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EDITORIAL

## **Daily Application of Evidence-Based Medicine**

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David Sackett, widely recognised as "the father of evidence-based medicine (EBM)", has defined EBM as "the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients [which involves] integrating individual clinical expertise with the best available external clinical evidence from systematic research".<sup>1</sup> In its initial introduction, EBM has been criticized as being restrictive to the practice of medicine, so far as to calling it 'recipe medicine'.<sup>2</sup> However, it is clear from its definition that in its philosophy, EBM is based on the best available evidence and clinician expertise, in consideration of the patients' needs and preferences.

It has become clear that to be able to practice EBM in their daily practice, clinicians need high-quality, reliable, and easily accessible evidence sources. This availability and accessibility of good evidence has been noted as one of the barriers of EBM in daily practice.<sup>3,4</sup>

Further augmenting the problem is the fact that the evidence base is never static and constantly shifting. What is once considered best practice and safe, may be scrutinized and considered unsafe as further evidence emerges. This brings about the dilemma of keeping up with the evidence. How will clinicians, especially obstetricians and gynecologists, follow the relentless development of evidence while managing their daily practice? The presence of 'evidence summaries' such as Cochrane systematic reviews and BMJ 'Best Practice', as well as periodic 'alert systems' offer assistance to clinicians in staying up-to-date with important updates from their respective fields.<sup>5</sup>

A further problem recognized in EBM is how to determine what is 'best' evidence. Literature can be misleading, and since evidence 'never speaks for itself' it is never free from bias.<sup>6,7</sup> Several ways can be employed to avoid being misled by what is written in the literature. Firstly, we should always apply caution when assessing the discussion section as this is where authors typically 'spin' their findings. Second, we should be aware of surrogate outcome measures that are not of clinical importance, composite outcome measures, and inappropriate comparators, especially in randomized clinical trials. Thirdly, great care should be taken when reading papers demonstrating 'non-inferiority' or 'equivalence', as this is most commonly interpreted by readers. Finally, trials that are stopped early must always be considered with suspicion, since this may lead to a falsely large effect size in similar subsequent trials.<sup>5,8</sup>

Despite the wide acceptance of EBM in modern day medicine, limitations in the practice of EBM still exist. Increased connectivity and availability of evidence is valuable in developing the practice of EBM but clinicians should apply constant vigilance and take into account clinical experience and patients' condition before applying evidence into daily practice.

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