

Nursing Management

IN DRUG THERAPY

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Lippincott

FREE DISK INSIDE

MANAGEMENT IN DRUG THERAPY

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The authors, editors and publisher have exerted every effort to ensure that drug selection and dosage set forth in this text are in accordance with current recommendations and practice at the time of publication. However, in view of ongoing research, changes in government regulations, and the constant flow of information relating to drug therapy and drug reactions, the reader is urged to check the package insert for each drug for any change in indications and dosage and for added warnings and precautions. This is particularly important when the recommended agent is a new or infrequently employed drug.

Some drugs and medical devices presented in this publication have Food and Drug Administration (FDA) clearance for limited use in restricted research settings. It is the responsibility of the health care provider to ascertain the FDA status of each drug or device planned for use in their clinical practice.

Dedicated to the memory of my husband, Rob, for his encouragement,
to my children, John, Emily, and Allison, for their patience,
and to my students for the lessons they have taught me.

D. S. A.

To my husband, Ben, for his unconditional love,
support, and encouragement.

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and to the thousands of nursing students
who taught me much of what I hold meaningful.

J. A. P. Y.

To my family, friends, and students who were enthusiastic,
excited, and enormously loving and supportive throughout
this extraordinary professional and personal project.

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Preface

Nursing Management in Drug Therapy

How will I ever learn all of this? Where do I begin?" Are questions that nursing students frequently ask themselves and their faculty when beginning to study pharmacology. The subject is indeed vast for novices in the profession who lack the skills to organize drug information appropriately. Students feel overwhelmed by all of the isolated pieces of drug information they must learn. Consequently, they lose sight of "the forest for the trees."

Prototype Approach

For years, many pharmacology faculty have favored a prototype approach to teaching pharmacology. This method encourages identification of "the trees" and facilitates recognition of "the forest." Use of a prototype, a drug that is representative of a class (or group) of drugs, helps students because it offers a systematic approach to grouping drug data. It gives students a "method" with which to learn and organize large amounts of information. Now nursing pharmacology faculty have available a text that matches the way they teach. *Nursing Management in Drug Therapy*, designed and written by faculty who themselves teach nursing pharmacology using the prototype approach, is that text.

Clinical Judgment and Clinical Application

Learning the pharmacology facts about different drug prototypes is only half of the knowledge nursing students need. Because they're learning to be nurses, they must understand how to apply this knowledge to patient care. Nurses must learn to think critically, evaluate information, and make decisions. However, this essential aspect of knowledge application has never been thoroughly addressed in nursing pharmacology texts. Frequently, students view nursing application of drug knowledge as less important than learning the hard drug facts. This thinking is fostered when the pharma-

cology textbooks they use present the nursing process after or apart from drug knowledge. Now, the exciting and innovative *Nursing Management in Drug Therapy* presents a totally nursing-focused framework to support the teaching and learning of nursing pharmacology.

Applying drug information to patient care may overwhelm students because every patient is different, with different responses, positive or negative, to the same drug therapy. If the student sees each patient situation as an isolated case, learning is again hampered. This text provides a systematic framework for evaluating patient responses that change in accord with health, age, gender, lifestyle, and other factors. It integrates nursing with pharmacology, to help the student apply nursing pharmacology knowledge to practice, safely administer drugs, educate patients, and begin to make the journey from novice to expert.

Use of a Systematic Framework

The authors of *Nursing Management in Drug Therapy* present a nursing management map for every prototype drug. The Nursing Management Map demonstrates the interaction of two basic areas of information—core drug knowledge and core patient variables—to provide "clues" for customizing a nursing plan that maximizes the therapeutic effects and minimizes the adverse effects of a drug for each patient.

Core Drug Knowledge highlights the important drug facts about a prototype drug. Core drug knowledge includes: pharmacotherapeutics, pharmacokinetics, pharmacodynamics, contraindications and precautions, adverse effects, and drug interactions.

Core Patient Variables identify the major topics that should be assessed in every patient to determine special considerations that are necessary when administering the drug. Core patient variables include: health status, lifespan and gender, lifestyle, diet, and habits, environment, and culture.

Nursing Management Map is a visual grid that provides a literal framework for interweaving the core drug knowledge and the core patient variables. The nursing management map graphically shows which core drug

knowledge and core patient variables interact and, based on those interactions or “clues,” directs nursing actions needed to achieve the maximum therapeutic effects and to minimize adverse effects of the prototype drug. The map is designed especially to help visual learners master the content.

Organization

Nursing Management in Drug Therapy has eleven units and eight appendices. The first three units address the principles and process of nursing management in drug therapy, and the basics of core drug knowledge and patient-related variables. The next seven units present the nursing management of drugs affecting various body systems and disease states. The last unit encompasses the eight appendices.

Unit I: Principles and Process of Nursing Management in Drug Therapy consists of four chapters. Chapter 1 explains the framework for the text and how this framework relates to the application of drug knowledge to clinical practice. The remaining chapters address historical perspectives, safeguards in drug development and delivery, and the variety of drug preparations and modes of administration.

Unit II: Core Drug Knowledge includes two chapters that present the basics of pharmacology: pharmacotherapeutics, pharmacokinetics, pharmacodynamics, adverse effects, and drug interactions.

Unit III: Core Patient Variables includes eight chapters that present the eight categories of variables to take into consideration before, during, and after administering a drug. These areas are organized according to *health status* (pain, emotional status); *lifespan issues* (children, pregnant or breast-feeding women and older adults); *lifestyle* (substance abuse); *environment* (self-medication, over-the-counter drug use, and self-care); and *cultural* aspects of drug therapy (nursing competency and cultural diversity).

Units IV through X present drugs affecting various body systems—nervous, cardiovascular and respiratory, vascular, gastrointestinal, metabolic and endocrine, and hematopoietic and immune—and outlines nursing management for anti-infective and anticancer drugs as well.

Unit XI consists of eight comprehensive appendices that present essential information on diagnostic agents, enzymes, and debridement products, enteral and parenteral supplements, antidotes, vaccines, and antiemetic drugs.

Pedagogy

- **Chapter Learning Objectives** identify key content within the chapter to help direct student learning.

- **Key Terms** identify terms that are key to understanding each chapter's contents.
- **Chapter Summary** highlights the most important information presented in the chapter.
- **Questions for Study and Review** encourage the student to reflect on the important aspects of the chapter.

Key Features

- **Concept Maps** introduce the student to all drugs that will be mentioned in the chapter. Each map identifies the drug class, its prototype, and drugs in the class that are similar to or different from the prototype.
- **Physiology Figures** illustrate physiologic processes relevant to the drug class and link drug actions to physiology.
- **Nursing Management Maps** visually display the interaction between the core drug knowledge and core patient variables to guide students in study and in clinical practice.
- **Memory Chips** assist students in studying and preparing for clinical practice, providing a quick reference of key points for each prototype drug.
- **Community-Based Concerns** highlight nursing issues related to drug therapy carried out in patients' homes and communities.
- **Critical Thinking Scenarios** challenge students to develop critical thinking skills for applying pharmacology knowledge to patient care.
- **Drug Summary Tables** relate pharmacotherapeutics and general dosage data to pharmacokinetic parameters.
- **Drug Interaction Tables**, for every prototype drug, highlight known drug-drug and drug-food interactions. When diagnostic and laboratory test values are affected by drug use, this information is pointed out as well.

Ancillary Package

Student Study Guide guides student in the study and learning of text content through various techniques, such as multiple choice questions, matching, decision trees, and case studies that encourage critical thinking and the application of knowledge.

Instructor's Manual provides additional resources for faculty in understanding and using the nursing management framework in their courses. A master case study is included for each drug chapter that can be assigned for class discussion or individual assignment. Faculty notes are provided to assist in answering the questions and completing the nursing management map and the case study. Lecture outlines are provided to dovetail with the text. Website source bank for relevant material is

provided. Power point slides are available from a Web-site for assistance in classroom presentations.

Test Bank of 1,000 test items—using the ParTest program—is available upon adoption of *Nursing Management in Drug Therapy*. ParTest software allows selection of test items according to level of difficulty, cognitive type, part of the nursing process, as well as addition or deletion of questions using the ParTest software.

PharmPhax - Semi-annual newsletter mailed **FREE** to faculty who adopt this text for distribution to each student enrolled in the class. *PharmPhax* offers constantly updated drug information to ensure the most current drug information possible. The newsletter includes Web addresses to access electronic sources of new drug information.

The author team is excited to present *Nursing Management in Drug Therapy* in this dramatic new format that captures what experienced nurses have known for a long time—nurses must be able to apply drug knowledge to clinical practice to meet the individual needs of their patients. We believe that this text will introduce students to the intricacies and challenges presented by nursing pharmacology and provide them with the tools to become clinically effective professional nurses and critical thinkers in the 21st century.

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Lead Author, Cleveland, Aschenbrenner, Venable, Yensen team

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