# What is Complementary Medicine?

Catherine Zollman

## **Definitions and terms**

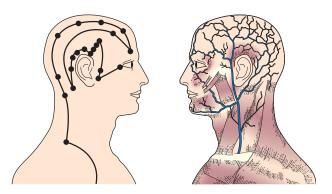
Complementary medicine refers to a group of therapeutic and diagnostic disciplines that exist largely outside the institutions where conventional health care is taught and provided. Complementary medicine is an increasing feature of healthcare practice, but considerable confusion remains about what exactly it is and what position the disciplines included under this term should hold in relation to conventional medicine.

In the 1970s and 1980s these disciplines were mainly provided as an alternative to conventional health care and hence became known collectively as 'alternative medicine'. The name 'complementary medicine' developed as the two systems began to be used alongside (to 'complement') each other. Over the years, 'complementary' has changed from describing this relationship between unconventional healthcare disciplines and conventional care to defining the group of disciplines itself. Some authorities use the term 'unconventional medicine' synonymously. More recently the terms 'integrative' and 'integrated' medicine have been used to describe the delivery of complementary therapies within conventional healthcare settings. This changing and overlapping terminology may explain some of the confusion that surrounds the subject.

We use the term complementary medicine to describe healthcare practices such as those listed in Box 1.1. We use it synonymously with the terms 'complementary therapies' and 'complementary and alternative medicine' found in other texts, according to the definition used by the Cochrane Collaboration.

#### Which disciplines are complementary?

Our list is not exhaustive, and new branches of established disciplines are continually being developed. Also, what is thought to be conventional varies between countries and changes over time. The boundary between complementary and conventional medicine is therefore blurred and constantly shifting. For example, although osteopathy and chiropractic are still predominantly practised outside the NHS in Britain, they are subject to statutory regulation and included as part of standard care in guidelines from conventional bodies such as the Royal College of General Practitioners.



**Figure 1.1** Some important superficial features of the head and neck from an acupuncture and a conventional medical perspective.

#### Box 1.1 Common complementary therapies

#### Acupressure

- Acupuncture\*
- Alexander technique
- Anthroposophic medicine
- Applied kinesiology
- Aromatherapy\*
- Autogenic training
- Ayurveda
- Chiropractic\*
- Cranial osteopathy
- Environmental medicine
- Healing\*
- Herbal medicine\*

\*Considered in detail in later chapters.

- Homeopathy\*
- Hypnosis\*
- Massage\*
- Meditation\*
- Naturopathy
- Nutritional therapy\*
- Osteopathy\*
- Reflexology\*
- Reiki
- Relaxation and visualization\*
- Shiatsu
- Therapeutic touch
- Yoga\*

Box 1.2 Definition of complementary medicine adopted by the Cochrane Collaboration Complementary Medicine Field

Complementary medicine includes all such practices and ideas which are outside the domain of conventional medicine in several countries and defined by their users as preventing or treating illness, or promoting health and well being. These practices complement mainstream medicine by (1) contributing to a common whole, (2) satisfying a demand not met by conventional practices, and (3) diversifying the conceptual framework of medicine. The wide range of disciplines classified as complementary medicine makes it difficult to find defining criteria that are common to all. Many of the assumptions made about complementary medicine are oversimplistic generalizations.

## **Organizational structure**

#### **Historical development**

Since the inception of the NHS, the public sector has supported training, regulation, research, and practice in conventional health care. The development of complementary medicine has taken place largely in the private sector. Until recently, most complementary practitioners trained in small, privately funded colleges and then worked independently in relative isolation from other practitioners. An increasing number of complementary therapies are now taught at degree and masters level in universities.

#### Research

More complementary medical research exists than is commonly recognized - the Cochrane Library lists over 6000 randomized trials and around 150 Cochrane reviews of complementary and alternative medicine (CAM) have been published, but the field is still poorly researched compared with conventional medicine. There are several reasons for this, some of which also apply to conventional disciplines like surgery, occupational therapy, and speech therapy (see Box 1.4). However, complementary practitioners are increasingly aware of the value of research, and many complementary therapy training courses now include research skills. Conventional sources of funding, such as the NHS research and development programme and major cancer charities, have become more open to complementary researchers. Programmes to build the capacity for research into complementary therapies have been introduced into several UK universities as a result of recommendations in the House of Lords Report, 2000. However funding for research in complementary medicine is still relatively small scale.

#### Training

Although complementary practitioners (other than osteopaths and chiropractors) can legally practise without any training whatsoever, most have completed some further education in their chosen discipline.

There is great variation in the many training institutions. For the major therapies – osteopathy, chiropractic, acupuncture, herbal medicine, and homeopathy – these tend to be highly developed. Some are delivered within universities, with degree level exams and external assessment. Others, particularly those teaching less invasive therapies such as reflexology and aromatherapy, tend to be small and isolated schools that determine curricula internally and have idiosyncratic assessment procedures. In some courses direct clinical contact is limited. Some are not recognized by the main registering bodies in the relevant discipline. Most complementary practitioners finance their training without state support (unless they are training within a university at undergraduate level), and many train part time over several years. National occupational standards (NOSs), which set competence expectations for

## Box 1.3 Unhelpful assumptions about complementary medicine

#### Non-statutory – not provided by the NHS

- Complementary medicine is increasingly available on the NHS
- Over 40% of Primary Care Trusts (PCTs) provide access to complementary medicine for NHS patients
- Most cancer centres in the UK offer some form of complementary medicine

#### Unregulated - therapists not regulated by state legislation

- Osteopaths and chiropractors are state registered and regulated and other disciplines are working towards statutory regulation and have well-established voluntary self-regulation
- A substantial amount of complementary medicine is delivered by conventional health professionals

#### Unconventional – not taught in medical schools

- Disciplines such as nursing, physiotherapy, and chiropody are also not taught in medical schools
- A large number of complementary therapies are taught in healthcare faculties within universities
- Some medical schools have a complementary medicine component as part of the curriculum

#### Natural

- Good conventional medicine also involves rehabilitation with, say, rest, exercise, or diet
- Complementary medicine may involve unnatural practices such as injecting mistletoe extract or inserting needles into the skin

#### Holistic - treats the whole person

- Many conventional healthcare professionals work in a holistic manner
- Complementary therapists can be narrow and reductionist in their approach
- Holism relates more to the outlook of the practitioner than to the type of medicine practised

#### Alternative

- Implies use instead of conventional treatment
- Most users of complementary medicine seem not to have abandoned conventional medicine

#### Unproved

- There is a growing body of evidence that certain complementary therapies are effective in certain clinical conditions
- Many conventional healthcare practices are not supported by the results of controlled clinical trials

#### Irrational – no scientific basis

• Scientific research is starting to uncover the mechanisms of some complementary therapies, such as acupuncture and hypnosis

#### Harmless

- There are reports of serious adverse effects associated with using complementary medicine
- Adverse effects may be due to the specific therapy (for example a herbal product), to a non-specific effect of using complementary medicine (such as stopping a beneficial conventional medication), to an interaction with another treatment, or to the competence of the practitioner

#### Box 1.4 Factors limiting research in complementary medicine

- Lack of research skills complementary practitioners have traditionally had no training in critical evaluation of existing research or practical research skills. However, research now features on some training programmes and a number of practitioners now study to masters and PhD level
- Lack of an academic infrastructure most CAM practitioners have limited access to computer and library facilities, statistical support, academic supervision, and university research grants. However, a number of academic centres of excellence in CAM research are developing and this will support research capacity in CAM
- Insufficient patient numbers individual list sizes are small, and most practitioners have no disease 'specialty' and therefore see very small numbers of patients with the same clinical condition. Recruiting patients into studies is difficult in private practice
- Difficulty undertaking and interpreting systematic reviews poor quality studies make interpretation of results difficult. Many different types of treatment exist within each complementary discipline (for example, formula, individualized, electro, laser, and auricular acupuncture)
- Methodological issues responses to treatment are unpredictable and individual, and treatment is usually not standardized. Designing appropriate controls for some complementary therapies (such as acupuncture or manipulation) is difficult, as is blinding patients to treatment allocation. Allowing for the role of the therapeutic relationship also creates problems

state-run courses, describe best practice (and are used in training and recruitment). NOSs have already been published for aromatherapy, herbal medicine, homeopathy, hypnotherapy, kinesiology, reflexology, nutritional therapy, and therapeutic massage, with draft standards available for Alexander technique, spiritual healing, acupuncture, and reiki. Standards for Bowen technique, craniosacral therapy, and yoga therapy are in development.

Conventional healthcare practitioners such as nurses and doctors have their own separate training courses in some disciplines, including homeopathy and acupuncture.

#### Regulation

Apart from osteopaths and chiropractors, complementary practitioners are not obliged to join any official register before setting up in practice. However, many practitioners are now members of appropriate registering or accrediting bodies. There are between 150 and 300 such organizations, with varying membership size and professional standards. Some complementary disciplines may have as many as 50 registering organizations, all with different criteria and standards.

Recognizing that this situation is unsatisfactory, many disciplines are taking steps to become unified under one regulatory body per discipline. Such bodies should, as a minimum, have published criteria for entry, established codes of conduct, complaints procedures, and disciplinary sanctions, and should require members to be fully insured. The Prince of Wales's Foundation for Integrated Healthcare is working with a number of comple-

## Box 1.5 Complementary medicine professions working towards self-regulation

#### Professions working towards statutory self-regulation

There is no single governing body but working parties with representatives from a range of regulatory organizations report to the Department of Health.

- Acupuncture: Acupuncture Stakeholders Group
- Herbal medicine: Herbal Medicine Working Group
- Chinese medicine: Chinese Medicine Working Group

#### Professions working towards voluntary self-regulation by a single governing body

- Alexander technique: Alexander Technique Voluntary Self Regulation Group
- Aromatherapy: Aromatherapy Consortium
- Bowen therapy: Bowen Forum
- Craniosacral therapy: Cranial Forum
- Homeopathy:\* Council of Organisations Registering Homeopaths
- Massage therapy: General Council for Massage Therapy
- Nutritional therapy: Nutritional Therapy Council
- Reflexology: Reflexology Forum
- Reiki: Reiki Regulatory Working Group
- Shiatsu: General Shiatsu Council
- Spiritual healing: UK Healers
- Yoga therapy: British Council for Yoga Therapy

\*Statutorily regulated health professionals who also practice homeopathy may become members of the Faculty of Homeopathy. Modified from Prince of Wales's Foundation for Integrated Healthcare (2005).



Figure 1.2 The General Osteopathic Council and General Chiropractic Council have been established by Acts of Parliament to regulate their respective disciplines. Reproduced with permission of BMJ/Ulrike Preuss.

mentary healthcare professions who are developing voluntary self-regulatory structures. The work is funded by the Department of Health.

The General Osteopathic Council and General Chiropractic Council have been established by Acts of Parliament and have statutory self-regulatory status and similar powers and functions to those of the General Medical Council. The government has established a joint working party for acupuncture and herbal medicine to progress joint statutory regulation of these professions.

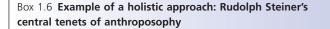
Efficient regulation of the 'less invasive' complementary therapies such as massage or relaxation therapies is also important. However, statutory regulation, with its requirements for parliamentary legislation and expensive bureaucratic procedures, may not be feasible. Legal and ethics experts argue that unified and efficient voluntary self-regulatory bodies that fulfil the minimum standards listed above should be sufficient to safeguard patients. Many disciplines have established, or are working towards, a single regulatory body. It will be some years before even this is achieved across the board. Conventional healthcare professionals practising CAM should either be registered and regulated by one of the CAM regulatory bodies, or, if they are practising under their own professional regulations ('primary regulator'), 'the government has recommended that each statutory health regulator, whose members make significant use of complementary medicine, should develop clear guidelines for members on both competencies and training required for the safe and effective practice of the leading complementary disciplines'.

### Approaches to treatment

The approaches used by different complementary practitioners have some common features. Although they are not shared by all complementary disciplines, and some apply to conventional disciplines as well, understanding them may help to make sense of patients' experiences of complementary medicine.

#### **Holistic approach**

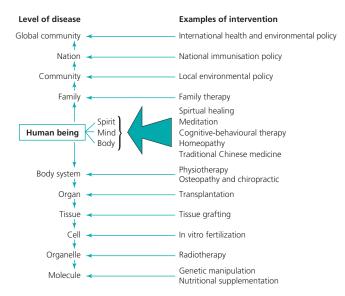
Many, but not all, complementary practitioners have a multifactorial and multilevel view of human illness. Disease is thought to result from disturbances at a combination of physical,



- Each individual is unique
- Scientific, artistic, and spiritual insights may need to be applied together to restore health
- Life has meaning and purpose the loss of this sense may lead to a deterioration in health
- Illness may provide opportunities for positive change and a new balance in our lives

psychological, social, and spiritual levels. The body's capacity for self-repair, given appropriate conditions, is emphasized.

According to most complementary practitioners, the purpose of therapeutic intervention is to restore balance and facilitate the body's own healing responses rather than to target individual disease processes or stop troublesome symptoms. They may therefore prescribe a package of care, which could include modification of lifestyle, dietary change, and exercise as well as a specific treatment.



**Figure 1.3** There are multiple levels of disease and, therefore, multiple levels at which therapeutic interventions can be made.

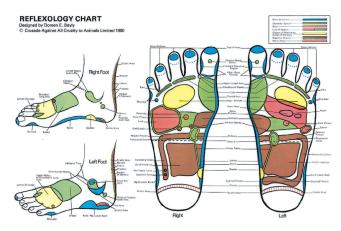
Thus, a medical herbalist may give counselling, an exercise regimen, guidance on breathing and relaxation, dietary advice, and a herbal prescription.

It should be stressed that this holistic approach is not unique to complementary practice. Good conventional general practice follows similar principles.

#### Use of unfamiliar terms and ideas

Complementary practitioners often use terms and ideas that are not easily translated into Western scientific language. For example, neither the reflex zones manipulated in reflexology nor the 'Qi energy' fundamental to traditional Chinese medicine have any known anatomical or physiological correlates.

Sometimes familiar terms are used but with a different meaning: acupuncturists may talk of 'taking the pulse', but they will be assessing characteristics such as 'wiriness' or 'slipperiness' which



**Figure 1.4** In reflexology, areas of the foot are believed to correspond to the organs or structures of the body. Reproduced with permission of the International Institute of Reflexology and the Crusade Against All Cruelty to Animals.



**Figure 1.5** Acupuncturists may 'take a patient's pulse', but they assess characteristics such as 'wiriness' or 'slipperiness'. Reproduced with permission of Rex/SIPA Press.

have no Western equivalent. It is important not to interpret terms used in complementary medicine too literally and to understand that they are sometimes used metaphorically or as a shorthand for signs, symptoms, and syndromes that are not recognized in conventional medicine.

#### Different categorization of illness

Complementary and conventional practitioners often have very different methods of assessing and diagnosing patients. Thus, a patient's condition may be described as 'deficient liver Qi' by a traditional acupuncturist, as a 'pulsatilla constitution' by a homeopath, and as a 'peptic ulcer' by a conventional doctor. In each case the way the problem is diagnosed determines the treatment given.

Confusingly, there is little correlation between the different diagnostic systems: some patients with deficient liver Qi do not have ulcers, and some ulcer patients do not have deficient liver Qi but another traditional Chinese diagnosis. This causes problems when comparing complementary and conventional treatments in defined patient groups.

It should be stressed that the lack of a shared world view is not necessarily a barrier to effective cooperation. For example, doctors work closely alongside hospital chaplains and social workers, each regarding the others as valued members of the healthcare team.

#### Approaches to learning and teaching

Teaching and learning approaches depend to some extent on the nature of the therapy and where the therapy is taught. Where training is taken at degree level, courses include basic biological sciences, ethics, research, and reflective practice.

However, for specific therapies, their knowledge base is often derived from a tradition of clinical observation and the treatment decisions are usually empirical. Sometimes traditional teachings are handed down in a way that discourages questioning and evolution of practice, or encourages a reliance on the practitioner's own and others' individual anecdotal clinical and intuitive experiences. Where an evidence base exists, it is now much more likely to be referred to in training and, increasingly, critical appraisal of the research literature is encouraged.

## Conclusion

It is obvious from this discussion that complementary medicine is a heterogeneous subject. It is unlikely that all complementary disciplines will have an equal impact on UK health practices.

The individual complementary therapies with the most immediate relevance to the conventional healthcare professions are reviewed in detail in later chapters, but some disciplines are

## Box 1.7 Sources of further information

National Library for Health Complementary and Alternative Medicine Specialist Library

URL: http://www.library.nhs.uk/cam

- Cochrane Complementary Medicine Field URL: http://www.compmed.umm.edu/cochrane\_reviews.asp#prot
- Research Council for Complementary Medicine
  URL: http://www.rccm.org.uk
- Department of Health URL:http://www.dh.gov.uk/en/PolicyAndGuidance/HealthAndSocial-CareTopics/ComplementaryAndAlternativeMedicine/index.htm
- National Centre for Alternative and Complementary Medicine (US) URL: http://nccam.nih.gov

inevitably beyond the scope of this book; interested readers should consult the texts and sources of information listed above.

## **Further reading**

- Berman B. Complementary medicine and medical education: teaching complementary medicine offers a way of making teaching more holistic (editorial). *BMJ* 2001; **322**: 121–2.
- Ernst E. Complementary Medicine: a critical appraisal. Oxford: Butterworth-Heinemann, 1996.
- Ernst E, Pittler M, Wider B, eds. *The Desktop Guide to Complementary and Alternative Medicine: an evidence-based approach.* St Louis: Mosby, 2005.
- House of Lords Select Committee on Science and Technology, Complementary and Alternative Medicine. *HL Paper 123, Session 1999–2000.* London: HM Stationery Office, 2000.
- Lewith G, Kenyon, Lewis P. Complementary Medicine: an integrated approach. Oxford General Practice Series. Oxford: Oxford University Press, 1996.
- Mason S, Tovey P, Long AF. Evaluating complementary medicine: methodological challenges of randomised controlled trials. *BMJ* 2002; **325**: 832–4.
- Mills SY. Regulation in complementary and alternative medicine. *BMJ* 2001; **322**: 158–60.
- Owen DK, Lewith G, Stephens CR, Bryden H. Can doctors respond to patients' increasing interest in complementary and alternative medicine? Commentary: Special study modules and complementary and alternative medicine – the Glasgow experience. *BMJ* 2001; **322**: 154–8.
- Prince of Wales's Foundation for Integrated Healthcare. *A Healthy Partnership: integrating complementary healthcare into primary care.* London: Prince of Wales's Foundation for Integrated Healthcare, 2005.
- Rees L, Weil A. Integrated medicine. BMJ 2001; 322: 119–20.

6

- Spence JW, Jacobs JJ. Complementary and Alternative Medicine: an evidencebased approach. St Louis: Mosby, 2003.
- Thomas, KJ, Coleman P, Nicholl JP. Trends in access to complementary and alternative medicines via primary care in England: 1995–2001. Results from a follow-up national survey. *Family Practice* 2003; **20**: 575–7.
- Vickers A, ed. *Examining Complementary Medicine*. Cheltenham: Stanley Thomes, 1998.
- Vickers A. Recent advances: complementary medicine. *BMJ* 2000; **321**: 683–6.
- Vincent C, Fumham A. Complementary Medicine: a research perspective. London: John Wiley & Sons, Ltd, 1997.
- Woodham A, Peters D. *An Encyclopaedia of Complementary Medicine*. London: Dorling Kindersley, 1997.
- Yuan CS, Bieber E, Bauer BA. *Textbook of Complementary and Alternative Medicine*, 2nd edn. London: Informa Healthcare, 2006.