

EDITORIAL

Why all the quarreling over evidence-based dentistry?

In 1991, Gordon Guyatt¹ from McMaster University at Hamilton, Ontario (Canada), was searching for a term that would best describe a novel approach of clinical decision-making characterized by the systematic application of the evidence derived from the medical literature to the care of individual patients. Finally, Guyatt¹ proposed the now-famous (for some, infamous) term “evidence-based medicine” (EBM). The name he originally had in mind was “scientific medicine.” Yet, as Guyatt¹ recalls, “Those already hostile to the challenge to the traditional sources of medical authority were incensed by the term; specifically, they were disturbed at the implication that they had previously been unscientific.”

In fact, within a short time, EBM and its monozygotic twin, EBD (evidence-based dentistry), would cause perceivable discomfort within parts of the medical and dental communities. The ensuing, sometimes ridiculous, debates, centering to a large extent around personal authority (and, more often than not, financial interests), did not remain uncommented. For instance, Gerd Gigerenzer,² director of the renowned Max Planck Institute for Human Development, must have been astonished and amused when he remarked that “It is telling that the term ‘evidence-based medicine’ had to be coined at all—think about a group of natural scientists in need of promoting evidence-based physics.” It appears that Gordon Guyatt was right: The debate on EBM/EBD is indeed one about science.

The very heart of medicine and dentistry has long been characterized by a peculiar mixture of art(istry) and sciences. In a remarkable article, John A. Harrington,³ a lawyer, nicely explored the relationship between these 2 counterparts. Using magnetic resonance imaging as an example, he explained: “After a relatively noisy series of manoeuvres, the machine turns out a beautiful set of images on film. That is the science. What happens next, though, is that the films are given to a radiologist who gazes at them, puzzles for awhile and then gives an opinion on what they might mean. That is the art.”

Traditionally, powerful authorities, “grandfathered” approaches, and personal convictions (as well as reimbursement schemes of insurance companies!) have had a strong influence to keep concepts alive that are over-rich on art(istry). A prime example is the diagnosis and management of temporomandibular disorders (TMDs), where too frequently “facts give way to feelings.”⁴ Although calls for adopting an evidence-based approach in the care of TMD patients are getting louder,⁵ the unwillingness to abandon authoritative and “art-driven” thinking persists. Still, the question needs to be answered to what degree dental practitioners are able and willing to consider (and, hopefully, to implement in their daily practice) current valid knowledge from scientific research.

The busy clinician is faced with 2 major challenges: (1) information overload, which is by no means a problem only of our modern world,^{6,7} and (2) time constraints. So the question arises how the badly needed knowledge transfer from current best research into the clinical practice can be brought about under present conditions.

Well, how about subscribing to a journal such as *Evidence-Based Dentistry* or *The Journal of Evidence-Based Clinical Practice*? And what do you think of getting access to the world’s most comprehensive source for EBM, The Cochrane Library (www.cochrane.org)? This excellent database provides, among others, exclusive and up-to-date full-text systematic reviews of medical and dental clinical problems. Of course, MEDLINE (PubMed) may also be helpful. However, due to its strange and nontransparent indexing policy, not every high-quality, peer-reviewed journal is listed in that database,⁸ even if it fulfills all requirements set forth in the National Library of Medicine’s Fact Sheet “Journal Selection for MEDLINE®” (www.nlm.nih.gov/pubs/factsheets/jssel.html). Hence, there is a chance that you will miss clinically relevant results when you rely exclusively on PubMed.⁹

Without doubt, EBD still has a long way to go before gaining full recognition within the dental community.¹⁰ Yet, it allows us to sharpen the clear distinction between believing and knowing, ie, between strategies based upon anecdotal evidence or unsystematic clinical experience (“Hey, in my hand it works!”) and approaches supported by scientific evidence from clinical research. How can that be wrong? So, let’s inject a little bit more science into our daily practice. Our patients deserve it.

Jens Christoph Türp, Prof Dr med dent
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