

The Essentials of Respiratory Care, 4th Edition. Robert M Kacmarek PhD RRT FAARC, Steven Dimas RRT, Craig W Mack MM RRT. St Louis: Elsevier Mosby. 2005. Hard cover, illustrated, 839 pages, \$69.95.

Previous editions of this text have been a staple in many respiratory care programs. I find myself referring students to **The Essentials of Respiratory Care** to answer their questions so often it is almost routine. "Have you checked Kacmarek?" is my standard reply when students need some tidbit of information for their homework or clarification for their classes. This text is listed as one of the primary or secondary texts in almost all of our core classes. That says a lot about its versatility as a text.

With this new edition the authors attempted to preserve the text's utility as a reference tool while adding up-to-date clinically relevant information for respiratory care students and practitioners. Many chapters have been totally rewritten, such as the chapter on mechanical ventilation and the chapter on positive end-expiratory pressure. There are several new chapters as well. The text was reorganized to group subjects together more logically.

This edition begins with an attractive and durable hard cover. The table of contents is well organized and useful. This text is divided into 8 sections and further divided into 46 chapters. Sections are organized to include several chapters that cover various subjects relevant to the section heading. For example, Section I is "Respiratory Care Sciences and Infection Control" and contains chapters on basic chemistry, physics, and microbiology. These chapters are relevant for any respiratory care student or clinician. This method of grouping chapters into meaningful sections continues throughout the text.

The text's many other sections include "Cardiopulmonary and Related Anatomy and Physiology," "Neonatal and Pediatric Respiratory Care," "Basic Respiratory Care," and "Advanced Respiratory Care," just to name a few. The section headings appear to follow the curriculum of a respiratory care program. Chapters are written in outline form, following a logical sequence, with a bibliography at the end of each chapter. There are many tables and illustrations

throughout the text. The illustrations are of good quality, and seem to be improved over the previous edition. Chest radiographs are present where appropriate and are clear and easy to see.

The text's stated goal is "to present what we believe is the knowledge base required of respiratory therapists, in a logical and concise manner." The authors explicitly dismiss discussions on technical information and new technology, stating that such a text cannot remain current for long and that there are other volumes and periodicals on those subjects. They also state that, because of the book's format, it is best used as a secondary text, for quick reference and review. They believe this text is best suited for students preparing for their board examinations.

Respiratory care is expanding as a profession, and greater demand is being placed on its practitioners. The requisite knowledge base is broader than ever before. Does this text adequately represent the knowledge base of a respiratory therapist? I believe it does. The authors have put the wide variety of subjects in one volume that addresses both the basics, such as gas exchange and acid-base balance, and important topics such as hemodynamic monitoring, fluid and electrolyte balance, and renal anatomy and physiology. The text goes above and beyond my expectations of a respiratory care text. The authors include relevant information that we have often needed to search outside our texts to find. For example, in the section "Cardiopulmonary Assessment and Diseases and Their Management," in addition to a host of diseases, there are discussions on various assessments, work of breathing, respiratory mechanics, and pulmonary function testing.

I was also pleased to find a short discussion on indirect calorimetry in the chapter on nutrition. It is refreshing to see a detailed discussion on nutrition and its assessment as a core component of a respiratory care text. In the same discussion the authors state that indirect calorimeters are incompatible with bias-flow ventilators; however, there are now systems available that compensate for bias flow. This supports the authors' position that a textbook is not the correct format to discuss new technologies, and this point does not detract from the overall discussion.

Aside from the standard chapters on obstructive and restrictive diseases, there is a whole chapter devoted to acute respiratory distress syndrome, severe acute respiratory syndrome, and sepsis, which is a topic on everyone's mind these days. This chapter is informative and contains up-to-date information. These are just a few examples of how the authors consistently provide detailed and complete discussions on the various aspects of respiratory care theory.

As stated in the preface, part of the goal of this text is to be logical and concise. I found the section on neonatal and pediatric respiratory care to be a good example of logical flow and concise information. This was one of the sections that benefited from a complete rewrite. The first 3 chapters follow a progression from intrauterine development and anatomy through mechanical ventilation for the neonate. The next 2 chapters follow a similar progression for the pediatric patient. Each of the chapters in this section is well thought out and is packed with information. One consistent problem subject for students is fetal circulation. The description of the transition from fetal to newborn circulation is given chronologically and easily does in half a page of text what takes me about 40 min to discuss in class. There is a nice illustration that uses arrows to show the pathway of blood flow. This is an instance where a color graphic might have been superior to black-and-white, but printing limitations may have made it impossible for the authors to employ color.

The ultimate meter of any text is how well it works in everyday situations. For the last 3 months, I have shared this edition with my students as well as using it to prepare for lectures. I found it easy to navigate and much quicker than a traditional text when looking for specific points. As in previous editions, the text is written entirely in outline format. Outlines allow the user to quickly find the desired information, rather than skimming through pages of text to find a specific point. The most consistent student complaint is that the text is difficult to read because of this format. I have observed with the third edition that as the student's knowledge-base increases, his or her ability to use this text efficiently does as well. When it comes time to study for examinations,

The Essentials of Respiratory Care is often the first book out of the book bag. I am sure this will hold true for the fourth edition as well.

Students, instructors, and practitioners have a variety of choices when it comes to respiratory care theory books. How does this book measure up to other texts in the same class? Because of its unique format, the authors are free to include large amounts of information in a compact and easily accessed package. As a reference manual I found this book superior to others on my shelf because of its detail and ease of use. Its extensive table of contents and comprehensive index contribute to the ease of use.

I agree with the authors' position that this book is best suited as a reference manual and not as a primary text. However, this is a quintessential piece of respiratory care literature. I believe it has a place in any student's book bag, as well being as a great complement to any respiratory care department's library. I found this book extremely useful in my daily preparations for teaching, and it pulls double-duty as a clinical reference.

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Respiratory Care Made Incredibly Easy!

W Chad Barefoot RN MSN CRNP and contributors. Philadelphia: Lippincott Williams & Wilkins. 2005. Soft cover, illustrated, 344 pages, \$35.95.

Respiratory Care Made Incredibly Easy! is presented as a new respiratory care reference for all acute-care nurses who have respiratory care patients. The foreword's author suggests this text is for nurses who work in medical-surgical, critical care, emergency, or pediatric nursing units, and is a supplement for hospice and home-care nurses. The foreword also recommends this text for nurses who require respiratory knowledge to be able to pass certification examinations in medical-surgical, critical care, or pediatric nursing.

The book includes 11 chapters, a glossary, a quick reference guide to laboratory tests, references and Internet resources, and an index. Each chapter is organized with a list of objectives, titled "Just the Facts." The text is highlighted and the type bolded to differentiate key concepts. The material is presented in a casual yet straightforward

manner and includes a "snapshot summary" in bullet format. I found the material clear and concise, and it held my attention. The illustrations and diagrams are ample and easy to understand, and many are nicely colored. There are cartoon-style figures scattered throughout, on the margins, which apparently are meant to be humorous, though I found them somewhat distracting in a reference book. Each chapter contains text boxes that highlight or reinforce important points. The "Advice From the Experts" section offers special tips from respiratory professionals. The "Now I Get It!" section notes particularly important aspects of respiratory disorders, procedures, tests, and treatments. The "Kids' Korner" section addresses concerns specific to children. The "No Place Like Home" section provides information on adapting care when the patient goes home. Each chapter ends with a quiz of multiple-choice questions and a scoring guide. The references and Internet resources seem to be current, as of my reading. I noted no typographical or grammatical errors.

Chapter 1 provides a succinct review of anatomy and physiology of the respiratory system, though the section on acid-base balance was over-simplified.

Chapter 2 was my favorite part of the text. It provides a thorough review on obtaining a health history, using a systematic approach for physical examination, which includes inspection, palpation, percussion, and auscultation, and a nice review of abnormal chest, respiratory patterns, and breath sounds. In other words, it's the "good old-fashioned way."

Chapter 3 covers common diagnostic tests, factors that interfere with those tests, pertinent nursing care, and what the tests may indicate. My main criticism relates to the section on arterial blood gas analysis and obtaining a blood sample. The explanation is far too brief for such an important diagnostic tool, and the description of obtaining a sample omits choosing an appropriate site and an explanation of how and where to perform an Allen's test. I liked the information on pulmonary function tests, though a diagram of lung volumes and capacities would have been helpful. The section on pulse oximetry could benefit from an illustration of an appropriate waveform, which is useful in determining the accuracy of the reading.

Chapter 4 includes classes of drugs used to improve respiratory function, surgical treatments, how to administer inhalation

therapy, and how to perform chest physiotherapy. The section on drug therapy completely omits anticholinergics. The discussion of nursing considerations with endotracheally intubated patients should include hyperoxygenation and hyperinflation before and after suctioning. I liked the sections on securing an endotracheal tube and end-tidal carbon dioxide monitoring. The section on handheld oropharyngeal inhalers has nice illustrations of types of inhalers, but incorrectly lists the administration of mucolytics. The section on nursing considerations of incentive spirometry provides a very nice patient instruction set. The discussion on mechanical ventilation is too brief; it provides only the bare minimum of information. There is no illustration of waveforms associated with mechanical ventilation. Discussion of continuous positive airway pressure should be included in the section on ventilator modes. I liked the inclusion of criteria for weaning. The depiction of the large-volume nebulizer is antiquated. The section on oxygen therapy did not include any discussion of humidification of dry gas. I liked the illustration of oxygen-delivery systems, but care of transtracheal oxygen needed more elaboration. The section on nursing considerations for transtracheal oxygen should also elaborate the requirements of tracheostomy care in the tracheostomy section. The discussion of miscellaneous treatments omitted mentioning the administration of chest physiotherapy via pneumatic, electric, or special bed. Other mucus-clearance devices include the Vest and positive-expiratory-pressure devices.

Chapter 5 discusses common acute and chronic respiratory infections and inflammation disorders, including their causes, pathophysiology, signs and symptoms, diagnostic test results for acute respiratory infections, and treatment options. There is a nice presentation on pneumonia. There is no mention of the need to nasotracheally suction children with respiratory syncytial virus in the "What to Do" portion.

Chapter 6 discusses common obstructive disorders, including the potential causes, recognition, and treatment of these conditions. There was no mention regarding the Standards for Asthma Management.

Chapter 7 discusses common restrictive disorders, including potential causes, recognition, diagnostic tests, and treatment.