Chapter 01: Critical Thinking and Evidence-Informed Assessment
Jarvis: Physical Examination and Health Assessment, 4th Canadian Edition

MULTIPLE CHOICE

1. Which type of data is collected by obtaining vital signs?
   a. Objective
   b. Reflecting
   c. Subjective
   d. Introspective

   ANS: A
   Objective data are what the health professional observes by inspecting, percussing, palpating, and auscultating during the physical examination. Subjective data are what the person *says* about themselves during history taking. The terms reflective and introspective are not used to describe data.

   DIF: Cognitive Level: Understanding (Comprehension)
   MSC: Client Needs: Safe and Effective Care Environment: Management of Care

2. During an assessment, a patient describes feeling warm, nauseated, and nervous. Which type of data is collected?
   a. Objective
   b. Reflective
   c. Subjective
   d. Introspective

   ANS: C
   Subjective data are what the person says about themselves during history taking. Objective data are what the health professional observes by inspecting, percussing, palpating, and auscultating during the physical examination. The terms reflective and introspective are not used to describe data.

   DIF: Cognitive Level: Understanding (Comprehension)
   MSC: Client Needs: Safe and Effective Care Environment: Management of Care

3. Which part of a patient's health record is created when combining laboratory studies, objective data, and subjective data?
   a. Database
   b. Admitting data
   c. Triage form
   d. Discharge summary

   ANS: A
   Together with the patient's record and laboratory studies, the objective and subjective data form the database. The other items are not part of the patient's record, laboratory studies, or data.

   DIF: Cognitive Level: Remembering (Knowledge)
   MSC: Client Needs: Safe and Effective Care Environment: Management of Care

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4. Which action will the nurse complete if while listening to a patient's breath sounds, they are unsure of a sound heard?
   a. Immediately notify the patient's most responsible practitioner.
   b. Document the sound exactly as it was heard.
   c. Validate the data by asking a coworker to listen to the breath sounds.
   d. Assess again in 20 minutes to note whether the sound is still present.

   ANS: C
   When unsure of a sound heard while listening to a patient's breath sounds, the nurse validates the data to ensure accuracy. If the nurse has less experience in an area, then they would ask an expert to listen.

   DIF: Cognitive Level: Analyzing (Analysis)
   MSC: Client Needs: Safe and Effective Care Environment: Management of Care

5. Which approach do novice nurses utilize when making decisions?
   a. Intuition
   b. Clear-cut rules
   c. Articles in journals
   d. Advice from supervisors

   ANS: B
   Novice nurses operate from a set of defined, structured rules. Expert practitioners use critical thinking and their substantial background of experience.

   DIF: Cognitive Level: Understanding (Comprehension) MSC: Client Needs: General

6. Which method moves a nurse from novice to expert?
   a. Critical thinking
   b. The nursing process
   c. Clinical knowledge
   d. Diagnostic reasoning

   ANS: A
   Critical thinking is a multidimensional, dynamic, and interactive thinking process by which expert nurses assess and make decisions in the clinical area.

   DIF: Cognitive Level: Understanding (Comprehension) MSC: Client Needs: General

7. Which statement reflects the meaning of evidence-informed practice (EIP)?
   a. Best practice techniques to treat patients. Taking note solely from Registered Nurses Association of Ontario (RNAO)
   b. Clinician experience and expertise to guide practice. Sometimes reflecting on the patient perspective
   c. Life-long problem-solving approach to clinical decision making using best available evidence
   d. The patient's own preferences are not important in EIP

   ANS: C

EIP is more than the use of best practice techniques to treat patients; it can be defined as a paradigm and lifelong problem-solving approach to clinical decision making that involves the conscientious use of the best available evidence (including a systematic search for and critical appraisal of the most relevant evidence to answer a clinical question) with one's own clinical expertise and patient values and preferences to improve outcomes for individuals, groups, communities, and systems. EIP is more than simply using the best practice techniques to treat patients, and questioning tradition is important when no compelling and supportive research evidence exists.

DIF: Cognitive Level: Applying (Application)
MSC: Client Needs: Safe and Effective Care Environment: Management of Care

8. Which example illustrates a first-level priority problem?
   a. Postoperative pain
   b. Newly diagnosed diabetes needing diabetic teaching
   c. Small laceration on the sole of the foot
   d. Shortness of breath and respiratory distress

ANS: D
First-level priority problems are those that are emergent, life-threatening, and immediate (e.g., establishing an airway, supporting breathing, maintaining circulation, monitoring abnormal vital signs) (see Table 1.1 – Identifying Immediate Priorities).

DIF: Cognitive Level: Understanding (Comprehension)
MSC: Client Needs: Safe and Effective Care Environment: Management of Care

9. Which critical thinking skill recognizes relationships among the data?
   a. Validation
   b. Clustering related cues
   c. Identifying gaps in data
   d. Distinguishing relevant data from irrelevant data

ANS: B
Clustering related cues helps the nurse see relationships among the data.

DIF: Cognitive Level: Understanding (Comprehension)
MSC: Client Needs: Safe and Effective Care Environment: Management of Care

10. Which diagnosis is critical to develop appropriate nursing interventions for a patient?
    a. Nursing
    b. Medical
    c. Admission
    d. Collaborative

ANS: A
An accurate nursing diagnosis provides the basis for the selection of nursing interventions to achieve outcomes for which the nurse is accountable. The other items do not contribute to the development of appropriate nursing interventions.

DIF: Cognitive Level: Remembering
MSC: Client Needs: Safe and Effective Care Environment: Management of Care

11. Which steps are included in the nursing process?
    a. Assessment, treatment, planning, evaluation, discharge, and follow-up
    b. Admission, assessment, diagnosis, treatment, and discharge planning
    c. Admission, diagnosis, treatment, evaluation, and discharge planning
    d. Assessment, diagnosis, outcome identification, planning, implementation, and evaluation

    ANS: D
    The nursing process is a method of problem solving that includes assessment, diagnosis, outcome identification, planning, implementation, and evaluation.

    DIF: Cognitive Level: Remembering
    MSC: Client Needs: Safe and Effective Care Environment: Management of Care

12. A newly admitted patient is in acute pain, not sleeping well, and is having difficulty breathing. In which sequence will the nurse prioritize the assessment?
    a. Breathing, pain, and sleep
    b. Breathing, sleep, and pain
    c. Sleep, breathing, and pain
    d. Sleep, pain, and breathing

    ANS: A
    First-level priority problems are immediate priorities focused on airway and breathing, followed by second-level problems, and then third-level problems.

    DIF: Cognitive Level: Applying (Application)
    MSC: Client Needs: Safe and Effective Care Environment: Management of Care

13. Which step of the nursing process involves data collection through health history, physical examination, and interview?
    a. Planning
    b. Diagnosis
    c. Evaluation
    d. Assessment

    ANS: D
    Data collection, including performing the health history, physical examination, and interview, is the assessment step of the nursing process (see Figure 1.2).

    DIF: Cognitive Level: Remembering (Knowledge) MSC: Client Needs: General

14. Which concept is considered when undertaking a life-cycle approach to health assessment?
    a. Consideration of the patient's cultural view of health
    b. Being responsive to the patient's gestures to build a relationship
    c. Acknowledgement of the effect of poverty on health
    d. Awareness of age-specific developmental factors

    ANS: D
    A life-cycle approach requires familiarity with the usual and expected developmental tasks for various age groups. Being aware of age-specific data can be helpful in determining normal and abnormal findings.

DIF: Cognitive Level: Understanding (Comprehension)
MSC: Client Needs: Safe and Effective Care Environment: Management of Care

15. Which statement outlines the purpose for a nurse identifying priorities and assessing risk factors in patients?
    a. Identify patterns to discover missing information.
    b. Determine areas for health promotion and disease prevention.
    c. Distinguish normal from abnormal findings.
    d. Determine treatment for a medical diagnosis.

    ANS: B
    Identifying and working with patients to manage known risk factors for their age group and social context supports disease prevention and health promotion.

    DIF: Cognitive Level: Understanding (Comprehension) MSC: Client Needs: General

16. Which information is an example of objective data?
    a. Patient's history of allergies
    b. Patient's use of medications at home
    c. Last menstrual period 1 month ago
    d. 2.5 cm scar on the right lower forearm

    ANS: D
    Objective data are the patient's record, laboratory studies, and condition that the health professional observes by inspecting, percussing, palpating, and auscultating during the physical examination. The other responses reflect subjective data.

    DIF: Cognitive Level: Applying (Application)
    MSC: Client Needs: Safe and Effective Care Environment: Management of Care

17. Which type of database is appropriate for a visiting nurse to use when making an initial home visit with a patient who has many chronic medical problems?
    a. A follow-up database to evaluate changes at appropriate intervals
    b. An episodic database because of the continuing, complex medical problems of this patient
    c. A complete health database because of the nurse's primary responsibility for monitoring the patient's health
    d. An emergency database because of the need to collect information and make accurate diagnoses rapidly

    ANS: C
    The complete database is collected in a primary care setting, such as a pediatric or family practice clinic, independent or group private practice, college health service, women's health care agency, visiting nurse agency, or community health agency. In these settings, the nurse is the first health care professional to see the patient and has the primary responsibility for monitoring the person's health care.

    DIF: Cognitive Level: Applying (Application)
    MSC: Client Needs: Safe and Effective Care Environment: Management of Care

18. Which situation is *most* appropriate for the collection of episodic or problem-centred data?
    a. Admission to a long-term care facility

b. Sudden and severe shortness of breath
c. Admission to the hospital for surgery the next day
d. An outpatient clinic where patients have cold and influenza-like symptoms

ANS: D
In compiling the episodic or problem-centered database, the nurse collects a "mini-database," which is smaller in scope compared with the complete database. This mini database primarily concerns one problem, one cue complex, or one body system.

DIF: Cognitive Level: Applying (Application)
MSC: Client Needs: Safe and Effective Care Environment: Management of Care

19. A patient is at the clinic to have their blood pressure checked. They have been coming to the clinic weekly since changing medications two months ago. Which action will the nurse perform?
a. Collect a follow-up database and then check blood pressure.
b. Ask patient to read health record and indicate any changes since last visit.
c. Check only blood pressure because the complete health history was documented two months ago.
d. Obtain a complete health history before checking blood pressure because much of the history information may have changed.

ANS: A
A follow-up database is used in all settings to monitor short-term or chronic health problems. The other responses are not appropriate for the situation.

DIF: Cognitive Level: Applying (Application)
MSC: Client Needs: Safe and Effective Care Environment: Management of Care

20. Which method will the nurse take to collect data for a patient brought to the emergency department by ambulance with multiple injuries after an automobile accident? The patient is alert, cooperative, with severe injuries.
a. Collect history information first and then perform the physical examination and institute life-saving measures.
b. Simultaneously ask history questions while performing the examination and initiating life-saving measures.
c. Collect all information on the history form, including social support patterns, strengths, and coping patterns.
d. Perform life-saving measures and delay asking any history questions until the patient is transferred to the intensive care unit.

ANS: B
The emergency database calls for a rapid collection of the database, and often data are compiled concurrently with administration of life-saving measures. The other responses are not appropriate for the situation.

DIF: Cognitive Level: Applying (Application)
MSC: Client Needs: Safe and Effective Care Environment: Management of Care

21. Which example illustrates the new national and provincial guidelines developed for particular populations?
a. Pain assessments

b. Human papillomavirus (HPV) vaccine guidelines
c. Antipsychotic medications
d. Acute urinary elimination treatments

ANS: B
In Canada, there are various guidelines for disease prevention and health promotion. New national and provincial guidelines are developed regularly for particular populations; an example is the updated recommendations on human papillomavirus (HPV) vaccine guidelines.

DIF: Cognitive Level: Understanding (Comprehension)
MSC: Client Needs: Safe and Effective Care Environment: Reduction of Risk Potential

22. Which action will a nurse take during the clinical assessment of a 68-year-old patient?
a. Remind the patient use medication wisely.
b. Perform a tuberculin skin test.
c. Discuss body image and dieting.
d. Helping the consumer choose a healthier lifestyle.

ANS: A
For individuals aged 65 years and greater, reminding about medication safety is critical to prevent injury (e.g., polypharmacy).

DIF: Cognitive Level: Understanding (Comprehension)
MSC: Client Needs: Safe and Effective Care Environment: Reduction of Risk Potential

23. Which planned intervention with the nurse implement for the nursing diagnosis of acute pain?
a. Establish priorities for the patient and their care.
b. Identify expected outcomes for the nurse.
c. Evaluate patient's condition and compare actual outcomes with expected outcomes.
d. Interpret data, and then identify clusters of cues and make inferences.

ANS: C
Evaluation is the next step after the implementation phase of the nursing process. During this step, the nurse evaluates the individual's condition and compares the actual outcomes with expected outcomes.

DIF: Cognitive Level: Applying (Application)
MSC: Client Needs: Safe and Effective Care Environment: Management of Care

24. Which statement describes an experienced nurse?
a. Little experience with a specified population and uses rules to guide performance.
b. Takes a linear approach to the nursing process.
c. Is focused only on a patient's disease process.
d. Understands a patient as a whole and recognizes long-term goals for the patient.

ANS: D
A nurse, who has more experience compared with the novice nurse, can understand a patient's situation as a whole, rather than as a list of tasks. Further, can see how today's nursing actions can apply to the point the nurse wants the patient to reach at a future time.

DIF: Cognitive Level: Applying (Application) MSC: Client Needs: General

25. In which type of problem, does the treatment involve multiple disciples, nurses having the primary responsibility to diagnose and monitor change in status?
    a. First-level priority problems
    b. Second-level priority problems
    c. Third-level priority problems
    d. Collaborative problems

    ANS: D
    Collaborative problems are those in which the approach to treatment involves multiple disciplines, and nurses often have the primary responsibility to diagnose the onset and monitor the changes in status. For example, the data regarding financial strain and food security represent a collaborative problem and require interprofessional team efforts to support people's health in the context of poverty. First-level priority problems are those that are emergencies, life-threatening, and immediate, such as establishing an airway or supporting breathing. Second-level priority problems are those that are next in urgency: those necessitating your prompt intervention to forestall further deterioration, such as mental status change, acute pain, acute urinary elimination problems, untreated medical problems, abnormal laboratory values, risks of infection, or risk to safety or security. Third-level priority problems are those that are important to the patient's health but can be addressed after more urgent health problems are addressed. Referrals and interventions to address these problems are lengthier, and the response to treatment is expected to take more time.

    DIF: Cognitive Level: Remembering (Knowledge)
    MSC: Client Needs: Safe and Effective Care Environment: Management of Care

26. Which concept is the collection of data about an individual's health state?
    a. Objective data
    b. Subjective data
    c. Assessment
    d. The nursing process

    ANS: C
    Assessment is the collection of data about an individual's health state. A clear idea of an individual patient's health status is important because it determines which assessment data should be collected. In general, the list of data that must be collected has lengthened as the concept of health has broadened.

    DIF: Cognitive Level: Understanding (Comprehension)
    MSC: Client Needs: Safe and Effective Care Environment: Management of Care

MULTIPLE RESPONSE

1. Which data listed below is considered to have related cues and would be clustered together during analysis? (*Select all that apply.*)
    a. Inspiratory wheezes noted in left lower lobes
    b. Hypoactive bowel sounds
    c. Nonproductive cough
    d. Edema, +2, noted on left hand
    e. Patient reports dyspnea upon exertion

f. Rate of respirations 16 breaths per minute

ANS: A, C, E, F
Clustering related cues help the nurse recognize relationships among the data. The cues related to the patient's respiratory status (e.g., wheezes, cough, report of dyspnea, respiration rate and rhythm) are all related. Cues related to bowels and peripheral edema are not related to the respiratory cues.

DIF: Cognitive Level: Analyzing (Analysis)
MSC: Client Needs: Safe and Effective Care Environment: Management of Care

2. Which example illustrates a second-level priority problem? (*Select all that apply.*)
   a. Low self-esteem
   b. Lack of knowledge
   c. Abnormal laboratory values
   d. Significantly abnormal vital signs
   e. New confusion and forgetfulness

ANS: C, D, E
Second-level priority problems are those that require prompt intervention to prevent further deterioration (e.g., mental status change, acute pain, acute urinary elimination problems, untreated medical problems, abnormal laboratory values, risks of infection, or risk to safety or security). Low self-esteem and knowledge deficit are third-level priorities, which will require longer time for treatment and improvement.

DIF: Cognitive Level: Understanding (Comprehension)
MSC: Client Needs: Safe and Effective Care Environment: Management of Care

3. Which statement defines the purpose of a nursing diagnosis? (*Select all that apply.*)
   a. Consider the cause of disease.
   b. Evaluate a patient's response to treatment.
   c. Determine the need to initiate supportive measures.
   d. Order specific diagnostic tests.
   e. Establish the need for health education.

ANS: B, C, E
The nursing diagnosis is used to evaluate the response of the whole person to actual or potential health problems; to monitor a patient's response to treatment; and to initiate supportive measures and health education, as needed.

DIF: Cognitive Level: Applying (Application) MSC: Client Needs: General

4. Which social determinant of health can influence a patient's health? (*Select all that apply.*)
   a. Poverty
   b. Poor research studies
   c. Unaffordable housing
   d. Lack of education
   e. Poor nursing skills

ANS: A, C, D

Social determinants of health are the social, economic, and political factors that shape the health of individuals, families, and communities. They are founded on the *Ottawa Charter for Health Promotion, Canada* and include peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice, and equity to support health.

DIF: Cognitive Level: Applying (Application) MSC: Client Needs: General

5. Which action demonstrates the nurse taking a relational approach in their practice? (*Select all that apply*.)
   a. Recognize unit policies and procedures
   b. Identifying and managing personal assumptions
   c. Promoting the use of best practice guidelines
   d. Determining what is important to patients in the context of their situations
   e. Forming decisions based on prevalent stereotyping

   ANS: B, D
   A relational approach in nursing focuses attention on what is significant to people in the context of their everyday lives and how capacities and socioenvironmental limitations shape people's choices. An important skill of relational practice is examination of how one views and responds to patients based on personal assumptions.

   DIF: Cognitive Level: Applying (Application)
   MSC: Client Needs: Safe and Effective Care Environment: Management of Care