

# PREFACE

## PURPOSE

The basic precepts underlying previous editions of *Clinical Drug Therapy* also guided the writing of this eighth edition. The overall purpose is to promote safe, effective, and rational drug therapy by

- Providing information that accurately reflects current practices in drug therapy
- Facilitating the acquisition, comprehension, and application of knowledge related to drug therapy. Application requires knowledge about the drug and the client receiving it.
- Identifying knowledge and skills the nurse can use to smooth the interface between a drug and the client receiving it

## GOALS AND RESPONSIBILITIES OF NURSING CARE RELATED TO DRUG THERAPY

- Preventing the need for drug therapy, when possible, by promoting health and preventing conditions that require drug therapy
- Using appropriate and effective nonpharmacologic interventions instead of, or in conjunction with, drug therapy when indicated. When used with drug therapy, such interventions may promote lower drug dosage, less frequent administration, and fewer adverse effects.
- Enhancing therapeutic effects by administering drugs accurately and considering clients' individual characteristics that influence responses to drug therapy
- Preventing or minimizing adverse drug effects by knowing the major adverse effects associated with particular drugs, identifying clients with characteristics that may increase their risks of experiencing adverse effects, and actively monitoring for the occurrence of adverse effects. When adverse effects occur, early recognition allows interventions to minimize their severity. Because all drugs may cause adverse effects, nurses must maintain a high index of suspicion that signs and symptoms, especially new ones, may be drug induced.
- Teaching clients and caregivers about accurate administration of medications, nonpharmacologic treatments to use with or instead of pharmacologic treatments, and when to contact a health care provider

## ORGANIZATIONAL FRAMEWORK

The content of *Clinical Drug Therapy* is organized into ten sections, primarily by therapeutic drug groups and their effects on particular body systems. This approach helps students make logical connections between major drug groups and the conditions for which they are used. It also provides a foundation for learning about new drugs, most of which fit into known groups.

The first section contains the basic information required to learn, understand, and apply drug knowledge. The chapters in this section include information about drug names, classifications, prototypes, costs, laws and standards, schedules of controlled substances, drug approval processes, and learning strategies (Chapter 1); cellular physiology, drug transport, pharmacokinetic processes, the receptor theory of drug action, types of drug interactions, and factors that influence drug effects on body tissues (Chapter 2); dosage forms and routes and methods of accurate drug administration (Chapter 3); and guidelines for using the nursing process in drug therapy and general principles of drug therapy (Chapter 4).

Most drug sections include an initial chapter that reviews the physiology of a body system, followed by several chapters that discuss drug groups used to treat disorders of that body system. The seven physiology review chapters are designed to facilitate understanding of drug effects on a body system. These include the central nervous system; the autonomic nervous system; and the endocrine, hematopoietic and immune, respiratory, cardiovascular, and digestive systems. Other chapters within each section emphasize therapeutic classes of drugs and prototypical or commonly used individual drugs, those used to treat common disorders, and those likely to be encountered in clinical nursing practice. Drug chapter content is presented in a consistent format and includes a description of a condition (or conditions) for which a drug group is used; a general description of a drug group, including mechanism(s) of action, indications for use, and contraindications; and descriptions and tables of individual drugs, with recommended dosages and routes of administration.

Additional clinically relevant information is presented under the headings of **Nursing Process**, **Principles of Therapy**, and **Nursing Actions**.

**Nursing Process** sections emphasize the importance of the nursing process in drug therapy, including assessment of the client's condition in relation to the drug group, nursing diagnoses, expected outcomes, needed interventions, and evaluation

of the client's progress toward expected outcomes. **Client Teaching Guidelines** are displayed separately from other interventions to emphasize their importance and for easy student reference.

**Principles of Therapy** sections present guidelines for maximizing benefits and minimizing adverse effects of drug therapy in various circumstances and populations, including middle-aged and older adults, children and adolescents, and clients with impaired kidney or liver function. General principles are included in Chapter 4; specific principles related to drug groups are included in the chapters where those drug groups are discussed. This approach, rather than separate chapters on pediatric and geriatric pharmacology, for example, was chosen because knowledge about a drug is required before that knowledge can be applied to a specific population with distinctive characteristics and needs in relation to drug therapy.

Each drug chapter includes a **Nursing Actions** display that provides specific nursing responsibilities related to drug administration and client observation.

Other drug sections include products used to treat infectious, ophthalmic, and dermatologic disorders plus drugs used during pregnancy, labor and delivery, and lactation.

## NEW TO THIS EDITION

This thoroughly updated edition includes new content and features:

- **Updated Drug Information.** Many new drugs have been added: some are additions to well-known drug groups, such as antidiabetic drugs (Chapter 26) and anti-retroviral drugs (Chapter 35); others represent advances in the drug therapy of some disease processes, such as newer anticancer agents (Chapter 42).  
In addition, continuing trends in drug dosage formulations are reflected in the increased numbers of fixed-dose combination drug products, long-acting preparations, and nasal or oral inhalation products.
- **Major Revision of Many Chapters.** Chapter revisions reflect current practices in drug therapy, integrate new drugs, and explain the major characteristics of new drug groups.
- **Applying Your Knowledge.** These threaded case studies provide real-world examples and lend significance to conceptual content. Each drug chapter opens with a client scenario, which builds throughout the chapter. Case-based questions test students' critical thinking, and special "How Do You Avoid This Medication Error?" questions promote safe and accurate drug administration.
- **Research Briefs.** The briefs summarize important research related to drug therapy and provide nursing implications.
- **New Illustrations.** Several new illustrations have been developed to enhance understanding of drug actions.

## SPECIAL FEATURES

- **Four-Color Design.** The striking design enhances the liveliness of the text and promotes student interest and interactivity.
- **Readability.** Since the first edition of *Clinical Drug Therapy* was published in 1983, many students and faculty have commented about the book's clear presentation style.
- **Organizational Framework.** The book's organizational framework allows it to be used effectively as both a textbook and as a reference. Used as a textbook, students can read chapters in their entirety to learn the characteristics of major drug classes, their prototypical drugs or commonly used representatives, their uses and effects in prevention or treatment of disease processes, and their implications for nursing practice. Used as a reference book, students can readily review selected topics for classroom use or clinical application. Facilitating such uses are a consistent format and frequent headings that allow readers to identify topics at a glance.
- **Chapter Objectives.** Learning objectives at the beginning of each chapter focus students' attention on important chapter content.
- **Drugs at a Glance Tables.** These tables highlight and summarize pertinent drug information, including drug names, dosages, and other related facts.
- **Boxed Displays.** These include information to promote understanding of drug therapy for selected conditions.
- **Herbal and Dietary Supplements.** Commonly used products are introduced in Chapter 4 and included in selected later chapters. Safety aspects are emphasized.
- **Client Teaching Guidelines.** This feature is designed to meet several goals. One is to highlight the importance of teaching clients and caregivers how to manage drug therapy at home, where most medications are taken. This is done by separating teaching from other nursing interventions. Another goal is to promote active and knowledgeable client participation in drug therapy regimens, which helps to maximize therapeutic effects and minimize adverse effects. In addition, written guidelines allow clients and caregivers to have a source of reference when questions arise in the home setting. A third goal is to make client teaching easier and less time consuming. Using the guidelines as a foundation, the nurse can simply add or delete information according to a client's individual needs. To assist both the nurse and client further, the guidelines contain minimal medical jargon.
- **Principles of Therapy.** This unique section describes important drug- and client-related characteristics that need to be considered in drug therapy regimens. Such considerations can greatly increase safety and therapeutic effects, and all health care providers associated with drug therapy should be aware of them. Most chap-

ters contain principles with the headings of **Use in Children**, **Use in Older Adults**, **Use in Clients with Renal Impairment**, **Use in Clients with Hepatic Impairment**, and **Use in Home Care** to denote differences related to age, developmental level, pathophysiology, and setting. Some chapters include principles related to these headings as well: **Genetic and Ethnic Considerations**, **Use in Critical Illness**, and **Management of Drug Toxicity or Drug Withdrawal**.

- **Nursing Actions Displays.** These displays emphasize nursing interventions during drug therapy within the following categories: Administer accurately, Observe for therapeutic effects, Observe for adverse effects, and Observe for drug interactions. The inclusion of rationales for interventions provides a strong knowledge base and scientific foundation for clinical practice and critical thinking.
- **Review and Application Exercises.** Located at the end of each chapter, these exercises include two types of questions. **Short Answer** questions encourage students to rehearse clinical application strategies in a nonclinical, nonstressful, nondistracting environment. They also promote self-testing in chapter content and can be used to promote classroom discussion. To help students prepare for the licensing examination, this edition adds **NCLEX-style** questions to each drug chapter. Answers and rationales for these exercises can be found on the **Instructor's Resource CD-ROM**.
- **Appendices.** These include recently approved and miscellaneous drugs, the International System of Units, therapeutic serum drug concentrations for selected drugs, Canadian drug laws and standards, Canadian drug names, and anesthetics.
- **Extensive Index.** Listings of generic and trade names of drugs, nursing process, and other topics provide rapid access to desired information.

## TEACHING–LEARNING PACKAGE

Nursing students must develop skills in critical thinking, information processing, decision making, collaboration, and problem solving. How can a teacher assist students to develop these skills in relation to drug therapy? The ancillary package assists both students and teachers in this development.

The **Study Guide** engages students' interest and active participation by providing a variety of learning exercises and

opportunities to practice cognitive skills. Worksheets promote the learning of concepts, principles, and characteristics and uses of major drug groups and can be completed independently or by small groups as in-class learning activities. Applying Your Knowledge scenarios promote appropriate data collection, critical analysis of both drug- and client-related data, and application of the data in client care.

The **Connection** companion Web site, <http://connection.lww.com/go/abrams8e>, provides online updates for faculty and students, links to newly approved drugs, and more.

The free **Student Resource CD-ROM** is an invaluable learning tool that provides 3-D animated demonstrations of pharmacology concepts, medication administration video, NCLEX-style review questions, and monographs of the most commonly prescribed drugs.

The **Instructor's Resource CD-ROM** facilitates use of the text in designing and implementing courses of study. To fulfill this purpose, the CD-ROM contains

- General observations and comments about teaching and learning pharmacology in relation to nursing
- A sample syllabus for a separate 3-credit-hour, 1-semester pharmacology course that may be taught in a traditional classroom or a nontraditional, online setting
- General teaching strategies for pharmacology and specific teaching strategies for each chapter
- Answers to the review exercises from the book
- Brownstone test bank that includes approximately 1,000 multiple-choice test items in NCLEX format, a test generator, and a grade book. These materials can assist the instructor in evaluating students' knowledge of drug information and their ability to apply that information in client care.
- PowerPoint slides that include text and art from *Clinical Drug Therapy* to provide significant classroom or online teaching support.

These varied materials allow each instructor to choose or adapt them relevant to his or her circumstances. The authors and publisher hope these resources are truly helpful in easing the day-to-day rigors of teaching pharmacology and invite comments from instructors regarding the materials.

Anne Collins Abrams, RN, MSN  
 Carol Barnett Lammon, RN, PhD  
 Sandra Smith Pennington, RN, PhD