Reviews of Books and Other Media. Note to publishers: Send review copies of books, films, tapes, and software to RESPIRATORY CARE, 600 Ninth Avenue, Suite 702, Seattle WA 98104.

Books, Films, Tapes, & Software

Handbook of Practical Critical Care Medicine. Joseph Varon MD and Robert E Fromm Jr MD MPH. Berlin: Springer-Verlag. 2002. Soft cover, illustrated 518 pages, €39.95, US $40.

This is a compact book presented in outline form. Needless to say, to review *all* of critical care medicine in a book this size is a huge task. Its intended audience is "every practitioner engaged in critical care medicine," including medical students, residents, critical care physicians, nurses, and respiratory therapists. The book is 11.5×18×2.5 cm, and the outline form makes it easy to read. From the beginning the book seems primarily oriented toward medical students and physicians in training. The first chapter, "Approach to the Intensive Care Unit," is good. The section on system-oriented rounds will be quite helpful for the student or resident rotating through the intensive care unit for the first time. The next chapter, "The Basics of Critical Care," is problematic. The tachycardia algorithms are in the section on the alveolar air equation and are not well described. Primary ventricular fibrillation is not mentioned as a cause of sudden nontraumatic cardiac arrest (Table 2.1). Also, though admittedly the following are my own pet peeves, "F_{IO_2}" is a *fraction*, not a percent, and "P_{CO_2}" should be "P_{aCO_2}" when describing the carbon dioxide level in arterial blood.

Parts of the section on mechanical ventilation are also confusing. "Oxygenation is accomplished in normal people by purposefully inspiring a certain F_{IO_2} and maintaining a certain positive end-expiratory pressure." That sentence could be confusing to some readers. In Table 2.4 the ventilator Principle #3 is that patients do not "buck" or "fight" the *ventilator:* patients buck *ill-conceived ventilator settings*. That may not be true in this era of low-tidal-volume ventilation and pressure-controlled ventilation.

The chapter entitled "Cardiovascular Disorders" reviews most of the basics but is somewhat out of date because invasive cardiology has been rapidly evolving. Also, pericarditis is left out of the differential diagnosis for ischemic chest pain, alcohol is not in the differential diagnosis of cardiomyopathy, and neck vein elevation and Kussmaul's sign are left out of the physical findings for cardiac tamponade as a complication of pericarditis. Finally, in the section on therapy for aortic stenosis the authors state that "valve replacement should be reserved as palliative therapy for patients who are poor surgical risks." Undoubtedly they meant *valvuloplasty*; valve replacement per se is not mentioned and a neophyte should not be expected to figure this out. At the end of this and other chapters there are "useful facts and formulas" that are quite helpful.

Chapter 4, "Endocrinologic Disorders," covers the basics. However, I think diabetic ketoacidosis and hyperosmolar nonketotic coma should be discussed separately, since their pathophysiology and management are somewhat different. Chapter 5, "Environmental Disorders," is helpful for those who do not regularly deal with burns, heat stroke, smoke inhalation, and spider and snake bites. Because of the time lag between the writing of a book and its publication, Chapter 6, "Gastrointestinal Disorders," does not mention proton pump inhibitors as a treatment for gastrointestinal bleeding; and the section on anticoagulation in Chapter 7, "Hematologic Disorders," does not mention low-molecular-weight heparin therapy.

The remaining chapters contain quite a bit of very useful information. Again, compiling this much information in such a compact book was a huge undertaking. However in some instances the information is out of date and misleading and, in addition, there are important omissions and errors that temper my ability to recommend this book, especially for the first-time intensive care unit caregiver.

Jon S Huseby MD
Pulmonary and Critical Care Medicine
Swedish Medical Center
Providence Campus
Department of Medicine
University of Washington
Seattle, Washington

Evaluating Critical Care: Using Health Services Research to Improve Quality. William J Sibbald MD and Julian F Bion MD, editors (Update in Intensive Care Medicine, Volume 35, Jean-Louis Vincent MD PhD, Series Editor). Berlin: Springer-Verlag. 2002. Soft cover, illustrated, 379 pages, €49.95, US $50.

This text provides a comprehensive overview of key challenges in critical care research and practice today and offers potential solutions from the health services perspective. The book is inspired by the 2000 Brussels Roundtable Meeting of the same name and is part of the successful *Update in Intensive Care Medicine* series.

Drs Sibbald and Bion introduce the book by acknowledging the enormous achievements in critical care since its creation. They point out, however, that we have failed to translate promising basic science and physiologic research into improved clinical outcomes. They suggest that what may be missing in critical care is the broader approach offered by health services research (HSR)—an approach that integrates basic and clinical research, epidemiology, ethics and issues of organization, economics, delivery and access in order to improve quality of care. This idea is further defined and characterized by Dr Lomas in the second part of the introduction and throughout the rest of the text.

The book is divided into 3 sections. The first, "Methods of Measurement in Intensive Care," consists of 6 chapters that together provide an outstanding overview of structure, process, and outcome of care in the intensive care unit (ICU). Dr Rubenfeld begins the section by defining ICU structure, reviewing pertinent literature (nicely summarized in Table 1), and detailing each component of ICU structure (material, human, organizational, and other resources). Dr Knaus continues on to process of care and process assessment (what is done, when, and how). He discusses the impact of ICU processes on outcomes, making note of methodologically sound studies that have revealed that what intensivists do can be harmful (eg, transfusions, pulmonary artery catheters). Both Drs Rubenfeld and Knaus conclude that structure and process impact care and outcome and must continue to be