## Resource review

Jenicek M, Hitchcock DL. *Evidence-based practice: logic and critical thinking in medicine.* Chicago: AMA Press, 2004.



*Evidence-based practice: logic and critical thinking in medicine* can be obtained through www.amazon.co.uk for £45.95.

Ithough its title links this book to the evidence-based practice movement, Jenicek and Hitchcock's text only tangentially addresses the clinical epidemiology, decision theory, and biostastistics that are the conventional tools of EBP. Instead, they set out to write a text anchoring the application of evidence within a framework of formal logic derived from the study of philosophy. Their underlying goal is to improve health care and teaching by improving critical thinking skills in medicine.

I read the book with interest. The first half provides an introduction to the theory and practice of logic. The authors provide a historical overview of models of logic from Aristotle to chaos theory and fuzzy logic. They show how to use the principles to analyse and construct logical arguments. Although they give some medical examples, this section is generic and would serve well as a text for an introductory course in a philosophy curriculum. Good illustrations and boxed definitions help to guide the neophyte, though occasionally these lapse into the pedantic (do we really need a definition of differential diagnosis?).

The second part of the book aims to show the application of principles of logic to problems in health care, including clinical practice, use of research, and communication with society. I turned with particular curiosity to the chapter on logic and critical thinking in a clinician's daily practice, and came away just a little disappointed. The authors present a number of realistic clinical scenarios, but they succeed better in using their tools to analyse the logic (or lack of it) in these scenarios than in guiding the clinician to new ways of practice through application of formal logic. The authors suggest that clinicians should spend more time evaluating daily dilemmas as categorical syllogisms, using such tools of logic as qualification of propositions, reconstruction of arguments, and assessment of logical validity of arguments. They do not, however, provide a worked example showing how this might improve clinical decision making.

I can still remember my excitement when I saw for the first time how understanding of concepts of probability and risk could be applied to and enhance diagnostic and therapeutic problems in clinical care. Clinical epidemiology offered me (and still does) a challenging, but practical, method for thinking critically about what I do as a doctor. I share the authors' view of the importance of critical thinking for 21<sup>st</sup> century doctors. Reading this book has helped me better to define the core skills I need to think critically. Logic is clearly implicit in critical thinking, but the authors have not yet convinced me that explicit training in formal logic will substantially enhance practice based on integration of clinical experience with best available evidence.

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