

7. A physician advises a patient to accept intravenous fluids, which she refuses. The nurse says to the patient, "You must have the fluids if you want to stay in the hospital and have us take care of you." The nurse is:
1. correct in insisting on fluid replacement.
 2. violating the patient's right to refuse treatment.
 3. not providing specific enough information about the options available for fluid replacement.
 4. giving information so the patient can make an informed refusal of fluids.
 5. wrong in speaking to the patient; the daughter should make the decision for or against fluid replacement.
8. The most frequently cited factor involved in a sentinel event is related to:
1. incompetence.
 2. malpractice.
 3. communication.
 4. confusion.
9. Your patient asks you, "What do you think of my physician?" You mention that the physician doesn't seem to care about her patients or how well their symptoms are managed. As a result, the patient switches to another physician. The physician may have grounds to sue you for:
1. malpractice.
 2. slander.
 3. libel.
 4. invasion of privacy.
10. For a patient to successfully win a malpractice claim, which element(s) must be proven? (Select all that apply.)
1. Duty
 2. Breach of duty
 3. Lack of caring
 4. Harm or damage
 5. Cause-and-effect relationship
 6. Intent
 7. Fraud

Critical Thinking Activities

Read each clinical scenario and discuss the questions with your classmates.

Scenario A

José Morales is a 46-year-old husband and father of two grown children. He has painful metastatic bone cancer. He is being discharged with a pain management program that still does not completely ease his pain. He tells you that he plans to "end it all" once he is at home and asks you to help him with information about what kind and how much medication it would take so his death did not look like suicide. He also warns you not to tell anyone of his plans because of "confidentiality."

1. Describe how you would answer his questions about assisted suicide.
2. Discuss the issue of confidentiality among the health care team versus invasion of privacy. How would you handle his request not to tell anyone?

Scenario B

You are a staff nurse at a skilled nursing facility on the evening shift. A 66-year-old woman who is very confused and agitated is pacing in the halls, entering other residents' rooms, and attempting to leave the building. Another nurse grabs the patient roughly and shouts at her, "If you don't stay in your room, I'm going to tie you in that bed." The nurse escorts the patient to her room, pushes her into a chair, and ties a sheet across the patient's lap to prevent her from getting out of the chair.

1. Identify the legal and ethical violations the nurse has committed.
2. What is your legal and ethical responsibility in this situation?

Scenario C

How would you respond to a physician at the clinic where you work who asks you embarrassing questions about your sexual experience and suggests that you would benefit in your job if you entertained him at your home?

The Nursing Process and Critical Thinking

Objectives

Upon completing this chapter, you should be able to:

Theory

1. Explain the use of the nursing process.
2. Identify the components of the nursing process.
3. Compare and contrast the terms critical thinking, clinical reasoning, and clinical judgment.
4. Identify the steps of the problem-solving process.
5. List the steps used in making decisions.
6. Identify ways to improve clinical reasoning skills.
7. Apply the critical thinking process to a real-life problem.

8. Discuss the use of critical thinking in nursing.
9. Explain the basic principles of setting priorities for nursing care.
10. List factors to be considered when setting priorities.

Clinical Practice

1. Apply nursing process to a patient care assignment.
2. Use clinical reasoning to prioritize care for a patient assignment.

Key Terms

assessment (data collection) (p. 47)

clinical judgment (p. 47)

clinical reasoning (p. 47)

critical thinking (p. 47)

decision making (p. 48)

evaluation (p. 47)

implementation (p. 47)

nursing diagnosis (p. 47)

nursing process (p. 46)

outcomes (p. 46)

planning (p. 47)

priority (prī-ŌR-ĭ-tē, p. 50)

scientific method (sī-ĕn-Tĭ-fĭk, p. 46)

THE NURSING PROCESS

The **nursing process** is a way of thinking and acting based on the **scientific method** (a step-by-step process used by scientists to solve problems). The nursing process is a tool for identifying patients' problems or potential problems and an organized method for meeting patients' needs. It was developed in the 1950s to describe the nurse's independent role in providing patient care. Nurses are taught to use this framework consistently and methodically (Figure 4-1).

The five components of the nursing process are **assessment (data collection), nursing diagnosis, planning, implementation, and evaluation**. Box 4-1 provides a brief explanation of each component. The goals of the systematic, dynamic process are to explore patients' health status, to identify actual or potential health care problems, to determine desired **outcomes** (results of actions), to deliver specific nursing interventions that will solve the problems and promote health, and to evaluate care given and determine whether

outcomes have been achieved. The components often overlap as the nurse continually assesses and evaluates effects of actions. The role of the LPN/LVN with regard to the nursing process is shown in Table 4-1, as set by the LPN/LVN Standards described by the National Federation of Licensed Practical Nurses (NFLPN). The LPN role is explained more fully in Chapters 5 and 6.

The construction of a care plan for the patient is a collaborative process involving the nurse, the patient, and other health team members. **Patient input during the planning stage results in greater success with the care plan.** Registered nurses (RNs) are officially responsible for the initiation of nursing care plans, but the LPN/LVN assists with each part of the care plan. The LPN is often responsible for data collection to assist the RN with the assessment phase. The nursing process allows for constant alterations in the care plan as patients' conditions change.

The nursing process is similar to other methods used to organize tasks in daily life. In planning a

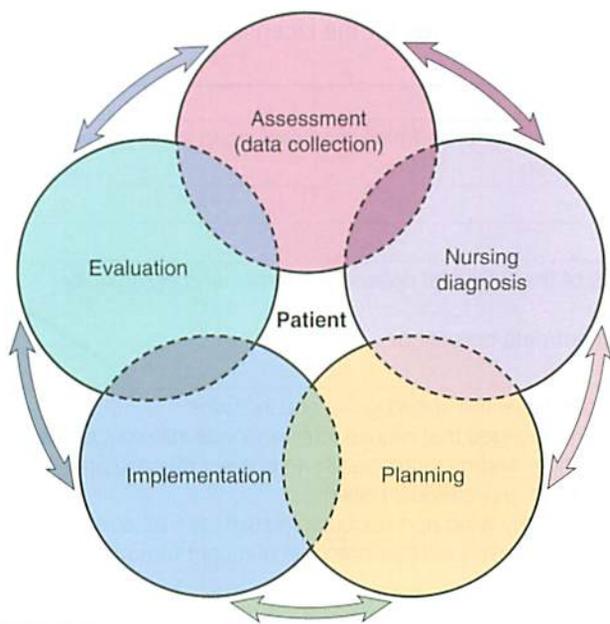


FIGURE 4-1 The nursing process—a dynamic, overlapping, continuous process centering on the patient.

week's meals at home, the goal is to supply each family member with good nutrition. The assessment, or data collection, phase involves surveying the supplies on hand needed for food preparation. These data are analyzed to determine what must be purchased at the store; to plan specific menus; and to plan for deviation from normal meals, such as school lunches or quick dinners before a child's basketball game. Implementation includes shopping, preparing and serving the meals, and cleaning up afterward. Evaluation is performed to determine whether the plan was successful: Did the family members eat what was served? Was there too much left over? Was the expected outcome of balanced nutrition for each family member met? If not, how could the plan be altered for next week? This is not a new way of thinking and doing; the process is just being applied in a nursing context.

? Think Critically

Can you think of something you do frequently in which you use this type of process for thinking and accomplishing things?

CRITICAL THINKING

It is necessary to think critically to use the nursing process successfully and to develop good **clinical reasoning** skills that result in solid **clinical judgment**. What does this mean? **Critical** means requiring careful judgment. **Thinking**, in this context, means to reason. **Critical thinking** is directed, purposeful, mental activity by which you evaluate ideas, construct plans, and determine desired outcomes. Critical thinking can occur anywhere, both inside or outside of the clinical setting.

Box 4-1 Components of the Nursing Process

Assessment (data collection): Collecting, organizing, documenting, and validating data about a patient's health status. Assessment data are obtained from the patient, the family, the physician, diagnostic tests, and information about the patient from other health professionals.

Nursing diagnosis: The process by which the assessment data are sorted and analyzed so that specific actual and potential health problems are identified. The factors contributing to the problems are considered, and specific nursing diagnoses are chosen for the patient's care plan.

Planning: A series of steps by which the nurse and the patient set priorities and goals to eliminate or diminish the identified problems. The goals are stated as specific expected outcomes. The nurse and the patient collaborate and choose specific interventions for each nursing diagnosis. The interventions assist the patient in meeting the expected outcomes. The expected outcomes and nursing interventions are listed on the patient's nursing care plan.

Implementation: Carrying out the nursing interventions in a systematic way. The nurse carries out (or appropriately delegates) the interventions. The patient's response to the care given is documented.

Evaluation: Assessing the patient's response to the nursing interventions. The responses are compared with the expected outcomes to determine whether they have been achieved. The entire care plan is reassessed, and any changes needed are made.

When we talk about critical thinking *inside the clinical setting* we call it clinical reasoning. Clinical reasoning is necessary to make reliable observations regarding health status and to draw sound conclusions from the data obtained. Critical thinking and clinical reasoning are needed to creatively problem solve and to produce new ideas and solutions. They are also essential for the evaluation of information received from others. Clinical reasoning is the keystone of good clinical decision making and the development of clinical judgment. **Clinical judgment** is the *outcome* of clinical reasoning; the conclusion or decision (sometimes a nursing diagnosis) you arrive at as a result of exercising your clinical reasoning skills.

PROBLEM SOLVING AND DECISION MAKING

Nursing is a discipline that incorporates scientific knowledge and research methods. Scientists use a consistent, logical method to solve problems. In the scientific method the scientist first defines the problem, then gathers information, analyzes the information, and develops solutions. The scientist makes a decision about which solution to use, implements the decision, and then evaluates the outcome of the decision. The nursing process has many similar characteristics to the scientific method. Table 4-2 compares the scientific method with the nursing process.

Table 4-1 Correlation of Nursing Process and NFLPN Nursing Practice Standards for the Licensed Practical/Vocational Nurse

STANDARD	
	Shall know and utilize the nursing process in planning, implementing, and evaluating health services and nursing care for the individual patient or group.
1. <i>Assessment</i>	<i>RN function</i>
2. <i>Nursing diagnosis</i>	<i>RN function</i>
3. <i>Planning</i>	1. Assessment/data collection of health status of the individual patient, the family, and community groups. 2. Reporting information gained from assessment/data collection. 3. The identification of health goals.
4. <i>Implementation</i>	The plan for nursing care is put into practice to achieve the stated goals and includes: 1. Observing, recording, and reporting significant changes that require intervention or different goals. 2. Applying nursing knowledge and skills to promote and maintain health, to prevent disease and disability, and to optimize functional capabilities of an individual patient. 3. Assisting the patient and family with activities of daily living and encouraging self-care as appropriate. 4. Carrying out therapeutic regimens and protocols prescribed by personnel pursuant to authorized state law.
5. <i>Evaluation</i>	The plan for nursing care and its implementations are evaluated to measure the progress toward the stated goals and will include appropriate person and/or groups to determine: 1. The relevancy of current goals in relation to the progress of the individual patient. 2. The involvement of the recipients of care in the evaluation process. 3. The quality of the nursing action in the implementation of the plan. 4. A re-ordering of priorities or new goal setting in the care plan.

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Table 4-2 Comparison of Scientific Method and the Nursing Process

SCIENTIFIC METHOD STEP	NURSING PROCESS STEP
Define the problem. Gather information.	Assessment (Data Collection) Take patient history, perform physical assessment, gather results of diagnostic tests.
Analyze the information (data).	Nursing Diagnosis Consider assessment database and identify problems; choose nursing diagnoses.
Develop solutions. Make a decision.	Planning Determine desired outcomes. Choose interventions to achieve those outcomes.
Implement the decision.	Implementation Carry out the interventions.
Evaluate the decision.	Evaluation Assess the result of the interventions; determine whether outcomes have been achieved; revise the plan if outcomes are not being met; terminate interventions no longer needed.

The **problem-solving** process has the following several steps:

1. Define the problem clearly.
2. Consider all possible alternatives as solutions to the problem.
3. Consider the possible outcomes for each alternative.
4. Predict the likelihood of each outcome occurring.
5. Choose the alternative with the best chance of success that has the fewest undesirable outcomes.

Decisions are necessary to solve problems. Nurses make decisions in each step of the nursing process. Good **decision making** is choosing the best actions to meet a desired goal and is part of the critical thinking process. Nurses often have to make quick decisions in moments of crisis; they also assist patients in making decisions. Nurses must problem-solve continually. Critical thinking improves the outcomes of the problem-solving process.

SKILLS FOR CRITICAL THINKING

Critical thinking involves a variety of skills. Foundation skills are effective reading, effective writing, attentive listening, and effective communicating.

Effective reading involves reading material in a way that helps you pick out the main ideas and relevant data. Reading a paragraph and then restating the main ideas to yourself is one way to read critically.



FIGURE 4-2 Student listening attentively to staff nurse.

Effective writing concerns writing thoughts coherently and concisely, yet clearly. Writing clearly, logically, and concisely is a learned skill that takes practice. Evaluating what you write helps improve this skill.

Attentive listening is consciously focusing on the topic of discussion. Attentive listening also takes practice. With our busy lives, we tend to rush ahead to form an answer or ask a question rather than wait until the speaker has finished. Pay attention to each word and the meaning the speaker is trying to convey (Figure 4-2). To practice attentive listening, work with a partner. Have your partner tell you about something that interests her. When she is finished, repeat back the main ideas of what was stated. Confirm with the speaker that you heard correctly.

Effective communicating requires speaking in a disciplined manner. The disciplined speaker thinks about what to say and how to state it clearly and concisely in a logical way before beginning to speak. Effective speaking follows attentive listening. Much communication in our fast-paced society results in spontaneous response without conscious thought, and misunderstanding often occurs. Take time to consider your response before beginning to speak to improve this skill. Group interactions that provide feedback will help you assess and improve your speaking skill. Other skills and attributes found in the critical thinker are listed in Box 4-2. Practicing careful consideration of problems and purposeful thinking, rather than random thinking, will help you develop these skills and attributes.

A technique that nursing students have found helpful to promote critical thinking is **concept mapping**. Concept mapping helps students learn to synthesize pertinent assessment data, develop comprehensive care plans, link nursing interventions with health problems and nursing diagnoses, and effectively implement the care plan. It can help you see relationships within a concept or relationships between

Box 4-2 Skills and Attributes of the Critical Thinker

The critical thinker has the ability to do the following:

- Maintain an open mind and a questioning attitude.
- Recognize one's own biases and limitations.
- Be persistent in seeking solutions.
- Separate relevant from irrelevant information.
- Recognize inconsistencies in data gathered.
- Identify missing information.
- Consider all possibilities.
- Assume an empathetic attitude.
- Use an organized and systematic approach to problems.
- Verify accuracy and reliability of data.
- Consider all possible solutions before making a decision.
- Admit what one does not know.
- Reason logically.
- Strive for excellence and improvement.
- Draw valid conclusions from the evidence or data.
- Set priorities and make carefully considered decisions.
- Be flexible, realistic, creative, humble, honest, curious, and insightful.

concepts. Concept mapping will help you gather data in a logical manner and then group those data in a meaningful way. Concept Map 4-1 shows the possible demands and responsibilities in a student nurse's life. This map does not show the interrelationships between the items depicted. Looking at it, try to visualize how one area may be affected by another. For example, study hours and work hours will probably affect the time available for sleep. Multiple lines could be drawn to show the interrelationships. Concept mapping is helpful in learning about the pathophysiology of a disease and how it affects the body. It can be used to show relationships between ideas. You will find a number of concept maps throughout this text.

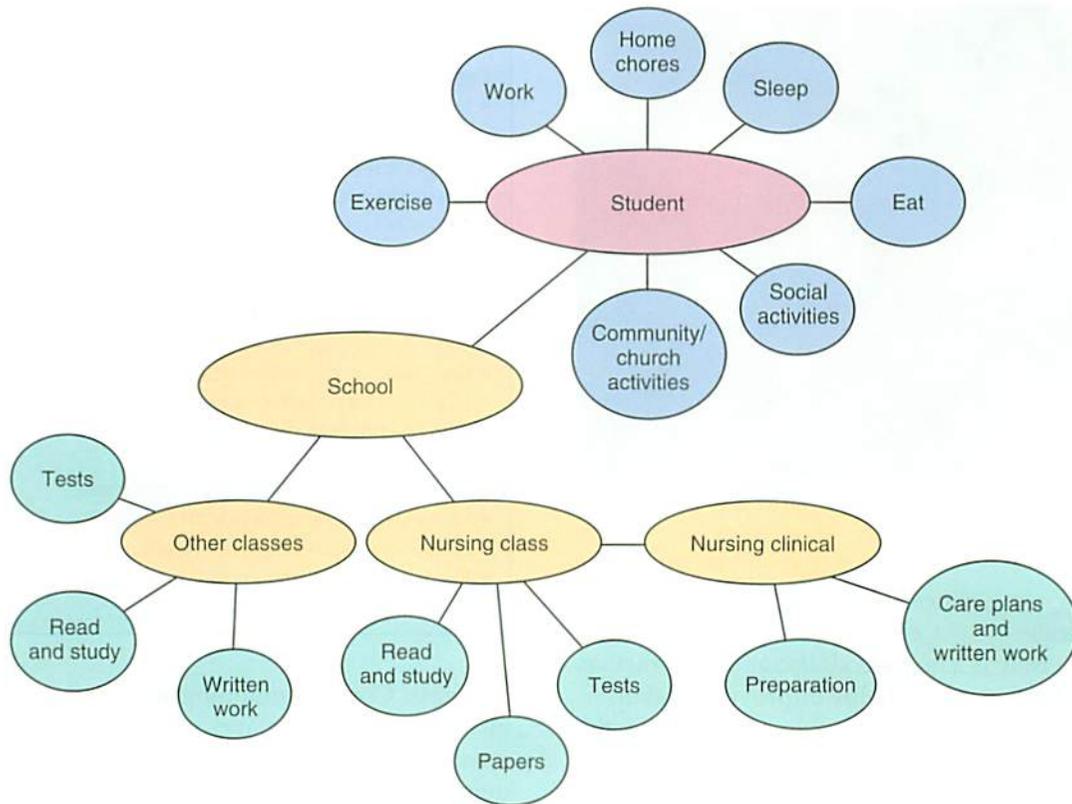
Think Critically

What critical thinking skills do you already use? Give some examples. Which critical thinking skill do you think is most important?

CRITICAL THINKING IN NURSING

Critical thinking in nursing requires skills and experience as well as knowledge. Professional standards and codes of ethics influence a nurse's critical thinking. The QSEN project (see Chapter 3) identifies evidence-based practice (EBP) as one of the major areas where prelicensure knowledge, skills, and attitudes (KSAs) are important for nursing students to acquire.

Critical thinking, clinical reasoning, and clinical judgment are applied to the nursing process in many ways. **Assessment (data collection)** is carried out in an organized, systematic way. Data are gathered to determine and eliminate or manage actual or potential health problems. The data are accurately recorded.



CONCEPT MAP 4-1 Demands on a student nurse's life and associated responsibilities.

Ways of helping patients obtain optimum wellness and independence are identified.

Nursing diagnosis requires analysis of data gathered during assessment, clustering related information, identifying problem areas, and choosing appropriate nursing diagnoses.

Planning involves determining specific desired outcomes for each nursing diagnosis. While planning interventions to achieve those outcomes, consider ways to promote optimum wellness and independence. How to achieve the desired outcomes in the most timely, cost-effective way is decided.

Implementation is begun by preparing to perform the interventions. Equipment and supplies are gathered and procedures are thought through before beginning them. Interventions are performed and responses to them are assessed. Changes in interventions are instituted as needed. Accurate documentation of interventions and patient response occurs.

Evaluation is carried out by gathering data to determine whether expected outcomes have been achieved. When interventions are not leading to expected outcomes, what needs to be done is reconsidered. Aspects of the care plan are modified or terminated as appropriate.

PRIORITY SETTING AND WORK ORGANIZATION

Critical thinking is applied to setting priorities for patient care. Nurses must also be able to prioritize the

tasks assigned to them. A **priority** is more important than something else at that time. **Prioritizing involves placing nursing diagnoses or nursing interventions in order of importance.** Life-threatening problems are of **high priority**. Problems that threaten health or coping ability are of **medium priority**. **Low-priority** problems are ones that do not have a major effect on the person if not attended to that day or even that week. Prioritizing patient problems is usually based on the adaptation of Maslow's hierarchy of needs. Prioritizing will be discussed in Chapter 5.

Prioritizing to organize your work requires considering several factors. As a student, you begin by prioritizing care for one patient. After graduation, you will prioritize care for many patients. When beginning your clinical day, go over your patient assignment worksheet, the Kardex, or the computer patient care plan and determine what needs to be done in the next hour. These items are high priority. Some tasks that may need to be done are vital signs, daily weights before breakfast, blood glucose readings before eating, morning insulin injections, preoperative assessments, and administration of medication for pain control.

When prioritizing such tasks, you must consider what will happen if the task is not done on time. The recovering patient whose vital signs have been stable for the past 24 hours probably will not suffer a bad consequence if you do not take her vital signs right at 8 A.M. The diabetic patient who is hospitalized to control

ASSIGNMENT/WORK ORGANIZATION SHEET									
Patient/ Room #	7:30	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00
J. G. 526	V.S. Quick Assess	Shower A dressing	Meds chart	Full Assess chart			V.S. Pre-op Teaching chart	1+0 Tape report	Close Chart
G. H. 528A	V.S. ✓ Feed Pump	Quick Assess	Meds Full Assess	chart	Teaching ✓ Feed Pump	V.S.	meds	1+0	Close chart ✓ Feed Pump
S. S. 528B	V.S. ✓ IV Quick Assess	med ✓ IV	Full Assess chart	✓ IV	✓ IV	V.S. Teaching	✓ IV A dressing	1+0	Close Chart

FIGURE 4-3 One example of a work organization sheet for a shift.

her disease really needs to have her blood glucose checked and her insulin given and may suffer an alteration in her health status if these tasks are not completed on time.

Other factors to consider are the surgery schedule, stability of each patient, amount of time to perform each task, availability of help, medication orders, unforeseen problems, and physicians making rounds. Knowledge, clinical reasoning, and clinical judgment will help you prioritize your workload.

When all tasks have a rather high priority and there is no way you can do them all alone, you must assign some tasks to others. After prioritizing your tasks for the first hour, consider priorities for the rest of the shift. Figure 4-3 shows one type of work organization sheet.

? Think Critically

How would you respond if you are about to go to check a patient's blood glucose and administer her insulin, and a physician asks you to perform a wound dressing for a patient who is not assigned to you?

Priorities constantly change because patient needs and conditions change frequently. To maintain organization with your workload, you must be flexible and you must frequently reorder your tasks. You should reconsider your work organization plan at least every 2 hours during your shift, reprioritizing as needed.

APPLICATION OF PROBLEM SOLVING AND CLINICAL REASONING

The emergency department is a good place to observe how nurses prioritize care and solve problems. When the emergency department nurse is faced with three patients seeking help, the problem of how to deal with all three patients and quickly make a decision about who is treated first must be solved. The first patient complains of severe chest pain; the second has a fever and a very bad cough; the third has a laceration on her chin and is bleeding. The problem: Which patient to treat first?

There are six possibilities for the order of treatment. When considering the possible outcome of choosing each alternative, the nurse looks at the consequences of placing each patient first, second, or third. If the woman with the laceration is chosen to be first, the outcomes might be (1) she will stop bleeding; (2) the man with chest pain may be having a heart attack and may die, or he may be diagnosed with severe indigestion; and (3) the woman with the fever and cough may become angry and cause a commotion. If the man with the chest pain is chosen to be first to be treated, the outcomes might be (1) his life may be saved, or it may be determined he has severe indigestion; (2) the woman with the laceration may lose more blood, or the bleeding may stop by applying pressure while she

is waiting to be treated; and (3) the woman with the cough and fever may cause a commotion or may be courteous about waiting.

Considering the likelihood of each outcome occurring is the next step. The nurse looks at the three patients and estimates that the man with chest pain has at least a 65% chance of it being a life-threatening heart attack and a 35% chance that he has indigestion; the chance of the woman with the fever and sore throat causing a commotion is about 5%, and the chance of this woman courteously waiting about 95%. If you choose the man with the chest pain to be treated first, the chance of the woman with the laceration losing a serious amount of blood is about 20%, while the chance of stopping the blood with pressure while awaiting treatment is about 80% or better. Since the chance of a bad outcome is highest for the man with the chest pain, you choose to have him treated first. **The goal is to avoid having your clinical judgment cause injury to anyone.**

Besides ordering treatment for emergency department patients, you must decide many things each day, such as what size needle is best to use for an injection,

what to tell the patient or her family about her prognosis, which tasks to assign and which to do yourself, which staff to assign to which patients, and which nursing diagnosis has the highest priority for a patient on a particular day. **With critical thinking skills, you can weigh many factors and skillfully solve problems, making good decisions a majority of the time.** No one makes perfect decisions all the time. Learning to apply the nursing process well will assist you in developing sound clinical judgment and following logical processes automatically when solving problems and making decisions. **Operating in a critical thinking mode while pursuing your nursing studies will help you develop the clinical judgment necessary for safe nursing practice.**

The nursing process is a way of thinking as well as organizing. In this dynamic process, the nurse is constantly gathering data and evaluating. The next two chapters explain the components of the nursing process more thoroughly. The chapter bibliography identifies resources to enhance learning by improving critical thinking skills.

Get Ready for the NCLEX® Examination!

Key Points

- The nursing process is a way of thinking and acting based on the scientific method. It is a framework for planning, implementing, and evaluating nursing care.
- RNs are officially responsible for the initiation of nursing care plans, but LPN/LVNs assist with the care plan, evaluate care, and help revise through collaboration with other health team members.
- The components of the nursing process are assessment, nursing diagnosis, planning, implementation, and evaluation.
- Formulating a care plan is a collaborative process among the nurse, the patient, and other health team members.
- The nursing process is similar to the scientific method.
- The steps to problem solving are (1) define the problem clearly, (2) consider all possible alternatives, (3) consider the possible outcomes for each alternative, (4) predict the likelihood of each outcome occurring, and (5) choose the alternative with the best chance of success and the least undesirable outcomes.
- Critical thinking is directed, purposeful mental activity by which you create and evaluate ideas, construct plans, and decide on desired outcomes; it is needed to make reliable observations and draw sound conclusions. It can occur inside or outside of the clinical setting.
- Clinical reasoning is critical thinking in the clinical setting. Clinical judgment is the result or outcome of clinical reasoning.

- Critical thinking involves a variety of skills, including effective reading, writing, communication, and attentive listening. It is applied in each phase of the nursing process.
- Practicing careful consideration of problems and purposeful thinking increases critical thinking skills.
- Priority setting involves placing tasks, nursing diagnoses, or nursing interventions in order of importance.
- Nurses use priority setting for work organization. Priorities constantly change as patient needs change.
- With critical thinking, factors can be weighed, problems skillfully solved, and good decisions made a majority of the time.

Additional Learning Resources

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- Animations
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- Answers and Rationales for Review Questions for the NCLEX® Examination
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- Interactive Review Questions for the NCLEX® Examination and more!