

THE DEATH OF FILLERS AND NEUROMODULATORS?



*"...Evidence Based Medicine has been held as one of the 15 most important developments in medicine in the past 100 years."*¹

Evidence based medicine (EBM) has been a welcomed ferry transporting aesthetic medicine to the modern day. The aesthetic medical field, with its influx of

non-surgical products and procedures as a whole, has benefited from well-designed clinical trials distilling out safe and effective protocols for the masses of physicians who want to meet the demands of a hungry populous. However, these blessed decrees come with a caveat, which we'd be naïve to not recognize.

While conceived with the greatest of intentions, EBM has attracted a nearly religious following, highly vulnerable to hijacking by a well-meaning clergy of academics, authoritative bureaucrats, and profit-motivated insiders with an intent to direct the training and delivery of medicine. However, hidden from those in the pews, the canonized sacraments of EBM are based on conditions that can only be considered a loose representation of everyday clinical reality. It is ironic "that there is currently little evidence that EBM has actually improved patient care."^{2,3} Doctors beware: the authoritative bodies that dictate and mandate the practice of medicine may use an allegorical syntax to increasingly influence and enforce how you should practice.

Large EBM studies are designed to prove efficacy, as well as to consider cost. They rarely are created for the individual, nor are they sensitive and amenable to what happens in the aftermath of their implementation.³ Not all populations are the same, and as any researcher can tell you, the dosing and delivery of a drug or device in clinical practice is often a departure from how it is offered and delivered in clinical trials.

Yet, the majority of teaching to novices is based on approved label methods. At a major conference recently, I heard a young academic from a major institution report two cases of vascular complications following filler injection into a known risky zone using a needle. I was astonished. Those with extensive experience in clinical practice have defined where and how to inject filler safely with a large bore cannula. While safer, more reliable methods for using fillers and neurotoxins are being taught under the umbrellas of CME, they are less heralded and often drowned out by the tidal wave of sponsored training session using published EBM studies.

This is understandable. It makes sense that regulating bodies and academics tasked with protecting the public want to make sure on-label methods only are being promoted. Such

dogmas help to protect from the rogue treatment or treader. They simultaneously harness the visionary and creative adapters in technique and safety. While the degrees of improvement in safety identified and put into practice by progressive clinicians is usually small, the much larger impact on clinical practice is the leap of improvement in cosmetic outcomes that comes from "off-label" methods. If newer advancements are not effectively transmitted to the masses of providers, then the vast majority will use the less safe methods and less natural outcome-producing techniques defined in the EBM trials. Those providers offering safer and better outcomes will be marginalized. A misled public will unduly develop a negative impression and fear of a product and/or treatment. And a promising industry is at risk for being commoditized and defeated, perhaps beyond repair.

If our universities, journals, and societies want to remain relevant, protect patients, and provide the best and most current treatments to the public, then the established channels of yesteryear must bend to the rapid flow of non-EBM information from selective disruptors. A younger generation much savvier in disseminating information to the masses coming of age will be more apt to go straight to the consumer if not given a seat at the table. It is already rather obvious that the most recognized physicians in any specialty are not those with 100 scientific papers but rather the ones with 100K Instagram followers. Let this be a wake-up call to those who control traditional routes of information. It is time we manage the reins of EBM. Data should be cautiously interpreted through a lens of reason and a commentary of practicality. Let's welcome back to our meetings, journals, and societies the free thinkers, the Internet darlings, and the progressives who have been kicked to the curb by EBM.

We don't have to adopt their ways, but we certainly can provide an honest and respected forum to hear their progressive thoughts without requiring them to hire a PhD in mathematics to validate their message. No field of medicine needs its creatives more so than aesthetics. Let's not lose them. ■

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This editorial is excerpted from a longer piece, available at ModernAesthetics.com

1. Godlee F. Milestones on the long road to knowledge. *BMJ*. 2007 Jan 6;334 Suppl 1:s2-3.

2. Ioannidis JPA. Evidence-based medicine has been hijacked: a report to David Sackett. *J Clin Epidemiol* 2016;73:82e6

3. Fava GA, Guidi J, et al. The clinical inadequacy of evidence-based medicine and the need for a conceptual framework based on clinical judgment. *Psychother Psychosom* 15;84: 1e3.