

Complementary medicine pharmacist?

In this first article in a series discussing different aspects of complementary medicine, **Edzard Ernst** looks at pharmacists' current attitudes

Complementary medicine (CM) has been defined as “diagnosis, treatment and/or prevention, which complements mainstream medicine by contributing to a common whole, by satisfying a demand not met by orthodoxy or by diversifying the conceptual frameworks of medicine”.¹ The term “alternative medicine” is used in contrast to “conventional health care”. Because clear distinctions are rarely possible, the term “complementary and alternative medicine” (CAM) is often also used.

At the last count (2000/2001), about 20 per cent of the UK general population had used some type of CM within the past year² and 39 per cent of British general medical practices provided access to CM.³ These figures appear to be growing rapidly. In Scotland, for instance, usage increased from 29 per cent in 1993 to 41 per cent in 1999.⁴ Moreover, we should note that these figures pertain to the general public. In patient populations they are significantly higher, often close to 100 per cent.^{5,6}

The reasons for this remarkable popularity are complex. A patient with cancer may turn to CM in desperation, while a person suffering with arthritis might do so to avoid the adverse effects of non-steroidal anti-inflammatory drugs.⁷ Interestingly, pharmacists who use CM state that “maintenance of general health” is their most important reason for doing so.⁸

Other overriding themes include the strong influence of the media that, often uncritically, promote CM.⁹ Not least due to this “undue influence”¹⁰ do the majority of patients believe that “natural” remedies have no side effects.¹¹ Many proponents of CM are wealthy enough to pay for it out of their own pockets.¹² In Britain, 71 per cent of CM users pay privately.¹³ Affluence must, therefore, be a further contributor to CM's popularity.

Should there be CM pharmacists?

Pharmacists frequently offer herbal remedies, homoeopathic drugs, aromatherapy oils and flower remedies to their trusting customers. One study, conducted in 1998, found that 99 per cent of UK community pharmacists work in pharmacies that sell at least one type of complementary medicine.¹⁴ Of these pharmacies, 59 per cent stocked homoeopathic remedies and 58 per cent sold herbal medicines.¹⁵ In the US, about 73 per cent of pharmacists indicated that their pharmacy carries herbal products.¹⁶

Most patients are reluctant to tell their doctor about their use of CM^{17,18} and it is



Use of St John's wort for depression is supported by a positive Cochrane review

pharmacists who are often approached on CM matters. Their responsibility to advise clients responsibly is widely acknowledged.¹⁹ However, this is somewhat at odds with the fact that many pharmacists feel insufficiently informed about CM in general and herbal remedies in particular.^{8,19,20}

In the UK, 80 per cent of pharmacists would like to undertake additional training in herbal medicine.¹⁵ The need for more high quality education is obvious and represents a considerable challenge for the future. Despite a perceived lack of knowledge on the subject, 56 per cent of pharmacists do recommend

Table 1: Positive or tentatively positive Cochrane reviews of herbal medicines

First author	Number of RCTs	Plant	Indication
Wilt	21	<i>Serenoa repens</i> (saw palmetto)	Benign prostatic hyperplasia
Wilt	18	<i>Pygenum africanum</i> (African plum)	Benign prostatic hypertrophy
Pittler	7	<i>Piper methysticum</i> (kava)	Anxiety
Pittler	13	<i>Aesculus hippocantum</i> (horse chestnut)	Chronic venous insufficiency
Little	11	Various herbal medicines	Rheumatoid arthritis
Little	5	Various herbal medicines	Osteoarthritis
Pittler	4	<i>Tanacetum parthenium</i> (feverfew)	Migraine prevention
Pittler	2	<i>Cynara scolylus</i> (artichoke)	Hypercholesterolaemia
Linde	27	<i>Hypericum perforatum</i> (St John's wort)	Depression

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Panel 1: Limitations of survey data on CM

- Questionnaires are often not adequately validated so they may not truly assess what the investigators think they do
- Surveys are frequently not focused and produce more data than are eventually published (selective reporting, "data dredging")
- Surveys are often not representative of an entire population and generalisation can, therefore, be problematic
- Data are "snapshots in time" — once they are published they can already be out of touch with a fast-changing reality
- The data generated through surveys crucially depend on the definition of CM — different definitions will produce different data
- The way a particular question is phrased can importantly influence its answer — investigator bias may, therefore, have unwanted effects
- Most surveys are descriptive and do not test hypotheses
- Data generated by surveys are frequently open to interpretation

herbal or other natural remedies to their customers.²⁰

The five complementary therapies pharmacists perceive as the most useful (in descending order) are:

- Acupuncture
- Food allergy treatments
- Hypnotherapy
- Herbal medicine
- Osteopathy²¹

Such ratings are problematic but, based on the best available evidence, I would have placed herbal medicines at the top of this list. Table 1 on p197 summarises the Cochrane reviews (usually the most reliable evidence regarding efficacy) of herbal medicine, which all produced compellingly positive or at least encouraging evidence for the efficacy of herbal products.

Pharmacists' attitudes to CM

A survey conducted at the 61st congress of the International Pharmaceutical Federation examined pharmacists' attitudes to complemen-

tary medicines. Of the 420 pharmacists from around the world who took part in the survey, 84 per cent reported to have tried some type of CM themselves.⁸ In addition, 37 per cent of UK pharmacists think there is sufficient evidence to offer homoeopathy on the NHS and 75 per cent of them believe herbal remedies should only be available as licensed medicines.¹⁵ Garlic, glucosamine and St John's wort are perceived by US pharmacists as the most efficacious dietary supplements.²² Of 91 pharmacy students from Hong Kong, only one displayed a negative attitude towards traditional Chinese medicine.²³ Perhaps one of the most revealing answers that emerged from such surveys on pharmacists was that when asked to comment on the statement: "The profit potential is high with herbal medicines", 52 per cent of US pharmacists agreed, 9 per cent disagreed and 39 per cent were neutral.¹⁶

Much of the above evidence is based on survey data, which has a range of limitations. Panel 1 lists these as they pertain to CM. Nevertheless the totality of these data highlights, beyond reasonable doubt, that pharmacists do play a central role in the current CM "boom".

Summary

The public's love affair with CM should be channelled wisely and pharmacists are in an excellent position to help achieve this goal. We know that by no means all complementary therapies are free of risks (see Panel 2).²⁴ We also know that health food stores personnel often provide unreliable advice on CM²⁵ and that internet sites can mislead patients.²⁶ If pharmacists were to acquire a sound knowledge in this area, they could constructively contribute to impartially informing their customers about the evidence for or against CM. In my view, this seems to be an ethical imperative.

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Panel 2: Examples of risks associated with CM

Risk

Toxicity
Contamination (eg, with lead)
Adulteration (eg, with corticosteroids)
Infection
Pneumothorax
Stroke

Type of treatment

Herbal medicines (eg, ephedra)
Herbal medicines (eg, Asian herbal mixtures)
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Acupuncture (eg, hepatitis C)
Acupuncture (a needle penetrating a lung)
Chiropractic spinal manipulation (several hundred cases of vertebral carotid artery dissection have been associated with upper spinal manipulation)