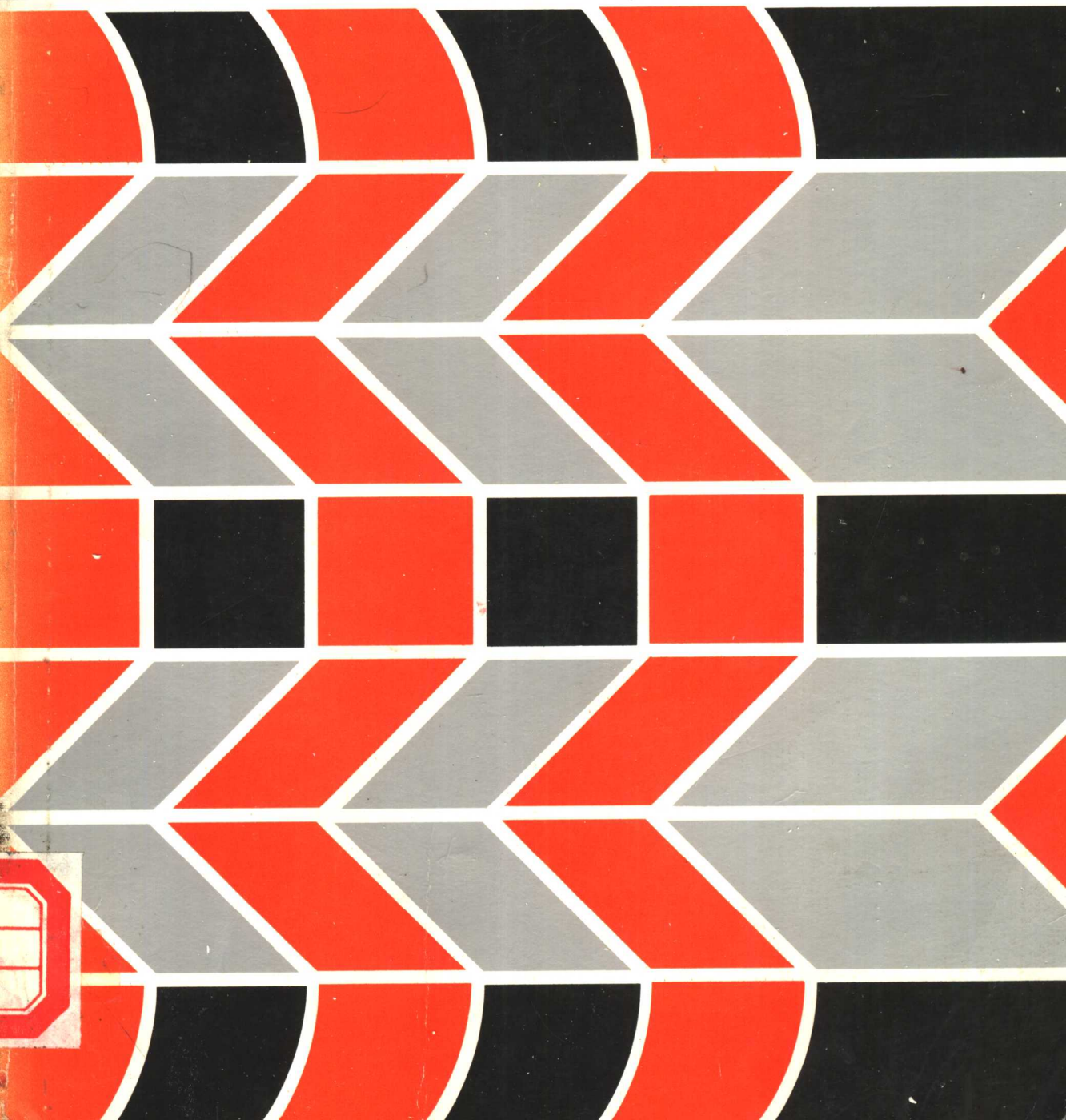


# NURSING RESEARCH

a learning guide

NATALIE PAVLOVICH



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# Preface

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This learning guide is designed as a supplement to help students in a baccalaureate nursing program learn the essentials of nursing research. Students will be able to master the material successfully if they remember that: (1) they have the ability to identify knowledge; (2) learning is a developmental process; (3) learning is an integration of various experiences; and (4) learning occurs when one is personally involved in identifying knowledge.

The purposes of the learning guide are to: (1) help students identify basic concepts in nursing research; (2) assist students in understanding salient features of the topic discussed in each chapter; (3) provide students with exercises so that they can apply their knowledge of the topic; (4) give students practice in using their knowledge and skills in nursing research; (5) motivate students to determine how research contributes to the improvement of nursing practice.

The learning guide may be used for independent study by each student or for class discussion or class assignments by the instructor.

The learning guide contains eight chapters, each covering one phase of the research process. These are: Problem (Chapter 1); Literature Review (Chapter 2); Hypothesis (Chapter 3); Research Methods (Chapter 4); Data Collection (Chapter 5); Data Analysis (Chapter 6); Findings, Conclusions, Recommendations, and Implications (Chapter 7); and Research Report (Chapter 8). Each chapter consists of seven sections. The first four sections are designed to help students study the content relevant to the topic. The final three sections of each chapter give students the opportunity to apply the knowledge obtained from the readings and to develop their ability in using that knowledge in nursing.

- A. *Objectives.* This section identifies the behavioral outcomes of the chapter. Its purpose is to give students guidance and direction in identifying the topic's major facts.
- B. *Selected readings.* This section identifies the pages in the basic nursing research textbooks and journal articles that are used in the chapter. For textbook references, inclusive page numbers are given; however, only initial page numbers are given for journal articles. The readings are divided into two categories: required and recommended. The required readings are actually referred to in

the chapter. The recommended readings contain supplemental articles that may be of help in broadening the students' understanding of the topic.

- C. *Definition of terms.* The students are required to identify and define several key terms relating to the topic. The purpose of this section is to help students become familiar with the research vocabulary. The terms are cross-referenced with the basic nursing research textbooks as well as with relevant journal articles in order to help students review the terms.
- D. *Discussion questions.* Each chapter contains a series of discussion questions that focus on factual information presented in the required readings identified in section B, selected readings. These open-ended questions require short answers. Reference pages are given for each question to help students understand the question asked. The purpose of this section is to help students concentrate on certain major facts and principles contained in the various readings.
- E. *Application.* This section contains two types of questions. First, selected nursing examples are described. The students are required to relate knowledge obtained from the readings to the given examples. In the second part of the section students are required to evaluate a specific nursing research article. The identified articles, published in *Nursing Research*, consist of studies conducted within the past 10 years. The purpose of this section is to help students acquire specific research skills by giving them the opportunity to apply their knowledge.
- F. *Implications for nursing.* This section is designed to further motivate students to think about the key concepts, ideas, and facts of the specific topic presented in each chapter. The purpose of this section is twofold: (1) to help students transfer the knowledge to their everyday experiences in nursing and (2) to recognize how research is relevant and how it contributes to the nursing profession.
- G. *Review.* This section contains review questions. All questions consist of multiple-choice and true-false items. The answers to the questions are given in the back of the learning guide for quick reference. The purpose of this section is to help students test their recall, understanding, and application of the basic concepts and facts covered in each chapter. Reference pages are given for each test item to help students review the questions if necessary.

In essence, I hope that this learning guide will enhance students' understanding and interest in nursing research and that ultimately they will use their research skills to evaluate and improve their nursing practice.

I wish to express my gratitude to: Miss Olga Markovich for her continued genuine interest in this project; Dr. Stella Yaksich, R.N., for her ever present encouragement; Dr. Ann Marriner, R.N., for her thoughtful, constructive comments on the final manuscript; my family for their support and patience; and Sister Anita Lynn Carruthers, S.D.R., for typing the manuscript.

**Natalie Pavlovich**

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## CHAPTER 1

# Problem

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### A. OBJECTIVES

Upon completing this chapter, the student nurse should be able to:

1. Identify a problem statement.
2. Distinguish between the problem statement and the purpose of the problem.
3. Describe several criteria for researchable topics in nursing.
4. Define the significance of the study.
5. Distinguish between delimiting the problem and the significance of the problem.
6. Describe basic sources used in formulating research problems.
7. Identify a research topic in nursing.
8. Define delimitations.
9. Distinguish between assumptions and limitations.

### B. SELECTED READINGS

#### Books

##### *Required*

- Abdellah, F. G., and Levine, E.: Better patient care through nursing research, New York, 1965, The Macmillan Co., pp. 93-104, 134-135.
- Fox, D. J.: Fundamentals of research in nursing, ed. 2, New York, 1970, Appleton-Century-Crofts, pp. 26-28, 42-44, 290, 299.
- Notter, L. E.: Essentials of nursing research, New York, 1974, Springer Publishing Co., pp. 33-39, 139.
- Treعه, E. W., and Treعه, J. M.: Elements of research in nursing, ed. 2, St. Louis, 1977, The C. V. Mosby Co., pp. 35-37, 48, 54-56, 295-296, 300-301.
- Wandelt, M.: Guide for the beginning researcher, New York, 1970, Appleton-Century-Crofts, pp. 1-24, 99.

#### Articles

##### *Required*

- Chater, S. S.: Search or research? The teaching of selecting and stating the problem, *Nurs. Outlook* **13**:65, 1965.
- Diers, D.: Finding clinical problems for study, *J. Nurs. Admin.* **1**:15, 1971.

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Hoffman, K. J.: Problem identification and the research design. In Batey, M. V., editor: *Communicating nursing research*, Boulder, Colo., 1969, Western Interstate Commission for Higher Education, pp. 5-11.

### *Recommended*

- Adebo, E. G.: Identifying problems for nursing research, *Int. Nurs. Rev.* **21**:53, 1974.
- Beckingham, A. C.: Identifying problems for nursing research, *Int. Nurs. Rev.* **21**:49, 1974.
- Bunge, H.: Defining the problems and the method. In Heidgerken, L. E., editor: *The improvement of nursing through research*, Washington, D.C., 1969, Catholic University of America Press, pp. 29-41.
- Dickoff, J., and others: 8-4 research. I. A stance for nursing research; tenacity or inquiry, *Nurs. Res.* **24**:84, 1975.
- Downs, F. S.: This I believe . . . about the dimensions of nursing research, *Nurs. Outlook* **19**:719, 1971.
- Dubs, R.: Comparison of student achievement with performance ratings of graduates and state board examination scores, *Nurs. Res.* **24**:59, 1975.
- Elder, R. G.: Orientation of senior nursing students toward access to contraceptives, *Nurs. Res.* **25**:338, 1976.
- Ellis, R.: Characteristics of significant theories, *Nurs. Res.* **17**:218, 1968.
- Foley, J.: Wanted: a theory of nursing, *Int. Nurs. Rev.* **18**:144, 1971.
- Heidgerken, L. E.: The research process, *Can. Nurse* **67**:40, 1971.
- Lindeman, C. A.: Nursing research: a visible, viable component of nursing practice, *J. Nurs. Admin.* **3**:18, 1973.
- Lindeman, C. A.: Priorities in clinical nursing research, *Nurs. Outlook* **23**:693, 1975.
- McDowell, W.: Asking the research question, *Nurs. Res. Rep.* **3**:2, 1968.
- Notter, L. E.: Availability of nursing research, *Nurs. Res.* **20**:291, 1971.
- Notter, L. E.: Research in nursing—a critical need, *Nurs. Res.* **20**:195, 1971.
- Paterson, J. G.: From a philosophy of clinical nursing to a method of nursing, *Nurs. Res.* **20**:143, 1971.
- Pierce, L.: Usefulness of a systems approach for problem conceptualization and investigation, *Nurs. Res.* **21**:509, 1972.
- Ragucci, A. T.: Approaches to the study of nursing questions and the development of nursing science: the ethnographic approach and nursing research, *Nurs. Res.* **21**:485, 1972.
- Schlotfeldt, R. M., and others: Approaches to the study of nursing questions and the development of nursing science, *Nurs. Res.* **21**:484, 1972.
- Sotejo, J. V.: Nursing research for improvement of nursing service, *Philipp. J. Nurs.* **35**:329, 1966.
- Valadez, A. M., and Anderson, E. T.: Rehabilitation workshops: change in attitudes of nurses, *Nurs. Res.* **21**:132, 1972.
- Van Ort, S. R., and Gerber, R. M.: Topical application of insulin in the treatment of decubitus ulcers: a pilot study, *Nurs. Res.* **25**:9, 1976.
- Volicer, B. J.: Patients' perceptions of stressful events associated with hospitalization, *Nurs. Res.* **23**:235, 1974.
- Whaley, P. J.: Nursing research: limbo or liberty? *Am. J. Nurs.* **67**:1675, 1967.



**C. DEFINITION OF TERMS**

DIRECTIONS: Define each of the following terms in your own words.

<b>TERM</b>	<b>SOURCE</b>
1. Problem	Chater, p. 65 Diers, p. 17 Treece and Treece, p. 55 Wandelt, p. 1
2. Problem area	Chater, p. 65 Fox, p. 27 Treece and Treece, p. 56
3. Statement of problem	Chater, p. 65 Hoffman, p. 6 Notter, p. 38 Wandelt, p. 3
4. Purpose of problem	Fox, p. 27 Hoffman, p. 6 Notter, p. 39 Treece and Treece, p. 56 Wandelt, pp. 2-3, 99
5. Significance of study	Chater, p. 65 Notter, p. 38
6. Rationale for study	Notter, p. 38
7. Delimitations	Treece and Treece, p. 301

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<b>TERM</b>	<b>SOURCE</b>
8. Assumptions	Abdellah and Levine, p. 134 Fox, pp. 42-44 Notter, p. 139
9. Limitations	Abdellah and Levine, 134 Fox, pp. 42-44, 298 Treece and Treece, pp. 300-301

#### **D. DISCUSSION QUESTIONS**

**DIRECTIONS:** Discuss each of the following questions.

<b>TASK</b>	<b>SOURCE</b>
1. Identify several basic sources used in the selection of a topic to be studied in nursing. a. b. c. d. e. f. g.	Abdellah and Levine, pp. 93-95 Fox, pp. 26-27 Notter, p. 34 Wandelt, pp. 6-24
2. Identify three reasons why a study would be replicated. a.	Notter, p. 35

TASK	SOURCE
b.	
c.	
3. Why is the "review of literature" helpful in identifying problems for studying in nursing?	Abdellah and Levine, p. 94 Notter, pp. 34-35
4. What is the value of investigating a topic to be studied in nursing?	Treece and Treece, pp. 54-55
5. When are problems <i>not</i> researchable in nursing?	Abdellah and Levine, p. 98 Diers, p. 15 Notter, pp. 35-36
6. What criteria (guidelines) should a nurse researcher use in determining whether or not a problem is researchable?	Abdellah and Levine, pp. 98-104 Diers, p. 17 Notter, pp. 35-36 Treece and Treece, p. 296
7. Explain why the selection of the problem for study is one of the most important steps in the research process.	Chater, p. 65 Diers, p. 17 Notter, p. 37

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<b>TASK</b>	<b>SOURCE</b>
8. Explain why intellectual curiosity is so important when defining a problem in nursing research.	Notter, pp. 34, 37
9. Differentiate between the terms "delimiting the problem" and "significance of the problem."	Notter, pp. 36-37
10. Identify the procedure for delimiting a problem in nursing research.	Notter, p. 35
11. What are the advantages of identifying the significance of the problem?	Notter, p. 37
12. What are the advantages of stating the purpose of the problem?	Notter, p. 38
13. How do the statement of the problem to be studied and the statement of the purpose of the study differ?	Chater, p. 65 Notter, p. 39 Wandelt, pp. 3-4

TASK	SOURCE
14. What information is often included in the rationale for a study?	Notter, p. 38
15. What is the main purpose of any kind of research in nursing?	Treece and Treece, p. 48
16. Identify four purposes for student research in nursing.	Fox, p. 27
a.	
b.	
c.	
d.	
17. State three purposes for professional research in nursing.	Fox, p. 28
a.	
b.	
c.	
18. What two aspects of the problem should the statement of the problem consider?	Fox, p. 290
a.	
b.	

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<b>TASK</b>	<b>SOURCE</b>
19. Identify the process of formulating a problem for research in nursing.	Abdellah and Levine, p. 96 Notter, pp. 38-39
20. What are six questions that a nurse researcher should ask when formulating a research problem? a.  b.  c.  d.  e.  f.	Abdellah and Levine, p. 103
21. Distinguish between assumptions and limitations.	Fox, pp. 42-44
22. Why is the identification of assumptions and limitations important in a nursing study?	Fox, pp. 42-44
23. What are some limitations in human investigations?	Treece and Treece, pp. 35-37

TASK	SOURCE
24. Identify several sources that a nurse researcher uses to identify assumptions and limitations in a study.	Abdellah and Levine, pp. 134-135
25. Identify two types of limitations. a.  b.	Treece and Treece, p. 300
26. Of what aspects of limitations should the nurse researcher be aware?	Fox, p. 299

**E. APPLICATION**

1. Consider the following statement:  
Breast feeding versus bottle feeding.
  - a. Is the above statement researchable? Briefly explain.
  - b. What criteria, if any, does the above statement meet in determining if it is researchable? Explain.
  - c. What criteria, if any, does the statement fail to meet in determining if it is researchable? Explain.

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d. Revise the above statement so that it would meet the criteria required for a possible research study.

2. Consider the following statement:

What are the attitudes of patients toward male nurses?

a. Is the above statement a research problem? Explain.

b. Is the statement of the problem concise? Explain.

c. If not, rephrase the above statement of the problem.

d. Is the problem limited? Explain.

e. Identify the rationale for the importance of the study problem to be investigated.

f. Identify the purpose of the study.



- g. Identify a few assumptions underlying this study.
  
- h. Identify a few limitations to the study.
  
- i. Briefly, identify a few nursing implications of the problem.
  
- j. Is the above question, as stated, feasible for a nurse researcher to conduct a study? Explain.

3. Read one of the following suggested articles; then answer the questions that follow.

- Dubs, R.: Comparison of student achievement with performance ratings of graduates and state board examination scores, *Nurs. Res.* **24**:59, 1975.
- Elder, R. G.: Orientation of senior nursing students toward access to contraceptives, *Nurs. Res.* **25**:338, 1976.
- Valadez, A. M., and Anderson, E. T.: Rehabilitation workshops: change in attitudes of nurses, *Nurs. Res.* **21**:132, 1972.
- Van Ort, S. R., and Gerber, R. M.: Topical application of insulin in the treatment of decubitus ulcers: a pilot study, *Nurs. Res.* **25**:9, 1976.
- Volicer, B. J.: Patients' perceptions of stressful events associated with hospitalization, *Nurs. Res.* **23**:235, 1974.

- a. What is the general statement of the problem?
  
  
  
  
  
  
  
  
  
  
- b. What is the specific statement of the problem?
  - (1) What is being studied?