

Acupuncture and Context

Acupuncture Research: A Personal View

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WITH SOME INITIAL SUCCESSES to fuel interest, acupuncture research in the West is increasingly attempting to simulate pharmaceutical and device research using sham needles and/or points as controls.¹⁻³ But, the consensus that the randomized controlled clinical trial is an acceptable method of research for acupuncture is still far from universal.⁴

A lively discussion on the difficulties of acupuncture research took place in 2005.⁵ Paterson and Dieppe pointed out that in order to use a placebo or sham controlled design, an intervention has to be divided into characteristic (specific) and incidental (placebo, nonspecific) elements, a process that largely destroys the effectiveness of acupuncture and generates false-negative results. They added that while many researchers are aware of the difficulty, few have been willing to directly challenge the legitimacy of the methodology itself.

The authors echoed something every acupuncture practitioner knows intuitively, that a research model suitable for drugs and devices cannot be transferred to interactional therapies. To take a simple analogy: imagine removing a chef from his/her kitchen and then concluding that the frying pan doesn't cook decent eggs. Such a conclusion would be absurd because the chef and frying pan cannot be separated without compromising the outcome. As an expression of the *Tao*, they are 1 entity, not 2.

Some lively discussion followed the aforementioned article. One critic took the view that needles themselves might be superfluous. He pointed out that since controlled trials often show that sham acupuncture and genuine acupuncture both have similar positive benefits, that it might be something else in the acupuncture experience that achieves results—possibly a version of the placebo effect, or the way in which practitioners care for or listen to patients. He

concluded his commentary with a provocative question: Why use needles at all?⁶

Why indeed? The answer might be that an acupuncturist not using needles would be like a chef not using his/her frying pan. Again, the point is that a craftsman and his tools cannot be separated.

Research models are highly contextual and outcomes are affected by all kinds of subjective influences.⁷⁻⁹ Even in drug and device research, in which double-blind randomization at least has some coherent rationale, it is becoming increasingly clear that subjective biases are never eliminated, and contextual issues such as job security and the agenda of funding agencies all influence outcome.^{10,11} Kaptchuk has captured the essence of these difficulties, pointing out: “the idea of sham acupuncture raises all kinds of contextual problems, which are largely insurmountable.”¹²

Conventional medicine often fosters the erroneous idea that all good medicine should be open to objective scientific scrutiny, and that resistance to such scrutiny implies that the practice is based in charlatanry.¹³ This position puts the onus on complementary/alternative medicine (CAM) researchers to provide evidence of efficacy in a form that permits the status quo to cite methodological flaws and dismiss results. Ironically, those who make the above argument may not be aware that only some 36% of therapies commonly used in conventional practice have evidence-based medicine accredited proof of efficacy.¹⁴ Perhaps quackery is not just limited to CAM.

In my opinion, those who require inappropriate proof should get it for themselves. Surely, acupuncture practitioners have better things to do than to waste time on self-defeating research methodologies. The randomized controlled trial, though certainly suitable for drugs and devices, finds itself caught in a category error when applied to interactional

disciplines.¹⁵ Perhaps more to the point, because the universe is holographic, there is really no such thing as a placebo acupuncture point. Since all points potentially contain the information of the whole, any acupuncture point might facilitate healing if stimulated at the optimal time and place, in a suitable context, and with appropriate intent.¹⁶ This makes the sham controlled research design itself a sham. Perhaps it is time the acupuncture community makes a more compelling challenge to such a model by dispensing with it and moving on.

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REFERENCES

1. Lee A, Done ML. The use of nonpharmacological techniques to prevent postoperative nausea and vomiting: a meta-analysis. *Anaesth Analg*. 1999;88:1362–1369.
3. Berman BM, Lao L, Langenberg P, et al. Effectiveness of acupuncture as adjunctive therapy in osteoarthritis of the knee: a randomized controlled trial. *Ann Intern Med*. 2004; 141(12):901–910.
4. Lewith G, Walach H, Jonas WB. Balanced research strategies for complementary and alternative medicine. In: Lewith G, Jonas WB, Walach H, eds. *Clinical Research in Complementary Therapies: Principles, Problems and Solutions*. Edinburgh, UK: Churchill Livingstone; 2002:1–28.
5. Paterson C, Dieppe P. Characteristic and incidental effects in complex interventions like acupuncture. *BMJ*. 2005;330: 1202–1205.
6. Hodgkinson MJ. Why use needles at all? *BMJ*. 2005;330: 1202–1205.
7. Kaptchuk TJ. Powerful placebo: the dark side of the randomised controlled trial. *Lancet*. 1998;351(9117):1722–1725.
9. Kaptchuk TJ, Kelley JM, et al. Components of placebo effect: randomised controlled trial in patients with irritable bowel syndrome. *BMJ*. 2008;336:999–1003.
10. Pharmaceutical industry sponsorship and research outcome and quality. *BMJ*. 2003;326:1167–1170.
11. Finn P. Bias and blinding: self-fulfilling prophecies and intentional ignorance. *ASHA Leader*. 2006;11(8):16–17, 22.
12. Kaptchuk TJ. Sham device vs. inert pill: randomised controlled trial of two placebo treatments. *BMJ*. 2006;332(7538): 391–397.
13. Dixon-Warren B. Alternative therapies and allied health: what's going on. *BC Med J*. 2001;43:162–163.
14. Clinical Evidence. *BMJ* online source. <http://clinicalevidence.bmj.com>.
15. Greenwood MT. Acupuncture and evidence-based medicine: a philosophical critique. *Medical Acupuncture*. 2002;13(2): 34–39.
16. Jarrett L. The holographic paradigm and acupuncture. *J Tradit Acupuncture*. 1985;8(2):36–41.

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