

Physicians' Beliefs and Evidence Based Medicine

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The interesting Amin's study showed disconnects between belief and actual practice of evidence-based medicine (EBM) among physicians.¹ There is still controversy and disagreement around EBM, a clamorous example, is the recent commentary by Dr Bernadine Healy, former director of National Institutes of Health, in the U.S. News & World Report she raised several issues that EBM practitioners and teachers face when advocating this model of care. She likened EBM to a "straitjacket" or a cookbook approach in which both clinician judgment and patient values and circumstances are ignored.²

A recent study in Mayo Clinic has shown again a low adherence to EBM; in a review of 228 charts only 30% of patients had uncomplicated urinary tract infection, making their management within clinical guidelines appropriate; of those patients less than 25% received empirical treatment as suggested by guidelines.³ It seems not a solo finding, a meta-analysis of various medical conditions reports a mean adherence rate of 54.5,⁴ these outcomes have been generally interpreted as disappointing and insufficient. Among the barriers to increase compliance have been identified the lack of awareness, familiarity, agreement, self-efficacy, expectations about outcomes with guidelines; the inertia of previous practices; and various patient and environmental-related external characteristics.⁵ Studies showed that diverse strategies could help to promote and improve the adherence to EBM;⁶ however, they are too specific, time and resource consuming, mixed results are found for almost all educational interventions reviewed and disparate results for any single tool.⁷ It seems that physician behavior change is complex.

Current views in educational psychology suggest that learning involves the awareness of and regulation of knowledge, beliefs and goals. There is a system of independent, personal and non formal presuppositions about the simplicity, certainty, source of knowledge, control and speed of knowledge acquisition.⁸ They have been studied and described by cognitive sciences as a theoretical construct called "epistemological beliefs". There is evidence that such beliefs influence our learning processes; most of people move from the early stage of believing in absolute, concrete knowledge that is justified by acclamation

of authority to a final stage of believing in a tentative, context dependent knowledge that is justified with reason as well as expertise.⁸ This kind of cognitive development can cause conflict with EBM. Furthermore, our clinical practice is sometimes full of uncertainty, scenario which can turn our minds toward a more relativistic posture, causing confrontation with the realistic-positivist epistemology on which EBM is based upon.

How physicians' mind integrates "best evidence" with uncertainty is still not well known. Getting physicians' opinions toward EBM is not enough. If we not incorporate cognitive models as epistemological beliefs, it will be very difficult to describe the deep and intricate physicians' metacognition. More studies in this area are necessary, to date only a couple have been published.⁹⁻¹⁰

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