

A SCIENTIFIC LOOK AT ALTERNATIVE MEDICINE

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Faith Healing; Psychic Surgery; Prayer; Political Developments; Summary

FAITH HEALERS

Techniques employed in some faith healing services

"Slaying in the spirit" - person being healed is struck on forehead and falls backwards into arms of "catchers."

Lengthening a "short leg" - a trick of stage magic, based on optical illusion.

Wheelchair tricks - person told to get out of wheelchair and walk or run, or push preacher in chair. Often these are people who do not need to be in wheelchairs; they were seated in wheelchairs provided by the ministry prior to the service.

Healing the "blind" - healer may ask the person to count fingers held before him. But many legally blind people can see well enough to do this.

"Shotgun" method: healer announces that someone in the audience is being healed of a certain ailment. Pat Robertson does this with television audience ("Word of Knowledge").

"Calling out", "gift of knowledge" - healers calls out a member of audience, identifying name, disease, doctor, etc., supposedly without having talked to the person previously. Gives impression that the information comes from God. However, information is received from pre-service interviews, survey cards, etc. Is remembered by preacher using mnemonic devices, or conveyed through hand signals and other means. Preacher may also employ *cold reading*, in which a perceptive observer, aided by clever guesses and leading questions, can appear to know a great deal about a person he or she has just met.

Arguments against; characteristics of pseudoscience; dangers to subjects; etc.

Fantastic claims without supporting evidence (Oral Roberts has even claimed to raise the dead)

Numerous attempts to document healing with before and after medical records have failed to provide convincing evidence. Many healers do not respond to requests for information that would allow documentation.

Healers do not do followup studies and report results to audiences. Many cases of "healed" individuals who still had their ailments, some even dying soon after.

Ailments that are "healed" are internal conditions; the healing cannot be verified by the audience. We do not see missing limbs restored. "Impossible" cases may be segregated away from potential subjects prior to the

service.

A long period of preaching and singing precedes the healing part of the service, building up audience expectations, excitement, and emotion; audience members become less likely to critically evaluate the evidence. The "healed" person may be less likely to feel pain.

Some "healing" likely of psychosomatic conditions.

Some report subjective feelings of being healed, even though medical data shows they were not. May not seek medical confirmation of "healing."

Some "healing" appears to be fraudulent (e.g., patients and doctors could not be located despite detailed information provided to audience).

Failure to be cured can be attributed to insufficient faith. Subject then left with guilt.

Performances have elements of a morality play, in which audience members play roles expected of them and agree to go along with the dramatic action.

Trickery of the sort used by stage magicians.

Cases of the same person being "healed" of the same "short leg" more than once, with the leg allegedly being lengthened 2-3" each time

People throw away needed medications (e.g., insulin, blood pressure medication, nitroglycerin) during services. At least one death of diabetic after discarding insulin.

Canes and walkers broken and thrown on stage; subjects later find that they need them.

Exaggerations of the nature and extent of the ailments, or misidentification to the audience of the true ailment

In tests by skeptics of "calling out," fake names and illnesses given beforehand were repeated by the healers.

Financial improprieties and other deceptions by some healers.

Critics attacked as being agents of Satan, etc.

Pat Robertson's successful "Word of Knowledge" pronouncements likely due to statistical likelihood that someone in the audience will spontaneously recover from the indicated ailment. No attempt to verify the proportion of successful and unsuccessful identifications of "healing."

Faith healers seek conventional medical care for themselves

Television programs are carefully edited to remove potentially embarrassing material.

Some alleged cases of medical confirmation of healing were found to have inaccuracies and misinterpretation of medical evidence.

Other points

Governments generally uninterested in prosecution of faith healers - worried about violating freedom of religion. (Are faith healers practicing medicine illegally?)

Do the publicized "miracles" of faith healers make it more likely that parents who belong to certain sects will rely on faith healing rather than seeking medical care for their children?

CHRISTIAN SCIENCE (Church of Christ, Scientist)

Established by Mary Baker Eddy, 1879. Authorized text: *Science and Health, with Key to the Scriptures* (1875).

About 1300 churches nationally. Estimated national membership 106,000.

"Humans and the physical universe are really perfect ideas that emanate from God and reflects his harmonious and eternal existence. Only God, his manifestations, and the synonyms that express the completeness of his nature - Mind, Spirit, Soul, Principle, Life, Truth, and Love - exist; all else, especially body, matter, death, error, and evil, are merely illusions, the nonexistence of which is proved as humans grow to reflect God." (R.B. Schoepflin (1988), in *Other Healers* (N. Gevitz, ed.), pp. 192-214)

Disease is considered an illusion. Treated through prayer, identification of harmful thoughts, etc.; *practitioners* assist in the healing.

"Practitioners take two weeks of religious instruction and then can apply for church accreditation as professional healers. They charge between \$7 and \$25 a day for spiritual 'treatments,' usually given without seeing the 'patient' or knowing the nature of the illness. The church gives them no limits on what diseases they may treat or any duty to refer cases to other health care providers." (R. Swan (1984) *Free Inquiry*, Spring, 4-9)
About 1800 practitioners in U.S.

"Christian Science nurses care for their patients and assist practitioners by holding pure thoughts that make a positive contribution to the healing atmosphere...'The nurse dresses wounds and keeps the body clean, comfortable, and nourished so that it intrudes less on the patient's thought'...practitioners often 'cure,' while nurses 'care for,' patients." (Schoepflin) About 500 certified nurses in U.S.

Allowed by the church: seeking treatment for setting bones; eyeglasses; dental treatments; deliveries of babies by doctors; injections for relief of extreme pain.

Church opposes: drugs, immunizations, X-rays, fever thermometers, taking pulses; pain relief measures such as ice packs and backrubs.

"In forty-eight states the church has won religious exemptions from immunizations. In the majority of states they have recently won exemptions from metabolic testing of newborn babies. In many states they have religious exemptions from silver nitrate drops, premarital and prenatal blood tests, and from studying about disease in the public schools." (Swan)

Payments to Christian Science practitioners, nurses, and sanatoria are tax-deductible medical expenses and are covered by many health insurance companies. Sanatoria covered by Medicare.

In 1996, a federal judge ruled against Medicare (estimated \$8 million/yr) and Medicaid payments to Christian Science practitioners on the grounds of separation of church and state. However, "Congress responded by replacing references to Christian Science with the new RNCHI [religious nonmedical health care institutions]

designation.” (*American Medical News*, May 7, 2001) This was upheld by federal court decisions.

Church claims that its methods have been proven "scientific" and verified by decades of empirical evidence (and therefore it is distinct from other groups that believe in faith healing). However, "healing" are poorly documented, and evidence is unavailable for others to examine.

Christian Scientists point out that they have above average health despite not seeking conventional medical care. This may be in part because they advocate healthy lifestyles, and abstain from alcohol, tobacco, and drugs. A 1950's study found, however, higher than average death rates due to malignancy and heart disease, and a lower than average life expectancy, for Christian Scientists. A more recent study (*JAMA* 262, 1657-1658 (1989)) also concluded a higher death rate.

In U.S., church forbids healing prayer for someone receiving medical treatment, claiming the conflict between the therapies would harm the patient. But in some other countries that require medical care for all children, such prayer is allowed.

LEGAL ASPECTS RELATED TO MEDICAL CARE FOR CHILDREN

General

Code of Federal Regulations "religious immunity" provision, which was once required for states to be eligible for federal funding for child protection programs:

A parent or guardian legitimately practicing his religious beliefs who thereby does not provide specified medical treatment for a child for that reason alone shall not be considered a negligent parent or guardian; however, such an exception shall not preclude a court from ordering that medical services be provided to the child, where his health requires it.

As a result many states adopted similar provisions, in some cases referring specifically or indirectly to Christian Science. The provision was removed from the federal code in 1983; failure to provide medical care was made a reportable condition whether or not supported by religious belief. However, most states have retained their exemptions. "Today only five states, Massachusetts, Maryland, Nebraska, North Carolina, and Hawaii have no exemptions either to civil abuse and neglect charges or criminal charges." (Asser and Swan (1998) *Pediatrics* 101, 625-629) Six states (Iowa, Ohio, Delaware, West Virginia, Arkansas, Oregon) provide religious exemptions for crimes ranging from manslaughter to murder for deaths of children from medical neglect.

"In 1996 the first religious exemption allowing parents to withhold medical care was placed in federal law. The Child Abuse Prevention and Treatment Act requires states in the federal grant program to include failure to provide medical care in their definitions of child neglect, but also states: 'Nothing in this Act shall be construed as establishing a Federal requirement that a parent or legal guardian provide a child any medical service or treatment against the religious beliefs of the parent or legal guardian.' Thus, the federal government allows one class of children to be deprived of protections it offers to others." Swan (1998/9) *Free Inquiry*, Winter, 6-7.

Asser and Swan (*op cit*) identified 172 cases between 1975 and 1995 of children who died of "religion-motivated medical neglect," having conditions with high probabilities of survival with proper treatment. They suspect that many more cases have occurred, with deaths being attributed to natural causes. After their data were compiled, the cemetery of a faith-healing congregation in Oregon was found to contain 21 children who probably would have survived with proper medical care (*Time*, Aug. 31, 1998).

Asser and Swan also note that "outbreaks of vaccine-preventable diseases among groups with religious exemptions to immunization are reported frequently."

Many prosecutions in various places have involved fundamentalist groups, but not Christian Scientists, who are given greater legal recognition.

“California, Colorado, Michigan, Minnesota, and Ohio statutes offer religious exemptions from physical examinations of school children. California, Connecticut, New Jersey, and West Virginia have a religious exemption from hearing tests for newborns. California, Colorado, Massachusetts, Michigan, Minnesota, and Ohio have statutes excusing students with religious objections from even studying about disease in school. And California has a religious exemption from tuberculosis testing of public school teachers.” (R. Swan (2000) *The Humanist*, Nov/Dec, 11-16)

Issues

Freedom of religion vs. rights of children (and interests of state to protect those rights). Is freedom of religion a defense for actions that result in harm to another person?

Right of parents to decide what is best for child's welfare

Possible violation of First Amendment (establishment of religion): laws that give Christian Science special status not given to other religious groups

Practical problems in legal situations

In some cases there are provisions for court orders for necessary medical treatment. However, when a sect rejects all medical treatment and diagnosis, potentially dangerous conditions may not be recognized in time.

Difficulty in proving that the disease could be treated successfully with conventional care.

Difficulty of proving that parents knew the child's life was in danger, especially with lack of diagnosis. Children may be trained not to show pain.

Results of some court cases and other recent happenings

Pediatrics 81, 169-171 (1988) refers to "important court rulings to the effect that parents may not martyr their children based on parental beliefs and that children cannot be denied essential medical care" (citations of 1944, 1964, and 1967 cases were given). From the 1944 Supreme Court decision, dealing with the child of a Jehovah's Witness:

The right to practice religion freely does not include liberty to expose the community or the child to communicable disease or the latter to ill health or death...Parents may be free to become martyrs themselves. But it does not follow that they are free, in identical circumstances, to make martyrs of their children before they have reached the age of full and legal discretion when they can make that choice for themselves.

Massachusetts 1999-2002 - deaths of two babies among sect members in 1999; father of one (and leader of the sect) convicted of first-degree murder. Mother and one other awaiting trial. Fourteen children of sect members placed in foster care.

California 2001 - baby died of untreated meningitis; parents charged with involuntary manslaughter in 2002.

Tennessee 2002 - 15-year-old died of bone cancer. Mother and spiritual leader may be charged with murder, aggravated child abuse, and neglect.

Pennsylvania 2003 - 9-year-old died of acute lymphoblastic leukemia, a treatable disease.

Wisconsin 2003 - 8-year-old autistic child died while being restrained during a healing service.

California 2003 - 10-year-old died of flu-like illness. Parents charged with involuntary manslaughter and child abuse. Members of Church of Firstborn, which has been linked to deaths in other states.

Indiana 2003 - newborn dies of infection. Parents convicted of reckless homicide, 2005. Members of Church of Firstborn. In 1999, the mother was given emergency treatment and a Caesarian during birth of another child, against her wishes.

Minnesota 2005 - four Amish children infected with polio virus.

PSYCHIC SURGERY

Sleight-of-hand trick practiced by hundreds of "psychic surgeons" in Philippines, Brazil, and elsewhere. "Surgeon" pretends to make incision with bare hands, removes tumors and other materials, and recloses the wound. Blood appears. However, blood and tissues have been found to be of animal origin, not from patients.

"Medical anthropologists have described the development of psychic surgery in the Philippines as a 'transition from traditional shamanism ("extraction" from the body of leaves, seeds, worms, hair, etc.) to the appearance of Western scientific medicine ("extraction" of blood, tissue, tumors, organs).'" (American Cancer Society, "Psychic Surgery")

Patients from U.S. (thousands per year), England, Japan, Australia, and other countries travel to them to be "healed." Tours are promoted by travel agencies, some affiliated with the healers. The Federal Trade Commission brought charges against four travel agencies and their officers; the court determined that "psychic surgery is pure fakery and a fraud," and ordered the defendants to cease promoting visits to psychic surgeons.

Spiritual component; healers claim to be able to facilitate divine healing. Prayer and meditation may also be part of the treatment.

Brazilian "healer" João Teixeira (known as "John of God") claims to channel forty deceased physicians, and performs both "visible" and "invisible" operations. In the former, he uses the well-known stunts of inserting forceps in the nose and scraping the eyeball. Received publicity in 2005 from a gullible ABC "investigation."

HEALING PLACES

Lourdes (France)

Site of vision by Bernadette Soubirous in 1859 (she did not, however, make any claim regarding healing). Shrine established in 1876 (there were already 14 similar healing shrines in the area).

Afflicted bathe in mineral springs or drink the spring water.

5 million visitors a year. Large tourist industry has grown around the shrine, with 400 hotels and many souvenir stores.

Alleged 30,000 healing a year, but total of only 66 recognized as miracles by Roman Catholic Church (6000 alleged cures have been rejected). As medical knowledge has improved, recognized miracles have become less frequent. An examination of recent recognized cures showed the documentation to be inadequate. Several were of multiple sclerosis, which often has long periods of remission. One "cured" woman later died of her ailment.

Other

Healing are associated with many other locations, particularly sites of visions of Mary by Roman Catholics. Medjugorje was a popular site for pilgrims before the outbreak of civil war in Bosnia. In recent years apparitions of Mary or Jesus have become more common in the U.S., sometimes as images which viewers see in ordinary objects. Another recent phenomenon is that of statues, icons, or pictures that allegedly produce tears or blood.

INTERCESSORY PRAYER

Value of prayer promoted by Larry Dossey, M.D., author of *Healing Words: The Power of Prayer and the Practice of Medicine*. However, as pointed out by critic Gary Posner, "Dossey builds his case largely upon anecdotes and the work of parapsychologists, and appears to accept their supernatural claims at face value." He shows little awareness of the counter arguments raised by skeptics.

A widely cited study is Byrd (1988), *S. Med. J.* 81, 826-829: prayed-for patients in coronary care unit had better recovery by some measures. An attempt to replicate this study was published by Harris et al. in 1999 (*Arch. Intern. Med.* 159, 2273-2278), with allegedly positive effects of prayer. Critics have found many flaws in the two studies. For example, despite the supposed benefits of prayer, there were no effects on lengths of stay in the hospital or deaths. Yet another study of CCU patients (Aviles et al. (2001) *Mayo Clin. Proc.* 76, 1192-1198) found no benefit of intercessory prayer. Another large study of heart patients (Krucoff et al. (2005) *Lancet* 366, 211-217) also found no benefits.

Other negative studies include one of alcoholics and one on arthritis.

In 1998, E. Targ published a study of intercessory prayer for AIDS patients, which supposedly showed positive effects (Sicher et al., *Western J. Med.* 169, 356-363). She then received \$1.5 million from NCCAM for two larger trials (she died in 2002, but the trials will continue). In 2002 it was revealed that the earlier study was flawed by improper data manipulation: the primary outcome (mortality) showed no effect; the data were then unblinded and searched for a secondary outcome that would support a benefit of prayer.

A study by Cha et al. (*J. Reprod. Med.* 46, 781-787 (2001)) indicated that intercessory prayer increased the success rate of in vitro fertilization. A critique by Flamm (*Sci. Rev. Alt. Med.* 6, 47-50 (2002)) found many flaws in the study. In 2004, one of the authors, associated with promoting other paranormal claims, pleaded guilty to business fraud. The senior author admitted that he was only involved in editorial assistance after the study was completed, and withdrew his name from the article.

POLITICAL DEVELOPMENTS IN COMPLEMENTARY AND ALTERNATIVE MEDICINE

State Issues

“Health Freedom” states (from www.healthlobby.com/statelaw.html; site is no longer operational so this information may not be current):

The following states have laws that protect patient access to alternative therapies from licensed physicians:
Alaska, Colorado, Georgia, Indiana, Massachusetts, New York, North Carolina, Ohio, Oklahoma,
Oregon, Texas, Washington

The following has law that protects patient access to alternative therapies from all licensed health care professionals:
Florida

The following states have regulations that protect patient access to alternative therapies from licensed physicians:
Louisiana, Nevada, Texas

The following states have passed laws that protect patient access to EDTA Chelation, specifically, from licensed physicians:
Oklahoma, Louisiana, South Dakota

The following states license homeopathic practice for physicians already licensed in any state:
Arizona, Connecticut, Nevada.

Federal

An “Access to Medical Treatment Act” has been introduced repeatedly in Congress, but so far has not passed. This would reduce government regulation of unconventional methods.

Other issues that will continue to be dealt with by Congress include:

1. Funding of research on alternative methods, through NCCAM and other mechanisms
2. Coverage of alternative methods in health insurance programs and in federal programs (such as VA medical centers).
3. Regulation of herbs and dietary supplements.

A White House Commission on Complementary and Alternative Medicine was established in 2000. Skeptics complained that there was no representation of experts who are critical of CAM methods, while advocates of pseudoscientific approaches were included. The Commission submitted its report in 2002. As expected, it recommended increased research, teaching, and integration of CAM into the health care system. However, two Commission members issued a separate statement, noting that the report presumed that CAM methods are useful without recognizing that many of them are unproven, disproven, or unsafe.

With sponsorship of NCCAM, the Institute of Medicine assembled “a committee to identify major scientific and policy issues in ‘complementary and alternative medicine’ (‘CAM’) research, regulation, training, credentialing and ‘integration with conventional medicine.’” (S. Barrett, Quackwatch article) The committee issued its report in 2005. The recommendations were generally in favor of more research on, and teaching of, CAM methods (it also recommended greater protection against dubious dietary supplements). Critics have noted that the committee was dominated by CAM advocates, and included no perceived critics of CAM.

SUMMARY

A review of the scientific status of some CAM methods:

1. Some degree of support in controlled studies. Being investigated within scientific community. Principles do not conflict with scientific knowledge.

- Many aspects of mind-body medicine
- Some herbal remedies
- Preventive roles of antioxidant vitamins and phytochemicals
- Some other dietary supplements

2. Some scientific support for limited applications. Original theory contradicts scientific knowledge, but observed effects can be explained in scientific terms. Even if effects are genuine, questionable whether methods are preferable to conventional medicine.

- Chiropractic for back pain
- Acupuncture for pain relief and nausea

3. Principles do not conflict with scientific knowledge, but as yet not supported by research

- Many dietary supplements
- Most herbal remedies

4. Contradicts scientific understanding of anatomy, physiology, and/or biochemistry; or of basic principles of physics and chemistry. Scientific studies in support are weak or absent; in some cases scientific studies disprove.

- Chiropractic for most conditions other than back pain
- Acupuncture for many conditions
- Most "alternative" cancer and AIDS therapies
- Chelation therapy
- External qi gong
- Homeopathy
- Iridology
- Reflexology
- "Energy medicine"
- Therapeutic touch
- Crystal therapy
- Magnet therapy
- Most other "holistic" and "New Age" approaches
- Some dietary supplements
- Distant healing