

# Alternative Medicine: Science or Snake Oil?

Dr. Todd Huffman

2011

Western medicine and its professionals have long decried acupuncture, homeopathy, and the like as dangerous nonsense that preys on the gullible. Time and again, carefully controlled studies across the globe have shown alternative medicine to work no better than a placebo. Yet parents and patients still often ask for our opinions on what is better known as “complementary” or “holistic” medicine.

Modern medicine does not know all. Every second of every day something new is being learned, or something old is being discredited. Studies are published by the thousands every month, expanding our knowledge and breaking down our preconceived notions. That is the beauty of science and medicine: they are evidence-based and continually subject to re-examination and cross-examination, until we come as close to “fact” as ever may be possible.

There’s no official list of what alternative medicine actually comprises, but therapies falling under the umbrella generally include acupuncture, homeopathy (ultra-dilute solutions of semi-toxic chemicals), chiropractic, herbal medicine, energy therapy (Reiki), meditation (“mindfulness”), massage, aromatherapy, hypnosis, reflexology, and Ayurveda (a traditional medicine practice originating in India).

And then there are the outright shams and scams: crystals and magnetic bracelets that each promise to create energy and revitalize the fatigued come to mind.

Again, for most forms of complementary or holistic medicine, little or no evidence exists of any medicinal benefit. As Dr. Edzard Ernst, the world’s foremost professor of complimentary medicine who pioneered the rigorous study of everything from acupuncture to herbal remedies, writes in his seminal work *Guide To Complementary and Alternative Medicine*, around 95 percent of the alternative treatments he and his colleagues have studied over several decades are statistically indistinguishable from placebo.

Which is not to say that alternative remedies cannot provide mental health benefit – they may. Sometimes this is referred to as “the placebo effect”. But if such effect lowers a patient’s stress, even if it doesn’t relieve his illness, isn’t that beneficial? Yes, because stress plays an important role in worsening disease, and stress relief has been confirmed by research to slow the progression of cancer in some patients.

The important thing is to approach complimentary and holistic medicine with an understanding of the difference between stress relief – finding a mental safe harbor in a physical storm – and therapeutic relief, alleviating or even curing a physical disease or illness. There is just no evidence to support the latter.

## “Natural”

It’s natural to think that natural is good. But it’s a false assumption.

A common error in risk perception held by many people is that “natural” means “no risk of harm”. But that’s simply not true. You can have allergic reactions to herbal teas and balms just the same as you can experience them with prescription medications. Chiropractors who manipulate the spines of children in attempt to relieve an ear infection might instead cause permanent nerve, artery, or spine damage. Acupuncture carries the risk of infection.

Yes, all these risks are small. But they are present nonetheless.

In the case of using plants to treat illness, there are plenty of “natural” poisons. Plants have no “natural” intention to help humans. If there’s a chemical in a plant that medicinally useful to use, it’s not natural: it’s unnaturally good luck. Moreover, when a useful medicine comes to us from a plant, it brings its friends: chemicals that may do us harm. Better to isolate the useful chemical – as witnessed by many modern pharmaceuticals that originally were derived from plant chemicals – than risk the adverse effect of other, unnecessary ingredients.

Also important to note is that conventional medicines must be shown to be both safe and efficacious before they can be licensed for sale. That is rarely true of alternative treatments, which rely on a mixture of appeals to tradition, and to the “natural” wholesomeness of their products to reassure customers.

That explains why, for instance, some homeopaths can market treatments for malaria despite a lack of evidence that they work, or why some chiropractors claim to be able to cure child bedwetting, asthma, or chronic ear infections.

### **Chiropractic Treatment of Children**

The American Academy of Pediatrics reports that children and adolescents constitute over 10 percent of visits to chiropractors nationwide. Chiropractic is the most common complementary medicine practice used by children.

While chiropractic medicine has its limited place in the treatment of mechanical back problems (such as low back pain, or chronic tension headaches due to malalignment of the head and vertebrae), the physicians of McKenzie Pediatrics do not support the use of chiropractic therapy in children under age 18 with non-musculoskeletal conditions.

While the risk of complications is small, it is very real: strokes, missed more serious diagnoses, and spinal injury with or without nerve injury.

Chiropractors promote detection and correction of “vertebral subluxations”, believing that most or all human disease is caused by out of place bones, and that such displacement interferes with nerve function, and the removing such interference allows Innate (a vital force) to heal the body.

However, there is NO credible evidence outside of self-serving chiropractic journals to support that such “subluxation correction” will restore or maintain good health, or that such subluxations even exist. Repeated, legitimate, randomized clinical controls have failed to demonstrate any benefit whatsoever for the treatment of colic, asthma, recurrent middle ear infections, ADHD, and other conditions claimed curable by chiropractic medicine.

### **Acupuncture**

For an excellent review of the history and claims of acupuncture, please check out this terrific article by the SkepDoc, Dr. Harriet Hall: <http://www.skeptic.com/eskeptic/08-10-08/#feature>. She explains it all so well that there’s no need to repeat it here.

### **Homeopathy**

Dr. Hall also explains the pseudoscience of homeopathy better than anyone. I’ll let her take it from here: <http://www.skeptic.com/eskeptic/09-01-14/>

And, finally, there is the American Academy of Pediatrics, which in December 2008 issued its own comprehensive findings in a clinical report titled “The Use Of Complementary and Alternative Medicine in Pediatrics”. If you’re interested, follow the link:

<http://pediatrics.aappublications.org/content/122/6/1374.full.html>