

Hunches in complementary medicine

In the third article in our series on complementary medicine, **Edzard Ernst** asks if these treatments should be available to all

If complementary therapies are effective, they must be made available to all. This was the first conclusion drawn by Eric Winer, associate professor of medicine, Harvard Medical School, Boston, when he presented a paper on complementary therapies at the fourth European Breast Cancer Conference in Hamburg earlier this year. Few people would disagree with this statement. In the UK, as in many other countries, complementary medicine is largely private medicine — people usually have to pay for it. The poor often cannot afford it while the rich use it a lot.

One would need an under-developed sense of justice to find this situation acceptable. Health care is not a luxury item and inequality must not be tolerated. However, before we can advocate complementary therapies for all, Professor Winer's statement needs careful analysis. The word "if" is crucial. It alerts us to two important facts:

- Apart from a few exceptions, we currently do not know whether or not complementary therapies are effective¹
- Before we make complementary therapies available to all, we require acceptable proof of efficacy

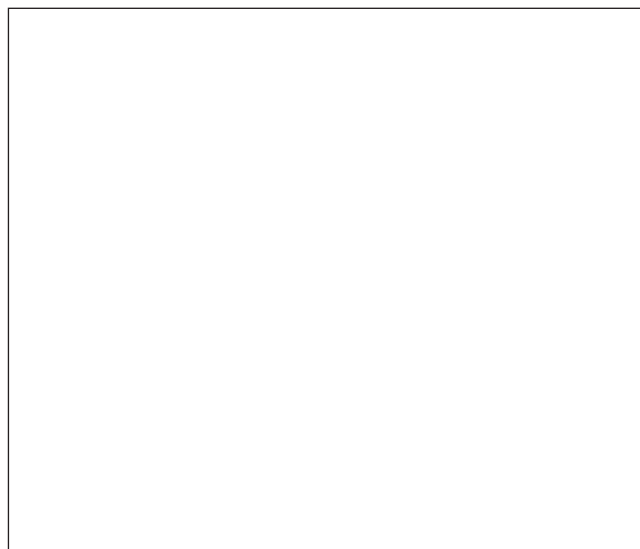
Guesswork is not good enough

Many people have hunches about medical treatments. For example, until recently, doctors had a hunch that hormone replacement therapy was helpful in the prevention of cancer and cardiovascular disease. Although the suggestion was supported by a mountain of data, these data were weak and acceptable proof did not exist. When reliable evidence finally emerged in the form of large randomised clinical trials, many were surprised by how inaccurate their hunch had been. My point is that hunches can be all right but often they are not good enough — conclusive data are indisputably better.

In complementary medicine, "experts" have dozens of hunches; too many, I often think. And too frequently these hunches turn out to be little more than wishful thinking. We need to get it right and do the research. We need to see the evidence before making complementary medicine available to all.

The good news is that for some complementary treatments our hunches are, in fact, being confirmed by science.¹ St John's wort serves as a good example. Even though the evidence is not totally uniform (it never is),

Edzard Ernst, PhD, FRCP (Edin), is professor of complementary medicine at Peninsula Medical School, Universities of Exeter and Plymouth, and editor-in-chief of the journal *Focus on Alternative and Complementary Therapies*



Efficacy of St John's wort for mild to moderate depression has been proved by science

collectively it leaves little doubt that this herbal medicine is effective for mild to moderate depression.²

Could there be risks?

Professor Winer's second conclusion was even more thought-provoking: "If complementary therapies entail a risk, we must do everything to minimise it." This, again, seems common sense but, in practice, the implications are considerable. Currently, we are unsure about the risks of many complementary therapies. In addition, if some do prove to be harmful under certain circumstances, we must discourage people from using them in those situations.

Considering that complementary medicine might represent a risk is viewed as an "act of treason" by many of its proponents. But taking the side of the consumer or of public safety, or simply using common sense,

Drugs shown to interact with St John's wort

Ciclosporine
Digoxin
Fexofenadine
Indinavir
Irinotecan
Omeprazole
Oral contraceptives
Pravastatin
Simvastatin
Tacrolimus
Warfarin

In all cases the plasma level of the drug is reduced.

one must insist on sound data — safety is too important for relying on hunches.

There are several examples of complementary treatments that were once considered entirely safe and only when they were investigated rigorously did evidence emerge that changed our minds. Again, the herbal antidepressant St John's wort can be used as an example. When researchers discovered that it can diminish the effects of many vital prescribed drugs³ (see Panel), proponents of complementary medicine tried their best to trivialise this new evidence, which they considered seriously "bad news".

Eventually they had to bow to irrefutable data.⁴ This meant that dangerous herb-drug interactions could be prevented and patients' lives could be saved. So, in my opinion, this was good news.

St John's wort is also a good example to demonstrate the meaning of Professor Winer's two conclusions in combination. Because this herbal remedy is effective, it should be a therapeutic option for treating mild to moderate depression.² And, yes, it can cause harm when taken together with other drugs. To make it available for all people who feel mildly depressed would, therefore, be a serious mistake. St John's wort should be considered for all who suffer from mild to moderate depression and who do not take medicines that interact with it.

This story has a moral, I think. Uncritical promotion of complementary medicine, as we so often see it these days, is clearly counter-productive. It has the potential to cause harm to patients and, in the long run, even to complementary medicine itself.

References

1. Ernst E, Pittler MH, Stevinson C, White AR. The desktop guide to complementary and alternative medicine. Edinburgh: Mosby; 2001.
2. Linde K, Ramirez G, Mulrow CD, Pauls A, Weidenhammer W, Melchart D. St John's wort for depression — an overview and meta-analysis of randomised clinical trials. *BMJ* 1996;313:253–8.
3. Ernst E. Second thoughts about safety of St John's wort. *Lancet* 1999;345:2014–6.
4. Komoroski BJ, Zhang S, Cai H, Hutzler JM, Frye R, Tracy TS et al. Induction and inhibition of cytochrome P450 by the St John's wort constituent hyperforin in human hepatocyte cultures. *Drug Metabolism and Disposition* 2004; 32:512–8.