Using best evidence in practice

Evidence-based medicine (EBM) is the practice of integrating individual clinical expertise with the best available evidence from systematic research.1 The EBM approach, which has become fashionable over the past 10 - 20 years, has been known for a millennium. The great physician, Maimonides, is quoted to have said in about 1195 AD: ‘... if a man declares to you that he has found facts that he has observed and confirmed with his own experience, be cautious in accepting what he says. Rather, investigate and weigh this opinion according to requirements of pure logic, without paying attention to the contention that he affirms empirically.’ Maimonides thus made a plea for an evidence-based approach to medicine by calling on his followers to seek a balance between empiricism and objectivism.2

The advent of large-scale prospective randomised trials in the modern era has greatly increased the objective evidence upon which management decisions can be made in clinical practice.

EBM emphasises three As: Access, Appraisal and Application.3 Access requires refining a clinical problem into an answerable question and a searchable term and using search engines to track down the information. Appraisal is using epidemiological principles and methods to critically review evidence for validity and applicability. Application is integrating the critically appraised evidence with clinical expertise and each patient’s unique situation. In this issue of CME, we have assembled contributions from some of the proponents of EBM in South Africa. Their brief was to address a broad range of common disorders that highlight management issues based on current best evidence.

The three papers by Kali and Swingler, Khumalo and Lawrence, and Matchaba, respectively, demonstrate the value of information from high-quality clinical trials and systematic reviews in decision making. By contrast, the guidelines and recommendations arising from the papers by Visser et al. and Mkize are based mainly on expert consensus statements and non-randomised information. This illustrates the wide range of the kinds of evidence that is available to support different practices and treatments.

In the ‘More about . . . ’ section, Siegfried and Volmink highlight the role of the South African Cochrane Centre as a resource for EBM in sub-Saharan Africa. Hofmeyr, who is probably the most prolific South African writer on EBM (>100 systematic reviews and protocols in the Cochrane Library), offers some thoughtful commentary on the problems and prospects for practising EBM in South Africa. Finally, Burch and Seggie discuss the development of clinical reasoning skills that are essential for the appropriate use of best evidence in clinical practice.

We trust that you will enjoy reading these articles, and we welcome comments on the contents of the papers from readers of CME.

References