

Ethics and Evidence-Based Medicine: Fallibility and Responsibility in Clinical Science. Kenneth W Goodman. Cambridge, United Kingdom: Cambridge University Press. 2003. Soft cover, 168 pages, \$27.

In **Ethics and Evidence-Based Medicine: Fallibility and Responsibility in Clinical Science**, Kenneth Goodman PhD, who is the director of the University of Miami's Bioethics Program, starts out to examine the link between the theory and practice of evidence-based medicine, moral theory, and clinical ethics. Given the broad scope of the task and the many interests of the author, it is not surprising that the book meanders through many aspects of the evidence-based medicine movement, from its history, to practical difficulties in implementation, to statistical considerations, to implications for clinical practice and public policy. Along the way Goodman identifies the conflicts and controversies at the heart of the evidence-based medicine movement and a large number of tangential issues as well. Unfortunately, but unapologetically, he approaches these questions and controversies as an evidence-based medicine "true believer," often giving short shrift to criticisms and cautionary words of those who view evidence-based medicine more skeptically. Despite that limitation Goodman deals with complex and nuanced concepts while writing in a casual vernacular that is at times amusing, though at other times a bit flip. Clearly, he is writing with the clinician in mind, making the book accessible to physicians, nurses, and therapists who lack formal training in the philosophy of science or ethics but who nonetheless find themselves worrying about the reasoning and rightness of clinical decisions. The book thus provides an interesting, if not completely satisfying, tour through the phenomenon that is evidence-based medicine.

The first 5 chapters read as independent essays about central and tangential aspects of the evidence-based medicine movement. Loosely woven around the theme of ignorance as moral culpability, brief discussions of everything from medical history to computer databases reveal Goodman's encompassing familiarity with the subject matter. The book is most interesting in Chapter 5,

in which Goodman acknowledges the difficulties in applying clinical-research evidence to the care of individual patients. Here clinicians will recognize the daily struggles of trying to practice some version of evidence-based medicine. As a nonclinician Goodman at times appears to lack an appreciation of the complexity of clinical decision making—a weakness present in virtually all guides to the practice of evidence-based medicine. In discussing the ethical necessity of a clinician knowing the results of clinical research relevant to one's clinical practice Goodman sometimes conflates the moral culpability of ignorance of the evidence with that of not acting on the evidence. But that distinction is critically important to understanding the ethical paradox of evidence-based medicine. If one must always act in accordance with the evidence, then there is ultimately no role for independent thought and decision-making on the part of clinicians, and computers really could do our jobs. But if clinicians are allowed to deviate from the evidence (or guidelines) in individual cases—something Goodman and all thoughtful proponents of evidence-based medicine support—then we must understand the rules and reasoning that allow for such deviations to be rational and ethical. Unfortunately, neither Goodman nor any other proponents of evidence-based medicine have put much effort into that task.

Readers sympathetically inclined toward evidence-based medicine will find the book thought-provoking and ultimately comforting, as it will not induce any crisis of confidence. Those with vague, nagging doubts about evidence-based medicine will probably feel reassured. But for clinicians more deeply troubled by the epistemic or moral assumptions underlying the evidence-based medicine movement the book does not offer any new or more satisfying responses to those concerns. Such central concerns as the lack of evidence to support practicing evidence-based medicine, the moral and epistemic gap between evidence derived from clinical trials and the care of the individual patient, and the question of when a clinician can ethically deviate from guidelines are all acknowledged in the text, but too quickly bypassed as the author moves on to topics presenting less of a challenge to

evidence-based medicine. Sacrificing the exhaustive survey of evidence-based medicine and instead focusing on those core issues would have presented a more vigorous defense of evidence-based medicine and a more compelling argument that the failure to adopt the evidence-based-medicine construct brings moral culpability.

Mark R Tonelli MD MA

Department of Medicine
Department of Medical History and Ethics
University of Washington
Seattle, Washington

Critical Diagnostic Thinking in Respiratory Care: A Case-Based Approach.

James K Stoller MD MSc FAARC, Eric D Bakow MA MPM RRT, and David L Longworth MD. Philadelphia: WB Saunders. 2002. Soft cover, 398 pages, \$34.95.

Critical Diagnostic Thinking in Respiratory Care: A Case-Based Approach is divided into 4 parts. Part 1 is an introduction to the critical thinking process used by respiratory care clinicians. The authors of this section provide some background theory in what constitutes "critical diagnostic thinking," including a brief description of the process by which a clinician learns to gather data and integrate that information into what ultimately becomes the diagnosis. The process of hypotheses generation and differential diagnosis of the patient's clinical problem(s) are reviewed. Identifying the patient's clinical problem through use of patient history, physical, and laboratory examination is then described. Briefly reviewed are the major elements of physical examination, with the key findings that are often associated with pulmonary problems, as well as common laboratory tests used in differential diagnosis. Respiratory signs and symptoms are identified with their common and less common causes to assist the clinician in formulating a differential diagnosis.

Parts 2–4 constitute 90% of the book. Each of the 35 chapters in these 2 parts begins with a case study that illustrates a common pulmonary problem. The presenting signs, symptoms, and other initial data are given in the brief beginning section entitled "The Clinical Problem." The reader is then taken through the diagnostic reasoning