

Should We Maintain an Open Mind about Homeopathy?

Once upon a time, doctors had little patience with the claims made for alternative medicines. In recent years the climate has changed dramatically. It is now politically correct to have an open mind about such matters; “the patient knows best” and “it worked for me” seem to be the new mantras. Although this may be a reasonable approach to some of the more plausible aspects of alternative medicine, such as herbal medicine or physical therapies that require manipulation, we believe it cannot apply across the board. Some of these alternatives are based on obsolete or metaphysical concepts of human biology and physiology that have to be described as absurd with proponents who will not subject their interventions to scientific scrutiny or if they do, and are found wanting, suggest that the mere fact of critical evaluation is sufficient to chase the healing process away. These individuals have a conflict of interest more powerful than the requirement for scientific integrity and yet defend themselves by claiming that those wanting to carry out the trials are in the pocket of the pharmaceutical industry and are part of a conspiracy to deny their patients tried and tested palliatives.¹

HOMEOPATHY

Homeopathy is among the worst examples of faith-based medicine that gathers shrill support of celebrities and other powerful lobbies in place of a genuine and humble wish to explore the limits of our knowledge using the scientific method.² Homeopathy is based on the like cures like principle (“*Similia similibus curentur*”) and the concept of the memory of water. The like cures like principle holds that if a substance causes certain symptoms in healthy volunteers (eg, onions cause a runny nose), then this substance constitutes an effective treatment for conditions associated with those symptoms (ie, an onion cures a common cold). The second principle posits that serial dilution in combination with vigorous shaking of a substance—“potentiation”—does not render that substance less but *more* powerful. Thus the most “potent” homeopathic medicines are so highly diluted that they no longer contain a single molecule of the original

substance.³ These axioms are not only out of line with scientific facts but also directly opposed to them. If homeopathy is correct, much of physics, chemistry, and pharmacology must be incorrect. To put it more strongly, in the parallel universe of homeopathy, life, as we know it, would be inconceivable, and the alien creatures that might dwell in that hostile environment are hard to envisage.

To have an open mind about homeopathy or similarly implausible forms of alternative medicine (eg, Bach Flower remedies, spiritual healing, crystal therapy) is therefore not an option. We think that a belief in homeopathy exceeds the tolerance of an open mind. We should start from the premise that homeopathy cannot work and that positive evidence reflects publication bias or design flaws until proved otherwise. If not, we must believe that water has a selective memory, recalling the 1×10^{-9} molecule of the mother tincture in favor of the multitude of molecules that are likely to be present in concentrations orders of magnitude greater.

So far homeopathy has failed to demonstrate efficacy in randomized controlled trials and systematic reviews of well designed studies.^{2,4,5} Homeopathic physicians seem to clutch onto the straws of a series of poorly designed or underpowered studies to retain their credibility or claim that the randomized controlled trial is an inappropriate methodology to assess their belief system in the name of post-modern relativism.^{6,7} We wonder whether any kind of evidence would persuade homeopathic physicians of their self-delusion and challenge them to design a methodologically sound trial, which if negative would finally persuade them to shut up shop. This is not a double standard; as the 2 authors have been involved in studies that have challenged our favored remedies and the practice of our specific disciplines.^{8,9}

IN SETTING LIMITS TO AN OPEN MIND

Should we keep an open mind about astrology, perpetual motion, alchemy, alien abduction, and sightings of Elvis Presley? No, and we are happy to confess that our minds have closed down on homeopathy in the same way. Here’s why:

- Homeopathy is based on an absurd concept that denies progress in physics and chemistry. Some 160 years after *Homeopathy and Its Kindred Delusions*, an essay by Oliver Wendell Holmes, we are still debating whether homeopathy is a placebo or not.¹⁰

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- Homeopathy is mainly advocated for self-limiting conditions, for example, it cures a cold in 7 days that would otherwise take a week. Do even homeopaths rely on their treatments for cancer and other life-threatening conditions?
- There are no reported major “advances” in homeopathy.
- Homeopathic principles are bold conjectures. There has been no spectacular corroboration of any of its founding principles.¹¹ An example of the spectacular corroboration of a bold conjecture is that the planet Pluto was predicted by observing minor discrepancies in the orbit of its neighboring planet Neptune, and its discovery was counted as a spectacular corroboration of a bold conjecture (although in 2006 the International Astronomical Union downgraded Pluto’s status from that of a planet to a dwarf planet). In medicine the same might apply to the discovery of antibiotics.

Yet homeopaths remind us of Galileo’s battle with the dogma of his day and how in the fullness of time this heretic was proven right. The Galileo argument is a syllogism, a kind of logical argument in which 1 proposition (the conclusion) is inferred from 2 others (the premises) of a certain form. For example, Van Gogh was a great artist not recognized in his lifetime. We are artists who have so far not sold a painting, ergo “we are great.” After more than 200 years, we are still waiting for homeopathy “heretics” to be proved right, during which time the advances in our understanding of disease, progress in therapeutics and surgery, and prolongation of the length and quality of life by so-called allopaths have been breathtaking. The true skeptic therefore takes pride in closed mindedness when presented with absurd assertions that contravene the laws of thermodynamics or deny progress in all branches of physics, chemistry, physiology, and medicine. As the late lamented Petr Skrabanek¹² once stated, “if your mind is too open your brain slides out.” Well, our brains are too precious an organ to be hazarded in this way, and our minds are too tightly closed when asked to consider the possibility that homeopathy is anything other than placebos offered by a kindly practitioners with ample time at their disposal.

CONCLUSIONS

We are often accused of tilting at windmills; and hey, what’s wrong with offering placebos for the worried well with self-limiting conditions? Well firstly, it is considered unethical for modern medical practitioners to sink to this kind of deception that denies the patient his or her autonomy. Secondly, by opening the door to irrational medicine alongside evidence-based medicine, we are poisoning the minds of the public. Finally, if we don’t put a brake on the increasing self-confidence of the homeopathic establishment, they will cease to limit their attention to self-limiting or nonspecific maladies. Already, an investiga-

tive journalist for *Newsnight* has exposed the willingness of homeopathic chemists to offer homeopathic prophylactics for malaria.¹³ On World AIDS Day, the Society of Homeopaths in London hosted a conference on the treatment and prevention of human immunodeficiency virus/acquired immune deficiency syndrome by using water with a remarkable memory.¹⁴

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