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Essentials of

NURSING RESEARCH

Methods, Appraisal, and Utilization

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Fifth Edition

Lippincott

FIFTH EDITION

Essentials of NURSING RESEARCH

Methods, Appraisal, and Utilization

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To our children: Nate, Curt, and Lisa

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PREFACE



This fifth edition of *Essentials of Nursing Research: Methods, Appraisal, and Utilization* presents a number of important changes to this award-winning textbook. This edition retains all of the features that have made the text popular in the past, while introducing revisions that we think will make it more useful to nurses and students who are learning to critically appraise research reports. There is a growing expectation that nurses—especially those in clinical practice—will utilize the results of scientific studies as a basis for their practice. A major purpose of this book is to assist consumers of nursing research in evaluating the adequacy of research findings in terms of their scientific merit and potential for utilization.

NEW TO THIS EDITION

Improved Readability

This textbook has been widely hailed for its clear, concise, and “user-friendly” presentation. It has been written in a style designed to be nonintimidating, without including any detailed information on the “how-to’s” of conducting research. In this edition, however, we have gone to great lengths to write in an even simpler, more straightforward fashion, in recognition of the fact that research methods are an inherently complex topic. Additionally, the readability of the text is enhanced by several visual features, such as the use of two colors.

Greater Assistance to Consumers

This edition is more consumer-focused than ever before. It is designed to help consumers progress fairly slowly into the complexities of disciplined research. For example, we have added a separate chapter, early in the text, on how to read research reports. We have also reorganized the text to include such topics as the ethics of research earlier than in previous editions, in part because this enables readers to develop a fuller understanding of general research issues before delving into more technical material. Additionally, we have

interspersed our consumer “tips” throughout the text, which not only highlights the focus on consumer issues but also makes for a livelier presentation.

More Emphasis on Utilization

We have made two major changes to ensure that this textbook will better help to prepare students for utilizing research in their practice. First, we have made several important additions to the chapter on research utilization. Second, we repeatedly remind readers to think about the implications of research for utilization. In particular, we conclude each chapter with some actual research examples that highlight material discussed in the chapter (as before), and then we discuss the possible clinical implications of those research examples.

Better Coverage of Qualitative Research

Every new edition of this textbook has improved on the quality and quantity of information provided to students about qualitative research. This edition makes a major step forward in this tradition through the input of a new coauthor, Cheryl Tatano Beck, who is well-known for her research and writing on qualitative methods.

ORGANIZATION OF THE TEXT

The content of this edition is organized into six main parts.

Part I—Overview of Nursing Research serves as the overall introduction to fundamental concepts in nursing research. Chapter 1 introduces and summarizes the history and future of nursing research, discusses the philosophical underpinnings of qualitative research versus quantitative research, and describes the major purposes of nursing research. Chapter 2 presents an overview of the steps in the research process for both qualitative and quantitative studies and defines some key research terms. Chapter 3 provides an introduction to research reports—what they are and how to read them. Chapter 4 is devoted to a discussion of ethics in research studies.

Part II—Preliminary Steps in the Research Process includes three chapters and focuses on the steps that are taken in getting started on a research project. Chapter 5 focuses on the development of research questions and the formulation of research hypotheses. Chapter 6 discusses how to prepare and critique literature reviews. Chapter 7 presents information about theoretical and conceptual frameworks.

Part III—Designs for Nursing Research presents material relating to the design of qualitative and quantitative nursing research studies. Chapter 8 describes some fundamental principles of research design and discusses many specific aspects of quantitative research design. Chapter 9 addresses the vari-

ous research traditions that have contributed to the growth of naturalistic inquiry and qualitative research, and also describes integrated qualitative/quantitative designs. Chapter 10 presents various designs for sampling of study participants.

Part IV—Collection of Research Data deals with the collection of research data. Chapter 11 discusses the full range of data collection options available to researchers, including both qualitative and quantitative approaches. The chapter focuses primarily on self-reports, observational techniques, and biophysiological measures, but other techniques are also mentioned. Chapter 12 explains methods of assessing data quality.

Part V—Analysis of Research Data is devoted to the organization and analysis of research data. Chapter 13 reviews methods of quantitative analysis. The chapter assumes no prior instruction in statistics and focuses primarily on helping readers to understand why statistics are needed, what tests might be appropriate in a given research situation, and what statistical information in a research report means. Chapter 14 presents a discussion of qualitative analysis, greatly expanded and improved in this edition.

Part VI—Critical Appraisal and Utilization of Nursing Research is intended to sharpen the critical awareness of consumers with respect to several key issues. Chapter 15 discusses the interpretation and appraisal of research reports. Chapter 16, the final chapter, is a guide to utilization for clinical practitioners.

KEY FEATURES

Many of the features successfully used in previous editions to assist consumers have been retained.

Research Examples: Each chapter concludes with one or two actual research examples designed to sharpen the readers' critical skills. In most chapters, there is an example of both a quantitative and a qualitative study. Students are asked to evaluate features of these studies according to the chapter's critiquing guidelines. Then, the clinical relevance of each example is explored. In addition, many real or fictitious research examples are used to illustrate key points in the text. The use of relevant examples is crucial to the development of both an understanding of and an interest in the research process. We also hope that the inclusion of many research ideas will stimulate an interest in further reading or pursuit of a utilization project of one's own.

Tips for Consumers of Nursing Research: Each chapter contains numerous tips on what to expect in research reports vis-a-vis the topics that have been discussed in the chapter. In these tips, we have paid special attention to helping students *read* research reports, which are often daunting to those without specialized research training. This feature will enable students to translate the

material presented in the textbook into meaningful concepts as they approach the research literature. In this edition, these tips are located directly near related instructional material, rather than being placed at the end of the chapter.

Guidelines for Critiquing Research Reports: Each chapter has a section devoted to guidelines for conducting a critique. These sections provide a list of questions that walk the consumer through a study, drawing attention to aspects of the study that are amenable to appraisal by research consumers.

FEATURES FOR STUDENT LEARNING

To enhance and reinforce learning, several features are used to help focus the student's attention on specific areas of text content:

Chapter Objectives: Learning objectives are identified on the chapter opener to focus the reader's attention on critical content.

New Terms: Each chapter begins with a list of new terms that are defined in context when used for the first time.

Chapter Summary Points: A succinct list of summary points that focus on salient chapter content is included in each chapter. In this edition, the summary is presented as a bulleted list rather than, as in previous editions, in paragraph form.

Suggested Readings: Two lists of suggested readings, methodologic and substantive resources, are provided in each chapter to direct the student's further inquiry.

Actual Research Examples: This edition includes two recent full-length examples of research studies—one quantitative and the other qualitative—that students can read, analyze, and critique.

Critical Thinking Activities: Each chapter of the textbook now includes two or three questions or activities designed to reinforce student learning. The questions often relate specifically to the full research reports that are included in the appendix.

TEACHING-LEARNING PACKAGE

Essentials of Nursing Research: Methods, Appraisal, and Utilization, fifth edition has an ancillary package designed with both the student and the instructor in mind.

The Study Guide augments the text and provides the student with application exercises that correspond to each text chapter. This supports the learning of fundamental research terms that appear in research journals and provides the opportunity to practice the application of the concepts presented in the

text and explore hundreds of research possibilities. This edition provides the answers to the selected exercises at the end of the study guide.

Free CD-ROM : The study guide also includes a CD-ROM providing 225 review questions to assist students in self-testing. This review program provides the rationale for both correct and incorrect answers, helping students to identify areas of strength and areas needing further study.

The Instructor's Manual and Testbank includes a chapter that corresponds to every chapter in the textbook. Each chapter of the instructor's manual contains the following: Statement of Intent, Comments on the Actual Research Examples in the Textbook, Answers to Selected Study Guide Exercises, and Test Questions and Answers.

It is our hope and expectation that the content, style, and organization of this fifth edition of *Essentials of Nursing Research* will be helpful to those students desiring to become intelligent and thoughtful readers of nursing research studies and to those wishing to improve their clinical performance based on research findings. We also hope that this textbook will help to develop an enthusiasm for the kinds of discoveries and knowledge that research can produce.

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Bernadette P. Hungler, RN, PhD

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This fifth edition, like the previous four, depended on the contribution of many individuals. We are deeply appreciative of those who made all five editions possible. In addition to all those who assisted us with the earlier editions, the following individuals deserve special mention.

This edition of the book involved many revisions to more specifically address the needs of beginning students and to expand the discussion of qualitative research. We are indebted to the insightful comments of several anonymous reviewers, who contributed to the overall conceptualization of this edition.

We would also like to extend our warmest thanks to those who helped to turn the manuscript into a finished product, including Lisa Kachidurian and Chloë Kettlewell. The staff at Lippincott Williams & Wilkins has given us ongoing support and understanding. We would like to express our gratitude to many individuals, including Margaret Zuccarini, Deedie McMahon, Helen Kogut, Erika Kors, and all the others behind the scenes for their contributions.

Finally, we thank our friends and family, who were patient and supportive throughout this enterprise.

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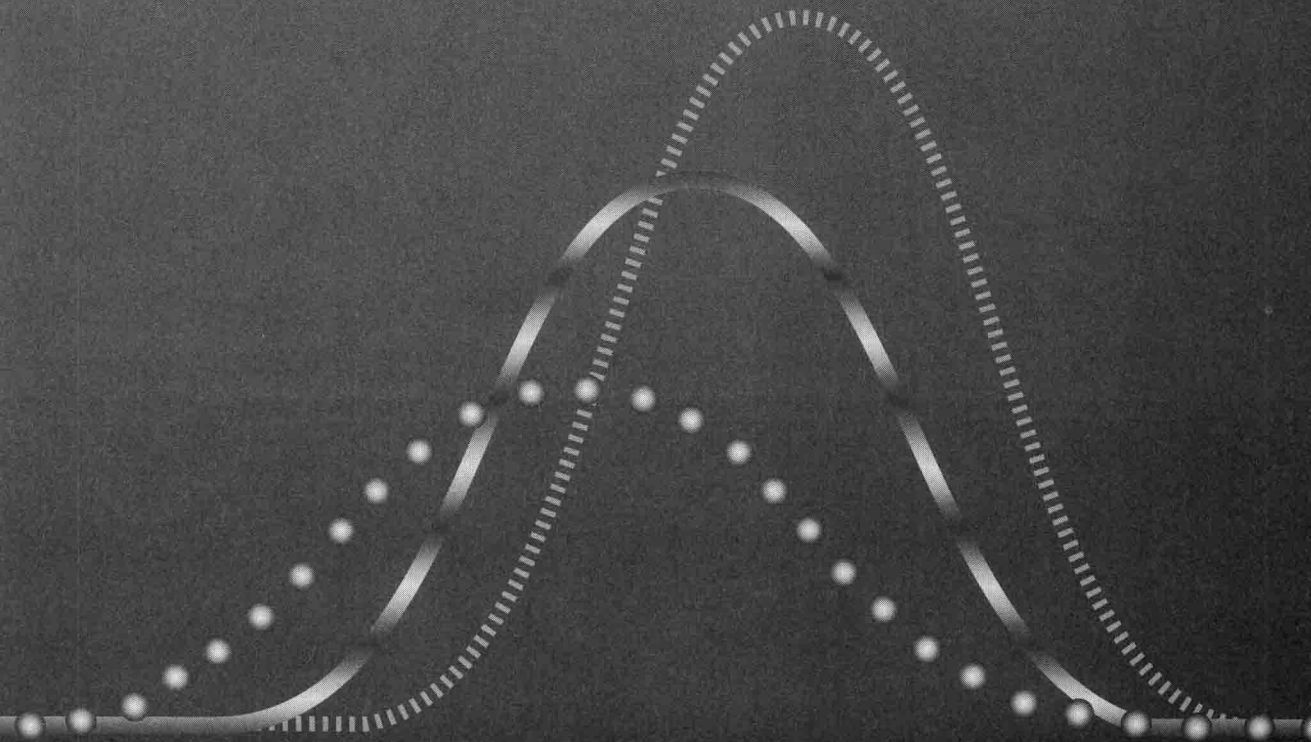
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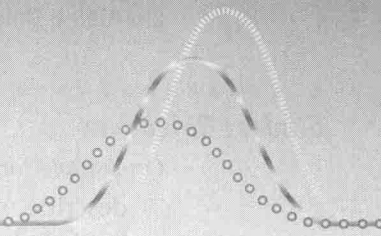
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PART I

OVERVIEW OF NURSING RESEARCH





Exploring Nursing Research

AN INTRODUCTION TO NURSING RESEARCH

- What Is Nursing Research?
- The Importance of Research in Nursing
- Roles of Nurses in Nursing Research

NURSING RESEARCH: PAST, PRESENT, AND FUTURE

- The Early Years: From Nightingale to the 1960s
- Nursing Research Since the 1970s
- Future Directions for Nursing Research

SOURCES OF KNOWLEDGE

PARADIGMS AND METHODS FOR NURSING RESEARCH

- The Positivist Paradigm
- The Naturalistic Paradigm
- Paradigms and Methods: Quantitative and Qualitative Research
- Multiple Paradigms and Nursing Research

PURPOSES OF NURSING RESEARCH

- Specific Purposes of Quantitative and Qualitative Research
- Basic and Applied Research

ASSISTANCE TO CONSUMERS OF NURSING RESEARCH

RESEARCH EXAMPLES

- Research Example of a Quantitative Study
- Research Example of a Qualitative Study

SUMMARY POINTS

CRITICAL THINKING ACTIVITIES

SUGGESTED READINGS

- Methodologic and Theoretical References
- Substantive References

Student Objectives

On completion of this chapter, the student will be able to:

- describe why research is important in the nursing profession and discuss why evidence-based practice is needed
- describe historical trends in the evolution of nursing research and identify several areas of current priority for nurse researchers
- describe alternative means of acquiring knowledge
- describe the major characteristics and assumptions of the two alternative paradigms used by nurse researchers
- identify similarities and differences between the traditional scientific method (quantitative research) and naturalistic methods (qualitative research)
- identify several purposes of qualitative and quantitative research
- define new terms in the chapter

New Terms

Applied research	Naturalistic paradigm
Assumption	Nursing research
Basic research	Outcomes research
Control	Paradigm
Deductive reasoning	Positivist paradigm
Determinism	Qualitative research
Empirical evidence	Quantitative research
Evidence-based practice	Replication
Generalizability	Research-based practice
Inductive reasoning	Research methods
Journal club	Research utilization
National Institute of Nursing Research (NINR)	Scientific approach
	Scientific research

AN INTRODUCTION TO NURSING RESEARCH

The purpose of this book is to provide you with the skills to read, understand, evaluate, and use nursing research. The goals of this introductory chapter are twofold: to highlight the important role of research in establishing a knowledge base for your nursing practice and to present an overview of nursing research approaches.

What Is Nursing Research?

Research is systematic inquiry that uses disciplined methods to answer questions or solve problems. The ultimate goal of research is to develop, refine,