

Is 50% ever enough?

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The great David Sackett is famed for saying 'I know that half of what my Faculty teaches to students will be shown to be mistaken, within the next ten years. My problem is that I don't know which half'.

And that famous quote pretty much sums up what evidence-based dentistry is about. Today's 'state of the art', the current "status quo" our knowledge to date' are, we must understand, all ephemeral. There simply are no eternal verities, no certainties, no forever truths in dentistry as in all else. We only know only what is known today, right now. And that will of course change as each day goes by, largely because of the enormous effort, expertise and sums of money that are invested in research around the world in order to try to root out the untruths, clarify partial-truths and discover new truths.

Perhaps ironically, retrospect can be a great help. In order to grasp the enormity, importance and impact of research and innovation, and its effect on what we do every day, simply think back 20 years. Not necessarily about oral healthcare but about everyday life. If, at the turn of the twenty-first century, someone had suggested to you that you take a photograph with your phone, you would have thought that they were either taking some sort of hallucinogenic drug, or that

you had overdosed on the imaginary wizardry in the Harry Potter books. Yet today millions, billions of photographs are taken, uploaded, downloaded and shared via our telephones. The little plastic boxes that reside in our pockets now contain more computer power than my entire university did when I was a postgraduate! Telephones used to be things with dials that you turned, which sat in the corner of a room, and had one use, and one use only ... to talk to people. So, try to imagine an immense seismic shift in dentistry, such as the one which has taken telephones from being voice transmitting devices to the immensely powerful and complex communication, photographic, information, direction finding machines of 2019. If that shift, which took place over a mere couple of decades, could be replicated in oral health, how brilliant will our profession be by the year 2030 or 2040?

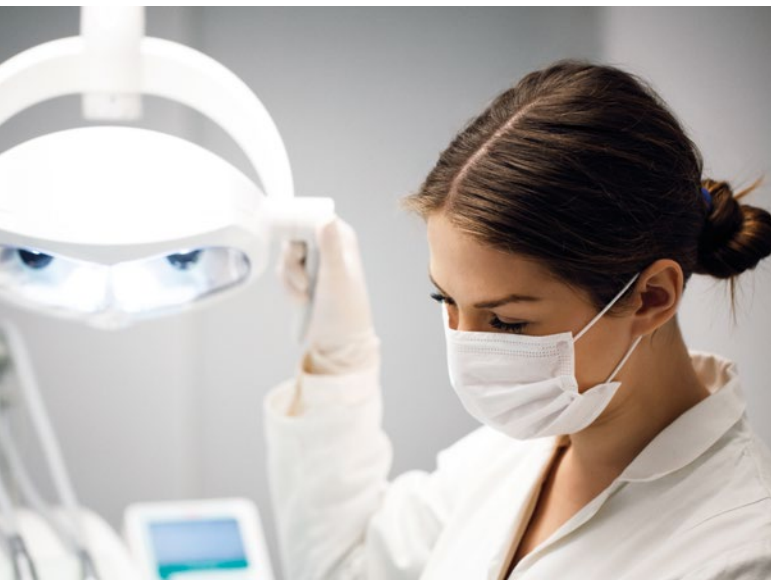
But those sorts of transformative changes can only happen if knowledge derived from research (about how to make people's mouths and teeth work better, look better, feel better and give a better quality of life) is translated into everyday dentistry. This, in turn, can only happen when the technology held by material scientists is transformed into marketable, usable dental products. As an example, what would happen if the growing understanding of facial aesthetics, on which researchers have worked for law enforcement agencies, security firms and the beauty industry, was adapted to be useful in the hands of dentists? But it is not only the physical and

biological sciences in which progress can be made. Massive shifts in our capabilities as health carers can also occur when knowledge of how individuals, families and communities function, accrued by sociologists, psychologists and anthropologists, is applied in dental care. While so often used (and sometimes abused) by political parties, marketeers and educationalists, when these behavioural findings are interpreted and applied in the dental sphere, who knows what beneficial changes might follow?

However, these things can only happen if our wonderful profession takes the time to scout out, unearth and reveal today's known scientific facts and apply them in our field. To enable that to happen we need to take the time to thoroughly scan the published literature for every recent development, all the new 'facts', each innovative way of working, that might be useful or relevant in our surgeries. By doing so and by applying new knowledge to that which we do each day with our patients, we can take things forward – perhaps not quite at the pace of mobile phone technology, but certainly at a greater speed than in days gone by. This is precisely what *Evidence-Based Dentistry* aims to do. To bring to the attention of dental professionals, in a rapidly digestible form, developments and scientifically sound knowledge about new ways of doing things, so that we can grow and innovate in our practices.

It is a quite terrifying thought that fifty percent of what is happening each day in every dental surgery might be found, within the next ten years, to be erroneous, wrong, detrimental to patients. *Evidence-Based Dentistry* exists to try to help to ensure that this happens as little possible and that everything performed within dentistry has a sound basis in the best knowledge and science available.

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