



Wong's

Nursing Care of Infants and Children

7th Edition

Hockenberry

Wilson

Winkelstein

Kline

 Mosby

Wong's **Nursing Care of Infants and Children**

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This book is dedicated to Donna Wong who has been an inspiration to nurses caring for children and their families since the publication of her first nursing textbook in 1979.

Dr. Wong, with her commitment to excellence in nursing practice, has been a role model to us all. Her legacy continues in this newest edition of *Nursing Care of Infants and Children*.



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Preface

The new century brings with it the seventh edition of *Nursing Care of Infants and Children*. This text has been a landmark book in pediatric nursing since it was first published over two decades ago. This kind of recognition places a unique accountability and responsibility on us to continue to strive to provide students with the latest information they need to become competent, critical thinkers and to attain the sensitivity necessary to become caring pediatric nurses.

To accomplish this, three section editors, David Wilson, Marilyn Winkelstein, and Nancy Kline, along with Patrick Barrera serving as contributing editor, have joined Marilyn Hockenberry on this edition of the book. This team has put together an expert writing staff of 54 nurses and multidisciplinary specialists who assisted in reviewing, revising, rewriting, or authoring portions of the text on areas undergoing rapid and complex change, such as immunizations, genetics, home care, high-risk newborn care, adolescent health issues, and numerous diseases. We have carefully preserved aspects of the book that have met with such universal acceptance—its state-of-the-art evidence-based information; its strong, integrated focus on the family and community; its logical and user-friendly organization; and its easy reading style.

We have tried to meet the increasing demands of faculty and students to teach and to learn in an environment characterized by rapid change, enormous amounts of information, fewer traditional clinical facilities, and less time. To help students quickly locate essential information, most of the features used in the last edition have been retained, and new ones, such as Evidence-Based Practice boxes, have been added. Most important, this text encourages students to *think critically*.

This book is about families with children, and the philosophy of family-centered care is emphasized. This book is also about providing atraumatic care—care that minimizes the psychologic and physical stress that health promotion and illness can inflict. Features such as Family Focus, Community Focus, and Atraumatic Care boxes bring these philosophies to life throughout the text. Finally, the philosophy of delivering nursing care is addressed. We believe strongly that children and families need consistent caregivers. The establishment of the therapeutic relationship with the child and family is explored as the essential foundation for providing quality nursing care.

This text serves as a reference manual for the practicing nurse. The latest recommendations have been included

from authoritative organizations such as the American Academy of Pediatrics, Centers for Disease Control and Prevention, Agency for Healthcare Research and Quality, American Pain Society, American Nurses' Association, and the National Association of Pediatric Nurse Associates and Practitioners. To expand the universe of available information, web sites and e-mail addresses have been included for hundreds of organizations and other educational resources.

ORGANIZATION OF THE BOOK

The same general approach to the presentation of content has been preserved from previous editions, although much content has been added, condensed, and rearranged within this framework to improve flow, minimize duplication, and emphasize health care trends, such as home and community care. This book is divided into two broad parts. The first part of the book, sometimes called the “age and stage” approach, considers infancy, childhood, and adolescence from a developmental context. It emphasizes the importance of the nurse’s role in health promotion and maintenance and in considering the family as the focus of care. From a developmental perspective, the care of common health problems is presented, giving readers a sense of what normal problems can be expected in otherwise healthy children and demonstrating when during childhood these problems are most likely to occur. The second part of the book presents the more serious health problems not specific to any particular age group but that frequently require hospitalization or major medical and nursing intervention.

UNIT I (Chapters 1 through 5) provides an overview of the multitude of influences on a child who is developing as a member of a family unit, maturing within a culture, community, and a society. Chapter 1 includes a discussion of morbidity and mortality in infancy and childhood, including Canadian child mortality, and examines child health care from a historical perspective. Because unintentional injury is one of the leading causes of death in children, an overview of this topic is included. The nursing process, with emphasis on nursing diagnosis and outcomes and the importance of developing critical thinking skills, is presented. The role of the nurse as caring provider, family advocate, health promoter, teacher, counselor, and coordinator of care is discussed.

Special Features

Much effort has been directed toward making this book easy to teach from and, more important, easy to learn from. In this edition the following features have been included to benefit educators, students, and practitioners.

- A functional and attractive **FULL-COLOR DESIGN** visually enhances the organization of each chapter as well as the special features.
- Many of the **COLOR PHOTOGRAPHS** are new, and anatomic drawings are easy to follow, with color appropriately used to illustrate important aspects, such as saturated and desaturated blood. As an example, the full-color heart illustrations in Chapter 34 clearly depict congenital cardiac defects and associated hemodynamic changes.
- **FAMILY HOME CARE** boxes help nurses and students teach parents about the special needs of their infants and children.
- **EVIDENCE-BASED PRACTICE** boxes have been added to this edition to focus the reader's attention on application of both research and critical thought processes to support and guide the outcomes of nursing care and to provide measurable outcomes that nurses can use to validate their unique role in the health care system.
- **COMMUNITY FOCUS** boxes address issues that expand to the community, such as increasing immunization rates, preventing lead poisoning, or decreasing smoking among teens.
- **CRITICAL THINKING EXERCISES** describe brief scenarios of the child-family-nurse interaction that depict real-life clinical situations. From the synthesis of the topical content and a critical analysis of possible options, the reader chooses the best intervention and learns to make clinical judgments. Immediately following the scenario, a rationale is offered for the correct answer and explanations are given for the incorrect options.
- **CULTURAL AWARENESS** boxes integrate concepts of culturally sensitive care throughout the text. Their emphasis is on the clinical application of the information, whether it focuses on toilet training or on male or female circumcision.
- **ATRAUMATIC CARE** boxes emphasize the importance of providing competent care without creating undue physical and psychologic distress. Although many of the boxes provide suggestions for managing pain, atraumatic care also considers approaches to promoting self-esteem and preventing embarrassment.
- **NURSING CARE PLANS** include **RATIONALES** for nursing interventions that may not be immediately evident to the student. This strengthens the connection between the text and the interventions in the care plans. All care plans include patient and family goals and the most recent NANDA nursing diagnoses.

Numerous pedagogic devices that enhance student learning have been retained from previous editions:

- **CHAPTER OUTLINES** with page numbers begin each chapter, which allows readers to quickly locate topics of interest.
- **RELATED TOPICS** sections at the beginning of each chapter indicate the chapter or chapters where additional discussion(s) of a given topic can be found. On turning to the cross-referenced chapter(s), readers will find the topic listed in the chapter outline with a page number.
- **NURSING ALERTS** call the reader's attention to considerations that if ignored could lead to a deteriorating or emergency situation. Key assessment data, risk factors, and danger signs are among the kinds of information included.
- **NURSING TIPS** present handy information of a non-emergency nature that makes patients more comfortable and the nurse's job a little easier.
- **GUIDELINES** boxes summarize important nursing interventions for a variety of situations and conditions.
- **EMERGENCY TREATMENT** boxes are flagged by colored thumb tabs, enabling the reader to quickly locate interventions for crisis situations.
- **FAMILY FOCUS** boxes present issues of special significance to families who have a child with a particular disorder. This feature is another method of highlighting the needs or concerns of families that should be addressed when family-centered care is provided.
- **KEY TERMS** are highlighted throughout each chapter to reinforce student learning.
- Hundreds of **TABLES** and **BOXES** highlight key concepts and nursing interventions.
- **KEY POINTS**, located at the end of each chapter, help the reader summarize major points, make connections, and synthesize information.
- **APPENDICES** provide additional materials to assist with assessment, including family, developmental, growth, and laboratory evaluation. The NANDA-approved nursing diagnoses and translations of the Wong-Baker FACES Pain Rating Scale also are found here.
- **INDEX**, detailed and cross-referenced, allows readers to quickly access discussions.
- **PRINTED ENDPAPERS** on the inside front and back covers provide information nurses refer to often, such as vital signs and blood pressure as well as listings of some of the text's features and their page numbers.

Chapter 2 provides the opportunity to expand the discussion of social, cultural, and religious influences on child development and health promotion, including socioeconomic factors, customs, and health beliefs and practices. The content clearly describes the role of the nurse with such additions as guidelines for culturally sensitive interactions and an updated table, which includes discussion of religious beliefs that affect nursing care. Cultural Awareness boxes throughout the entire text highlight the influences of culture on children and families. Chapter 3, devoted to the family, further emphasizes the importance of this social group to the health and welfare of children. Family theories are the focus of the chapter, which includes a variety of parenting situations that reflect contemporary society. An important example is a revised section on nontraditional families. Family strengths and vulnerabilities are addressed, and current findings on adoption, divorce, single-parenting, stepfamilies, and dual-earner families have been incorporated. The child in the context of family, culture, and community has been broadened to include discussion in a new Chapter 4 of the issue of community health nursing. Chapter 4 provides important information on community-based nursing care, with emphasis on epidemiology as it applies to the detection and identification of causes of morbidity and mortality in pediatrics. Chapter 5 focuses on heredity as it relates to health promotion and the influence of the Human Genome Project on future treatment strategies for inherited diseases. The chapter is written in student-friendly terms to encourage understanding of the complex changes in the field of genetics. Family concerns and ethical issues that arise because of these advances are highlighted throughout the chapter.

UNIT II (Chapters 6 and 7) is concerned with the principles of nursing assessment, including communication and interviewing skills, observation, physical and behavioral assessment, and health guidance. Chapter 6 contains guidelines for communicating with children, adolescents and their families, telephone triage, and a detailed description of a health assessment, including an extensive discussion of family assessment and nutritional assessment. In conjunction with new JCAHO guidelines, assessment of pain as the sixth vital sign has been incorporated into the unit. Information on taking a sexual history has been added. Content on communication techniques is outlined to reduce reading time and provide a concise format for reference. Chapter 7 continues to provide a comprehensive approach to physical examination and developmental assessment, using the latest literature on temperature measurement and the new growth charts on how to assess a child's body mass index (BMI).

UNIT III (Chapters 8 through 11) stresses the importance of the neonatal period, the time of greatest risk to a child's survival, and discusses several health concerns encountered in the vulnerable first month of life. The nutrition section of Chapter 8 has been updated and revised to include the latest benefits of breast-feeding, incorporating the *Baby Friendly Hospital Initiative* and the *10 Steps to Successful Breast-Feeding*. Infant formula tables and the sections on infant abduction, newborn circumcision, and pain management have all been updated. Newborn screening guidelines now include univer-

sal newborn hearing assessment. The latest information on preparation for home discharge, newborn skin care, and umbilical cord care has been added. Chapter 9 has been revised and updated in the areas of birth trauma and hyperbilirubinemia, including management of breast-feeding jaundice. Updated management protocols and screening guidelines are included for neonatal hypoglycemia, PKU, IDM, and galactosemia. Chapter 10 includes a new expanded developmental outcomes section. Numerous updates include the latest literature on neonatal pain management (including atraumatic care guidelines for neonatal heelsticks and new neonatal pain assessment tools), retinopathy of prematurity, evidence-based neonatal skin care guidelines, and bronchopulmonary dysplasia/chronic lung disease. The most recent classifications of intraventricular/germinal matrix hemorrhage and neonatal seizures are presented in this chapter. Chapter 11 has been extensively revised, including new color photos, and discusses anorectal malformations, management of the child with spina bifida, cranial deformities including plagiocephaly, developmental dysplasia of the hip, cleft lip and cleft palate, biliary atresia, abdominal wall defects, congenital diaphragmatic hernia, and management of genitourinary tract defects. The gender assignment section has also been revised according to the latest guidelines and recommendations.

UNITS IV through VII (Chapters 12 to 21) present the major developmental stages, expanded to provide a broader concept of the stages and the health problems most often associated with each age group. Special emphasis is placed on the preventive aspects of care. The chapters on health promotion follow a standard approach that is used consistently for each age group.

The chapters on health problems primarily reflect more typical and age-related concerns. The information on many disorders has been revised to reflect recent changes. Examples include the latest information on communicable diseases, immunizations, cow's milk sensitivity and lactose intolerance, colic, failure to thrive, passenger safety, pacifier use and thumb sucking, lead poisoning, wound healing, sexual abuse, Lyme disease, attention deficit hyperactivity disorder, school-related violence, smoking, diet, contraception, teenage pregnancy, drug abuse, and suicide. The section on sudden infant death syndrome (SIDS) has been extensively updated to include the latest American Academy of Pediatrics considerations for co-sleeping and use of apnea monitors in infancy.

The chapters on adolescence include the latest American Medical Association (AMA) guidelines for adolescent prevention services (GAPS), rankings of body mass index percentiles, nonsmoking strategies, and current trends in suicide. All psychosocial/physiologic conditions discussed include the latest diagnostic criteria from the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR)*. A new section on the gay, lesbian, and bisexual adolescent has been added to Chapter 19.

UNIT VIII (Chapters 22 to 25) deals with children who have the same developmental needs as growing children but who, because of congenital or acquired physical, cognitive, or sensory impairment, require alternative interven-

tions to facilitate development. Chapter 22 reflects current trends in the care of families and children with chronic illness or disability such as home care, normalizing children's lives, focusing on developmental needs, enabling and empowering families, and providing early intervention. Extensive revisions have been made in Chapter 23 to reflect increased awareness of the need for quality nursing care at the end of life. This chapter highlights common fears experienced by the child and family and includes discussion of the nurses' reaction to caring for dying children. Pain management strategies using World Health Organization guidelines are emphasized.

The content in Chapter 24 on cognitive, sensory, and communication impairment includes important updates on the definition and classification of mental retardation. Major updates on hearing impairment, including the use of cochlear implants for sensorineural hearing loss, are presented.

Chapter 25 has been extensively revised by an expert in child home care and includes new information on home care management of children with chronic health conditions. New information includes guidelines for choosing a home health care agency, home care coordination, parent-professional collaboration in the home, and new critical thinking exercises.

UNIT IX (Chapters 26 and 27) is concerned with the impact of hospitalization on the child and the family and presents a comprehensive overview of the stressors imposed by hospitalization and nursing interventions available to prevent or eliminate them. Chapter 26 discusses pain assessment and management and presents new material on assessment instruments for nonverbal children and drug dosages for intravenous administration. Chapter 27 discusses safe implementation of procedures with children, including emphasis on the use of therapeutic hugging. We have tried to include as much available research as possible to base the nursing interventions on scientific findings, not just traditional practice. A new section on bladder catheterization has been added, as well as updates on peripheral and central venous access devices, injections, restraints, wound care products, special pressure-reducing devices, and infection control. Major revisions include NPO guidelines before sedation and general sedation guidelines for nursing practice.

UNITS X through XIV (Chapters 28 to 40) consider serious health problems of infants and children primarily from a biologic system orientation, which has the practical organizational value of permitting health care problems and nursing considerations to relate to specific pathophysiologic disturbances. Important additions and revisions include discussion of hepatitis, all blood disorders, respiratory syncytial virus (RSV), tuberculosis, the new classification for asthma, effects of passive smoking, seizures, chemotherapy, acquired immunodeficiency syndrome (AIDS), diabetes mellitus, and burns. Chapter 39 has a new section on considerations for the female athlete as well as updated sections on the management of various sports injuries. Care and management of the child with a fracture has been updated as have the sections on immobility, mobilization devices, cast care, and orthotics. Conditions such as systemic lupus

erythematosus and juvenile rheumatoid arthritis have been revised and updated. Chapter 40 includes updates on Guillain-Barré syndrome, cerebral palsy, muscular dystrophy, botulism, and spinal muscular atrophy. New management therapies are presented in the section on spinal cord injuries and rehabilitation, and new drug therapy is discussed for myasthenia gravis.

Extensive **Appendices** are also included and contain information on family assessment; developmental assessment; growth measurements, including a complete set of the newly revised National Center for Health Statistics growth charts; pediatric laboratory values; NANDA-approved nursing diagnoses; and several foreign-language translations of the Wong-Baker FACES Pain Rating Scale. All of the appendices reflect the most current versions of forms, charts, and measurements.

UNIFYING PRINCIPLES

Several unifying principles have guided the organizational structure of this book since its inception. These principles continue to strengthen the book with each revision in order to produce a text that is consistent in approach throughout each chapter.

The Family as the Unit of Care

The child is an essential member of the family unit. Nursing care is most effective when it is delivered with the belief that *the family is the patient*. This belief permeates the book. The family is seen as a myriad of structures; each has the potential to provide a caring, supportive environment in which the child can grow, mature, and maximize his or her human potential. In addition to family-centered care being integrated into every chapter, an entire chapter is devoted to understanding the family as the core focus in children's lives. Another chapter discusses the social, cultural, and religious influences that impact family beliefs. Separate sections in yet another chapter deal in depth with family communication and family assessment. The impact of illness, hospitalization, home care, and the death of a child are covered extensively in three additional chapters. The needs of the family are emphasized throughout the text under Nursing Considerations with a separate section on family support. Numerous Family Focus and Family Home Care boxes are included to assist nurses in understanding and providing helpful information to families.

An Integrated Approach to Development

Children are not small adults but special individuals with unique minds, bodies, and needs. No book on pediatric nursing is complete without extensive coverage of communication, nutrition, play, safety, dental care, sexuality, sleep, self-esteem, and, of course, parenting. Nurses promote the healthy expression of development and need to understand how this is observed in children at different ages and stages.

Effective parenting depends on the parent's knowledge of development, and it is often the nurse's responsibility to provide parents with a developmental awareness of their children's needs. For these reasons, coverage of the many dimensions of childhood are integrated within each developmental stage chapter, rather than being presented in a separate chapter. Safety concerns, for instance, are much different for a toddler than for an adolescent. Sleep needs change with age as do nutritional needs. As a result, the units on each stage of childhood contain complete information on all these functions as they relate to the specific age. In the unit on the school-age child, for instance, information is presented on nutritional needs; age-appropriate play and its significance; safety concerns characteristic of the age-group; appropriate dental care; sleep characteristics; and means of promoting self-esteem, a particularly significant concern for school-age children. The challenges of being the parent of a school-age child are presented, and interventions are suggested that nurses can use to promote healthy parenting. Using the integrated approach, students gain an appreciation for the unique characteristics and needs of children at every age and stage of development.

Focus on Wellness and Illness: Child, Family, and Community

In a pediatric nursing text, a focus on illness is expected. Children become ill, and nurses typically are involved in helping children get well. However, it is not sufficient to prepare students to care primarily for sick children. First, health is more than the absence of disease. Being healthy is being whole in mind, body, and spirit. Therefore the majority of the first half of the book is devoted to discussions that promote physical, psychosocial, mental, and spiritual wellness. Much emphasis is placed on anticipatory guidance of parents to prevent injury or illness in the child. Second, health care is more than ever prevention focused. The objectives set forth in *Healthy People 2010* clearly establish a health care agenda in which solutions to medical/social problems lie in preventive strategies. Third, health care is moving from acute care settings to the community, the home, short-stay centers, and clinics. In this edition, a new chapter on community nursing has been added to stress the importance of community-based nursing care. Nurses must be prepared to function in all settings. To be successful, they must understand the pathophysiology, diagnosis, and treatment of health conditions. Competent nursing care flows from this knowledge and is enhanced by an awareness of childhood development, family dynamics, and communication skill.

Nursing Care

Although this text incorporates information from numerous disciplines (medicine, pathophysiology, pharmacology, nutrition, psychology, sociology), its primary purpose is to provide information on the nursing care of children and families. Discussions of all disorders conclude with a section on Nursing Considerations. In addition, over 30 care plans are included. Taken together, they provide coverage of nursing

care for numerous diseases, disorders, conditions, and crises of childhood.

The purpose of the care plans, like every other feature of the book, is to teach to convey information. They include all current nursing diagnoses approved by NANDA, through its Thirteenth Conference, which have a potential bearing on health problems. Although the care plans can be individualized for use with a specific patient in a clinical setting, that is not their main purpose. For every diagnosis, appropriate patient goals, extensive possible interventions with rationales, and outcomes are presented. Thus a complete range of nursing care is presented within the context of a care plan and the nursing process.

For every health problem for which a care plan is included, the surrounding narrative text is presented according to the nursing process. In these instances specific headings for assessment, nursing diagnoses, planning, implementation, and evaluation, with unifying logos for the five steps, present appropriate information that is then amplified in the care plan, presented in a standard nursing practice context. In keeping with our general purpose of providing practical as well as conceptual information on every page of this book, the care plans provide guidelines and standards for excellence in nursing practice.

Critical Role of Research and Evidence-Based Practice

The seventh edition is the product of an extensive review of the literature published since the book was last revised. Many readers and researchers have come to rely on the copious references that reflect significant contributions from a broad audience of professionals. So that information is accurate and current, the majority of citations are less than 5 years old, and almost every chapter has entries within 1 year of publication. Examples of current "cutting-edge" information are recommendations from the American Academy of Pediatrics on immunizations and sleep position. The section on pain reflects guidelines from the Agency for Health Care Policy and Research (AHCPR) (now the Agency for Healthcare Research and Quality [AHRQ]) and the American Pain Society. The discussions on skin care reflect the AHCPR's guidelines on pressure ulcers. Lead poisoning has been completely rewritten to reflect the latest Centers for Disease Control and Prevention statements on lead poisoning prevention, diagnosis, and treatment. The American Diabetes Association's new classifications of diabetes mellitus is included as well as the most recent treatment guidelines for asthma.

This book reflects the art and science of pediatric nursing. A central goal in every revision is to base care on research, not tradition. Evidence-based practice produces measurable outcomes that nurses can use to validate their unique role in the health care system.

CANADIAN CONTENT

The seventh edition of this text includes Canadian statistics regarding infant and child health in Chapter 1

Just as children and their families bring with them a value system and unique background that affect their role within the health care system, so it is that each nurse

brings to each child and family an individual set of characteristics and values that will affect their relationship. Although we have attempted to present a total picture of the child in each age-group both in wellness and in illness, no one child, family, or nurse will be found in this book. We hope that each page, chapter, and unit builds a foundation on which the nurse can begin to construct an ideal of comprehensive, atraumatic, and individualized nursing care for infants, children, adolescents, and their families.

Teaching/Learning Package

For the seventh edition of this text, an extensive number of ancillary products for instructors and students to use in class and clinical settings are offered:

MERLIN. *Mosby's Electronic Resource Links & Information Network* is an innovative web site that provides a wealth of continually updated content, resources, and state-of-the-art information on pediatric nursing, including links to related web sites, important new content updates, Donna Wong's most recent lectures, and more! Use the web address in the text to access *MERLIN's* wide array of information, including course resources for instructors (*Instructor's Manual*, *Test Bank*, *Image Collection*) and learning resources for students (WebLinks, crossword puzzles, and more).

CD Companion. FREE with every text, this valuable CD-ROM contains a variety of activities to enhance learning through the use of Critical Thinking Exercises, Case Studies, Anatomy Reviews, and Guidelines and Clinical Manifestations boxes. Also included are Nursing Care Plans to build, individualize, and print out.

Instructor's Electronic Resource. This innovative electronic resource for the instructor is available online and on CD and contains the following components:

Instructor's Manual, with learning objectives, chapter outlines, and accompanying teaching strategies and learning activities.

Test Bank, with over 1400 multiple-choice stand-alone test items. An answer key with page references to the text is included.

Electronic Image Collection, containing more than 400 full-color illustrations and photos from the text, to help instructors develop presentations and explain key concepts. All images can be printed out as acetates for overhead projection.

Available for Purchase

Virtual Clinical Excursions: CD and Workbook Companion. A CD-ROM and workbook have been developed as a "virtual clinical" experience to expand student opportunities for critical thinking. This package guides the student through a computer-generated virtual clinical environment

and helps the user apply textbook content to "virtual patients" in that environment. Seven case studies are presented that allow students to use this textbook as a reference to assess, diagnose, plan, implement, and evaluate "real" patients using actual clinical scenarios. The state-of-the-art technologies reflected on this CD-ROM demonstrate *cutting-edge* learning opportunities for students and facilitate knowledge retention of the information found in this textbook. The clinical simulations and workbook represent the next generation of research-based learning tools that promote critical thinking and meaningful learning.

Study Guide. This comprehensive and challenging study aid presents a variety of questions to enhance learning of key concepts and content from the text. Multiple-choice, matching, and true-false questions are included as well as Critical Thinking Case Studies. Answers for all questions are included in the back of the book.

Whaley and Wong's Pediatric Nursing Video Series. Narrated by Donna Wong, this outstanding series of six videotapes provides an opportunity to see nurses, children, and families in actual clinical settings. The following topics are included in the series: *Communicating with Children and Families*, *Pain Assessment and Management*, *Growth and Development*, *Medications and Infections*, *Family-Centered Care*, and *Pediatric Assessment*.

Wong and Whaley's Clinical Manual of Pediatric Nursing, Edition 5. This manual contains a wealth of information for use as a reference for students and in the clinical setting. The manual includes over 80 Nursing Care Plans, home care instructions that can be copied and given to families, detailed descriptions of nursing skills and procedures, and much, much, more!

Pediatric Quick Reference. A handy and invaluable clinical guide for pediatric nursing, the *Pediatric Quick Reference* covers physiologic assessment, pain assessment and management, fluid requirements, emergency information, and laboratory values.

Acknowledgments

This new seventh edition of *Nursing Care of Infants and Children* brings with it the addition of a new era of authors for the book. This book, dedicated to **Donna Wong**, reflects her legacy as a pioneer for pediatric nurse education. I am grateful for her leadership and continued mentorship. To carry out her legacy, we have joined together numerous authors with diverse expert nursing backgrounds to continue the commitment to providing latest state-of-the-art information on pediatric nursing practice. I am grateful to the many nursing faculty members, practitioners, and students who have offered their comments, recommendations, and suggestions. I am grateful to my three Section Editors, **David Wilson, Marilyn Winkelstein, and Nancy Kline**; our contributors; and the many reviewers who brought constructive criticism, suggestions, and clinical expertise to this edition. We could not have completed this enormous task of updating and adding information without the dedication of these special people.

I am especially thankful to **Patrick Barrera**, Contributing Editor, for this book. His commitment to excellence has provided attention to detail that is essential to maintaining the text's uniqueness and quality. His extensive efforts at searching the literature have provided the book with the most up-to-date information available to pediatric nursing practice. Appreciation also goes to **Vanessa Blackstone** for her continued support and devotion. Thanks go to **Paul Kuntz** and **Jim Deleon** for their beautiful color photography and to the health care professionals, children, and parents who generously allowed us to use or take their photographs.

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Marilyn J. Hockenberry

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