

Homeopathy – can the undetectable cure?

By Anthony King, freelance journalist based in Dublin

Dental homeopathy is the first subject to be unpicked in our new series of columns delving into possible pseudoscience in the world of dentistry.



Has there been a comprehensive review of the evidence in recent years?

One of the largest reviews of homeopathy was released by the National Health and Medical Research Council of Australia in 2015.³ It concluded that there are 'no health conditions for which there is reliable evidence that homeopathy is effective'. It advises that it not be used for conditions that are chronic, serious or could become serious. It looked at 57 systematic reviews containing 175 individual studies.

Does it count as bad science?

The principles of homeopathy were created in 1796 and today rely on belief, not scientific evidence. 'Homeopathy most of the time won't contain any active ingredient,' says David Shaw, bioethicist at the University of Basel, Switzerland. The extreme dilutions used often means no active molecules are detectable, which defies what we have learnt about biology since the seventeenth century. This would appear to place homeopathy clearly in the bad science box. 'It makes false promises about its efficacy,' says Shaw.

Are there downsides for patients?

If used alongside proven treatments, patients are just spending their money on something which there is no evidence for, but which they may find reassuring. If advertised as an alternative to necessary medical treatment, homeopathy can prove harmful. 'If you delay regular medical treatment, say by trying to cure an infection with homeopathy, the infection could become a lot worse,' says Shaw.

The British Homeopathic Dental Association acknowledges that concerns arise if homeopaths advise patients to stop taking potentially life-saving treatment, but says 'this is not a belief of most of us and certainly is not condoned'. ■

How is homeopathy supposed to work?

A basic principle is that 'like cures like', so that for instance onion extracts cure the symptoms of a cold where the eyes and nose are runny. Another principle is that the tincture is diluted so that the original substance is no longer toxic and will not produce symptoms normally associated with it. The British Homeopathic Dental Association (BHDA)¹ says a full consultation asks lots of questions about symptoms, but also about how a patient feels or even what they dream about or like to eat so that the remedy is patient specific.

What are homeopathy treatments in dentistry used for?

There are remedies that offer help with anxiety, healing after surgery, bruising, muscle tenderness and temporal mandibular conditions. One common remedy is Arnica, a genus of perennial, herbaceous plants in the sunflower family, which is said to help with bruising and therefore purported to be useful after a lot of dental procedures.

What is in the remedies?

Remedies originate from many different sources, say homeopaths, but include animal secretions, minerals, plants and energy sources such as sunlight and X-rays. People may focus on these 'natural ingredients', but most times they are undetectable.

Is there any evidence for it being effective?

The BDHA admits there has not been much research done on homeopathy in dentistry. Most scientific bodies find that no rigorous, reliable scientific studies exist to support homeopathy.

Critics say homeopathic remedies are not actively harmful, but they contain no active molecules. The basic principles are counterintuitive, given what we know from modern science.² It is likely that any benefits are due to the placebo effect, but herein lies a 'bad science' symptom. For the placebo effect to occur, patients must believe they are receiving something that works, despite there being no evidence that it does.

1. British Homeopathic Dental Association. *What is homeopathy?* Available at: <http://www.bhda.co.uk/for-patients/faq.html> (accessed January 2018).
2. Smith K. Against homeopathy - a utilitarian perspective. *Bioethics* 2012; **26**: 398-409.
3. Australian Government. National Health and Medical Research Council. NHMRC Statement on Homeopathy and NHMRC Information Paper - Evidence on the effectiveness of homeopathy for treating health conditions. 2015. Available at: <https://www.nhmrc.gov.au/guidelines-publications/cam02> (accessed January 2018).