

# Where's the proof?

Michael Sultan looks into the evidence behind claims of success.



Recently I have come to the conclusion that there is quite a gulf between the things that I think I know and the things I actually know. I have written previously about the need to be more open-minded and



**Michael Sultan**  
is a specialist in endodontics and clinical director of EndoCare.

accepting of the fact that within the profession we don't know as much as we should, and perhaps some of our more strongly held opinions are based on misnomers and should therefore be challenged.

As dentists, we don't always get things right first time, but sometimes it can be difficult to acknowledge that the things we have been doing may not have been the best option or course of action. In such circumstances there can be the tendency for denial to sink in and for us to 'stick to what we know', but what exactly is that?

## Empirical knowledge

Ultimately, in dentistry as in all areas of healthcare, we perform treatments

and offer diagnoses that are based on empirical knowledge. After decades of observation and experimentation we gather all the relevant information about a specific field or condition and study the ways to improve and enhance treatment outcomes based on the data gathered.

But along the way it is possible, likely even, that poor research and sub-standard information compromise the things we know to such an extent that when the analysis is complete there is really no undeniable proof for a lot of what we do.

## Scientifically proven

Of course, as healthcare professionals we look for things that are



Scientifically proven and we often read that a product or system has been established to achieve a certain result, or is guaranteed to provide optimum outcomes.

However, science is rarely able to prove anything to be 100 per cent effective, and of course it is not uncommon for a company to publish pseudoscientific research that delivers some vague evidence supporting the use of their own specific product. What's more, sometimes the assertion that something is scientifically proven and achieves guaranteed results can be presented, based on only a single piece of research.

In any healthcare setting it is crucial that we can trust and rely on the techniques and protocols we use, especially when considering the ramifications of not doing so, such as with poor infection control for instance, and yet for the most part the scientifically proven evidence we see is rarely entirely free from bias or agenda.

#### Evidence based dentistry

Across the industry, another area that we hear a lot about is the importance

of evidence based dentistry. This is a system that comes to us with the best intentions, and is the basis for the preferred method of teaching in many higher education institutions. However, good intentions do not always garner the best results.

This approach to oral health care and medicine requires the application and examination of scientific data to guide any and all decision-making. But arguably the standard of evidence and scientific data needed for dentistry in particular is in scant supply, can often be conflicting and, as previously mentioned, of dubious origin. Evidence based dentistry seeks to provide a solution by providing strategies and systems of investigation and hierarchical analysis of literature, but until we have the volume of good clinical research, relying solely on this approach doesn't seem practical.

Evidence based dentistry aims to provide protocols that make treatment decisions easier to justify, especially if there is a complaint or dento-legal issue. But this can

also have significant drawbacks. At the moment, if a dentist carries out a procedure that generates an adverse response, they may face litigation for failing to follow a specific protocol. But there is very little in place to protect dentists should such protocols later be shown as flawed or based on poor research or limited evidence.

What this means is that despite years of research and study, we are no closer to achieving 100 per cent effective, guaranteed outcomes in dentistry. Without doubt the profession has made significant headway across all areas, and technological advances continue to drive dentistry forward, but we should all be aware of the limitations and deficiencies of our limited approach.

New procedures, protocols and techniques are introduced into dentistry all the time and we need to be able to acknowledge the potential fallibility of the research and evidence these have been based on.

We should be clear that what we know and what we think we know are not necessarily the same thing, and often what we don't know will have a much greater impact.



2014 WINNER  
Leading Adviser



#### JONATHAN TYSON

Mobile: 07770 959969

Direct Dial: 01782 338832

Email: [jonathan.tyson@knightsllp.co.uk](mailto:jonathan.tyson@knightsllp.co.uk)

# DENTAL LAW EXPERT

Specialist legal advice for all aspects of running, owning, buying or selling a dental practice.

- Buying or selling a practice
- Incorporating your practice
- GDS contracts and PDS agreements
- Shareholders' agreements
- Partnership agreements
- Expense sharing agreements
- Associate agreements
- Employment law and HR
- Property advice
- Tax, Trusts and wealth planning

0844 371 2562

A UK professional services firm

[knightsllp.co.uk](http://knightsllp.co.uk)

Knights  
1759