

## **Alternative medicine**

In Western culture, alternative medicine can be loosely described as any healing practice that does not fall within the realm of conventional medicine. A distinction can also be made between "alternative medicine" on the one hand, used to describe practices used independently or in place of conventional medicine, as opposed to "complementary medicine", describing practices used in conjunction with or to complement conventional medical treatments.

Alternative medicine practices are as diverse in their foundations as in their methodologies. Practices may incorporate or base themselves on traditional medicine, folk knowledge, spiritual beliefs, or newly conceived approaches to healing.

The official US government agency, the National Center for Complementary and Alternative Medicine (NCCAM), classifies complementary and alternative therapies into five major groups. The classifications are rather loose, and there can be some overlap:

1. Whole medical systems cut across more than one of the other groups; examples include traditional Chinese medicine, such as acupuncture and Chinese herbal medicine and traditional Indian medicine, known as Ayurveda.
2. Mind-body medicine takes a holistic approach to health that explores the interconnection between the mind, body, and spirit. It works under the premise that the mind can affect "bodily functions and symptoms".
3. Biologically based practices use substances found in nature such as herbs, foods, vitamins, and other natural substances.
4. Manipulative and body-based practices feature manipulation or movement of body parts, such as is done in chiropractic and osteopathic manipulation.
5. Energy medicine is a domain that deals with putative and verifiable energy fields:
  - a. Biofield therapies are intended to influence energy fields that purportedly surround and penetrate the body. No empirical evidence has been found to support the existence of the putative energy fields on which these therapies are predicated.
  - b. Bioelectromagnetic-based therapies use verifiable electromagnetic fields, such as pulsed fields, alternating-current or direct-current fields in an unconventional manner.

## **Prevalence**

Many people resort to mainstream medicine for diagnosis and basic information, while turning to alternatives for what they believe to be health-enhancing measures. In the West, complementary therapies are often used in palliative care for managing chronic pain, and is often considered more acceptable in the interdisciplinary approach used in palliative care than in other areas of medicine.

Studies indicate that alternative approaches are often used in conjunction with conventional medicine, with the use of alternative medicine on the increase in developed countries: in 1998, one study showed that the use of alternative medicine had risen from 33.8% in 1990 to 42.1% in 1997 in the UK, with a systematic review of studies for that same year concluding about 31% of cancer patients use some form of complementary and alternative medicine in the 13 countries studied.

The prevalence of alternative medicine varies from country to country, with traditional medicine still used extensively in developing nations where access to conventional Western medicine is severely restricted by lack of resources and poverty. In Africa, for example, traditional medicine is used for 80% of primary health care, and in developing nations as a whole over one third of the population lack access to essential medicines.

A 2002 survey of US adults 18 years and older conducted by the National Center for Health Statistics (CDC) and the National Center for Complementary and Alternative Medicine indicated that 74.6% had

used some form of complementary and alternative medicine. The most common CAM therapies were prayer (45.2%), herbalism (18.9%), meditation (7.6%), chiropractic medicine (7.5%), yoga (5.1%), body work (5.0%), diet-based therapy (3.5%), progressive relaxation (3.0%), mega-vitamin therapy (2.8%) and visualization (2.1%)

There are several reasons which can account for the growth of interest in alternative therapies, including the increase in conspiracy theories towards conventional medicine and pharmaceutical companies, including disease mongering and mistrust of traditional authority figures, such as the physician, and a dislike of the current delivery methods of scientific biomedicine, all of which have lead patients to seek out alternative medicine to treat a variety of ailments.

Patients can also be averse to the painful, unpleasant, and sometimes dangerous side effects of biomedical treatments. Treatments for severe diseases such as cancer and HIV infection have well-known, significant side effects. Even low-risk medications such as antibiotics can potentially cause life-threatening anaphylactic reactions in a very few individuals. More commonly, many medications may cause minor but bothersome symptoms such as cough or upset stomach. In all of these cases, patients may be seeking out alternative treatments to avoid the adverse effects of conventional treatments.

## **Effectiveness**

Critics of alternative medicine say the vast majority of studies of homeopathy, acupuncture, therapeutic touch and other unconventional therapies have shown little or no effect.

However, the findings of a study published in the British Medical Journal in 1991 revealed that 81 out of 107 the experiments carried out with homeopathic treatments between 1966 and 1990 had proved successful. And a later double-blind trial carried out on patients suffering from hay-fever found that those who received the homeopathic remedy had six times fewer symptoms and were able to cut their use of antihistamines in half.

Acupuncture has also been extensively studied, The researchers, from the Ruhr University Bochum, say their findings suggest that the body may react positively to acupuncture. More than 1,100 patients took part in the study. They were given either conventional therapy, acupuncture, or a sham version. After six months, 47% of patients in the acupuncture group reported a significant improvement in pain symptoms, compared to 44% in the sham group, and just 27% in the group who received conventional therapy.

Some sceptics of alternative practices say that a person may attribute symptomatic relief to an otherwise ineffective therapy due to the placebo effect, the natural recovery from or the cyclical nature of an illness, or the possibility that the person never originally had a true illness.

## **Safety issues**

Forms of alternative medicine that are biologically active can be dangerous even when used in conjunction with conventional medicine, for example immuno-augmentation therapy, shark cartilage, bioresonance therapy, oxygen and ozone therapies and insulin potentiation therapy. Some herbal remedies can also cause dangerous interactions with chemotherapy drugs, radiation therapy or anaesthetics during surgery, for example St John's wort.

Any treatment that has a biological or psychological effect on a patient may also have potentially dangerous biological or psychological side-effects, whether conventional or alternative, for example many essential oils commonly used in aromatherapy, such as eucalyptus and wintergreen, are potentially toxic even in small quantities is taken internally.

However, one notable exception to the normal thinking regarding side-effects is homeopathy. Homeopathic remedies are extremely dilute, often far beyond the point where a single molecule of the original active (and possibly toxic) ingredient is likely to remain and are, therefore, considered wholly safe.

One further serious safety concern involves delayed treatment, with people who have experienced or perceived success with one alternative therapy for a minor ailment becoming convinced of its efficacy and extrapolating that success to some other alternative therapy for a more serious, possibly life-threatening illness.

For this reason, critics argue that therapies that rely on the placebo effect to define success are very dangerous, with individuals who spend large amounts of time on ineffective treatments potentially forfeiting the opportunity to obtain conventional treatments that could be more helpful.

## **Conclusions**

Alternative and complementary therapies are gaining in popularity in the Western world for a variety of reasons, and in certain cases have been shown to be relatively effective, especially when used in conjunction with conventional medicine and/or for the treatment of specific ailments, particularly pain relief and chronic health problems.

Although mainly natural in origin, care should nevertheless be taken when using any biological active substances to avoid adverse side-effects, with therapies delivery by a reputable, qualified practitioner whenever possible, taking all necessary precautions to avoid delayed treatment with conventional medicine brought about by ineffective alternative therapies.