” pronunciation system.

**Spelling Is Always Important** Discover how one wrong letter can change the entire meaning of a term!

**Using Abbreviations** Caution is important when using abbreviations.

**Singular and Plural Endings** Unusual singular and plural endings used in medical terms.

**Basic Medical Terms** Terms used to describe disease conditions.

**Look-Alike Sound-Alike Terms and Word Parts** Clarification of confusing terms that look or sound alike.
The items on this list have been identified as key word parts and terms for this chapter. However, all words in boldface in the text are also important and may be included in learning exercises and tests.

**Word Parts**
- -algia
- dys-
- -ectomy
- hyper-
- hypo-
- -itis
- -osis
- -ostomy
- -otomy
- -plasty
- -rrhage
- -rrhaphy
- -rrhea
- -rrhexis
- -sclerosis

**Medical Terms**
- abdominocentesis (ab-dom-ih-noh-sen-TEE-sis)
- acronym (ACK-roh-nim)
- angiography (an-jee-OH-rah-fee)
- appendectomy (ap-en-DECK-toh-mee)
- appendicitis (ah-pee-dih-SIGH-tis)
- arterionecrosis (ar-tee-ree-oh-neh-KROH-sis)
- arteriosclerosis (ar-tee-ree-oh-skleh-ROH-sis)
- arthralgia (ar-THRAL-jee-ah)
- colostomy (koh-LAHS-toh-mee)
- diagnosis (dye-ag-NOH-sis)
- edema (eh-DEE-mah)
- endarterial (end-ar-TEE-ree-al)
- endoscopy (en-DOS-koh-pee)
- eponym (EP-oh-nim)
- fissure (FISH-ur)
- fistula (FIS-tyou-lah)
- gastralgia (gas-TRAL-jee-ah)
- gastritis (gas-TRY-tis)
- gastrosis (gas-TROH-sis)
- gerontologist (jer-on-TOL-oh-jist)
- hemorrhage (HEM-or-idj)
- hepatomegaly (hep-ah-toh-MEG-ah-lee)
- hypertension (high-per-TEN-shun)
- hypotension (high-poh-TEN-shun)
- ileum (ILL-ee-um)
- ilium (ILL-ee-um)
- infection (in-FECK-shun)
- inflammation (in-flah-MAY-shun)
- interstitial (in-ter-STISH-al)
- intramuscular (in-trah-MUS-kyou-lar)
- melanosis (mel-ah-NOH-sis)
- mycosis (my-KOH-sis)
- myelopathy (my-eh-LOP-ah-thee)
- myopathy (my-OP-ah-thee)
- myorrhesis (my-oh-RECK-sis)
- neonatology (nee-oh-nay-TOL-oh-jee)
- neuritis (new-RYE-tis)
- neuroplasty (NEW-roh-plas-tee)
- otolaryngology (oh-toh-lar-in-GOL-oh-jee)
- otorhinolaryngology (oh-toh-rye-noh-lar-in-GOL-oh-jee)
- palpation (pal-PAY-shun)
- perinatal (pehr-ih-NAY-tal)
- postnatal (pohst-NAY-tal)
- prognosis (prog-NOH-sis)
- prostate (PROS-tayt)
- prostrate (PROS-trayt)
- pyelitis (pye-eh-LYE-tis)
- pyoderma (pye-oh-DER-mah)
- subcostal (sub-KOS-tal)
- supination (soo-pih-NAY-shun)
- suppuration (sup-you-RAY-shun)
- supracostal (sue-prah-KOS-tal)
- symptom (SIMP-tum)
- syndrome (SIN-drohm)
- tonsillectomy (ton-sih-LECK-toh-mee)
- tonsillitis (ton-sih-LYE-tis)
- trauma (TRAH-mah)
- triage (tree-AHZH)
- viral (VYE-ral)
- virile (VIR-ill)
Learning medical terminology is much easier once you understand how word parts work together to form medical terms. This book includes many aids to help you continue reinforcing your word building skills.

- The types of word parts and the rules for their use are explained in this chapter. Learn these rules and follow them!
- Key terms made up of word parts include in their definitions an explanation of the word parts and their meanings. These word parts appear in magenta.
- The Learning Exercises for each chapter include a “Challenge Word Building” section to help develop your skills in working with word parts.
- After Chapter 2 there is a Word Part Review section. This section provides additional word part practice and enables you to evaluate your progress toward mastering the meanings of these word parts.

The Four Types of Word Parts

Four types of word parts may be used to create medical terms. Guidelines for their use are shown in Table 1.1.

- **Word roots** contain the basic meaning of the term. They usually, but not always, indicate the involved body part.
- **Combining forms** are word roots with a vowel at the end so that a suffix beginning with a consonant can be added.
- **Suffixes** usually, but not always, indicate the procedure, condition, disorder, or disease. A suffix always comes at the end of a word.
- **Prefixes** usually, but not always, indicate location, time, number, or status. A prefix always comes at the beginning of a word.

Word roots act as the foundation of most medical terms. They usually, but not always, describe the part of the body that is involved (Figure 1.1). They may also indicate color. Some of the word roots that indicate color are shown, in their combining forms, in Table 1.2.

<table>
<thead>
<tr>
<th>Table 1.1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Word Part Guidelines</strong></td>
</tr>
<tr>
<td>1. A word root cannot stand alone. A suffix must be added to complete the term.</td>
</tr>
<tr>
<td>2. The rules for the use of creating a combining form by adding a vowel apply when a suffix beginning with a consonant is added to a word root. These rules are explained in Table 1.3.</td>
</tr>
<tr>
<td>3. When a prefix is necessary, it is always placed at the beginning of the word.</td>
</tr>
</tbody>
</table>
Combining Vowels

A combining vowel may be needed between the word root and suffix to make the medical term easier to pronounce. The rules for using combining vowels are explained in Table 1.3.

- The letter o is the most commonly used combining vowel.
- When a word root is shown with a back slash and a combining vowel, such as cardi/o, this format is referred to as a combining form (cardi/o means heart).

SUFFIXES

A suffix is added to the end of a word root or its combining form to complete the term. Suffixes usually, but not always, indicate the procedure, condition, disorder, or disease (Figure 1.2).

- For example, tonsill/o means tonsils. A suffix is added to complete the term and to tell what is happening to the tonsils.
- Tonsillitis (ton-sih-LYE-tis) is an inflammation of the tonsils (tonsill means tonsils and -itis means inflammation).
- A tonsillectomy (ton-sih-LECK-toh-mee) is the surgical removal of the tonsils (tonsill means tonsils and -ectomy means surgical removal).

Table 1.2

<table>
<thead>
<tr>
<th>Word/Roots/Combining Forms Indicating Color</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>cyan/o means blue</td>
<td>Cyanosis (sigh-ah-NOH-sis) is a blue discoloration of the skin caused by a lack of adequate oxygen (cyan means blue and -osis means condition).</td>
</tr>
<tr>
<td>erythr/o means red</td>
<td>Erythrocytes (eh-RITH-roh-sights) are mature red blood cells (erythr/o means red and cytes means cells).</td>
</tr>
<tr>
<td>leuk/o means white</td>
<td>Leukocytes (LOO-koh-sights) are white blood cells (leuk/o means white and -cytes means cells).</td>
</tr>
<tr>
<td>melan/o means black</td>
<td>Melanosis (mel-ah-NOH-sis) is any condition of unusual deposits of black pigment in different parts of the body (melan means black and -osis means condition).</td>
</tr>
<tr>
<td>poli/o means gray</td>
<td>Poliomyelitis (poh-lee-oh-my-eh-LYE-tis) is a viral infection of the gray matter of the spinal cord that may result in paralysis (poli/o means gray, myel means spinal cord, and -itis means inflammation).</td>
</tr>
</tbody>
</table>
Suffixes Meaning “Pertaining To”

Some suffixes complete the term by changing the word root into an adjective (a word that describes a noun). Many of these suffixes are defined as “pertaining to.” The “Pertaining to” table, at the beginning of Appendix A, makes such suffixes easy to find.

- For example, cardiac (KAR-dee-ack) is an adjective that means pertaining to the heart (cardi means heart and -ac means pertaining to).

Suffixes as Noun Endings

Some suffixes complete the term by changing the word root into a noun (a word that is the name of a person, place, or thing). Other suffixes in this group are defined as noun endings. These suffixes also are listed in a table at the beginning of Appendix A.

- For example, the cranium (KRAY-nee-um) is the portion of the skull that encloses the brain (crani means skull and -um is a noun ending).

Suffixes Meaning “Abnormal Condition”

Some suffixes have a general meaning of “abnormal condition or disease.” These suffixes are also listed in a table at the beginning of Appendix A.

- For example, -osis means an abnormal condition or disease. Gastrosis (gas-TROH-sis) means any disease of the stomach (gast means stomach and -osis means abnormal condition).
Suffixes Related to Pathology

Pathology (pah-THOL-oh-jee) means the study of disease, and the suffixes related to pathology describe specific disease conditions (path means disease and -ology means study of).

- **-dynia** also means pain. **Gastrodynia** (gas-troh-DIN-ee-ah) also means pain in the stomach (gastr/o means stomach and -dynia means pain).
- **-itis** means inflammation. **Gastritis** (gas-TRY-tis) is an inflammation of the stomach (gastr means stomach and -itis means inflammation).
- **-malacia** means abnormal softening. **Arteriomalacia** (ar-tee-oh-mah-LAY-shee-ah) is the abnormal softening of the walls of an artery or arteries (arteri/o means artery and -malacia means abnormal softening). Notice that -malacia is the opposite of -sclerosis.
- **-megaly** means enlargement. **Hepatomegaly** (hep-ah-toh-MEG-ah-lee) is the abnormal enlargement of the liver (hepat/o means liver and -megaly means enlargement).
- **-necrosis** means tissue death. **Arterionecrosis** (ar-tee-oh-neh-KROH-sis) is the tissue death of an artery or arteries (arteri/o means artery and -necrosis means tissue death).
- **-sclerosis** means abnormal hardening. **Arteriosclerosis** (ar-tee-oh-skleh-ROH-sis) is the abnormal hardening of the walls of an artery or arteries (arteri/o means artery and -sclerosis means abnormal hardening). Notice that -sclerosis is the opposite of -malacia.
- **-stenosis** means abnormal narrowing. **Arteriostenosis** (ar-tee-oh-steh-NOH-sis) is the abnormal narrowing of an artery or arteries (arteri/o means artery and -stenosis means abnormal narrowing.)

Suffixes Related to Procedures

Suffixes related to procedures identify a procedure that is performed on the body part identified by the word root.

- **-centesis** is a surgical puncture to remove fluid for diagnostic purposes or to remove excess fluid.

**Abdominocentesis** (ab-dom-ih-noh-sen-TEE-sis) is the surgical puncture of the abdominal cavity to remove fluid (abdomin/o means abdomen and -centesis means a surgical puncture to removal fluid).
- **-graphy** means the process of producing a picture or record. **Angiography** (an-jee-OG-rah-fee) is a radiographic (x-ray) study of the blood vessels after the injection of a contrast medium (angi/o means blood vessel and -graphy means the process of recording).
- **-gram** means a picture or record. An **angiogram** (AN-jee-oh-gram) is the film produced by angiography (angi/o means blood vessel and -gram means a picture or record).
- **-plasty** means surgical repair. **Myoplasty** (MY-oh-plas-tee) is the surgical repair of a muscle (myo means muscle and -plasty means surgical repair).
- **-scopy** means visual examination. **Endoscopy** (en-DOS-koh-pee) is the visual examination of the interior of a body cavity or organ by means of an endoscope (endo- means within and -scopy means visual examination).

The “Double R” Suffixes

Suffixes beginning with two Rs, which are often referred to as the “double RR,” are particularly confusing. They are grouped together here to help you understand the word parts and to remember the differences.

- **-rrhage** and **-rrhagia** mean bleeding, bursting forth, or abnormal or excessive flow. A **hemorrhage** (HEM-or-idj) is the loss of a large amount of blood in a short time (hem/o means blood and -rrhage means bursting forth of blood).
- **-rrhaphy** means surgical suturing to close a wound and includes the use of sutures, staples, and surgical glue. **Myorrhaphy** (my-OR-ah-fee) is the surgical suturing of a muscle wound (my/o means muscle and -rrhaphy means surgical suturing).
- **-rrhea** means flow or discharge and refers to the flow of most body fluids. **Diarrhea** (dye-ah-REE-ah) is the flow of frequent loose or watery stools (dia- means through and -rrhea means flow or discharge).
- **-rrhexis** means rupture. **Myorrhexis** (my-oh-RECK-sis) is the rupture of a muscle (my/o means muscle and -rrhexis means rupture).
A prefix is added to the beginning of a word to influence the meaning of that term (Figure 1.3). Prefixes usually, but not always, indicate location, time, or number. The term natal (NAY-tal) means pertaining to birth (nat means birth, and -al means pertaining to). The following examples show how a prefix changes the meaning of this term.

- **Prenatal** (pre-NAY-tal) means the time and events before birth (pre- means before, nat means birth, and -al means pertaining to) (Figure 1.4).
- **Perinatal** (pehr-ih-NAY-tal) refers to the time and events surrounding birth (peri- means surrounding, nat means birth, and -al means pertaining to). This is the time just before, during, and just after birth (Figure 1.5).

- **Postnatal** (pohst-NAY-tal) refers to the time and events after birth (post- means after, nat means birth, and -al means pertaining to) (Figure 1.6).
Contrasting and Confusing Prefixes

Some prefixes are confusing because they are similar in spelling but opposite in meaning. The more common prefixes of this type are summarized in Table 1.4.

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ab</strong>-</td>
<td>means away from.</td>
</tr>
<tr>
<td>Abnormal</td>
<td>means not normal or away from normal.</td>
</tr>
<tr>
<td><strong>ad</strong>-</td>
<td>means toward or in the direction of.</td>
</tr>
<tr>
<td>Addiction</td>
<td>means drawn toward or a strong dependence on a drug or substance.</td>
</tr>
<tr>
<td><strong>dys</strong>-</td>
<td>means bad, difficult, painful.</td>
</tr>
<tr>
<td>Dysfunctional</td>
<td>means an organ or body part that is not working properly.</td>
</tr>
<tr>
<td><strong>eu</strong>-</td>
<td>means good, normal, well, or easy.</td>
</tr>
<tr>
<td>Euthyroid</td>
<td>(you-THIGH-roid) means a normally functioning thyroid gland.</td>
</tr>
<tr>
<td><strong>hyper</strong>-</td>
<td>means excessive or increased.</td>
</tr>
<tr>
<td>Hypertension</td>
<td>(high-per-TEN-shun) is higher than normal blood pressure.</td>
</tr>
<tr>
<td><strong>hypo</strong>-</td>
<td>means deficient or decreased.</td>
</tr>
<tr>
<td>Hypotension</td>
<td>(high-poh-TEN-shun) is lower than normal blood pressure.</td>
</tr>
<tr>
<td><strong>inter</strong>-</td>
<td>means between or among.</td>
</tr>
<tr>
<td>Interstitial</td>
<td>(in-ter-STISH-al) means between, but not within, the parts of a tissue.</td>
</tr>
<tr>
<td><strong>intra</strong>-</td>
<td>means within or inside.</td>
</tr>
<tr>
<td>Intramuscular</td>
<td>(in-trah-MUS-kyou-lar) means within the muscle.</td>
</tr>
<tr>
<td><strong>sub</strong>-</td>
<td>means under, less, or below.</td>
</tr>
<tr>
<td>Subcostal</td>
<td>(sub-KOS-tal) means below a rib or ribs.</td>
</tr>
<tr>
<td><strong>super</strong>, <strong>supra</strong>-</td>
<td>mean above or excessive.</td>
</tr>
<tr>
<td>Supracostal</td>
<td>(sue-prah-KOS-tal) means above or outside the ribs.</td>
</tr>
</tbody>
</table>

**Table 1.4**

**Contrasting and Confusing Prefixes**

Contrasting and Confusing Prefixes

Some prefixes are confusing because they are similar in spelling but opposite in meaning. The more common prefixes of this type are summarized in Table 1.4.

**DETERMINING MEANINGS ON THE BASIS OF WORDS PARTS**

Knowing the meaning of the word parts often makes it possible to figure out the definition of an unfamiliar medical term.

**Taking Terms Apart**

To determine a word’s meaning by looking at the component pieces, you must first separate it into word parts.

- Always start at the end of the word, with the suffix, and work toward the beginning.
- As you separate the word parts, identify the meaning of each. Identifying the meaning of each part should give you a definition of the term.
- Because some word parts have more than one meaning, it also is necessary to determine the context in which the term is being used. As used here, context means to determine which body system this term is referring to.
- If you have any doubt, use your medical dictionary to double-check your definition.

**An Example**

Look at the term otorhinolaryngology as shown in Figure 1.7. It is made up of three combining forms plus a suffix. Here are the word parts as the term is taken apart, beginning at the end.

- The suffix -ology means the study of.
- The word root laryng means larynx and throat. The combining vowel is not used here because the word root is joining a suffix that begins with a vowel.
- The combining form rhin/o means nose. The combining vowel is used here because rhin/o is joining another word root.
- The combining form ot/o means ear. The combining vowel is used here because ot/o is joining another word root.
- Together they form otorhinolaryngology (oh-toh-rye-noh-lar-in-GOL-oh-jee), which is the study of the ears, nose, and throat (ot/o means ear, rhin/o...
means nose, laryng means throat, and -ology means study of).

- Because this is such a long name, this specialty is frequently referred to as ENT (ears, nose, and throat) or it is shortened to otolaryngology (oh-toh-lar-in-GOL-oh-jee), which is the study of the ears and larynx or throat (ot/o means ears, larynx means larynx, and -ology means study of).

**Guessing at Meanings**

When you are able to guess at the meaning of a term on the basis of word parts that make it up, you must always double check for accuracy, because some terms have more than one meaning. For example, look at the term lithotomy (lih-THOT-oh-mee):

- On the basis of word parts, a lithotomy is a surgical incision for the removal of a stone (lith means stone and -otomy means a surgical incision). This meaning is discussed further in Chapter 9.
- However, lithotomy is also the name of an examination position in which the patient is lying on the back with the feet and legs raised and supported in stirrups. This term is discussed further in Chapter 15.
- This possible confusion is only one of the many reasons why a medical dictionary is an important medical terminology tool.

**MEDICAL DICTIONARY USE**

Learning to use a medical dictionary is an important part of mastering the correct use of medical terms. The following tips for dictionary use apply whether you are working with a traditional book-form dictionary or an electronic dictionary on your computer.

**If You Know How to Spell the Word**

When starting to work with an unfamiliar dictionary, spend a few minutes reviewing its use guide, table of contents, and appendices. The time you spend reviewing now will be saved later when you are looking up unfamiliar terms.

- On the basis of the first letter of the word, start in the appropriate section of the dictionary. Look at the top of the page for clues. The top left word is the first term on the page. The top right word is the last term on the page.
- Next, look alphabetically for words that start with the first and second letters of the word you are researching. Continue looking through each letter until you find the term you are looking for.
- When you think you have found it, check the spelling very carefully letter by letter working from left to right. Terms with similar spellings have very different meanings.
- When you find the term, carefully check all of the definitions.

**If You Do Not Know How to Spell the Word**

- Listen carefully to the term and write it down. If you cannot find the word on the basis of your spelling, start looking for alternative spellings based on the beginning sound as shown in Table 1.5. Note: All of these examples are in this text. However, you could practice looking them up in the dictionary!

**Look Under Categories**

Most dictionaries use categories such as Diseases and Syndromes to group disorders with these terms in their titles. For example:

- Venereal disease would be found under Disease, venereal. These sexually transmitted diseases are discussed further in Chapter 14.
- Fetal alcohol syndrome would be found under Syndrome, fetal alcohol. This condition is discussed further in Chapter 2.
When you come across such a term and cannot find it listed by the first word, the next step is to look under the appropriate category.

Multiple Word Terms
When you are looking for a term that includes more than one word, begin your search with the last term. If you do not find it here, move forward to the next word.

- For example, congestive heart failure is sometimes listed under heart failure, congestive.

Table 1.5  
GUIDELINES TO LOOKING UP THE SPELLING OF UNFAMILIAR TERMS

<table>
<thead>
<tr>
<th>If it sounds like</th>
<th>It may begin with</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>F</td>
<td>flatus (FLAY-tus)</td>
</tr>
<tr>
<td>PH</td>
<td></td>
<td>phlegm (FLEM)</td>
</tr>
<tr>
<td>J</td>
<td>G</td>
<td>gingivitis (jin-jih-VYE-tis)</td>
</tr>
<tr>
<td>J</td>
<td></td>
<td>jaundice (JAWN-dis)</td>
</tr>
<tr>
<td>K</td>
<td>C</td>
<td>crepitus (KREP-ih-tus)</td>
</tr>
<tr>
<td>CH</td>
<td></td>
<td>cholera (KOL-er-ah)</td>
</tr>
<tr>
<td>K</td>
<td></td>
<td>kyphosis (kye-FOH-sis)</td>
</tr>
<tr>
<td>QU</td>
<td></td>
<td>quadriplegia (kwad-rih-PLEE-jee-ah)</td>
</tr>
<tr>
<td>S</td>
<td>C</td>
<td>cytology (sigh-TOL-oh-jee)</td>
</tr>
<tr>
<td>PS</td>
<td></td>
<td>psychologist (sigh-KOL-oh-jist)</td>
</tr>
<tr>
<td>S</td>
<td></td>
<td>serology (seh-ROL-oh-jee)</td>
</tr>
<tr>
<td>Z</td>
<td>X</td>
<td>xeroderma (zee-roh-DER-mah)</td>
</tr>
<tr>
<td>Z</td>
<td></td>
<td>zygote (ZYE-goht)</td>
</tr>
</tbody>
</table>

- When you come across such a term and cannot find it listed by the first word, the next step is to look under the appropriate category.

SEARCHING FOR DEFINITIONS ON THE INTERNET
Search engines can help you find medical terms. Type the complete term into the “search box” and add the word “definition.” Be cautious and take care to determine that the site you’ve found is a reputable source for medical information.

PRONUNCIATION
A medical term is easier to understand and remember when you know how to pronounce it properly. To help you pronounce terms, we have identified each new term in the text in bold. The term is followed (in parentheses) by a commonly accepted pronunciation and then the definition.

- In this “sounds-like” pronunciation system, the word is respelled using normal English letters to create sounds that are familiar. To pronounce a new word, just say it as it is spelled in the parentheses.
- The part of the word that receives the primary (most) emphasis when you say it is shown in capital letters and bold. For example, edema (eh-DEE-mah) means excess fluid in body tissues, causing swelling.
- The part of the word that receives secondary emphasis when you say it, is shown in lowercase letters and bold. For example, appendicitis (ah-pen-dih-SIGH-tis) means an inflammation of the appendix (appendic means appendix and -itis means inflammation).

A Word of Caution
Frequently, there is more than one correct way to pronounce a medical term!
- The pronunciation of many medical terms is based on their Greek, Latin, or other foreign origin. However, there is a trend toward pronouncing terms as they would sound in English.
- The result is more than one “correct” pronunciation for a term. In the text, sometimes an alternative pronunciation is included to reflect these changes.
- Both are correct, and the difference is a matter of preference. However, your instructor will tell you which pronunciation to use in your course.

SPELLING IS ALWAYS IMPORTANT
Accuracy in spelling medical terms is extremely important!
Changing just one or two letters can completely change the meaning of a word—and this difference literally could be a matter of life or death for the patient. The section “Look-Alike Sound-Alike Terms and Word Parts” later in this chapter will help you become aware of some terms and word parts that are frequently confused.

**USING ABBREVIATIONS**

Abbreviations are frequently used as a shorthand way to record long and complex medical terms; Appendix B contains an alphabetized list of many of the more commonly used medical abbreviations.

- Abbreviations can also lead to confusion and errors! Therefore, it is important that you be very careful when using or translating an abbreviation.
- For example, the abbreviation **BE** means both “below elbow” and “barium enema.” Just imagine what a difference a mix-up here would make for the patient!

- Most clinical agencies have policies for accepted abbreviations. It is important to follow this list for the facility where you are working.
- If there is any question in your mind about which abbreviation to use, always follow this rule: When in doubt, spell it out.

**SINGULAR AND PLURAL ENDINGS**

Many medical terms have Greek or Latin origins. As a result of these different origins, there are unusual rules for changing a singular word into a plural form. In addition, English endings have been adopted for some commonly used terms.

- Table 1.6 provides guidelines to help you better understand how these plurals are formed.
- Also, throughout the text, when a term with an unusual singular or plural form is introduced, both forms are included. For example, a **phalanx** (FAY-lanks) is one bone of the fingers or toes (plural, **phalanges**) (Figure 1.8).

### Table 1.6

<table>
<thead>
<tr>
<th>Guideline</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If the term ends in <em>a</em>, the plural is usually formed by adding an <em>e</em>.</td>
<td>bursa</td>
<td>bursae</td>
</tr>
<tr>
<td>2. If the term ends in <em>ex</em> or <em>ix</em>, the plural is usually formed by changing the <em>ex</em> or <em>ix</em> to <em>ices</em>.</td>
<td>appendix</td>
<td>appendices</td>
</tr>
<tr>
<td>3. If the term ends in <em>is</em>, the plural is usually formed by changing the <em>is</em> to <em>es</em>.</td>
<td>diagnosis</td>
<td>diagnoses</td>
</tr>
<tr>
<td>4. If the term ends in <em>itis</em>, the plural is usually formed by changing the <em>is</em> to <em>ides</em>.</td>
<td>arthritis</td>
<td>arthritides</td>
</tr>
<tr>
<td>5. If the term ends in <em>nx</em>, the plural is usually formed by changing the <em>x</em> to <em>ges</em>.</td>
<td>phalanx</td>
<td>phalanges</td>
</tr>
<tr>
<td>6. If the term ends in <em>on</em>, the plural is usually formed by changing the <em>on</em> to <em>a</em>.</td>
<td>criterion</td>
<td>criteria</td>
</tr>
<tr>
<td>7. If the term ends in <em>um</em>, the plural usually is formed by changing the <em>um</em> to <em>a</em>.</td>
<td>diverticulum</td>
<td>diverticula</td>
</tr>
<tr>
<td>8. If the term ends in <em>us</em>, the plural is usually formed by changing the <em>us</em> to <em>i</em>.</td>
<td>alveolus</td>
<td>alveoli</td>
</tr>
</tbody>
</table>

If you are in doubt as to how a plural is formed, look it up under the singular in a medical dictionary!
BASIC MEDICAL TERMS

Some of the basic medical terms used to describe diseases and disease conditions are shown in Table 1.7.

LOOK-ALIKE SOUND-ALIKE TERMS AND WORD PARTS

One confusing part of learning medical terminology is dealing with words and word parts that look and sound much alike. This section highlights some frequently used terms and word parts that you may find confusing. Pay particular attention to these terms and word parts as you encounter them in the text.

arteri/o, ather/o, and arthr/o

- arteri/o means artery. Endarterial (end-ar-TEE-ree-al) means pertaining to the interior or lining of an artery (end- means within, arteri means artery, and -al means pertaining to).

Table 1.7

<table>
<thead>
<tr>
<th>Basic Medical Terms</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A sign is objective evidence</td>
<td>A symptom (SIMP-tum) is subjective evidence of a disease, such</td>
</tr>
<tr>
<td>of disease, such as a fever.</td>
<td>as pain or a headache. Subjective means that it can be</td>
</tr>
<tr>
<td>Objective means that the sign</td>
<td>evaluated or measured only by the patient.</td>
</tr>
<tr>
<td>can be evaluated or measured</td>
<td>A syndrome (SIN-drohm) is a set of the signs and symptoms that</td>
</tr>
<tr>
<td>by the patient or others.</td>
<td>occur together as part of a specific disease process.</td>
</tr>
<tr>
<td>A diagnosis (dye-ag-NOH-sis)</td>
<td>A differential diagnosis attempts to determine which one of</td>
</tr>
<tr>
<td>is the identification of the</td>
<td>several diseases may be producing the symptoms. Also known as</td>
</tr>
<tr>
<td>disease (plural diagnoses).</td>
<td>to rule out (R/O).</td>
</tr>
<tr>
<td>To diagnose is the process of</td>
<td>A prognosis (prog-NOH-sis) is a forecast or prediction of the</td>
</tr>
<tr>
<td>reaching a diagnosis.</td>
<td>probable course and outcome of a disorder (plural, prognoses).</td>
</tr>
<tr>
<td>An acute disease or symptom</td>
<td>A remission is the temporary, partial, or complete disappearance</td>
</tr>
<tr>
<td>has a rapid onset, a severe</td>
<td>of the symptoms of a disease without having achieved a cure.</td>
</tr>
<tr>
<td>course, and a relatively short</td>
<td>A condition described. For example, chronic fatigue syndrome</td>
</tr>
<tr>
<td>duration.</td>
<td>is a persistent overwhelming fatigue that does not resolve with</td>
</tr>
<tr>
<td>Some diseases are named for</td>
<td>An eponym (EP-oh-nim) is a disease, structure, operation, or</td>
</tr>
<tr>
<td>the condition described. For</td>
<td>procedure named for the person who discovered or described it</td>
</tr>
<tr>
<td>example, chronic fatigue</td>
<td>first. For example, Alzheimer’s disease is named for Alois</td>
</tr>
<tr>
<td>syndrome is a persistent</td>
<td>Alzheimer, a German neurologist who lived from 1864 to 1915.</td>
</tr>
<tr>
<td>overwhelming fatigue that</td>
<td>(See Chapter 10.)</td>
</tr>
<tr>
<td>does not resolve with bed</td>
<td>An acronym (ACK-roh-nim) is a word formed from the initial</td>
</tr>
<tr>
<td>rest.</td>
<td>letter or letters of the major parts of a compound term. For</td>
</tr>
<tr>
<td>An eponym (EP-oh-nim) is a</td>
<td>example, the acronym laser stands for light amplification by</td>
</tr>
<tr>
<td>disease, structure, operation,</td>
<td>stimulated emission of radiation. (See Chapter 12.)</td>
</tr>
</tbody>
</table>
• ather/o means plaque or fatty substance. An atheroma (ath-er-OH-mah) is a fatty deposit within the wall of an artery (ather means fatty substance and -oma means tumor).
• arthr/o means joint. Arthralgia (ar-THRAL-jee-ah) means pain in a joint or joints (arthr means joint and -algia means pain).

-ectomy, -ostomy, and -otomy
• -ostomy means to surgically create an artificial opening. A colostomy (koh-LAHS-toh-mee) is the surgical creation of an opening between the colon and the body surface (col means colon and -ostomy means an artificial opening).
• -otomy means cutting into or a surgical incision. A colotomy (koh-LOT-ooh-mee) is a surgical incision into the colon (col means colon and -otomy means a surgical incision).

Fissure and Fistula
• A fissure (FISH-ur) is a groove or crack-like sore of the skin. This term also describes normal folds in the contours of the brain.
• A fistula (FIS-tyou-lah) is an abnormal passage usually between two internal organs, or leading from an organ to the surface of the body.

Ileum and Ilium
• The ileum (ILL-ee-um) is part of the small intestine. (Remember, ileum is spelled with an e as in intestine.)
• The ilium (ILL-ee-um) is part of the hip bone. (Remember, ilium is spelled with an i as in hip.)

Infection and Inflammation
• An infection (in-FECK-shun) is the invasion of the body by a pathogenic (disease producing) organism. The infection may remain localized or may be systemic (affecting the entire body).
• Inflammation (in-flah-MAY-shun) is a localized response to an injury or destruction of tissues. The cardinal signs (indications) of inflammation are (1) redness (erythema), (2) heat (hyperthermia), (3) swelling (edema), and (4) pain. These are caused by extra blood flowing into the area as part of the healing process.
• The suffix -itis means inflammation. However, it also is often used to indicate infection.

Laceration and Lesion
• A laceration (lass-er-AH-shun) is a torn, ragged wound.
• A lesion (LEE-zhun) is a pathologic change of the tissues due to disease or injury.

Mucous and Mucus
• Mucous (MYOU-kus) is an adjective that describes the specialized mucous membranes that line the body cavities.
• Mucus (MYOU-kus) is a noun and is the name of the fluid secreted by the mucous membranes.

myc/o, myel/o, and my/o
• myc/o means fungus. Mycosis (my-KOH-sis) means any disease caused by a fungus (myc means fungus and -osis means abnormal condition).
• myel/o means bone marrow or spinal cord. Myelopathy (my-eh-LOP-ah-thee) is any pathologic change or disease in the spinal cord (myel/o means spinal cord, or bone marrow, and -pathy means disease).
• my/o means muscle. Myopathy (my-OP-ah-thee) is any pathologic change or disease of muscle tissue (my/o means muscle and -pathy means disease).

-ologist and -ology
• -ologist means specialist. A gerontologist (jer-on-TOL-oh-jist) is a specialist in diagnosing and treating diseases, disorders, and problems associated with aging (geront means old age and -ologist means specialist).
• -ology means the study of. Neonatology (nee-oh-nay-TOL-oh-pee) is the study of disorders of the newborn (neo- means new, nat means birth, and -ology means study of).

Palpation and Palpitation
• Palpation (pal-PAY-shun) is an examination technique in which the examiner’s hands are used to
feel the texture, size, consistency, and location of certain body parts

- **Palpitation** (pal-pih-TAY-shun) is a pounding or racing heart.

### Prostate and Prostrate

- **Prostate** (PROS-tayt) refers to a male gland that lies under the urinary bladder and surrounds the urethra.
- **Prostrate** (PROS-trayt) means to collapse and be lying flat or to be overcome with exhaustion.

### pyel/o, py/o, and pyr/o

- **pyel/o** means renal pelvis (which is part of the kidney). **Pyelitis** (pye-eh-LYE-tis) is an inflammation of the renal pelvis (pyel means renal pelvis and -itis means inflammation).
- **py/o** means pus. **Pyoderma** (pye-oh-DER-mah) is any acute, inflammatory, pus-forming bacterial skin infection such as impetigo (py/o means pus and -derma means skin).
- **pyr/o** means fever or fire. **Pyrosis** (pye-ROH-sis), also known as heartburn, is discomfort due to the regurgitation of stomach acid upward into the esophagus (pyr means fever or fire and -osis means abnormal condition).

### Supination and Suppuration

- **Supination** (soo-pih-NAY-shun) is the act of rotating the arm so that the palm of the hand is forward or upward.
- **Suppuration** (sup-you-RAY-shun) is the formation or discharge of pus.

### Triage and Trauma

- **Triage** (tree-AHZH) is the medical screening of patients to determine their relative priority of need and the proper place of treatment. For example, emergency personnel arriving on an accident scene must identify which of the injured require care first and determine where they can be treated most effectively.
- **Trauma** (TRAW-mah) means wound or injury. These are the types of injuries that might occur in an accident, shooting, natural disaster, or fire.

### Viral and Virile

- **Viral** (VYE-ral) means pertaining to a virus (vir means virus or poison and -al means pertaining to).
- **Virile** (VIR-ill) means possessing masculine traits.

### Abbreviations Related to the Introduction to Medical Terminology

Table 1.8 presents an overview of the abbreviations related to the terms introduced in this chapter. **Note:** To avoid errors or confusion, always be cautious when using abbreviations.
# Table 1.8

## Abbreviations Related to the Introduction to Medical Terminology

<table>
<thead>
<tr>
<th>Term</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alzheimer’s disease</td>
<td>AD = Alzheimer’s disease</td>
</tr>
<tr>
<td>appendectomy or appendicitis</td>
<td>AP = appendectomy or appendicitis</td>
</tr>
<tr>
<td>barium enema, below elbow</td>
<td>BE = barium enema, below elbow</td>
</tr>
<tr>
<td>chronic fatigue syndrome</td>
<td>CFS = chronic fatigue syndrome</td>
</tr>
<tr>
<td>cyanosis</td>
<td>C = cyanosis</td>
</tr>
<tr>
<td>diagnosis</td>
<td>DG, Dg, Diag, diag, DX, Dx = diagnosis</td>
</tr>
<tr>
<td>differential diagnosis</td>
<td>D/D, DD, DDx, diag. diag = differential diagnosis</td>
</tr>
<tr>
<td>endoscopy</td>
<td>EN = endoscopy</td>
</tr>
<tr>
<td>gastroenteritis</td>
<td>GE = gastroenteritis</td>
</tr>
<tr>
<td>hemorrhage</td>
<td>He = hemorrhage</td>
</tr>
<tr>
<td>inflammation</td>
<td>Inflam, Inflamm = inflammation</td>
</tr>
<tr>
<td>intramuscular</td>
<td>IM = intramuscular</td>
</tr>
<tr>
<td>pathology</td>
<td>Pa, PA, Path = pathology</td>
</tr>
<tr>
<td>postnatal</td>
<td>PN = postnatal</td>
</tr>
<tr>
<td>prognosis</td>
<td>prog, progn, Prx, Px = prognosis</td>
</tr>
<tr>
<td>tonsillectomy</td>
<td>TE = tonsillectomy</td>
</tr>
<tr>
<td>venereal disease</td>
<td>VD = venereal disease</td>
</tr>
</tbody>
</table>
### Matching Word Parts 1

Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1. bad, difficult, painful</td>
<td>______________________</td>
<td>-algia</td>
</tr>
<tr>
<td>1.2. excessive, increased</td>
<td>______________________</td>
<td>dys-</td>
</tr>
<tr>
<td>1.3. liver</td>
<td>______________________</td>
<td>-ectomy</td>
</tr>
<tr>
<td>1.4. pain, suffering</td>
<td>______________________</td>
<td>hepat/o</td>
</tr>
<tr>
<td>1.5. surgical removal</td>
<td>______________________</td>
<td>hyper-</td>
</tr>
</tbody>
</table>

### Matching Word Parts 2

Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.6. abnormal condition</td>
<td>______________________</td>
<td>hypo-</td>
</tr>
<tr>
<td>1.7. abnormal softening</td>
<td>______________________</td>
<td>-itis</td>
</tr>
<tr>
<td>1.8. deficient, decreased</td>
<td>______________________</td>
<td>-malacia</td>
</tr>
<tr>
<td>1.9. inflammation</td>
<td>______________________</td>
<td>-necrosis</td>
</tr>
<tr>
<td>1.10. tissue death</td>
<td>______________________</td>
<td>-osis</td>
</tr>
</tbody>
</table>
### Matching Word Parts 3

Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.11. bleeding, bursting forth</td>
<td>______________________</td>
<td>-ostomy</td>
</tr>
<tr>
<td>1.12. surgical creation of an opening</td>
<td>______________________</td>
<td>-otomy</td>
</tr>
<tr>
<td>1.13. surgical incision</td>
<td>______________________</td>
<td>-plasty</td>
</tr>
<tr>
<td>1.14. surgical repair</td>
<td>______________________</td>
<td>-rrhage</td>
</tr>
<tr>
<td>1.15. surgical suturing</td>
<td>______________________</td>
<td>-rraphy</td>
</tr>
</tbody>
</table>

### Matching Word Parts 4

Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.16. visual examination</td>
<td>______________________</td>
<td>-rrheal</td>
</tr>
<tr>
<td>1.17. rupture</td>
<td>______________________</td>
<td>-rrhexis</td>
</tr>
<tr>
<td>1.18. abnormal narrowing</td>
<td>______________________</td>
<td>-sclerosis</td>
</tr>
<tr>
<td>1.19. abnormal hardening</td>
<td>______________________</td>
<td>-scopy</td>
</tr>
<tr>
<td>1.20. flow or discharge</td>
<td>______________________</td>
<td>-stenosis</td>
</tr>
</tbody>
</table>

### Definitions

Select the correct answer and write it on the line provided.

1.21. The word part meaning plaque or fatty substance is ______________________.  
     -algia   angi/o   ather/o   arthr/o

1.22. The prefix meaning surrounding is ______________________.  
     inter-   intra-   peri-   pre-

1.23. A ______________________ is always placed at the end of the term.  
     combining form   prefix   suffix   word root
1.24. The combining form meaning white is _____________________________.

   cyan/o  erythr/o  leuk/o  poli/o

1.25. The suffix meaning abnormal softening is _____________________________.

   -malacia  -necrosis  -sclerosis  -stenosis

1.26. Pain, which can be observed only by the patient, is a _____________________________.

   prognosis  remission  sign  symptom

1.27. The prefix meaning deficient or decreased is _____________________________.

   hyper-  hypo-  peri-  supra-

1.28. A ____________________________ is a prediction of the probable course and outcome of a disease.

   diagnose  diagnosis  prognosis  syndrome

1.29. The suffix meaning to rupture is _____________________________.

   -rrhage  -rrhaphy  -rrhea  -rrhesis

1.30. The plural of the term appendix is _____________________________.

   appendexes  appendices  appendixxes  appendizes

---

**Matching Terms and Definitions**

Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.31. examination procedure</td>
<td>_____________________________</td>
<td>laceration</td>
</tr>
<tr>
<td>1.32. male gland</td>
<td>_____________________________</td>
<td>lesion</td>
</tr>
<tr>
<td>1.33. pathologic tissue change</td>
<td>_____________________________</td>
<td>palpitation</td>
</tr>
<tr>
<td>1.34. pounding heart</td>
<td>_____________________________</td>
<td>palpation</td>
</tr>
<tr>
<td>1.35. torn, ragged wound</td>
<td>_____________________________</td>
<td>prostate</td>
</tr>
</tbody>
</table>

---

**Which Word?**

Select the correct answer and write it on the line provided.

1.36. The body cavities are lined with specialized _____________________________ membranes.

   mucous  mucus
1.37. The formation of pus is called ___________________________.
   supination suppuration

1.38. The term meaning wound or injury is ___________________________.
   trauma triage

1.39. The term ___________________________ means pertaining to a virus.
   viral virile

1.40. The term describing part of the small intestine is ___________________________.
   ileum ilium

---

**Spelling Counts**

Find the misspelled word in each sentence. Then write that word, spelled correctly, on the line provided.

1.41. A disease named for the person who discovered it is known as an enaponym.
   ___________________________

1.42. A localized response to injury or tissue destruction is called inflimmation. ___________________________

1.43. A fissure of the skin is a groove or crack-like sore. ___________________________

1.44. The medical term meaning the surgical repair of a nerve is neuriplasty. ___________________________

1.45. The medical term meaning inflammation of the tonsils is tonsilitis. ___________________________

---

**Matching Terms**

Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.46. abnormal stomach condition</td>
<td>________________________________</td>
<td>cardiac</td>
</tr>
<tr>
<td>1.47. pertaining to the heart</td>
<td>________________________________</td>
<td>gastralgia</td>
</tr>
<tr>
<td>1.48. rupture of a muscle</td>
<td>________________________________</td>
<td>gastrosis</td>
</tr>
<tr>
<td>1.49. stomach pain</td>
<td>________________________________</td>
<td>myoplasty</td>
</tr>
<tr>
<td>1.50. surgical muscle repair</td>
<td>________________________________</td>
<td>myorrhexis</td>
</tr>
</tbody>
</table>
**Term Selection**

Select the correct answer and write it on the line provided.

1.51 The abnormal narrowing of an artery or arteries is called ____________________________.

   arteriosclerosis  arteriostenosis  arthrostenosis  atherosclerosis

1.52 Based on the word part that indicates color, the term ____________________________ means blue coloration of the skin that is caused by the lack of oxygen in the blood.

   cyanosis  erythrocytes  leukocytes  melanosis

1.53 The term ____________________________ contains a combining vowel between two word roots.

   abdominocentesis  endoscopy  gastroenteritis  hemorrhage

1.54 The prefix ___________________________ means bad, difficult, or painful.

   -algia  -dynia  dys-  eu-

1.55 A ____________________________ is a specialist in diagnosing and treating diseases, disorders, and problems associated with aging.

   gerontologist  gerontology  neurologist  neurology

**Sentence Completion**

Write the correct term on the line provided.

1.56 Lower than normal blood pressure is called ____________________________.

1.57 The process of recording a picture of an artery or arteries is called ____________________________.

1.58 The term meaning above or outside the ribs is ____________________________.

1.59 A strong dependence on a drug or substance is known as a/an ____________________________.

1.60 An abnormal passage, usually between two internal organs, or leading from an organ to the surface of the body, is a/an ____________________________.
Word Surgery

Divide each term into its component word parts. Write these word parts, in sequence, on the lines provided. When necessary use a back slash (/) to indicate a combining vowel. (You may not need all of the lines provided.)

1.61. **Arteriomegaly** is the abnormal softening of an artery.
   ___________________ ___________________ ___________________ ___________________

1.62. **Otorhinolaryngology** is the study of the ears, nose, and throat.
   ___________________ ___________________ ___________________ ___________________

1.63. The term **mycosis** means any disease caused by a fungus.
   ___________________ ___________________ ___________________ ___________________

1.64. The term **postnatal** describes the time and events after birth.
   ___________________ ___________________ ___________________ ___________________

1.65. A **tonsillectomy** is the surgical removal of the tonsils.
   ___________________ ___________________ ___________________ ___________________

1.66. The term **gastroenteritis** means inflammation of the stomach and small intestine.
   ___________________ ___________________ ___________________ ___________________

1.67. The term **rhinorrhea** means an excessive flow of mucus from the nose. It is also known as a runny nose.
   ___________________ ___________________ ___________________ ___________________

1.68. A **neonatologist** is a specialist in diagnosing and treating disorders of the newborn.
   ___________________ ___________________ ___________________ ___________________

1.69. The term **abdominocentesis** means the surgical puncture of the abdominal cavity to remove fluid.
   ___________________ ___________________ ___________________ ___________________

1.70. The term **appendicitis** means inflammation of the appendix.
   ___________________ ___________________ ___________________ ___________________
Clinical Conditions

Write the correct answer on the line provided.

1.71. Beverly Gaston suffers from higher than normal blood pressure. This is recorded on her chart as __________________________.

1.72. Mrs. Tillson underwent __________________________ to remove excess fluid from her abdomen.

1.73. Dr. Gusterson is trained in the treatment of the diseases and disorders associated with aging. His specialty is known as __________________________.

1.74. In an accident, Felipe Valladares suffered a broken toe. The medical term for this is a fractured __________________________.

1.75. Hal Jamison received emergency treatment for __________________________, which is an inflammation of the appendix.

1.76. Gina’s physician explained that she had a/an __________________________ complication. This means that there was a problem pertaining to the interior or lining of an artery.

1.77. Jennifer was interested in __________________________. This is the study of disorders of the newborn.

1.78. Joan Randolph’s medication was administered by an injection into the muscle. This is called an __________________________ or IM injection.

1.79. Andy Lewis describes that uncomfortable feeling as heartburn. The medical term for this condition is __________________________.

1.80. Max Greene’s muscle wound required suturing. This procedure is called __________________________.

Which Is the Correct Medical Term?

Select the correct answer and write it on the line provided.

1.81. The term __________________________ means an inflammation of a nerve or nerves.

    neuralgia neuritis neurology neuroplasty

1.82. The term __________________________ means loss of a large amount of blood in a short time.

    diarrhea hemorrhage hepatorrhagia otorrhagia
1.83. The term ____________________________ means the tissue death of an artery or arteries.

arteriomalacia  arterionecrosis  arteriosclerosis  arteriostenosis

1.84. The term ____________________________ describes the time and events before birth.

neonatal  perinatal  postnatal  prenatal

1.85. The term ____________________________ means enlargement of the liver.

hepatitis  hepatomegaly  nephromegaly  nephritis

**Challenge Word Building**

These terms are *not* found in this chapter; however, they are made up of the following word parts. You may want to look in the textbook glossary or use a medical dictionary to check your answers.

- **neo-** = new
- **arteri/o** = artery
- **-algia** = pain and suffering
- **arthr/o** = joint
- **-itis** = inflammation
- **cardi/o** = heart
- **-ologist** = specialist
- **nat/o** = birth
- **-otomy** = a surgical incision
- **neur/o** = nerve
- **-rrhea** = flow or discharge
- **rhin/o** = nose
- **-scopy** = visual examination

1.86. A medical specialist concerned with the diagnosis and treatment of heart disease is a/an ____________________________.

1.87. The term meaning a runny nose is ____________________________.

1.88. The term meaning the inflammation of a joint is ____________________________.

1.89. A specialist in disorders of the newborn is called a/an ____________________________.

1.90. The term meaning a surgical incision into a nerve is a/an ____________________________.

1.91. The term meaning the visual examination of the internal structure of a joint is ____________________________.

1.92. The term meaning an inflammation of an artery is ____________________________.

1.93. The term meaning pain in a nerve or nerves is ____________________________.

1.94. The term meaning a surgical incision into the heart is a/an ____________________________.

1.95. The term meaning an inflammation of the nose is ____________________________.
Labeling Exercises

Identify the numbered items in the accompanying figure.

1.96. The combining form meaning spinal cord is _________________/___.

1.97. The combining form meaning muscle is _________________/___.

1.98. The combining form meaning bone marrow is _________________/___.

1.99. The combining form meaning nerve is _________________/___.

1.100. The combining form meaning joint is _________________/___.
THE HUMAN TOUCH: CRITICAL THINKING EXERCISE

The following story and questions are designed to stimulate critical thinking through class discussion or as a brief essay response. There are right or wrong answers to these questions.

Baylie Hutchins sits at her kitchen table with her medical terminology book opened to the first chapter, highlighter in hand. Her two-year-old son, Mathias, plays with a box of Animal Crackers in his highchair, some even finding his mouth. “Arteri/o, ather/o, and arthr/o,” she mutters, lips moving to shape unfamiliar sounds. “They’re too much alike and they mean totally different things.” Mathias sneezes loudly, and spots of Animal Cracker rain on the page, punctuating her frustration.

“Great job, Thias,” she says wiping the text with her finger. “I planned on using the highlighter to mark with, not your lunch.” Mathias giggles and peaks through the tunnel made by one small hand.

“Mucous and mucus,” she reads aloud, each sounding the same. Then she remembers her teacher’s tip for remembering the difference, “The long word’s the membrane and the short one’s the secretion.”

Mathias picks up an Animal Cracker and excitedly shouts “Tiger, Mommy! Tiger!” “That’s right, Thias. Good job!”

Turning back to the page she stares at the red words -rrhagia, -rrhaphy, -rrhea, and -rrhexis. Stumbling over the pronunciation, Baylie closes her eyes and tries to silence the voices in her head. “You can’t do anything right,” her ex-husband says. “Couldn’t finish if your life depended on it,” her mother’s voice snaps.

Baylie keeps at it. “Rhin/o means nose,” highlighting those three words, “and a rhinoceros has a big horn on his nose.”

“Rhino!” Matthias shouts, holding up an Animal Cracker. Baylie laughs. We both have new things to learn, she realizes. And we can do it!

Suggested Discussion Topics:

1. Baylie needs to learn medical terminology if she wants a career in the medical field. What study habits would help Baylie accomplish this task?
2. A support group could help empower Baylie to accomplish her goals. What people would you suggest for this group and why?
3. How can this textbook and other resource materials help her (and you) learn medical terminology?
4. Discuss strategies the instructor could use, and has already used, to help Baylie improve her terminology skills.
5. Discuss how previous educational or learning experiences influence a student’s approach to learning a new skill or subject.