

CHAPTER 24

Doctors who use complementary and alternative medicine

Shaun Holt holds pharmacy and medicine degrees and is an Adjunct Professor at Victoria University of Wellington where he teaches courses on clinical trials and evidence based natural therapies.

Cite this as Holt S 2013. Doctors who use complementary and alternative medicine. Chapter 24 in St George IM (ed.). Cole's medical practice in New Zealand, 12th edition. Medical Council of New Zealand, Wellington.

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What is complementary and alternative medicine (CAM)?

Treatments that are not commonly used in mainstream medical practice have been given a number of names over the years, from quackery to unproven to unorthodox to unconventional. The most widely used current description is “complementary and alternative therapies and medicines”, shortened to CAM. Complementary therapies are health care and medical practices that work *alongside* traditional medical treatments, but are not currently an integral part of conventional medicine, whereas alternative therapies are used *instead of* standard medical treatments.

There are hundreds of CAM therapies and The National Centre for Complementary and Alternative Medicine, a United States government agency that carries out scientific research on complementary therapies, classifies them into five categories:

- *Alternative medical systems* have a completely different theory and practice to the conventional “Western” way of understanding and treating medical problems. Some of these systems were developed in the Western world, such as homeopathy, but most originate in other parts of the world, particularly in the East, such as acupuncture. In addition to homeopathy and acupuncture, they include ayurvedic medicine from India and traditional Chinese medicine.
- *Manipulative and body based systems* are methods of treating a person by way of moving part(s) of the body, or by using substances on/in the body for their physical properties (for example water, heat or oxygen) rather than for their pharmacological properties. Such systems include acupressure, Alexander technique, chiropractic, colonic irrigation, craniosacral massage, cupping, ear candling, Feldenkrais technique, hyperbaric oxygen, iridology, massage therapy, osteopathy and reflexology.
- *Mind body interventions* harness the undoubtedly powerful but currently poorly understood power of the mind to influence a person’s physical health. A good example of such an intervention would be the placebo effect, which can lead to improvements in 90 percent of people with some medical conditions. Other examples, some of which have proven benefits while others do not, include aromatherapy, art therapy, biofeedback, hypnosis, hypnotherapy, meditation, music therapy, psychic surgery, qigong, reiki, shiatsu, spiritual healing, t’ai chi and yoga.
- *Biologically based therapies* fit most closely with modern medical practice in Western countries, whereby medicines are often taken to relieve symptoms or even cure medical conditions. They include herbs, supplements, vitamins and diets, which are considered to be complementary therapies if they have not been fully accepted by the majority of traditional health care professionals.
- *Energy therapies* aim to harness invisible energy fields in order to improve health. There is a wide range of credibility in this category, ranging from measurable, proven energy therapies such as transcutaneous electrical nerve stimulation (TENS), through to implausible and unproven ones such as crystal healing and magnetic therapy.

CAM use is increasing and there are now more visits to CAM practitioners than there are to primary care or family doctors in many developed countries. An interesting aspect of CAM use is that it is almost totally patient driven. Proponents and consumers of CAM will often say that they are worried about the safety of conventional medicines and medical procedures, that the doctor patient relationship is unsatisfactory for them in terms of the perceived power disparity, and that traditional Western medicine treats them as a disease to be cured rather than a person to be healed.

The vast majority of New Zealanders take dietary supplements or use CAM.^{1,2} Despite this, health professionals receive little if any training on this subject and often the patient may know more than the health professional they are consulting with. Studies investigating the knowledge of health care professionals show that they mostly rate their knowledge in this area as inadequate and are not confident in answering patient enquiries, but they do want to learn more.³

How CAM can harm

There is a widespread misconception that CAM is safe because it is natural. Not only is this not true, but CAM can harm in a number of ways that may not be immediately apparent.

1. Direct harm

Adverse events from CAM can range from a trivial stomach upset from a herbal preparation to serious injury, disfigurement or even death. Many of the drugs that are used in everyday medical practice are of course extracts from plants themselves. Many more are closely related to plant extracts — in other words, natural products can be every bit as powerful (and harmful) as prescription medications. CAM proponents argue that severe side effects are rare and to a large degree they are correct. However, it is also likely that side effects are more common than is claimed, because unlike for conventional medicines, there are no good systems in place to monitor side effects from CAM therapies.

2. Indirect harm

- (i) Delay. In general terms, the earlier a disease is detected and treated the better the outcomes will be. Delays in using conventional, proven, effective treatments, due to decisions to try CAM therapies first, can lead to much worse outcomes including death.
- (ii) Substitution. A real danger arises when CAM is used as an alternative to proven medical treatments. This can lead to delays in seeking medical treatment, as described above, or even not seeking medical treatment at all. Although homeopathy, for example, can not cause any direct harm, harm can result in other ways, including if it used as a substitute for proven medical treatments or if it delays medical therapy.

3. Bad advice

Most CAM practitioners are not trained health care professionals. They have little or no training in anatomy, physiology, pharmacology, microbiology and many other areas of knowledge that health care professionals must have in order to give sound advice, diagnose and treat patients effectively. Without this training many CAM practitioners give out bad advice which can of course be dangerous in itself or cause harm in other ways. There is a whole spectrum of advice quality, from excellent to appalling, and the problem for laypeople is knowing which advice can be relied on.

4. Psychological harm

People with cancer and other serious diseases are often emotionally and psychologically very vulnerable. Extravagant claims for unproven therapies can give a patient false hope. Denial is one of the stages in the grief process that occurs with a diagnosis of a serious disease. Bad advice leading to false hope, from misguided or deliberately dishonest CAM practitioners, reinforces this denial stage, interfering with the natural process of grief (which leads to the acceptance phase) and therefore causes psychological harm.

5. Financial harm

It has been estimated that around US \$1 billion per year is wasted on CAM therapies for cancer that do not work, around the same amount that is spent each year on cancer research. Any money spent on a CAM therapy that does not work is wasted and there are many sad reports of people who, not wanting to leave any stone unturned, have spent all their savings or even lost their family home, trying a variety of expensive and ineffective treatments.

Evidence based CAM

Most CAM therapies are not supported by robust clinical trial data, but instead by some or all of: word of mouth, anecdote, inaccurate media reports and exaggerated and inaccurate marketing claims. There are three main reasons why people may think that a treatment, CAM or orthodox, works when in fact it does not.

1. Placebo effect — this is a beneficial effect, an improvement in health or a reduction in symptoms, that occurs when a treatment is administered but is not due to the treatment itself, but instead, is a result of complex mind body interactions whereby the expectation of a benefit from a treatment actually results in real benefits. Depending on the condition, up to 90 percent of patients can have an improvement in their health when taking a placebo, which is usually an inert substance such as a sugar pill that looks like a real treatment. Up to 30–40 percent improvements are common in clinical trials in participants who are in the placebo group.

2. Natural history — the role of the natural history of the illness when looking at whether a treatment works is often overlooked. Natural history refers to the likely course of events of an illness if it is not treated. For example, symptoms of the common cold will generally last 3–4 days and a cold sore will generally last 5–6 days without specific treatments. In other words, many illnesses will simply get better by themselves over time as the body heals itself.

3. Additional measures — often when a person is ill they will do several things to get better at the same time, but they may attribute the recovery to a single therapy. For example, a person with chronic fatigue syndrome may think that they got better because of the homeopathic remedy that they used, whereas the real reason (if not placebo effect or natural history) could be that they also changed their diet, started doing more exercise or some other lifestyle change.

Controlled clinical trials factor in these and other sources of error as, although they will still be present to some degree, they will be present to around the same level in both the active and control groups, and therefore the difference between the two groups will be due to the treatment under investigation. This of course applies equally to the investigation of orthodox medical treatments as well as CAM.

The New England Journal of Medicine summarised the requirement for CAM therapies to be supported by robust research as follows:

*There cannot be two kinds of medicine — conventional and alternative. There is only medicine that has been adequately tested and medicine that has not, medicine that works and medicine that may or may not work. ... But assertions, speculation and testimonials do not substitute for evidence. Alternative treatments should be subjected to scientific testing no less rigorous than that required for conventional treatments.*⁴

Some recommended sources of reliable information on CAM are listed in the resources section.

Medicolegal guidance

The Medical Council issued an updated statement on CAM in March 2011 and it is strongly recommended that doctors who recommend or practise CAM therapies are familiar with the contents.⁵ The statement was written to inform doctors of the standards of practice that are expected of them by the Council should they choose to practise CAM or if they have patients who use CAM. It may be used by the Health Practitioner's Disciplinary Tribunal, the Council and the Health and Disability Commissioner as a standard by which a doctor's conduct is measured.

The key points are that when CAM therapies have demonstrated benefits for the patient and have minimal risks, and patients have made an informed choice and given their informed consent, the Council does not oppose their use, and that no doctor:

...will be found guilty of a disciplinary offence under the Health Practitioners Competence Assurance Act 2003 merely because that person has adopted and practised any theory of medicine or healing if, in doing so, the person has acted honestly and in good faith.

Therefore the key issue is the strength, if any, of research evidence that supports the practice, as this underpins whether it has “demonstrated benefits”.

Previous decisions by the Medical Practitioners Disciplinary Tribunal also provide important guidance as to what is expected of doctors in this regards. For example decision 02/89D stated:

*Whilst section 109(4) recognises that a practitioner is not to be found guilty “merely” because he has adopted or practised a theory of medicine or healing, it does not follow that his adoption and practice of any theory of medicine or healing is by itself a sufficient answer.*⁶

In another case the Tribunal stated, among other things:

Where a registered medical practitioner practises “alternative or complementary” medicine, there is an onus on that practitioner to inform the patient not only of the nature of the alternative treatment offered but also the extent to which it is consistent with conventional theories of medicine and has, or does not have, the support of the majority of practitioners. The Tribunal recognises that persons who suffer from chronic complaints or conditions for which no simple cure is available are often willing to undergo any treatment which is proffered as a cure. As such, they are more readily exploited. The faith which such persons place in practitioners offering alternative remedies largely depends on the credibility with which such practitioners present themselves. Where such remedies are offered by a registered medical practitioner, it is difficult to escape the conclusion that the patient derives considerable assurance from the fact that the practitioner is so registered. It follows, therefore, that a registered medical practitioner cannot discharge his or her obligation to treat the patient to the acceptable and recognised standard simply by claiming the particular treatment was “alternative or complementary” medicine.⁷

In assessing complaints or concerns related to the practice of a doctor who has adopted or advocated CAM investigations or treatments, the Medical Council will apply the standards that have been developed for reviewing the competence of any practitioner. In the case of CAM practices it will particularly consider the above comments.

The Health Practitioners Disciplinary Tribunal will also consider whether:

- the methodology promoted for a diagnosis is reliable
- the risk/benefit ratio for any treatment is acceptable
- the treatment is extrapolated from reliable scientific evidence or is supported by a credible scientific rationale
- there is a reasonable expectation that the treatment will result in a favorable outcome compared with placebo
- the practitioner is excessively compensated for the service (ie, is there any suggestion of exploitation?)
- informed consent has been adequately documented in the medical record.

In assessing the performance of a doctor practising CAM, the Council will not attempt to evaluate the alternative therapy itself, although the critical appraisal skills of doctors may be of concern. The usual domains of competence are assessed, rather than the principles of CAM practice.

Resources

Web

Scientific evidence for popular supplements —

<http://www.informationisbeautiful.net/play/snake-oil-supplements>

Mayo Clinic — <http://www.mayoclinic.com/health/alternative-medicine/PN00001>

National Centre for Complementary and Alternative Medicine (NCCAM) —

<http://www.nccam.nih.gov>

Books

Ernst E et al 2008. Oxford handbook of complementary medicine (Oxford Medical Handbooks). ISBN 10: 0199206775

Hoffman R, Fox B 2008. Alternative cures that really work. ISBN 10: 1594864535

Holt S 2010. Complementary therapies for cancer. ISBN: 9781877517211

Journals

Focus on alternative and complementary therapies (FACT) —

[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)2042-7166](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)2042-7166)

Complementary therapies in medicine —

http://www.elsevier.com/wps/find/journaldescription.cws_home/623020/description

New Zealand Training course

8 hour RNZCGP CME approved DVD course — <http://cammasterclass.weebly.com>

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3. Holt S, Gilbey A 2011. A survey of New Zealand general practitioners' understanding of CAM therapies and recommendations they make. Focus on Alternative and Complementary Therapies (June): 189–90.
4. Angell M, Kassirer JP 1998. Alternative Medicine — the risks of untested and unregulated remedies. N Eng J Med; 339: 839–41.
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