

# Why should pharmacy students be interested in complementary and alternative medicine?

Complementary and alternative medicine (CAM) use is growing. Pamela Mason describes what CAM is and how pharmacists can be involved

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Use of complementary and alternative medicine (CAM) has grown enormously during the past decade. Estimates of use vary but a BBC survey in 2000<sup>1</sup> suggested that 20 per cent of the UK general population had used some type of complementary medicine — obtained either from a practitioner or a retail outlet — during the past year. A 2004 Omnibus survey<sup>2</sup> found that 10 per cent of the UK population had received at least one out of a list of 23 CAM therapies from a practitioner during the past year. The picture in the US is similar with the results of a recent government survey<sup>3</sup> showing that 36 per cent of the adult population use some form of CAM.

This growing interest in CAM should be directed wisely. Not all complementary therapies are free from risk, and advice in health food shops and on the internet is not always reliable. As a future pharmacist you will be in an ideal position to offer sound, impartial advice to customers and patients to ensure that they use these therapies appropriately.

## What is CAM?

CAM is described as a group of diverse medical and health care systems, practices and products that are not currently considered to be part of conventional medicine. Though the terms “complementary” and “alternative” are often used together, they are not necessarily synonymous. Complementary

therapies are often defined as therapies that are used alongside conventional medical therapies, while alternative approaches are generally thought of as being used instead of conventional methods. Using tai chi in addition to a prescription medicine for anxiety is an example of the former and seeing a homoeopath or herbalist instead of a GP an example of the latter.

There are hundreds of complementary therapies available, and the US National Institutes of Health (NIH) has categorised them according to five broad types:

- ▶ Healing systems (eg, ayurveda, homoeopathy, traditional Chinese). These are complete sets of theories and practices. A healing system is not just a single practice or remedy — like massage — but many different practices that revolve around a philosophy or lifestyle, such as the power of nature or the presence of energy in the body.
- ▶ Mind-body connections (eg, biofeedback, hypnosis, meditation, relaxation, yoga). These techniques are intended to strengthen the communication between mind and body. CAM practitioners believe these two systems must be in harmony to maintain health.
- ▶ Dietary supplements (eg, vitamins, minerals, fish oil, glucosamine) and herbs (eg, echinacea, St John’s wort).
- ▶ Manipulation and touch (eg, acupuncture, chiropractic, craniosacral

therapy, massage, osteopathy). These methods use human touch to move or manipulate a part of the body.

- ▶ Restoring natural energy forces (eg, acupuncture, magnet therapy, light therapy, reiki). Some CAM practitioners believe an energy force flows through the body. Although this force is invisible, if its flow is blocked or unbalanced, illness can result. These therapies aim to unblock or balance the energy force, and each one achieves this differently.

### How can pharmacists be involved in CAM?

The most obvious involvement for pharmacists in CAM is through the sale of products such as dietary supplements, herbal medicines, homoeopathic remedies and aromatherapy oils. However, as in other areas of pharmacy practice, pharmacists' role could extend beyond products. Pharmacists can be involved in:

- ▶ Providing information on the appropriate use of CAM. This should include not only those products sold in the pharmacy but also those products and therapies received by patients outside of the pharmacy.
- ▶ Asking customers questions about their use of CAM.
- ▶ Being aware of potential adverse reactions and interactions with conventional medicines.

### Providing information

Pharmacists should only provide information on complementary medicines and therapies to the level at which they are trained and competent. The Royal Pharmaceutical Society Code of Ethics makes this quite clear. It states: "The public trusts pharmacists to offer informed advice on treatments and medicines, and the profession expects pharmacists to ensure that they are competent in any area in which such advice is given. Pharmacists providing homoeopathic medicines or other complementary therapies have a professional responsibility:

- ▶ To ensure that stocks of homoeopathic medicines or herbal medicines or other complementary therapies are obtained

from a reputable source of supply

- ▶ Not to recommend any remedy where they have any reason to doubt its safety or quality
- ▶ Only to offer advice on homeopathic or herbal medicines or other complementary therapies or medicines if they have undertaken suitable training or have specialised knowledge."

Pharmacists have a responsibility to ensure that all products they recommend are of appropriate quality. With licensed prescription and over-the-counter medicines this is relatively straightforward since any medicine licensed by the Medicines and Healthcare products Regulatory Agency (MHRA) will have been subject to quality and safety assessments. However, many complementary medicines, such as dietary supplements, herbal medicines and homoeopathic remedies are sold as food supplements. There is no assurance of quality with such products. The active ingredients may not be accurately quantified and there is a risk of adulterants and toxicants, a problem which has been highlighted particularly with ayurvedic and Chinese herbal medicines. The most sensible approach would seem to be to stock and

recommend only those products made by reputable pharmaceutical companies. These should have been subject to appropriate in-house quality measures.

Quality is also an issue in relation to practitioners. Many CAM practitioners are largely unregulated and practise without recognisable training, qualifications, premises or insurance. So far, chiropractors and osteopaths are the only practitioners who are regulated by law, although herbalists and acupuncturists are expected to follow suit soon. The British Register of Complementary Practitioners has a list of practitioners registered according to the different disciplines (see [www.icmedicine.co.uk](http://www.icmedicine.co.uk)), and is currently the best overall guide to appropriately qualified practitioners.

The Society's Code of Ethics states only that pharmacists must not recommend remedies where there is reason to doubt their safety or quality. There is no explicit statement about efficacy. This is a confusing issue for pharmacists in that the evidence base for CAM is quite weak. There are several reasons for this. First, quality research (eg, randomised controlled trials with an adequate number of subjects) is costly to conduct. Whereas a drug company

sponsoring a study can hope to recover its money by patenting and selling a new medicine, most CAM therapies cannot be patented so there is no money in it for the sponsor. This contributes to the poor funding for research. Secondly, many CAM practitioners claim to treat the whole person and therefore use a variety of therapies for patients with what appears to be the same condition. In a typical randomised controlled trial, subjects take one treatment for one condition. Thirdly, in trials of some CAM therapies (eg, acupuncture, massage), it is difficult to have a placebo. Increasingly, however, CAM therapies (particularly food supplements and herbal remedies) are being subject to RCTs, and the evidence base is therefore growing.

### Questions

Questions about CAM should form part of any medication review or response to symptoms in the pharmacy. It is important to be aware that patients may be using CAM in addition to, or instead of, conventional treatments. This is most likely when conventional treatments offer little hope of a cure (eg, in cancer or AIDS), are associated with serious side effects (eg, chemotherapy) or when the condition is not easily managed by conventional medicine (eg, insomnia, back pain).

However CAM therapies may also have adverse effects and may influence the progression of a disease or have implications for the outcome of conventional therapy. Use of CAM may also delay a proper medical diagnosis of an illness or influence adherence to prescribed medication. Patients are often wary of telling health care professionals that they are using CAM, and if pharmacists are to contribute to the wise use of these therapies, they must be non-judgemental in their approach.

### Adverse reactions and interactions

CAM is often thought to be safer than conventional medicine. However, the public needs to be made aware that some therapies, including herbal medicines, acupuncture, chiropractic and osteopathy, are not risk free, although the incidence of adverse effects is low. There

is also a risk of interactions between herbal remedies, food supplements and conventional medicines. The clinical significance of many interactions — which are theoretically possible — is unknown.

Recent studies looking at the numbers of patients taking prescription medicines and also taking supplements and herbal medicines have reported figures of between 20 and 50 per cent. Among these, figures for potential interactions have been found to be as high as 50 per cent, and the possibility of serious interactions at 6 per cent,<sup>4</sup> but the true incidence of interactions in these studies is unknown. However, it is still important to ask about use of such products and consider the potential for such interactions regardless of their seriousness. The yellow card scheme can be used for reporting adverse reactions to complementary medicines, and this will help to improve the evidence base on the risks associated with CAM.

### Conclusion

CAM is rapidly increasing in popularity and as future pharmacists you will have an important role in ensuring that CAM is used wisely. This means providing appropriate information on benefits and risks, being non-judgemental in your approach and asking questions about patients' use of such therapies.

### References

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### Websites

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- British Medical Journal. There is a collection of articles on complementary medicine at: [www.bmj.com/cgi/collection/complementary\\_medicine](http://www.bmj.com/cgi/collection/complementary_medicine)
- Complementary medicine on Medline can be found at: [www.nlm.nih.gov/nccam/camonpubmed.html](http://www.nlm.nih.gov/nccam/camonpubmed.html)
- Herbal Safety News. This site is provided by the Medicines and Healthcare products Regulatory Agency and can be found at: [www.mhra.gov.uk/ourwork/licensingmeds/herbalmeds/herbalsafety.htm](http://www.mhra.gov.uk/ourwork/licensingmeds/herbalmeds/herbalsafety.htm)
- National Center for Complementary and Alternative Medicine. A US-based website which includes information on complementary medicine and clinical trials. [www.nccam.nih.gov](http://www.nccam.nih.gov)
- Natural Medicines Data Base. Provides monographs on herbal medicines and dietary supplements. [www.naturaldatabase.com](http://www.naturaldatabase.com)
- Research Council for Complementary Medicine: [www.rccm.org](http://www.rccm.org)