

Reversing the Paradox: Evidence-Based Medicine and Osteopathic Medicine

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Since the introduction of the term *evidence-based medicine* (EBM) in 1992 by the EBM working group from McMaster University led by Gordon Guyatt, MD, MSc, FRCPC,¹ the term and, more critically, the normative methodology it represents has become a pervasive feature in medical training and practice. Evidence-based medicine has been hailed as a “paradigm shift” in medicine² and has quickly become the standard by which clinical decisions are judged. It has even been suggested that physicians who violate the principles of EBM should face suspension of their license.³ In a letter to the editor in the April issue of *The Journal of the American Osteopathic Association*, Danto⁴ stated that perhaps EBM and osteopathic medicine are at odds.⁴ I could not agree more. It is time for the osteopathic medical profession to use research and data in a way that does not compromise the focus on the individual patient. One must not make the mistake of equating EBM to all forms of research and data use in clinical decision making.

Critics of EBM have pointed out several perceived flaws.⁵ Cohen and Hersh⁵ summarized these criticisms in the following 5 main themes: (1) the philosophical problem of empiricism as a scientific foundation for knowledge; (2) the narrow definition of EBM, including the evidence “hierarchy,” which excludes other information important to clinical decision making; (3) the lack of evidence to support EBM, thus causing EBM to fall short of its own test for value; (4) the limited application of EBM to the individual patient; and (5) the diminished autonomy of the patient-physician relationship. These critics view EBM as a particular methodology but point out that the use of EBM is not the only way to use science, data, and studies in making rational clinical decisions.^{5,6} Although there has been an attempt to integrate physicians’ judgment and other “types of evidence” into EBM, it has been questioned whether this modification of EBM is anything more than simple language without meaningful action.⁷

In 2008, the AOA’s House of Delegates reaffirmed the tenets of osteopathic medicine, as follows⁸:

- (1) The body is a unit; the person is a unit of body, mind, and spirit.
- (2) The body is capable of self-regulation, self-healing, and health maintenance.
- (3) Structure and function are reciprocally interrelated.
- (4) Rational treatment is based upon an understanding of the basic principles of body unity, self-regulation, and the interrelationship of structure and function.

The philosophy of osteopathic medicine was further exemplified by the “Proposed Tenets of Osteopathic Medicine and Principles for Patient Care.”⁹ These proposed principles highlight the individual patient focus of our philosophy:

- (1) The patient is the focus for health care.
- (2) The patient has the primary responsibility for his or her health.
- (3) An effective treatment program for patient care is founded on [the proposed] tenets.

Because the individual patient is the center of our philosophy, osteopathic medicine has been called a paradox for attempting to maintain a distinct but equal profession beside its allopathic counterpart. Moreover, its distinctiveness has been challenged in light of this paradox.¹⁰ Although there are some dissenters, our profession is in danger of fully embracing EBM because of its normative push into the practice of medicine in general.¹¹ As Howell¹⁰ suggests, osteopathic medicine is paradoxical in that (1) osteopathic manipulative medicine (OMM), one of osteopathic medicine’s unique distinctions, is not widely prevalent (according to surveys) and (2) the whole-person approach has been adopted by our allopathic counterparts. These factors challenge our right to be called a separate profession.¹⁰

The real divide between osteopathic philosophy and EBM is statistics. Evidence-based medicine is a population-based, mathematical approach to patient care in contrast to a patient-based approach. In terms

of the “hierarchy of evidence” in EBM, the strongest level of evidence is the systematic review or meta-analysis.² Simply put, the risk-benefit of a large population is at the heart of the EBM model of clinical decision making. Osteopathic medicine, on the other hand, puts the individual patient at the heart of clinical decision making. At best, EBM can offer a physician the best decision for the *largest* group of people *most* of the time. The philosophical problem is that there is never a guarantee that the decision for most people is the best for the individual patient.

As osteopathic physicians, we have a duty to ensure that our treatment methods—most specifically, OMM—are scientifically sound. Given its emphasis on individual patient care, the osteopathic medical profession is poised to create a larger discussion on what scientifically sound means. For example, although valid studies have come out of our academic centers, OMM may still fall victim to EBM’s strict definition of “good evidence,” simply owing to the nature of the practice (especially) in light of overwhelming evidence that OMM helps patients. The larger philosophical issues of EBM’s bias toward population-based clinical substantiation and its potential impact on the osteopathic identity becomes especially crucial. Therefore, a reevaluation of the definition of scientifically sound for the osteopathic medical profession and a fusion of science-driven medicine and person-centered care may be in order.

In conclusion, we must reexamine the embrace of EBM given our proud history of patient-centered care, hands-on treatment, and distinctive philosophy. Osteopathic medicine is no stranger to crossroads and controversy. We are in a strong position to uphold the individual patient’s place as the most important determinant of his or her health care. We can reverse our paradox and keep our distinctiveness from our allopathic counterparts by embracing our core principle of the focus on the individual patient. Evidence-based medicine is more than science. It is a particular way of using data to determine clinical care, but more than that, it is also a normative system that stretches beyond

what it intends. It is a conscious decision to choose the benefit of many over time at the cost of the individual at this moment. This approach to the practice of medicine is a part of a larger issue, the shifting of focus from the patient to the population. We may not be able to correct the unpredictability of that shift, but we can avoid deviating entirely from our tenets by continuing to embrace our tradition of focusing on the individual patient. Good solutions may be found by incorporating the best of EBM without losing the focus of osteopathic medicine. (doi:10.7556/jaoa.2014.166)

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