

1. Research utilization is a process that begins with which of the following?
  - A) A clinical problem that needs to be solved
  - B) A problem-focused trigger
  - C) A knowledge-focused trigger or research finding
  - D) A well-worded clinical question
  
2. Which of the following is an example of a systematic review?
  - A) An RCT study published in the journal *Nursing Research*
  - B) A meta-analysis from the Cochrane database
  - C) A synopsis published in *Evidence-Based Nursing*
  - D) A clinical practice guideline from the National Guideline Clearinghouse
  
3. Most evidence hierarchies put which of the following at the pinnacle?
  - A) Randomized clinical trials (RCTs)
  - B) Systematic reviews of multiple studies
  - C) Quality improvement projects
  - D) It depends on the research question
  
4. Which of the following can be used to critically appraise clinical practice guidelines?
  - A) A systematic review from the Cochrane Collaboration
  - B) The Iowa model
  - C) The AGREE instrument
  - D) An evidence hierarchy
  
5. Which of the following models was explicitly developed with the idea that individual nurses could engage in RU-type activities?
  - A) Iowa Model
  - B) Johns Hopkins Model
  - C) Cochrane Model
  - D) Stetler Model
  
6. In the following clinical question, what is the *Outcome* (O component): What is the effect of relaxation therapy versus biofeedback on the functional ability of patients with rheumatoid arthritis?
  - A) Functional ability
  - B) Rheumatoid arthritis
  - C) Biofeedback
  - D) Relaxation therapy

7. In the following clinical question, what is the *Intervention/influence/exposure* (I component): Does taking antidepressants affect the risk of suicide in cognitively impaired adolescents?
- A) Adolescence
  - B) Suicide
  - C) Antidepressant use
  - D) Cognitive impairment
8. In the following clinical question, what is the *Population* (P component): Do stress and depression affect dyspnea in patients with chronic obstructive pulmonary disease (COPD)?
- A) Patients who are stressed
  - B) Patients who are depressed
  - C) Patients who experience dyspnea
  - D) Patients with COPD
9. In the following clinical question, what is the *Comparison* (C component): Does chronic stress affect inflammatory responses in older men with atherosclerotic disease?
- A) Chronic stress
  - B) Inflammatory response
  - C) Atherosclerotic disease
  - D) There is no “C” component
10. In which of the following clinical questions is fatigue the “I” component?
- A) Does fatigue affect agitation in cognitively impaired elders?
  - B) Does a physical activity intervention affect fatigue in patients undergoing cardiac rehabilitation?
  - C) What is the meaning of fatigue among patients with sleep apnea?
  - D) Does the level of depression of patients suffering from chronic fatigue improve by participating in an exercise intervention?
11. Which of the following is a question that would be asked as part of the process of *appraising* research evidence?
- A) What are the P, I, and O components?
  - B) How rigorous and reliable is the evidence?
  - C) What type of trigger should I use?
  - D) Is a relevant systematic review available?

12. Which of the following activities is part of an organizational—but not an individual—EBP endeavor?
- A) Asking a good question/identifying a problem
  - B) Searching for evidence
  - C) Assessing implementation potential
  - D) Synthesizing and appraising evidence
13. Asking a clinical question is the first step in evidence-based practice. What are the four components of a PICO clinical question?
- A) Population, implication, comparison, outcome
  - B) Population, intervention, clinical, outcome
  - C) Population, intervention, comparison, outcome
  - D) Population, implication, clinical, outcome
14. Which following level of evidence includes systematic reviews of multiple studies?
- A) Level IV
  - B) Level III
  - C) Level II
  - D) Level I
15. A nurse in the United States is scheduled to care for a child with an ostomy. Which of the following resource would best assist the nurse with specific guidelines for evidence-based decision making for this patient?
- A) MEDLINE
  - B) TRIP
  - C) [www.guidelines.gov](http://www.guidelines.gov)
  - D) [www.rnao.org/bestpractices](http://www.rnao.org/bestpractices)
16. Which of following study types is a systematic review used for integration of statistical quantitative research findings?
- A) Meta-synthesis
  - B) Meta-analysis
  - C) Randomized controlled trial
  - D) Quasi-experiment

17. The best-known early research utilization (RU) project sought to bridge the gap between research and practice. Which following is the name of that well-known project?
- A) Cochrane Collaboration
  - B) Stetler Model of Research Utilization
  - C) Conduct and Utilization of Research in Nursing (CURN) Project
  - D) Promoting Action on Research Implementation in Health Services
18. The Iowa Model identifies problem-focused triggers for implementing an EBP project. Which of the following is a problem-focused trigger in the Iowa Model?
- A) A finding published recently in a nursing journal
  - B) A new clinical guideline issued by a federal agency
  - C) An increase in latex allergy among emergency room nurses
  - D) Questions from hospital committee
19. As a nurse, you must understand the difference between research utilization and evidence-based nursing practice. Which of the following best defines evidence-based practice?
- A) Begins with research itself, clinical expertise, and patient preference
  - B) Uses new evidence and translates research findings into real-world applications
  - C) Uses findings from disciplined research in practical application unrelated to original research
  - D) Integrates best research evidence, with clinical expertise, patient preference, and a particular clinical situation
20. Some EBP models recommend a formal assessment of organizational “fit,” known as implementation potential, when an organization is considering undertaking an EBP project. Which following issue is of particular importance to address to determine the implementation potential of the EBP project for the organization?
- A) Effectiveness of the innovation
  - B) Nurses' attitude toward the innovation
  - C) Patient benefit of the innovation
  - D) Transferability of the innovation
21. A nurse is observing how the time of feeding impacts an inpatient's gastric reflux. In which of the following steps of the EBP process would the nurse determine whether a specific feeding time alleviated the patient's gastric reflux symptoms?
- A) Searching for and collecting evidence that addresses the question
  - B) Appraising and synthesizing the evidence
  - C) Integrating the evidence with own clinical expertise, patient preferences, and local context
  - D) Assessing the effectiveness of the decision, intervention, or advice

22. After an institutional project has been developed, the next step is to conduct a pilot study (a trial study). Based on the Iowa Model, which step would identify the success or failure of a pilot study?
- A) Developing an evaluation plan
  - B) Measuring client outcomes prior to implementation
  - C) Training relevant staff in the use of the new guideline
  - D) Evaluating the project in terms of both the process and the outcomes
23. A narrative integrated review of qualitative studies focuses on interpretation of the studies. Which of the following study types would be considered an systematic integrated review of qualitative studies?
- A) Meta-synthesis
  - B) Meta-analysis
  - C) Randomized controlled trial
  - D) Quasi-experiment
24. The Iowa Model identifies several knowledge-focused triggers for implementing an EBP project. Which following statement is considered a knowledge-focused trigger in the Iowa Model?
- A) A report in the New England Journal of Medicine regarding a potential flu epidemic
  - B) Readmission rate of heart failure patients
  - C) Poor patient survey results
  - D) Increase in pediatric falls
25. Which of the following is the best resource to use when beginning the search for evidence necessary for an individual EBP project?
- A) Hayat, M. (2010). Understanding statistical significance. *Nursing Research*, 59(3), 219-223.
  - B) Durbin, C. R., Fish, A. F., Bachman, J. A., & Smith, K. V. (2010). Systematic review of education intervention for improving advanced directive completion. *Journal of Nursing Scholarship*, 42, 234-241.
  - C) Polit, D. R., & Beck, C. T. (2014). *Essentials of Nursing Research: Appraising Evidence for Nursing Practice* (8<sup>th</sup> ed.). Philadelphia: Wolters Kluwer| Lippincott Williams & Wilkins.
  - D) Aggarwal, B., Liao, M., & Mosca, L. (2010). Predictors of physical activity at 1 year in a randomized controlled trial of family members of patients with cardiovascular disease. *Journal of Cardiovascular Nursing*, 29(6), 444-449.

## Answer Key

1. C
2. B
3. B
4. C
5. D
6. A
7. C
8. D
9. D
10. A
11. B
12. C
13. C
14. D
15. C
16. B
17. C
18. C
19. D
20. D
21. D
22. D
23. A
24. A
25. B