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EDITORIAL

Why evidence based dentistry?

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Although my higher training specialty was Dental Public Health, throughout my career as an academic, even when I was Dean of Peninsula Dental School, I maintained my clinical activity. That was because I am, first and foremost, a dentist. And dentistry is a profession I am very, very proud to belong to. I am proud to have been a clinically active dentist because I, like most people who love research, like to solve problems. And to solve problems you need to make good rational decisions. If you take the time to consider what it takes to make a good clinical decision, you can see immediately what an important role research, and research synthesis, play. In order to make a decision which will lead to the best outcome for a patient, a dentist needs, firstly, a thorough knowledge of all the possible treatment options. When a patient presents with a problem, a dentist has to be able to enumerate all the possible ways forward (which may, on occasion, include doing nothing). Having identified what could be done, in order to determine what should be done, the clinician must be able to predict the likely outcomes of each particular way forward, and also decide how valuable each possible outcome would be to the patient. Only after doing this could an optimal treatment plan be established.

So, unless researchers have analysed treatment outcomes and identified the likelihood of treatment success, dentists have no foundation for their decision making. Thus, the need for clinical trials becomes immediately apparent. In addition, if a dentist is to work out what value a patient places on particular outcomes, a different type of research is required. Because not only must the likelihood of an outcome occurring be quantified, it must also be qualified; i.e. its value determined. This can only be done through the involvement of patients in the research. Hence, the rapid and necessary development of patient-reported outcome measures (PROMS).

All treatment decisions are made under conditions of uncertainty, but the level of uncertainty is lowered if the subject has been properly researched. However, no matter how substantial the evidence underpinning is, difficult decisions still need to be made. Both patient and dentist, faced with a particular problem, will reach their own conclusions about it, and about the possible actions which could be taken. They will also decide upon the process of treatment and the potential outcomes. For the dentist, these conclusions are built on evidence, if it is available in an accessible form, and upon their training and experience. For the patient, their conclusions will be based on their life experience, their culture and on other people's views. Their reasoning may be flawed and based on inconsistencies, and uncertainty, but nevertheless they matter hugely. The key to getting it right, is to recognise and deal with the fact that uncertainty exists for the profession as well as the patient. As all researchers know, probability is involved, rather than incontrovertible fact, even when evidence is strong.

And this is where I see the role of *Evidence-Based Dentistry (EBD)*. Firstly, the journal condenses and tries to makes accessible the research evidence which is of most relevance to dentists and their team, and to the day-to-day life they inhabit with their patients: secondly, we aim to quantify the strength of the evidence so that the degree of uncertainty attached to a decision is known. Thus, we hope and aspire to be an aid to decision making in practice. But ultimately, patients will only choose to take advantage of the dentist's knowledge if they wish to do so. And rightly so. Nevertheless, the service that every single contributor to *EBD* makes to the practice of dentistry is, in my view, invaluable. So my heartfelt thanks to all.

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