

entity they comment on the utility of trans-bronchial versus surgical lung biopsy in confirming the diagnosis, and they review the differential diagnosis for each entity, with comments on the distinguishing features of each disorder.

Chapter 6A is a nice summary of the various medications used in the treatment of DLD. The authors review both mechanism of action and adverse effects, with recommendations for monitoring when necessary. My favorite line in the book appears during the discussion of the appropriate dose of prednisone: "One guide is that if a patient is not responding as expected, they are receiving too little drug, but if they are doing well, they are receiving too much drug." Chapter 6B addresses experimental therapies. While this information may not be very useful in current clinical practice, it provides an interesting summary of therapies currently under investigation. One of the most helpful sections in the chapter is the discussion of the prognostic features of interstitial pulmonary fibrosis and which patients should even be considered for treatment—a question I encounter not infrequently in my own practice.

Part 2 (pages 110–163) reviews specific disease entities. These chapters are all clear and well organized, and they cover everything from histology to prognosis and treatment. With the paucity of proven treatment guidelines for many DLDs, I found the treatment recommendations put forth by the authors to be quite helpful. The chapters on collagen-vascular diseases, pulmonary vasculitis, and occupational and drug-induced lung diseases serve as a great reference on these complex diseases. The chapter on bronchiolitis (Chapter 13) (a disorder easily overlooked because of its nonspecific presentation and difficulty in diagnosis) is one of the best reviews of the topic I have encountered. I was disappointed, however, by the absence of a chapter on eosinophilic lung diseases, especially in a book with entire chapters dedicated to such rare disorders as pulmonary alveolar proteinosis and lymphangioleiomatosis.

Part 3 (pages 265–285) consists of 11 DLD case reports, most with some "twist" in the diagnosis or management, such as a case of bronchiolitis obliterans organizing pneumonia that turned out to be Churg-Strauss syndrome. Each case report contains a discussion by the author, who addresses several questions about the particular case, such as, "What is the importance of the large

cells seen in the biopsy?" or "What test would you order next to confirm the diagnosis?" I found these cases interesting, each containing several pearls to keep in mind in the management of DLD. Written in a narrative style, this section offers an interesting departure from the "reference" theme of the rest of the text.

In summary, **Diffuse Lung Disease: A Practical Approach** is just that. The strength of the text lies in the reputation and experience of the authors. In a field of medicine where there is often a paucity of data, practitioners are in many cases forced to rely on experience and "expert opinion." Both are found in the pages of this text. In the preface, Baughman and du Bois state, "It is hoped that this new book will aid in the diagnosis and management of diffuse lung disease from a practical standpoint, and that it would in this regard be additive to, rather than repetitive of, the existing diffuse lung disease texts." The editors have achieved their goal. The book has a rightful place on the shelf of any practitioner with an interest in DLD.

William J Dittrich MD

Pulmonary and Critical Care Medicine
Idaho Pulmonary Associates
Boise, Idaho

Clinical Sleep Disorders. Paul R Carney MD, Richard B Berry MD, and James D Geyer MD, editors. Philadelphia: Lippincott Williams & Wilkins. 2005. Hard cover, illustrated, 506 pages, \$99.

Sleep medicine has grown rapidly over the last 20 years. **Clinical Sleep Disorders** is a multi-author textbook that covers the physiology and pathophysiology of human sleep, the evaluation of sleep complaints, clinical sleep disorders, and sleep patients with other medical disorders. The book's appendix discusses polysomnographic technical problems, sleep questionnaires, advice on starting a sleep-disorders facility, pharmacologic treatments, and an introduction to the electroencephalogram.

The editors' goal was to write a comprehensive and current text that meets the rigorous demands of a wide range of readers, including physicians (generalists as well as physicians from all specialties involved in sleep medicine), resident house-staff, nurses, respiratory therapists, sleep technologists, and students. The editors hoped to provide sleep specialists and primary care providers with succinct authoritative reviews on the

evaluation and treatment of sleep disorders. "The book will have met its overall objective if practical state-of-the-art management advice is provided to a busy physician."

These are lofty goals that under any circumstances would be difficult to attain. But it is nearly impossible to write succinct, authoritative reviews on the evaluation and treatment of sleep disorders that will be a value to those with little training (students) and experts (sleep specialists, polysomnographic technologists), while at the same time providing practical state-of-the-art management advice to the busy physician.

The first chapter deals with definitions of sleep and sleep architecture. It then briefly discusses sleep staging rules. The editors are to be congratulated on including newborn and pediatric considerations in this chapter; so many sleep textbooks focus only on adults. The book then nicely describes polysomnography. Chapter 1 is strong.

Chapter 2 further defines and discusses normal human sleep. However, it allows for only 3 paragraphs on the need for sleep. In those paragraphs only 4 studies are reviewed, and in a cursory manner. There is an enormous body of research exploring the consequences of insufficient sleep on human performance, which should have been discussed in much more detail. For example, in one of the 4 articles discussed,¹ the authors did not address the interesting finding that even with 8 hours of sleep per night, performance (as assessed by the Psychomotor Vigilance Test) declined, even though self assessment of sleepiness (using the Stanford Sleepiness Scale) stabilized after a few days. In all conditions studied, performance continued to decline through 2 weeks of sleep deprivation and did not stabilize. The lack of a much more detailed description of the effects of sleep deprivation on human performance is a severe flaw in this book.

The descriptions of the neurobiology of sleep and breathing during sleep in Chapters 3 and 4 were more detailed than a general practitioner would want, yet not detailed enough for the specialist, although these 2 chapters were very well referenced.

Chapter 5 covers, though in a very cursory manner, sleep and normal human physiology. Growth hormone, adrenocorticotrophic hormone (ACTH), prolactin, gonadotropic hormones, thyroid-stimulating hormone, and melatonin were each given one paragraph. The authors were not clear which hormones are affected by sleep and which by circadian factors. There was no

mention of the effects of sleep or sleep deprivation on leptin, ghrelin, or insulin sensitivity. There has been much research over the last decade implicating sleep deprivation as a possible cause of obesity and diabetes, which is of much interest to the primary care provider as well as the specialist. That the book does not discuss this is a very serious omission.

Chapter 6 covers chronobiology and circadian rhythms in a very uneven manner; at the same time it has too much detail and yet not enough detail. For example, it discusses quite nicely the anatomy of the human circadian system, and it discusses zeitgebers, such as light. But it does not discuss, in the text, the phase-response curve of light. Only in Figure 6-2 is it discussed that light administered shortly after the circadian temperature minimum results in a 1-2 hour phase advance, and light administered shortly before the circadian temperature minimum results in a 1-2 hour phase delay. Those facts should be in the text as well. In contrast, the phase-response curve of melatonin is not presented in graphic form, and the text just states that the effects of melatonin are exactly opposite those of light, which isn't exactly true. My criticism is that this is poorly presented (light phase-response curve presented in graphic form but not text, and melatonin presented only in text and not in graphic form).

Chapter 7, which discusses the ontogeny of sleep, devotes only one paragraph to adolescent sleep, even though much is now known that the shift to later bedtimes and later wake times so characteristic of adolescence has a strong physiologic basis. Again, this is an area of immense public health importance and of great interest to primary care practitioners; much research has been done on adolescent sleep needs, and this should have been discussed in much more detail.² I view this as a very serious omission.

Chapters 8-12 discuss clinical presentations of sleep medicine, including chapters on sleepiness, evaluating sleeplessness, nocturnal events, pediatric and adolescent presentations, and sleep problems of the elderly. The placement of these chapters is illogical, because they discuss not only presenting symptoms, but differential diagnosis and treatment decisions—before the various sleep illnesses are discussed. Thus, one must be familiar with obstructive sleep apnea (OSA), narcolepsy, restless legs syndrome, parasomnias, et cetera, to understand

these chapters. Yet the intrinsic sleep disorders aren't defined until later in the book.

Chapters 13 to 24 discuss the various intrinsic sleep disorders; this is the strongest section of the book, although it too is unevenly written. The chapter on insomnia, in my opinion, is rather weak and not well organized. For example, the authors comment in one sentence that, "Idiopathic insomnia is a rare, lifelong inability to obtain adequate sleep." Yet 2 paragraphs later, while talking about idiopathic insomnia, the authors state that the "prevalence is unknown." How can idiopathic insomnia be rare if the prevalence is unknown? The authors then present an algorithm for insomnia diagnosis and treatment that is 6 pages long! This fails to take into account that a patient may have more than one sleep disorder: insomnia and OSA can occur in the same patient.

I would like to point out one excellent chapter. The chapter on restless legs syndrome and periodic limb movement disorder is an authoritative, succinct review that I think will be of value to all who read it. The author, Richard Allen, is one of the world's experts on the subject, and he writes very well and clearly articulates his well thought-out formulation. The chapter also provides practical suggestions for treatment.

The chapters on OSA are also rather well done, and I particularly enjoyed the chapter on the surgical treatment of OSA, written by Kasey Li of the Stanford group, although I would have liked to have seen a discussion on weight-loss surgery as a treatment for OSA in the massively obese.

I also thought the chapter on central sleep apnea was particularly well done.

The last section, Chapters 25 to 30, which discusses sleep patients with other medical disorders, was of variable quality. I was disappointed by the chapter on sleep and internal medicine, particularly by the lack of emphasis on taking a careful sleep history with all patients complaining of fatigue, and the lack of emphasis on asking patients about snoring. I was very disappointed that the authors made no connection between nocturnal gastroesophageal reflux and OSA. Any patient with nocturnal gastroesophageal reflux should be questioned about snoring and possible OSA.

There are 5 appendixes. Appendix A, on recording artifacts and solving the technical problems of the polysomnogram, should be of interest to students and technologists thinking about a career in sleep medicine.

However, working polysomnography technologists should already know everything in this appendix, as should anyone interpreting sleep studies.

Appendix B, on sleep questionnaires, is useful; it lists and references the most commonly used sleep questionnaires.

Appendix C, on starting a sleep-disorders facility, might be of use to those considering starting a sleep center, but the information is elementary—much too elementary for anyone seriously considering starting such a center.

Appendix D, on pharmacologic treatments, and Appendix E, an introduction to electroencephalograms, are too elementary to be of much use to anyone.

A very limited and incomplete glossary is provided at the end of the book. For example, it defines capacitor, impedance, and resistance, but it does not define amplifier, DC, or AC. I didn't find it to be useful at all.

The index is poorly done and incomplete. For example, if one couldn't remember what the function of the pedunculopontine tegmental nuclei (PPT) is, the index references only one page, yet its function is first defined on pages 42-44, and the PPT is mentioned numerous other times in the text.

All in all, I don't recommend this text. First and most importantly, the editors have targeted much too broad an audience. In trying to be too many things to too many people, they have, predictably, ended up with a book that is overly simplistic for some readers and inaccessible for others. Second, the book is poorly organized. Information that is necessary to understand earlier chapters isn't presented until later in the book. Some chapters are cursory, some are overly detailed. Third, the writing seems terribly uneven from chapter to chapter. A few chapters seem to be comprehensive and written with intelligence and even grace; most are poorly written and/or don't cover the material adequately.

This volume is rather short and fairly inexpensive (about 500 pages and \$99); it has stiff competition from several other sleep texts, such as *Principles and Practice of Sleep Medicine*, 4th edition (by Kryger, Roth, and Dement, published by Elsevier Saunders, 2005), which, although expensive (over \$250), remains the definitive textbook of sleep medicine, and with the addition of weekly online updates is well worth the price. *Sleep Disorders Medicine: Basic Science, Technical Considerations, and Clinical*

cal Aspects, 2nd edition (edited by Chokroverty, published by Butterworth/Elsevier, 1999), is getting old, but is shorter, moderately priced (\$165), well organized, and well written. *Sleep Medicine*, 1st edition (by Lee-Chiong et al; Hanley & Belfus/Elsevier, 2002), is also very well written, concise, and inexpensive at about \$82. Additionally, the on-line textbook of medicine *UpToDate* (UpToDate.com, Wellesley, Massachusetts, 2005) provides nice, concise, and practical discussions of sleep and sleep disorders (pathophysiology, diagnosis, and treatment), although the annual subscription fee is \$495.

I'm excited to see the field of sleep medicine grow, and there certainly is room for another text in sleep medicine; however, I cannot recommend this text very highly. It is, in my opinion, the weakest of the available texts.

Richard D Simon Jr MD

Kathryn Severyn Sleep Disorders Center
Saint Mary Medical Center
Walla Walla, Washington

REFERENCES

1. Van Dongen HP, Maislin G, Mullington JM, Dinges DF. The cumulative cost of additional wakefulness: dose-response effects on neurobehavioral functions and sleep physiology from chronic sleep restriction and total sleep deprivation. *Sleep* 2003; 26(2):117-126. Erratum in: *Sleep* 2004; 27(4):600
2. Carskadon Mary A, editor. *Adolescent sleep patterns: biological, social, and psychological influences*. Cambridge, United Kingdom: Cambridge University Press; 2002.

Evidence-Based Practice Manual: Research and Outcome Measures in Health and Human Services. Albert R Roberts PhD and Kenneth R Yeager PhD, editors. New York: Oxford University Press. 2004. Hard cover, illustrated, 1,050 pages, \$89.50.

Evidence-based practice, evidence-based medicine, and practice-based research have become common themes across the many professions involved in health care and human services professions, which must incorporate a steady rate of new advances in medical and social sciences. Technological developments, increased demand for services, cost-containment, accreditation requirements, medical malpractice, and patient safety, among other variables, require documentation of best practices and evidence-based applications in health and human ser-

vices. Researchers, educators, and health-care providers must utilize a variety of resources to incorporate evidence-based medicine into their work. The editors state that their "primary goal in compiling and editing this manual is to make the latest evidence-based protocols, practice-based research designs and exemplars, evaluation research, and assessment tools and measures accessible to all education, medical, public health psychology, public policy, and social work professionals."

This comprehensive volume contains 104 chapters, including the epilogue, which are organized into 11 sections. The first section is devoted to 11 chapters, which provide an overview of best practices, consensus models, evidence-based practices, and critical issues and methods of developing and disseminating practice-based research knowledge across professions and systems that include medical, epidemiology, mental health, public health, psychotherapy, criminology, statistical, and quantitative and qualitative research models. This handbook, especially the first section, provides a solid framework on the distinctions and interrelationships between evidence-based practice and practice-based research. These chapters clearly incorporate the roles for practitioners and ways to bridge the gaps between research and practice, including translational research, quantitative research, and qualitative forms of evidence.

The first 11 chapters and much of the book have a distinct focus on mental health and social work, which I believe is applicable to anyone involved in the delivery of health care. I agree with the editors and several of the authors that adoption of evidence-based practice and practice-based research requires utilizing the inherent knowledge of interdisciplinary teams, taking the understanding and experience of each individual practitioner and joining it with the research-practitioner to better assist the populations served. Consequently, physicians, respiratory therapists, nurses, and other health professionals must incorporate the practices and opinions of professionals across the continuum of care. This book can provide an important vehicle to consider the mental health and social work aspects of the care needed by our patients and clients to incorporate evidence-based practice, improve health, and reduce the burden of illness in society.

The second section includes 6 chapters that provide step-by-step grant guidelines and also examine ethical issues. This sec-

tion is not unique, and much of its contents can be found in numerous other research-methods and grant-writing textbooks.

Section 3 includes 19 chapters that examine the latest evidence-based practices in health and human services. Chapters 18-24 have broad applicability; however, the remaining chapters of this section focus predominately on evidenced-based mental health approaches.

Section 4 consists of 6 chapters that focus on epidemiology basics and different types of public health research. Chapters 40 and 41 deal specifically with smoking, smoking cessation, and controlling tobacco use, which should prove useful to respiratory therapists, nurses, and physicians working in primary care, pulmonary medicine, and related disciplines.

The fifth section also consists of 6 chapters, which focus on conceptualization, operationalization, and measurement in research and evaluation studies.

The sixth section contains 13 chapters, devoted to assessment tools and measures. Chapters 49, 50, and 61 address general principles for locating, using, constructing, and validating assessment tools, whereas the other chapters in this section deal with specific types and applications of assessment measures. This section underscores the importance of monitoring, maintaining quality, and operational improvement.

This seventh part contains 13 chapters, all focused on program evaluation strategies, approaches, issues, and models. This section and the first section are perhaps my favorite parts of the handbook, because they incorporate aspects of evidence-based practice that I had not fully considered, such as the role of evaluation research to inform whether empirical evidence of effectiveness is applicable to specific populations or clients/patients. Evaluation research is one means to help address the constant tension between using empirical evidence in practice and meeting individual needs.

Chapter 64 makes a compelling case on how the fields of program evaluation and organizational development have progressed on parallel courses, and how overlap of these fields with incorporation of the core principles of each can support organizational learning. This overlap would require that program evaluators incorporate more of the organizational and community stakeholders into their empirical evaluation, and those organizational development professionals would incorporate more empiri-