

Critical Thinking in Respiratory Care: A Problem-Based Learning Approach. Shelly C Mishoe PhD RRT FAARC, Melvin A Welch Jr MPH RRT, Editors. New York: McGraw-Hill. 2002. Soft cover, 708 pages, \$59.95.

The editors of this book state that a major goal is to provide information and learning experiences that develop an understanding of respiratory care content based on sound clinical decision-making. The book provides strategies to enhance cognitive and practical critical thinking skills by incorporating numerous individual and group exercises. Students are asked to solve practical problems in health care and respiratory care using a problem-based learning (PBL) approach. Faculty will find several options, with instructions on the use of the textbook, to incorporate PBL. Most educators believe critical thinking is essential for all areas of respiratory care. Respiratory therapists are becoming certified case managers as the health care industry responds to managed care.

Critical Thinking in Respiratory Care includes actual clinical cases for critical analysis, patient assessment, clinical application, discussion, and decision-making. The text is well designed and each chapter includes learning objectives, key words, critical content boxes, critical thinking exercises, and an end-of-chapter list of key points. It is ideal for use in traditional pathophysiology and medical and surgical respiratory therapy courses. The book focuses on biopsychosocial aspects of cardiorespiratory disease. There are 2 major sections: Part I consists of 10 chapters that provide a foundation in PBL, critical thinking, problem solving, and selected topics that are important to understand prior to attempting to solve the problems in the case chapters (the answers to which are *not* provided). Part II focuses on the development of critical thinking skills by way of cases that deal with common respiratory disorders. The cases included are the types most likely to appear in the National Board for Respiratory Care (NBRC) examinations. The PBL instructions accompanying cases encourage students to consider that there may be more than one correct answer and perspective.

Chapters 11–23 provide an overview of respiratory diseases, disorders, and treatment options. The reader is encouraged to seek additional sources for more extensive coverage of these techniques. Most of these chapters provide very comprehensive reviews of the problems in the case studies and extensive lists of references and Internet resources. Chapter 11, “Asthma”, does a good job of providing management recommendations from the National Heart, Lung, and Blood Institute. The authors of Chapter 12, on COPD, state that “Currently, the American Journal of Respiratory and Critical Care Medicine does not recommend elective use of invasive ventilatory support in ambulatory patients with COPD and hypercapnia,” but fail to cite the article from which that assertion arises. Chapter 14, “Acute Pediatric Upper Airway Emergencies,” relies on secondary references (textbooks and Internet resources), with only one refereed journal article cited. The authors of Chapter 15, “Obstructive Sleep Apnea,” provide an excellent review covering the spectrum of sleep apnea, and students will learn a great deal from the cases studies, references, and the listed sleep study resources. The book does an excellent job of covering cases in subjects where respiratory therapists need to develop critical thinking skills. The remainder of the chapters cover cystic fibrosis, pneumonia, acquired immune deficiency syndrome, tuberculosis, congestive heart failure with pulmonary edema, management of the burn patient with inhalational injury, neuromuscular disorders, and acute respiratory distress syndrome. Overall, the chapter reviews and critical thinking exercises are excellent. Some chapters are better referenced, but they all prepare students for the case exercises. The PBL approach is one of discovery, versus a traditional textbook review of a topic. Some of the chapter authors emphasize the case studies and critical thinking exercises and limit the length of their introductions and the number of references cited.

Respiratory therapy students and faculty alike will enjoy learning more about PBL in Part I. The time spent accomplishing the material on PBL puts everyone on the same page in terms of the expectations for the critical thinking exercises. Part II will re-

mind the reader why respiratory therapy is a profession for those interested in intellectual pursuits. Usually the most knowledgeable practitioner will raise the best case-related questions. Studying the case-related review and completing the critical thinking exercises will bring the reader to a higher level of clinical practice.

The editors and authors of this book have made a major contribution to the respiratory care profession and to PBL. The major beneficiaries will be the patients treated by the respiratory therapists who use critical thinking skills. Educators will enjoy moderating critical thinking exercises and should see their students’ performance improve on the decision-making sections of the NBRC clinical simulation examination. If you add only one required text to a respiratory therapy program this year, it should be **Critical Thinking in Respiratory Care**.

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Advanced Respiratory Therapist Exam Guide: The Complete Resource for the Written Registry and Clinical Simulation Exams. 2nd edition. James R Sills MED CPFT RRT. Original illustrations by Sandra Hogan. St Louis: Mosby. 2002. Soft cover (with CD-ROM), illustrated, 456 pages, \$52.95.

Advanced Respiratory Therapist Exam Guide, 2nd edition, is a comprehensive review text designed to help those taking the National Board for Respiratory Care (NBRC) written registry and clinical simulation exams. The book begins with a brief introduction that describes the 1998 NBRC Written Registry Examination Detailed Content Outline, describes the NBRC item coding system, and explains the written registry examination’s structure and difficulty levels. Registry written item type is also described, followed by a section on test-taking hints and the relative weighting of specific content areas in NBRC written registry exams. The clinical simulation exam is explained with a description of the case scenario and the information-gathering and de-

cision-making constructs. The scoring is explained, followed by a set of “do’s and don’t’s” for taking and mastering this exam style.

The book includes 17 chapters, which present the various content areas of respiratory care. Each chapter includes a rationale for including that chapter’s content (based on the NBRC exam matrix), comprehensive review of the material, exam hints, an extensive chapter bibliography, and test questions with answer keys that present the rationale for both the correct and incorrect responses. Review sections in the chapters are coded so that the reader can relate the content in that section to the NBRC exam matrix and to the level of difficulty to expect on the exam. The text, which includes exam hints and rationales throughout, does not claim to be a comprehensive review of the field of respiratory care, but rather an exam-specific review. Be sure to use this text in conjunction with a review text designed for the Certified Respiratory Therapist exam, since the NBRC exams emphasize content-specific information for the level of credential sought.

The book also includes a CD-ROM-based pre-test, post-test, and 10 clinical simulation scenarios. The exams mirror the NBRC exams in content emphasis, question style, and question difficulty. Patient scenarios of the NBRC clinical simulation exam are also matched on the CD-ROM-based clinical simulation exam. The exam is scored with an assessment of the candidate’s weaknesses and relates those weaknesses to the specific content areas. The CD-ROM will help students to assess themselves and to identify weak areas and also help them to gain familiarity with the computer-based testing style of the NBRC.

The text is designed for graduates of respiratory care programs that prepare students at the advanced respiratory therapist level. The book is not a comprehensive review of the field of respiratory care and thus cannot be generalized to broader populations. University educators and hospital respiratory care education personnel may find the book helpful in assuring curricular coverage of content at an appropriate level of understanding to assist their charges in preparing for their practice as respiratory therapists.

The book progresses logically through patient assessment, therapeutics, mechanical ventilation, home care, and special procedures. There is ample use of—but not over-reliance on—tables and easily understood

figures, which are used to summarize information presented. Each chapter is in outline form, which helps the reader find and review information in an efficient manner. The text is readable and at an appropriate level for the target audience. The content is well referenced, citing appropriate recent discipline-related texts. The index is comprehensive and specific enough to help the reader find general areas or exact content. The overall organization and up-to-date content helped the author achieve the goal of presenting an advanced registry exam guide.

The 17 chapters cover the scope of material required to master the advanced level exam. Understanding this content and presentation requires prior knowledge, as the text builds on an entry-level knowledge base. The chapters present accurate and up-to-date information and I found no errors. The graphs and tables enhance understanding of the concepts presented. Chapter subjects include: patient assessment, infection control, blood gas analysis and monitoring, pulmonary function testing, advanced cardiopulmonary monitoring, oxygen and medical gas therapy, humidity and aerosol therapy, pharmacology, bronchopulmonary hygiene therapy, cardiac monitoring and cardiopulmonary resuscitation, airway management, suctioning the airway, intermittent positive-pressure breathing, mechanical ventilation of the adult, mechanical ventilation of the neonate, home care and pulmonary rehabilitation, and special procedures. The coverage is thorough, the material is accurate, and the presentation is in a no-nonsense format that gets directly to the required information.

The CD-ROM is user-friendly and well organized. The pre-test is intended to be printed out. The answer key provides a rationale for each response, right and wrong, and gives an idea of where to focus study efforts. The post-tests for both the written and the clinical simulation exam are well written, and the presentation mirrors the new NBRC computerized format. The questions are at an appropriate level for these exams and help focus additional study on identified weaknesses. The CD-ROM is easy to install and ran smoothly without error for me. The format can familiarize the student with computer-based testing, which could eliminate some stress on exam day. I found the CD-ROM testing a great addition to this review text.

Overall, the book is an excellent source for students, graduates, and educators asso-

ciated with advanced respiratory care exam preparation. The CD-ROM could be used in hospital department settings to challenge the staff or as a form of mandatory documentation of knowledge maintenance. The book’s organization, exam hints, tables, figures, illustrations, practice questions, response rationales, and computerized practice exams contribute to the attainment of the stated goals. The information is up to date and expertly tailored to the NBRC exam matrix. The only frustrating feature was the limited number of review questions associated with each chapter. Although chapter questions are weighted to mirror the NBRC advanced respiratory therapist exam, and the reader is expected to use an entry-level exam review prior to using this text, the chapters are rich with information and many important questions are left unasked. That concern goes beyond the author’s intent, yet as an educator I thought it a shame not to include good questions that would further challenge the reader for the sake of the exam matrix. After all, the practice of respiratory care goes well beyond that which we can be tested for, regardless of exam format.

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Law & Ethics for Clinicians. Jacquelyn K Hall BSN MEd JD. Amarillo, Texas: Jack-hal Books. 2002. Soft cover, 392 pages, \$34.95.

Jacquelyn Hall’s book on law and ethics is a solid attempt at dealing comprehensively with the interactions between law and ethics in the clinical world. Though there is no way to write a book that can be all things to all people, and a lawyer may sense certain shortcomings in this book, it is a laudable attempt to set out clearly and precisely the legal issues and ethical conflicts that occur in everyday patient care.

Law & Ethics for Clinicians is adequately organized, with a comprehensive table of contents. An individual looking for information on a given legal topic would find it quickly. The amount and depth of the information varies from topic to topic, but the book’s general organizational scheme is helpful.

The book aims at getting clinicians to “lay down at last the tomes of ethics and