

# The future of complementary medicine

In this final article in a series on complementary medicine, **Edzard Ernst** says he is still optimistic for the future

**P**redictions are difficult, particularly about the future. This bon mot, attributed to Mark Twain, aptly highlights the problems I had in writing this article. I may be a decent scientist but I am likely to be a lousy clairvoyant. Notwithstanding this important caveat, I do understand where complementary medicine (CM) stands presently and have some intuition for where it might be going in the future.

Anyone who has recently followed the often lively and sometimes heated debate on CM in the British lay and professional press could be forgiven for being deeply confused. The almost incessant flow of articles depict anything from unsubstantiated optimism to dark pessimism, peppered by statements which can only be described as bewilderingly misleading (see Panel). This snapshot is confirmed by more systematic research into the confusion that surrounds CM. For instance, when my team extracted the recommendations for CM in seven lay books we found that everything seemed to be recommended for anything. For example, 119 CM methods were recommended for asthma, 57 for cystitis and 131 for arthritis. In addition, there was a lack of agreement among the authors.<sup>1</sup>

What seems to emerge from these and many other lines of evidence is the notion



Arthur Tress/Getty

**The future belongs to evidence-based medicine**

## Examples of statements relating to complementary medicines for 2005

Source	Statement	Comment
<i>The Times</i> (12 March)	Dr Ali admits that there is no proof that iridology [diagnosis by examining the iris] works but he says the “anecdotal coincidences are quite fascinating”. For this reason, he advises using iridology	There are numerous, rigorous studies of iridology demonstrating that it has no validity <sup>1</sup> (this is profoundly different from stating “there is no proof”).
<i>The Times</i> (12 March)	The chief executive of the Prevention of Professional Abuse Network, a Government funded charity, . . . says that about 12 per cent of the complaints he receives concern complementary therapists	To date, complementary medicine is largely unregulated in the UK.
<i>The Sunday Times</i> (14 August)	Mike Dixon, chairman of the NHS Alliance, states “we want GPs to realise if a patient has a frozen shoulder you can go down the traditional route . . . alternatively, devil’s claw and acupuncture are also proven to work”	There are no studies of devil’s claw for treating frozen shoulder and it may not be without risks. <sup>1</sup>
<i>The Times</i> (24 August)	A draft [of a report commissioned by Prince Charles] . . . suggests that . . . £480 million could be cut from the prescription drugs bill if 10 per cent of GPs were to offer homoeopathy as an alternative to standard drugs	There are no sound economic data from the UK to substantiate such figures. <sup>1</sup>
<i>The Lancet</i> (27 August)	Now doctors need to be bold and honest with their patients about homoeopathy’s lack of benefit	A meta-analysis of 110 homoeopathic and 110 conventional trials suggested that “the clinical effects of homoeopathy are placebo effects”. <sup>2</sup>
<i>The Guardian</i> (24 August)	Patients have their own system of evidence-based medicine — seeing someone else who has benefited from treatment. [statement made by the General Secretary of the European Council for Classical Homeopathy]	Anecdotes are hardly ever a sound basis for health care decisions.
<i>The Guardian</i> (29 August)	The didactic, paternalistic, authoritative, mystifying mantle has passed [from doctors] to the alternative therapists, and to wear it requires something most doctors are uncomfortable with, dishonesty	The success of some forms of CM may be based mostly on “non-specific” effects.

that, at present, CM is dominated by uncertainty and opinion rather than by clarity and fact. This cannot be good for anyone, least of all the patient.

### The future

One primary aim, therefore, must be to create certainty where uncertainty reigns. This is easier said than done. What we need is fact and not fiction; rationality, not wishful thinking; well-informed not self-appointed experts; as well as single, not double standards.

It would be over-optimistic to expect that all this can be achieved within months or even years. But, in the long run (ie, decades), CM quite simply has no other option than to become evidence-based. Scientific evidence must always be the most important determinant of health care developments. This assumption is not based on a blind belief in science but on common sense. The question is not if double standards will vanish but when they will.

Anyone who interprets this vision as negative (sadly, some people do) misunderstands my meaning. Sorting out the wheat from the chaff is a positive activity and a precondition for the long-term survival of CM. Only if we can show that a given CM intervention for a specific condition does more good than harm will this therapy find a secure place in any future health care system. The integration of unproven or useless treatments into the NHS today would be a sure recipe for making the NHS less effective tomorrow. Eventually — and only seemingly paradoxically — it also would turn out to be a threat to the survival of CM. Evidence-based medicine, I am convinced, is not a threat but an unprecedented

chance for CM to demonstrate its worth: it does not ask how a therapy works (a question that cannot be answered for many CM interventions) it only demands proof that it works.

### Brave new world?

Once the double standards which presently hinder progress have diminished or disappeared, we might approach a situation that, with a considerable degree of optimistic oversimplification, could be described as follows:

- Most forms of CM that generate net benefits are used routinely, eg, on the NHS
- Other types of CM that fail to fulfil this criterion are obsolete and only of historical interest
- CM is not the issue — medicine is not divided into complementary and conventional but into proven and unproven
- All proven interventions are practised taught, regulated, researched, etc, in similar ways

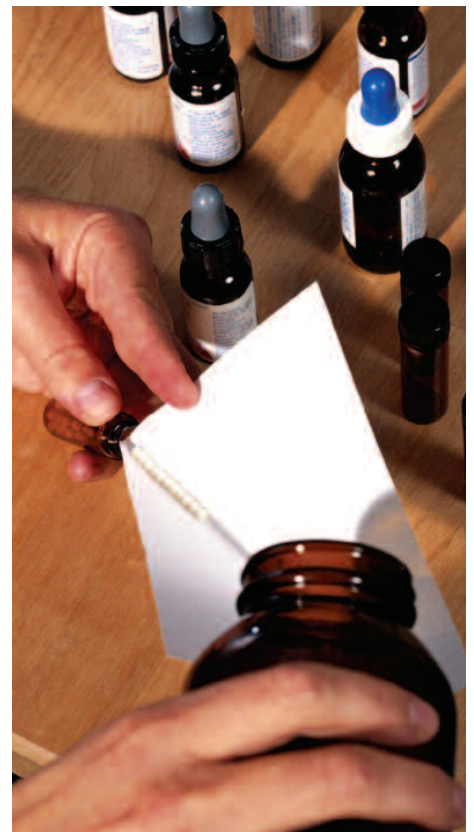
Is this then what proponents of integrated medicine aim for? I do not think so. Integrated medicine seems little more than an elaborate smokescreen to perpetuate double standards.<sup>3</sup> It tends to promote unproven treatments with a view of integrating them into the NHS (see for instance, the third quote in Panel 1).

The future, I am sure, belongs to evidence-based medicine which will employ proven conventional as well as proven complementary treatments and discard unproven interventions, regardless of their origin.

### Postscript

After 12 years of researching CM and being confronted with the sometimes depressing reality, where do I get all this optimism from? Honestly, I do not know.

Has it occurred to me that I might be the wishfully thinking idealist while others are realists? Yes.



**Medicine should not be divided into complementary and conventional but into proven and unproven**

### References

1. Ernst E, Pittler MH, Stevinson C, White AR. The desktop guide to complementary and alternative medicine. Edinburgh; Mosby, 2001.
2. Shang A, Huwiler-Muntener K, Nartey L, Juni P, Dorig S, Sterne JA et al. Are the clinical effects of homoeopathy placebo effects? Comparative study of placebo-controlled trials of homoeopathy and allopathy. *Lancet* 2005;366:726–32.
3. Ernst E. Disentangling integrative medicine. *Mayo Clinic Proceedings* 2004;79:565–6.

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## Society membership groups

The Royal Pharmaceutical Society has established special interest groups for community pharmacists, for veterinary pharmacists, for industrial, regulatory and technical pharmacists, for hospital pharmacists and for pharmacy academic staff. The groups hold meetings to consider topics of interest within their own fields of practice and they provide a source of advice to the Society's Council on specialist matters. Details of the groups can be obtained from the Society. Contact details are given below.

**Community Pharmacists Group** The Community Pharmacists Group, formed at the beginning of 1994, is open to all pharmacists engaged in the practice of community pharmacy. The group committee has the discretion to grant membership to pharmacists who are not engaged in community pharmacy practice but who have a direct involvement or demonstrable interest in that aspect of pharmacy. Contact: Angela Canning, practice division (tel 020 7572 2412; e-mail [angela.canning@rpsgb.org](mailto:angela.canning@rpsgb.org)).

**Veterinary Pharmacists Group** The Veterinary Pharmacists Group is open to all pharmacists who are engaged in, or actively considering engaging in, the preparation or supply of agricultural chemicals, veterinary medicines and allied products. Other pharmacists may be granted membership at the discretion of the group committee. Contact: Lorraine Fearon, practice division (tel 020 7572 2409; e-mail [lorraine.fearon@rpsgb.org](mailto:lorraine.fearon@rpsgb.org)).

**Industrial Pharmacists Group** The Industrial Pharmacists Group is for pharmacists who are engaged in industrial practice, those who act as consultants to industry, those whose work is concerned substantially with questions of industrial pharmaceutical practice and those whose work concerns, or who have an interest in, industrial, regulatory or technical matters affecting pharmacy. Contact: Angela Canning, practice division (tel 020 7572 2412; e-mail [angela.canning@rpsgb.org](mailto:angela.canning@rpsgb.org)).

**Hospital Pharmacists Group** The Hospital Pharmacists Group is for pharmacists who work in NHS, private or armed forces hospitals and those employed by, or acting as consultants to, NHS health authorities, health boards and trusts. Also eligible are pharmacists working in the prison service, community pharmacists seconded to provide a service within a private hospital and other pharmacists whose work is significantly concerned with matters relating to the practice of hospital pharmacy. Contact: Lorraine Fearon, practice division (tel 020 7572 2409; e-mail [lorraine.fearon@rpsgb.org](mailto:lorraine.fearon@rpsgb.org)).

**Academic Pharmacy Group** The Academic Pharmacy Group is open to pharmacists and other academic staff who make a significant contribution to pharmacy teaching and research in a UK school of pharmacy or a recognised pharmacy academic practice unit. Contact: Damian Day, education and registration directorate (tel 020 7572 2215; e-mail [damian.day@rpsgb.org](mailto:damian.day@rpsgb.org)).