



## The role of clinical experience in the implementation of evidence-based dentistry

I believe that there is a global agreement that as a medical and scientific profession, dentistry should aim for evidence-based treatment. Any treatment and diagnosis provided should be supported with controlled, double-blind, basic, or clinical studies. I am confident that this is the case regarding new materials from established pharmaceutical companies. Prior to marketing, compounds are tested and validated. However, dentistry is a dynamic profession that evolves rapidly. In addition, oftentimes, research has a hard time keeping pace with the creativity and inspiration of clinicians. The research process requires a lot: A researcher needs to write a proposal, get institutional approval, find funds, recruit patients, collect data, and analyze the results. The data can be presented at conferences, but it usually requires more than 1 year for the analyzed data to become available publicly. This entire process of research, from a mere idea to a valuable publication, may last a few years; meanwhile, the knowledge, technology, and other goods that could improve the patient treatment and quality of life are not shared with the dental world. Many times, clinicians who create or invent a new method or treatment do not have the resources (or sometimes the knowledge) to conduct the research. As a result, the dental world is robbed of an opportunity for better and more efficient treatment. Sharing knowledge is a vital tool for the development of science, medicine, and dentistry. Sharing ideas may trigger groups that have the knowledge, facilities, and resources to provide high-quality research. This enhances the need for publications of case reports and new technology presentations in journals such as *Quintessence International*. We welcome new ideas that might improve the treatment provided to patients or that may instigate a discussion on a certain beneficial topic. These, too, must be based on scientific research published in peer-reviewed journals.

It is important to note that such publications cannot replace solid, controlled double-blind studies, but they may certainly add.

As an example of the importance of evidence-based dentistry, I will share a personal anecdote. When I joined the Department of Diagnostic Sciences at the University of Medicine and Dentistry of New Jersey (UMDNJ) about 6 years ago, I noticed the faculty and residents (Dr Heir and Dr Ananthan) used a method that, based on my previous experience and training, could never prove efficient. They used a topical treatment for oral neuropathic pain—at that time, the common knowledge was that neuropathic pain responds to only systemic treatment with medications such as antiepileptic or antidepressant drugs. In spite of my skepticism toward the lack of evidence of this method of treatment, to my great surprise, I have noticed that patients do in fact feel better following the treatment. We reviewed patients' files and discovered that topical use of medication eases pain with fewer adverse effects or helps in decreasing the dosage of systemic medication prescribed. This observation was published in a peer-reviewed journal, as an initial observation, which was not yet scientifically solid or based on a controlled, double-blind study. Currently, our lab, as well as other labs around the world, is studying the mechanism and further use of this treatment possibility.

There are many methods developed by dentists around the world that have the potential to become widely used. Sharing such methods does not guarantee they will be validated by control studies. However, spreading the knowledge may initiate intellectual debate and research in the field.

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