# Patient-centred medicine

# George Lewith

### George Lewith

MA DM MRCGP FRCP, Reader in Complementary Medicine, University of Southampton

Clin Med 2007;7:250–2

# The politics of care

It is easy within the complementary and alternative medicine (CAM) literature to identify academic excellence, poor science and extreme bias. It is important to consider NHS service provision and the evidence separately. We would all agree that visiting the dentist is an excellent remedy for toothache despite the fact that there are no randomised clinical trials involving dental placebo procedures. Nevertheless, most of us intuitively accept the argument that dentists add value to our lives. Recently access to NHS dentistry has become more difficult thus separating the provision of an essential medical service from any argument about evidence of benefit. In a similar vein, we might separate health provision and policy from evidence of clinical effect in assessing CAM. Evidence is driven by clinical trials and academic excellence while health policy seems to be driven, in large part, by political expediency; thus, it would be sensible to separate rigorous science and politics in the context of healthcare.

## **Defining professions**

Thirty years ago it was possible to be struck off the medical register simply for referring a patient to a medical osteopath; osteopathy was not called CAM at the time but 'fringe medicine'. Osteopaths are now statutorily registered and form part of the conventional 'medical professions'; a political change which has little rigorous evidence to sustain it but a great deal of public support. Physiotherapists were unable to practice acupuncture in 1979, but over the last two decades acupuncture has become part of normal physiotherapy practice where between a quarter and a third of physiotherapists have been trained in the discipline, some at undergraduate level. As Wonderling suggests, we now have the necessary evidence to sustain this practice but initially the change came about based on the politics of expediency rather than clinical evidence or health economics.<sup>2</sup> The idea that any government and much of the medical profession has ever decided health policy solely based upon science cannot be sustained on present evidence from randomised placebo controlled studies, even in relation to surgical intervention.3,4

#### Patient led

What has created the patient-centred enthusiasm for CAM? Patients know that CAM works and seek treatment for many reasons, including the procurement of well-being and personal empowerment,5 but from the medical perspective of a limited evidence base it involves an unreasonable patient expense. Could the medical profession (particularly in the US) have decided to take CAM seriously because they might be 'missing out' on potential income? Current US estimates suggest that over \$30 billion is spent each year 'out of pocket' on CAM6 while over the last decade the salary of US physicians has fallen with the growth of healthcare provider organisations like Kaiser Permanente. A similar situation exists in the UK.7 Although UK physician's income is less influenced by patient choice, institutions may be threatened. Patients seeking treatment elsewhere keep recounting that CAM 'works' but their definition of this, and the definition used by more orthodox medicine, differs. Patients look for environments in which they feel comfortable and cared for as well as evidence of benefit in terms of safety and overall effect.<sup>5</sup> They also frequently base their treatment choices on the recommendations of friends and family.8

#### Evidence of effect?

Clinical scientists look for evidence of effects that are greater than placebo (efficacy). Many physicians spend considerable time managing and prescribing for chronic illness. In these circumstances evidencebased treatment means an improvement of 10% over placebo where there is often a substantial non-specific response. Eighty to ninety per cent of patients with depression improve with selective serotonin reuptake inhibitors, but perhaps only 10% of the response is related to the specific pharmaceutical agent itself.9 A new bronchodilator could be licensed with a 7% improvement over placebo<sup>10</sup> although much of the clinical effect might be related to the act of treatment rather than the specificity of the new drug. Much of clinical medicine seems to work in response to patients' expectations, particularly in the treatment of chronic illness such as asthma, irritable bowel, headache, arthritis and mood disorders. Patients with these conditions fill general practitioners' surgeries and account for a large proportion

of NHS prescriptions. It should come as no surprise that many complementary medicines have similarly small specific effects in these common conditions. 11,12 One of the challenging problems within CAM research has been the difficulty of developing placebos particularly for physical treatments such as acupuncture. Without a validated placebo the whole concept of the placebo-controlled trial becomes unsustainable. Recent rigorous trial data based on large patient numbers suggests that acupuncture, whatever the site of needle placement, provides a substantially superior clinical outcome when compared to standard conventional care and is far safer. 13 However, we still do not have effective placebo groups for many of these interventions. In pain caused by arthritis, for example, it may not matter where an acupuncture needle is inserted, but that does not mean it is any less effective than the conventional drug therapy with nonsteroidal anti-inflammatory drugs. Perhaps our patients are correct in their intuitive assumptions about the effectiveness and safety of CAM. We must also remember that the absence of evidence is just that, it must not be interpreted as evidence of no effect.14

## It must be safe, it's natural

Patients perceive CAM as natural, safe and effective. There can be little argument with the statements about overall effectiveness in chronic illness; by and large CAM does work. While there may be interactions between anticoagulants, the contraceptive pill and herbal remedies, the acute medical wards are not filled with patients suffering from adverse reactions to herbs, acupuncture and homeopathy. Safety is an issue and natural does not mean safe, but it is an issue that is exaggerated by those opposed to CAM. Complications with CAM are rare compared with the risks of conventional medicine. There may be as many as 784,000 deaths annually in the US from adverse drug reactions to conventional medicine. <sup>15,16</sup>

The wise physician looks at illness from the patients perspective and ensures that the physician 'understands' the patients illness. Patients have never asked me for a placebo. They have always implicitly asked my advice about treatments that might work with a degree of expectation that this approval might provide an answer to their problems. It seems that the perception of how a patient views 'what works?' and 'what is safe?' is different to the physicians. Telling a patient who obviously improved with homeopathy that their treatment does not work is a rapid route to closing down communication and indicates a failure to understand the concepts that surround clinical improvement for chronic benign illness. Homeopathy may or may not work better than placebo, but it may certainly be working for the patient in that instance; that is their truth and their perspective. To deny them their view of their health and their well-being with an apparently effective treatment might be considered misplaced.

## Will we ever know more?

It is remarkable that CAM has any significant evidence base. Although 15–20% of UK citizens use complementary medicine

each year<sup>7,17</sup> only 0.008% of research expenditure is devoted to this area.<sup>18</sup> Perhaps the quality of CAM research is so poor that many university-initiated research submissions are turned down by grant-giving bodies; there may be no university research infrastructure; there may be few research applications; funding bodies may not understand CAM research; or perhaps good applications remain unfunded because they are not considered a priority. The public certainly see it as an important issue and in this country they fund a large proportion of research. Academic departments for CAM in UK medical schools and universities as a whole are rare and suggest that the medical establishment has little real interest in this area.

Given this institutional bias it is surprising that the quality of publications within CAM has been so high. Our recent response to Derry *et al*'s review of acupuncture contains much rigorous and high quality science from acupuncture research and includes articles published in high impact journals. <sup>19–26</sup> This is a remarkable achievement given the lack of structure and funding that exists within acupuncture research. Similarly with homeopathy, the quality of the articles in Shang *et al*'s review was more rigorous for homeopathy then for conventional medicine. <sup>27</sup>

Even with the evidence base that currently exists for CAM treatments, there is little or no capacity for the NHS to implement evidenced-based treatments that involve these types of interventions. There are no policies that allow for the provision of acupuncture as an anti-emetic, either postoperatively or in conjunction with chemotherapy, in spite of the good evidence available. Even when evidence is available and promoted by unbiased individuals little is done to effect change thus providing yet more evidence of systematic institutional bias.

#### Politics and medicine do not mix

'Top docs slam CAM' is a wonderful example of muddling science and public policy.<sup>29</sup> The thirteen authors seem to have taken it upon themselves to speak for the medical profession. All of us would support the provision of evidence-based medications such as trastuzumab (Herceptin) in the treatment of breast cancer. The essence of this debate, however, was around the provision of CAM through the NHS for patients with cancer. It is interesting to note that one of the largest sources of referrals to the Royal London Homeopathic Hospital, the major 'target for the "top docs", are the oncologists from the same trust. The expense, while important to the hospital, is a minute fraction of the potential expenditure by the same trust for Herceptin. Saving on homeopathy would not result in the provision of appropriate funding for the evidence-based conventional treatment for cancer. All of us, of course, want the best available treatment for patients with life-threatening illness. The debate is really about provision of evidence-based treatments on the NHS, not CAM. These initiatives are poorly thought through: at worst they create an environment where patients feel that their doctors do not value their own views about health and well-being, particularly when it relates to the use of CAM. Indeed more than half the cancer patients in this country do not tell their conventional physicians that they are taking

complementary medicines.<sup>30</sup> We thus expose our patients to misunderstanding and the risk of drug interactions through a publicly stated negative view of CAM and the subsequent collision of different realities between patient and physician. If we approach CAM from the patients' perspective we can minimise such risks to their care rather than blame them for withholding information. We should embrace increasing patient empowerment as it is only through such mechanisms that we will be able to tackle enormous health problems such as diabetes, drug addiction and obesity. We can only do this by helping patients to manage their own health and take responsibility for their own well-being and, as such, we in conventional healthcare could learn from those who use CAM.

#### Conclusion

From a patient-centred viewpoint, CAM appears to be succeeding well with a large self-selected group of people who seem to be empowered and motivated to look after themselves. Conventional physicians can not force people to believe that CAM is of no value if the evidence of the patients own experiences argues to the contrary. CAM offers a clinical challenge within the research agenda. It questions implicit assumptions within medicine and may in the end tell us a great deal about how to manage patient expectation, empowerment, education and the process of self healing which in turn could be of enormous value in the management of chronic benign illness. Surely, for maximum patient benefit, we want the best of both worlds especially if they could be integrated to achieve a patient-centred outcome which is greater than the sum of the individual parts.

# References

- Wonderling D. Acupuncture in mainstream health care. BMJ 2006; 333:611–2.
- 2 Derry CJ, Derry S, McQuay HJ, Moore RA. Systematic review of systematic reviews of acupuncture published 1996–2005. *Clin Med* 2006;6:381–6.
- 3 Beecher H. The powerful placebo. JAMA 1955;159:1602-6.
- 4 Moseley JB, O'Malley K, Petersen NJ et al. A controlled trial of arthroscopic surgery for osteoarthritis of the knee. N Eng J Med 2002;347:81–8.
- 5 Bishop FL, Yardley L, Lewith GT. Why do people use different forms of complementary medicine? Multivariate associations between treatment and illness beliefs and complementary medicine use. *Psychol Health* 2006;21:683–98.
- 6 Eisenberg DM, Davis RB, Ettner SL. Trends in alternative medicine use in the United States. *JAMA* 1998;280:246–52.
- 7 Thomas K, Coleman P, Nicholl P. Trends in access to complementary or alternative medicines via primary care in England: 1995–2001. Results from a follow-up national survey. Fam Pract 2003;20:575–7.
- 8 Moore J, Phipps K, Marcer D, Lewith GT. Why do people seek treatment by alternative medicine? *BMJ* 1985;290:28–9.
- 9 Kirsch I. St John's Wort, conventional medication, and placebo: an egregious double standard. Complement Ther Med 2003;11:193–5.

- 10 Sculpher MJ, Buxton MJ. The episode free days as a composite measure of effectiveness. *Pharmacoeconomics* 1993;4:345–52.
- 11 Little P, Rumsby K, Kelly J et al. Information leaflet and antibiotic prescribing strategies for acute lower respiratory tract infection. JAMA 2005;293:3029–35.
- 12 White AR, Ernst E. A systematic review of randomized controlled trials of acupuncture for neck pain. *Rheumatology* 1999;38:143–7.
- 13 Witt CM, Jena S, Brinkhaus B et al. Acupuncture for patients with chronic neck pain. Pain 2006;125:98–106.
- 14 Oxman AD. Checklists for review articles. BMJ 1994;309:648-51.
- 15 Null G, Dean C, Feldman M, Smith D. Modern health care system is the leading cause of death. www.mercola.com/2004/jul/7/healthcare\_death.htm.
- 16 Horton R. The dawn of science. New York Review of Books 2004;51:7–9.
- 17 Thomas K, Nicholl P, Coleman P. Use and expenditure on complementary medicine in England. *Complement Ther Med* 2001; 9:2–11.
- 18 UK Clinical Research Collaboration. UK health research analysis. London: UKCRC, 2006.
- 19 Witt CM, Jena S, Selim D et al. Pragmatic randomized trial evaluating the clinical and economic effectiveness of acupuncture for chronic low back pain. Am J Epidemiol 2006;164:487–96.
- 20 Berman BM, Lao L, Langenberg P et al. Effectiveness of acupuncture as adjunctive therapy in osteoarthritis of the knee. Ann Intern Med 2004;141:901–10.
- 21 Witt C, Brinkhaus B, Jena S *et al.* Acupuncture in patients with osteoarthritis of the knee: a randomised trial. *Lancet* 2005;366:136–43.
- 22 Scharf HP, Mansmann U, Streitberger K et al. Acupuncture and knee osteoarthritis – a three-armed randomized trial. Ann Intern Med 2006:145:12–20.
- 23 White P, Lewith GT, Prescott P, Conway J. Acupuncture versus placebo for the treatment of chronic mechanical neck pain. A randomised, controlled trial. *Ann Intern Med* 2004;141:911–20.
- 24 Vickers AJ, Rees RW, Zollman CE et al. Acupuncture for chronic headache in primary care: large, pragmatic, randomised trial. BMJ 2004;328:744.
- 25 Linde K, Streng A, Jurgens S et al. Acupuncture for patients with migraine: a randomized controlled trial. JAMA 2005;293:2118–25.
- 26 Diener HC, Kronfeld K, Boewing G et al. Efficacy of acupuncture for the prophylaxis of migraine: a multicentre randomised controlled clinical trial. *Lancet Neurology* 2006;5:310–6.
- 27 Shang A, Huwiler-Muntener K, Nartey L et al. Are the clinical effects of homoeopathy placebo effects? Comparative study of placebocontrolled trials of homoeopathy and allopathy. *Lancet* 2005;366: 726–32.
- 28 Lee A, Copas JB, Henmi M, Gin T, Chung RCK. Publication bias affected the estimate of postoperative nausea in an acupoint stimulation systematic review. *J Clin Epidemiol* 2006;59:980–3.
- 29 Top docs slam CAM. Times 23 May 2006.
- 30 Corner J, Yardley L, Maher EJ et al. Report to the Department of Health: Quantitative and qualitative analysis of people using complementary and alternative therapies whilst undergoing cancer treatment. London, September 2005.