Evidence-based Medicine

Over the past decade evidence-based medicine (EBM) has led to a shift in paradigms in clinical medicine. Until recently, experts as opinion-leaders exclusively shaped clinical practice (opinion-based medicine). Such an approach, however, is based on unsystematic clinical experience and intuition and generally lacks scientific rigor which can lead to dramatically wrong decisions. EBM has introduced a new way of thinking in medicine by systematically evaluating the underlying scientific evidence for diagnosis, treatment, and prevention. It integrates research evidence with patient values and clinical expertise but places a lower value on authorities than the traditional medical approach. The key tools of EBM are systematic reviews and meta-analyses. The most important reason for practicing EBM, however, is to improve the quality of care for patients.

EBM has been institutionalised in many countries to provide forums of best practice for clinicians and health policy-makers. Examples are the Agency of Health Care Research and Quality (AHRQ) with its 13 Evidence-based Practice Centers in the U.S., the National Institute for Clinical Excellence (NICE) in the United Kingdom and the WHO-funded Health Evidence Network (HEN). These institutions provide substantial funding to systematically review the best available evidence on health-related questions. The Cochrane Collaboration is an international institution that has become one of the leaders in systematic reviews and meta-analyses.

Over the past years EBM has become an increasingly important feature of modern health care. To practice EBM efficiently, however, requires some knowledge of clinical epidemiology and the basic concepts of EBM. Multiple institutions offer courses in EBM and its clinical application. The following links provide examples of programs at universities and other EBM-related institutions:

Centre for Evidence-based Medicine: http://www.cebm.net/
Deutsches Cochrane Zentrum: http://www.cochrane.de/
Centre for Reviews and Dissemination: http://www.york.ac.uk/inst/crd/
University of Bristol: http://www.epi.bris.ac.uk/shortc/shortc.htm
University of Oxford: http://www.conted.ox.ac.uk/cpd/healthsciences/courses/