

Complementary and Alternative Medicine
The History, Current Prevalence, and Future Projections

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A Senior Thesis submitted in partial fulfillment
of the requirements for graduation
in the Honors Program
Liberty University
Spring 2013

Acceptance of Senior Honors Thesis

This Senior Honors Thesis is accepted in partial fulfillment of the requirements for graduation from the Honors Program of Liberty University.

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Abstract

Complementary and alternative medicine (CAM) has been used for centuries. Common methods include chiropractic, diet, yoga, and prayer. Though some methods have proven more successful than others, many have insufficient data to support claims of effectiveness.

A survey of medical professionals involving twenty-seven CAM methods was conducted in order to evaluate modern perceptions of complementary and alternative medicine. They were asked their experience with CAM, their personal opinion regarding its effectiveness, and how likely they would be to recommend a CAM treatment to a patient.

It has been hypothesized that more CAM treatments will be utilized in the future. This is most likely due to rising health care costs, greater individual exploration, and more data to support CAM claims.

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Introduction

Definition

Complementary or alternative medicine (CAM) is defined as anything not allopathic. It involves a focus on holistic, individual, and preventative health care (Abbott, 2011). Whereas alternative medicine is used in place of prescriptions or traditional medicine, complementary medicine is used in addition to other treatments. Treatment methods are considered complementary or alternative because there is insufficient data to prove their safety or effectiveness (Barnes, 2008). This type of care is “based on the patient’s needs and must be individualized to match the patient’s state, predicament, and preferences with consideration of the best available evidence” (Gatterman, 2001).

Common Practices

The main divisions of CAM are whole medical systems, mind-body medicine, biologically based practices, manipulative and body-based practices, and energy medicine (Abbott, 2011). Most commonly used methods of complementary and alternative medicine include natural products, chiropractic care, diet, massage, meditation, and yoga. Most frequently used to treat more minor issues, CAM is often utilized for neck, back, or joint pains. It is also common in treatment of anxiety, depression, or symptom relief in other diseases. Less frequently, CAM treatments are used for treatment of insomnia, stress, stomach illnesses, hypertension, fibromyalgia, diabetes, or coronary heart disease. In younger individuals, CAM is more popular for

treating back or neck pains, anxiety, ADHD, ADD, insomnia, asthma, or other allergies (Barnes, 2008).

Current Prevalence

In 1998, the United States population is estimated to have spent between \$36 billion and \$47 billion on complementary and alternative medicine treatments (Abbott, 2011). In the 2002 National Health Interview Survey, approximately one out of every three adults claimed to use a form of complementary or alternative medicine (Barnes, 2004). Though many individuals utilize CAM, physicians are often hesitant to recommend these treatments due to lack of sufficient scientific evidence (Cottingham, 2013).

In the 2007 National Health Interview Survey, it was estimated that four out of every ten American adults had tried a complementary or alternative treatment that year. Mostly used for health promotion rather than disease treatment, in the survey, 49% of users treated themselves, 38% received CAM treatment, and 14% treated others. Though there is still not yet enough research to support the effectiveness of CAM, 77% of medical students agreed that a doctor with complementary and alternative medicine knowledge was better than one without that information (Abbott, 2011).

Approximately 83 million American adults claimed to use complementary and alternative medicine in 2011, spending nearly \$34 billion (Bains, 2011). Younger people are more likely to use CAM practices, or find information regarding alternative treatments (Bennett, 2009).

Personal Opinions and Accounts

Chiropractor

With his own practice in Richmond, Virginia, Chiropractor Aaron Winston, D.C., has been practicing for thirteen years. He entered the field of chiropractic medicine because of his own experiences. Between the ages of twelve and eighteen, he had terrible migraines almost every day. He tried potions, pills, powders, and almost every method, but nothing worked. When Winston visited a chiropractor, all his migraines were gone within three visits. His entire life, he absolutely hated school. But with such results, he decided to attend chiropractic school for over eight years.

When asked to describe the current trend of complementary and alternative medicine, Winston commented on how far ahead the rest of the world is in this area. A proponent of natural remedies, Winston believes that Americans should follow the trends of other countries in using CAM. He claims that “Americans take medications like M&Ms” (Winston, 2012). The symptoms are not relieved and the causes are not cured. Winston offers an example that if a person is holding a pen and opens their hand, the pen will still fall to the ground even if that individual does not believe in gravity. Similarly, he says that a person does not have to believe in chiropractic or CAM in order for it to work.

Dr. Winston believes the public has a positive perception regarding CAM, with many people commenting that they “didn’t know that was an option.” In his chiropractic practice, many of his patients are nurses, because they are aware of what the chemical reactions in drugs do to a person’s body.

Winston believes the most utilized methods of complementary and alternative medicine are chiropractic and naturopathy, which are not clearly defined, but based on each individual state or school. In regard to the future, however, he believes that CAM use will depend on politics and the state of socialized medicine. More and more, people are trying to be or stay healthy instead of waiting until they are sick to fix the problem.

If a person has teeth, he needs a dentist. If he has a spine, he needs a chiropractor. If a person uses a part of his body, it is vital that he maintains it. The most effective method of health care is prevention. Instead of waiting for something to break, a person should maintain his health, eat healthy and stay physically fit.

Throughout his career as a chiropractor, Dr. Winston has witnessed the efficacy of CAM, especially chiropractic. One woman had been plagued with migraines for nearly fifty years. She went to the chiropractor and within just a few visits, her migraines were completely gone. Another instance involved Dr. Winston in a delivery room. When the baby was born, it was not breathing. Winston stepped in and gently pressed the neck bone back into place, returning the baby to a healthy state. Had Winston not been there, he could only imagine what harmful chemicals would have been used or what surgeries would have been done to that tiny newborn. Finally, he described a two and one-half year old child with seizures. Every night, she stopped breathing up to forty separate times. Doctors were planning on severing her corpus callosum, the bridge between the right and left hemispheres of the brain. Frantically searching for any possible alternative, the child's father went to Dr. Winston the morning of the surgery. Winston was unsure what he could do, but he agreed to try. He made a couple tiny adjustments on the girl and the following night, the child stopped breathing only eight times the entire night. The next

night, she stopped breathing only once. After that, all of the child's breathing problems and seizures completely stopped. It is personal experiences like these that support Dr. Winston's firm belief in complementary and alternative medicine (Winston, 2012).

Registered Nurse

Registered Nurse Catherine Hamlet has been practicing for five years. She describes the trend of complementary and alternative medicine use as slow, like a large ship turning. She believes there is not sufficient research available regarding CAM. Unlike prescription drugs or medicine, CAM is not controllable, making it difficult to measure results. Hamlet believes that after chiropractic, use of probiotics is one of the most popular emerging practices involving complementary treatment. She comments that many times, nurses pair antibiotics with probiotics. Humor, imagery, and music are other popular treatments. However, though CAM appears to be gaining popularity, Hamlet claims that 99% of her patients still request prescription drugs.

Hamlet says that from her nursing experience, the public is jumping on board regarding complementary and alternative medicine. However, when serious medical concerns arise, people always revert back to prescription drugs. CAM is more seen as a preventative method than as treatment. It seems that most doctors in the conventional medical field do not accept CAM as valid.

In patients with back problems, Hamlet would always recommend chiropractic care before an orthopedic doctor or surgery. She would recommend probiotics to almost everyone, in order to promote a healthy diet and lifestyle. However, she would never tell a patient not to take antibiotics unless that individual constantly used them with no effect.

Her other experiences involving complementary and alternative medicine have promoted her openness to the possibility of these methods. In the treatment of three anal cancer patients, thirty rounds of radiation and three to five rounds of chemotherapy was recommended by the oncologist. One of the three patients used probiotics and other items from the vitamin or mineral store. Compared to the other two, the patient who used the complementary treatment had very little pain and discomfort. In a different patient with tongue cancer, colloidal silver was used to kill bacteria and retain a strong immune system. In yet another patient with double pneumonia, colloidal silver brought the individual's levels back to normal.

In the oncology sector, doctors do every single thing they can to treat their patients. Oncologists strongly suggest that patients stick with the prescribed program of chemotherapy and radiation, which will either kill the patient or cure the cancer. Some suggest that adding complementary treatments may reduce the efficacy of cancer treatment by building up the immune system. More research in this field is still needed, however, before any conclusions can be formed.

Like Dr. Winston, Hamlet believes that the future of complementary and alternative medicine depends on the direction of health care. This could possibly lead to the public leaning toward cheaper alternatives when new health care laws and reforms are passed. Hamlet suggests that Americans will probably become more aware of alternatives to prescription treatments via word of mouth. In addition, trends continue to cycle. Great grandparents used all natural remedies without prescriptions, so the current trend may turn back in that direction (Hamlet, 2012).

Doctor of Osteopathic Medicine

Jeffrey Gogel, Doctor of Osteopathic Medicine, has been practicing for twenty-one years, working with musculoskeletal manipulation. According to Dr. Gogel, the Flexner report is responsible for what dictates “mainstream” medicine and what is classified as alternative. This report is also responsible for credentialing medical professionals, while simultaneously, eliminating most complementary and alternative medicine.

Dr. Gogel emphasized the necessity for individualized care. There is no cookbook solution, but each person should be evaluated on a case-by-case basis. He views CAM as an opportunity to look at a broader aspect of health and medicine, not just an issue of “alternative” or “mainstream.” His experience suggests that the complementary method used most frequently by MDs is referring patients to physical therapists.

In evaluating each patient, Dr. Gogel believes in deciding the best treatment option for an individual. Often times, he considers complementary or alternative medicine to be the most beneficial solution. He could not imagine a physician not looking at every aspect or perspective when treating a patient.

In the near future, Dr. Gogel believes that complementary and alternative medicine will become more prevalent due to increased recommendations from health professionals. In addition, the economy will greatly affect people’s choice in the use of CAM. If a person does not have a lot of extra money, he will usually stick to the prescriptions from his doctor instead of taking a risk on a complementary or alternative treatment. Mainstream medicine does not cover many other treatment options apart from prescriptions. Most people, however, are open to other options. For the most part, the

public just lacks the awareness of and information about CAM. Because it is not profitable to drug manufacturers or large research corporations, little double blinded research or data is being collected to support or demonstrate the effectiveness of CAM.

The most utilized method of complementary and alternative medicine is diet and exercise, especially in a preventative setting. Regarding treatments, Dr. Gogel claims that diet, humor, meditation, prayer, and qigong are the most prevalent. Dr. Gogel would recommend a CAM treatment based on an individual's preference. He believes in the importance of educating his patients, giving them options, then evaluating the positive and negative aspects of each potential choice of treatment, acknowledging that alternative treatments take time. Medicine is a tool, possessing both problems and benefits. In order to minimize the negative effects, Dr. Gogel proposes that people minimize prescription use and instead pursue a healthy lifestyle.

Prevention is the key to health, especially when it comes to food. It is not necessarily just "organic," but healthy versus unhealthy food choices. Every individual is responsible for his own health, but health care professionals must be proactive. They must address nutrition, exercise, and peace of mind. Beginning in elementary schools, younger children should begin exercise programs and practice good eating habits. If healthy habits can be established early in a child's life, they will be more likely to continue that throughout their entire life.

As witnessed in some American cities such as New York City, the government should not just outlaw bad foods or lifestyle choices. Gogel believes that those choices are up to each individual. When people choose a poor diet, high in excess sugar and fat, they are choosing to welcome disease and negative consequences. A problem of affluent

countries, these behaviors will take time to change. Until then, each person must live with the choices he makes every day. So if a person chooses an unhealthy diet and lack of exercise, he may potentially have to face diabetes, heart disease, high blood pressure, cancer or even premature death.

Dr. Gogel had the opportunity to experience alternative medicine in action, witnessing a tribal healing. While training on an Apache reservation, there was a man in a coma. None of the doctors were able to do anything to help the man. A medicine man then sprinkled yellow powder, possibly a sulfur-containing drug, on the patient. About twenty minutes later, the patient stood up and walked out of the clinic. Still without knowledge of what that mysterious powder was, this instance suggested that sometimes alternative methods can be more effective.

Description of CAM Methods

Acupressure

Acupressure is “a massage technique using the fingers and palms with a certain degree of force to stimulate acupoints and meridian lines on the surface of the skin. The purposes of acupressure are to regulate and balance the body energy or Qi and further to maintain health, prevent illness or enhance health” (Cho and Tsay, 2004). Acupressure is similar to acupuncture in that it selects particular points on the body. Pressing on certain points is thought to “alter the internal flow of energy” (Collins and Thomas, 2004). It is an easy and convenient practice in that acupressure can be carried out by a practitioner or the patient himself. This method is commonly used to treat nausea and vomiting in chemotherapy patients. It is also utilized in the promotion of healthy blood flow. And in a small scale trial involving sixty-two patients, acupressure was effective in the treatment

of fatigue and depression (Cho and Tsay). However, there is little concrete data or research involving the effectiveness of acupressure (Cho and Tsay).

Acupuncture

Acupuncture involves stimulating particular points on the body, and penetrating the skin with needles (Barnes, 2008). Supporting the use of acupuncture, “In 1997, after reviewing the available research, the NIH issued a consensus statement that acupuncture is effective for postoperative dental pain and for nausea and vomiting caused by anesthesia, chemotherapy, or pregnancy” (Collins and Thomas, 2004). Acupuncture is suggested to alleviate various pains or issues. Some of these include lower back pain, headaches, migraines, menstrual cramps, carpal tunnel syndrome, muscle pain, fibromyalgia, dental pain, and tendinitis (Collins and Thomas). Trials from certified acupuncturists suggest that this treatment method may be effective in reducing pain or inflammation in osteoarthritis in the knee (Itoh, 2008). Various studies have also proposed that acupuncture may aid in treating asthma, as well as nausea and vomiting from chemotherapy. Trials are continually being conducted by various research groups, including the National Center for Complementary and Alternative Medicine, researching the efficacy of acupuncture in hypertension, heart failure, osteoarthritis, and opioid additions (Collins and Thomas).

Aromatherapy

Aromatherapy involves the use of essential oils in stimulating olfactory receptors to elicit a response. Some common essential oils include chamomile, clary sage, lavender, majoram, Melissa, geranium, and rose (Han et al., 2006). Aromatherapy utilizes diffusers, baths, massages, and compresses. Because it is all natural elements and does not involve

anything entering the body, aromatherapy is considered safe. Aromatherapy is asserted to stimulate circulation, stimulate the adrenocortical region, alleviate pain, reduce bleeding, and function as a sedative. In a small scale study involving the treatment of severe menstrual cramps, aromatherapy held promising results. In addition, most users hold claim to the effectiveness of this CAM method. However, “the therapeutic effects of aromatherapy are not well supported by clinical studies” (Han et al.).

Ayurveda

Less known in western society, ayurveda is a traditional system of medicine from India. This treatment utilizes herbs as well as prepared herbal drugs. The goals are treatment, prevention, and improving the quality of life of the patient (Vayalil, 2002). According to ancient documentation, ayurveda is claimed to “arrests aging, enhance intelligence, memory, strength, youth, luster, sweetness of voice, and vigor” (Vayalil). Acting as antioxidants and enhancing the immune system, ayurvedic treatments are proposed to “nourish blood, lymph, flesh, adipose tissue, and semen and thus prevent degenerative changes and illness” (Vayalil). Despite the promising claims, little research or evidence is available to support the efficacy of this method.

Biofeedback

Biofeedback involves improving an individual’s overall health by training him to “consciously regulate bodily functions, such as breathing, heart rate, and blood pressure” (Barnes, 2008). It may use electromyographical or thermal methods. Biofeedback works to “increase awareness” in an individual of a particular “physiological process” (Thornton, 2002). An individual may learn what is acceptable by receiving a reward when a desired action or outcome is performed. Or a person may receive a punishment or

“inhibition signal” when an adverse behavior or reaction occurs (Thornton). Biofeedback is oftentimes utilized for the safety of patients, or by patients who do not desire to take drugs, such as children (Termine, 2011). Common uses for this treatment include reduction of headaches and for the “clinical symptoms of puborectalis dyssynergia” (Zhu, 2011).

Chelation

The goal of chelation is to tightly bind to and eliminate excess iron or toxic concentrations of other metals or minerals from the body. This method is frequently utilized by thalassemia patients, whose bodies do not produce enough normal red blood cells to eliminate these harmful elements (Delea, 2007). In one trial, chelation was employed in an attempt to eliminate lead in the blood of affected children. The experiment, however, demonstrated that chelation alone was not sufficient to lower the concentration of lead in children's blood to an acceptable level (Kassa, 2000). Though only limited trials have been conducted, chelation therapy has been approved for controlled use by the United States Food and Drug Administration (Delea).

Chiropractic

Chiropractic treatment involves the manipulation of the spine and joints (Barnes, 2008). Various methods are used in chiropractic manipulation. However, like many other CAM methods, there is little specific evidence or data to support claims of efficacy (Gatterman, 2001). A study published in 2006 suggested that chiropractic care may be effective in “influencing the complex process of proprioceptive sensibility and pain of cervical origin” (Palmgren, 2006).

Diet

Diet is one of the most commonly used forms of complementary and alternative medicine. Proper diet may be vital in preventing obesity, diabetes, or heart disease. Diet involves an individualized treatment, because each person responds to diets differently. As opposed to using diet as a treatment, this method is most commonly a preventative treatment. As a result, in order for this method to be effective, focus would be required to shift to prevention. Most likely, this method would gain prevalence due to economic factors as opposed to experimental data (Williams, 2003).

Dietary Supplement

Creatine, protein powders, and other performance enhancements are commonly used as dietary supplements. Dietary supplements are “a product (other than tobacco) intended to supplement the diet that bears or contains one or more of the following ingredients: a vitamin, mineral, herb or other botanical, an amino acid, a dietary substance for use by humans to supplement the diet by increasing total daily intake, or a concentrate, metabolite, constituent, extract or combination of these ingredients” (Housman, 2011). Previously controlled by the Food and Drug Administration, dietary supplements are now available over the counter. Despite their prevalent use, “consumption of unregulated dietary supplements has been associated with adverse effects (ie, heavy metal poisoning, heart-related health issues, and hyperthermia)” (Housman).

Energy Healing

Beginning with research involving electricity and wound healing in the 1940s, energy healing gained popularity in the 1950s. Pulse electromagnetic energy gives “the

tissues an energy boost in the form of an electromagnetic field without the tissues being required to tolerate a thermal load” (McGaughey, 2009). Some theories propose that energy healing functions by assisting with phagocytic and enzyme activity within cell membranes, as well as possibly influencing ion flow and cell membrane potential. In addition, “The physiological effects are thought to include: an increase in the number of white cells and fibroblasts in a wound, improved rate of oedema dispersion and re-absorption of haematomas, reduction of inflammation, enhanced deposition and organization of collagen and fibrin, stimulation of osteogenesis and enhanced blood flow” (McGaughey). Little research involving energy healing has been conducted, and there is even less convincing evidence for its efficacy.

Folk Remedies

Folk remedies are generally passed down culturally or generationally, and involve herbs, food products, or household items. Common remedies for diseases or issues include drugs (acetaminophen, ibuprofen, benzocaine), cool baths, potatoes or onions in socks, senna extract, chamomile, steam, covering the head, massages, whiskey for teething, ice cubes, vanilla, or clove. Additionally, laxatives (cod liver oil, castor oil, senna) and diuretics (herbal tea) are common. In the past, “folk remedy use has been associated with a lack of access to health care because of a shortage of physicians, language or cultural barriers, socioeconomic status, or mistrust of physicians” (Smitherman, 2005). Now, folk remedies are utilized because of their perceived effectiveness or cultural acceptance. Because physicians or medical professionals are often not consulted before folk remedy regimens are instituted, potential harm may

occur. For example, remedies involving isopropyl alcohol may cause poisoning if absorbed by the skin or inhaled (Smitherman).

Herbal Therapy

Herbal therapies are generally accepted as safe. The main purpose is for an individual's general wellness or treatment of a particular illness. Common herbal therapies include garlic, chamomile, Echinacea, milk thistle, ginseng, aloe vera, dandelion root, and cats claw (Johnson, 2000). Like many other CAM methods, few trials have been conducted evaluating the efficacy of herbal therapy.

Homeopathy

Homeopathic theory is based on the principle that substances that cause certain symptoms in high doses can cure the same symptoms in low doses. Commonly used substances include *Arsenicum album*, *Calcarea carbonica*, *Chamomilla*, *Podophyllum*, and sulphur (Jacobs, 2006). Definite evidence has yet to be proven, because, "In general, the evidence for the effectiveness of homeopathic combination remedies has been inconclusive. Some studies have shown that combination remedies are effective in treating rheumatoid arthritis, sea sickness, and vertigo, whereas others have shown them to be ineffective in the treatment of plantar warts and postoperative ileus" (Jacobs). Because various studies of homeopathy did not publish negative data, bias involving the effectiveness of this treatment is brought into question (Linde, 1998).

Humor

Though not typically perceived as a treatment, humor can often be an effective means of mood change or coping mechanisms. It can make situations appear more positive, so as to avoid death, depression, or suicide. According to a study from 2007,

“Therapeutic humor results in decreased anxiety and the pleasure of being able to laugh at what is feared, but telling funny jokes is not the essence of therapeutic humor”

(Richman, 2007). Therapeutic humor in medicine does not involve laughing at situations of death, depression, anxiety, or panic. Instead, it makes light of the situation and replaces the unpleasant emotions that were formerly looming. The goal is to “reduce stress and affirm life” (Richman).

Hypnosis

Hypnosis attempts to alter an individual’s state of consciousness, relying on the principle of suggestion. It is often used to treat anxiety disorder or post-traumatic stress disorders. Hypnosis is centered on a person’s perception and redirecting his attention away from a particular issue. But despite any evidence in favor of hypnosis, it is often argued that “suggestive effects in medicine are discounted as placebo effects” (Mende, 2009). Essentially, this would make this entire method invalid.

Imagery

Imagery is described as “a highly focused form of concentration that creates an alteration of sensations, awareness, and perceptions with the same biopsychosocial, integrative properties that allow people to process sensory information” (Wynd, 2005). Imagery is most commonly used in relation to surgery, cancer chemotherapy, reducing burn pain, headache, rheumatoid arthritis, chronic pain, rape, assault, and motivation for exercise. This method often times appears successful. But over time, the process proves ineffective (Wynd).

Iridology

Iridology involves studying part of the eye in order to diagnose diseases or issues found throughout the body. Iridologists believe that particular points on the iris surface correspond with certain organs in the body. They consider the color, pigment, and other features in order to diagnose a patient. Additionally, they claim that if an organ has been affected, a mark or scar will be visible on the iris. According to some experts, they could clearly view carcinomas of the breast, ovary, uterus, prostate, and colorectum when observing the iris (Munstedt, 2005). However, in a study conducted in 2005 involving iridology and cancer, “the results clearly show that iridology did not identify the cancer patients at an acceptable statistical level. Patients with two different malignancies were also not identified correctly. For the various benign diseases, iridology was of no help. Additional statistical cross correlation analyses confirmed these findings. In addition, analysis of other benign diseases, which was not part of our initial study design, and the correlation to iridologic findings, failed to show that iridology was useful in detecting these disorders” (Munstedt). After this large trial and a myriad of data collection, iridology appears ineffective.

Massage Therapy

Forms of massage therapy have existed since before 400 BC. Involving general relaxation or treatment, massage therapy may include the circulatory system, the respiratory system, the lymphatic system, and musculoskeletal system, and the immune system. According to a Registered Massage Therapist, “Massage therapy is the assessment and treatment, through manipulation of the soft tissues and joints of the body, of injuries and muscle tension. It can help prevent injuries, maintain physical well-being,

rehabilitate acute or chronic injury, and relieve pain” (Bennett, 2005). Though little scientific data exists to prove its efficacy, massage therapy is suggested to result in “increased range of motion, decreased stress levels, decreased scar tissue and adhesions, removal of metabolic waste from the tissue, increased white blood-cell activity, decreased pain, [and] increased speed in the healing of injuries” (Bennett).

Meditation

Similar to imagery or hypnosis, meditation involves focusing on something in particular, such as a sound or image, as well as breathing. Meditation is the “intentional training of individuals’ attention and concentration” (Ott, 2004). Though its origins can be traced to Buddhism, meditation is not a religious practice. Often, it is used to alleviate pain or suffering, and it can be effective in reducing stress and pain when utilized as a daily life practice. Great emphasis is placed on the present experience, with concentration and mindfulness meditation (Ott). Meditation can supposedly decrease anxiety, increase self-esteem, decrease fibromyalgia, and relieve psoriasis (Ott). It has also been suggested to “lower respiratory rate, heart rate, blood pressure, and skin temperature” (Ameling, 2000).

Naturopathy

Naturopathy is a treatment in which people can care for themselves. This method is “non-invasive natural, holistic, patient-involved healing” (Scott, 2003). Often involving homeopathy, flower essences, herbs, Chinese patent medicines, cell salts, light therapy, movement or meditation, naturopathy utilizes all natural ingredients and methods. Detoxifying anti-oxidants in high pH water, as well as green food diets, herbs, and vitamins, are common. Forms of kinesiology may also be employed. It is claimed

that naturopathy treatments can aid in better blood flow, stop excess bleeding, and help battle depression. Very few trials have tested the efficacy of this method. Though users claim healing, little, if any, concrete data supports the effectiveness of naturopathic methods (Scott).

Prayer

Though skepticism often surrounds the effectiveness of prayer as part of treatment or healing, a majority of Americans claim to pray weekly, if not daily. In regard to the use of prayer as part of treatment, it is hypothesized that “People were using such therapies, not as an alternative to traditional medical care, nor because of dissatisfaction with their medical care, but because of a desire to find treatments more compatible with their personal beliefs and life styles” (Ameling, 2000). Prayer can be similar to meditation or just turning the heart and mind to something or someone revered outside of the individual. Christians especially believe in the healing power of prayer. In Matthew 21:22 in the Bible, it says that “whatever you ask in prayer, you will receive, if you have faith.” Prayer is most commonly utilized in personal healing, or within a community after tragic events. Though limited studies have been conducted, research suggests that prayer offers a positive impact on a patient’s healing or care. In recent years, individuals are again considering the powerful influence of prayer in healing or treatment (Ameling).

Qigong

Qigong maintains its origins in Taoism and Buddhism. It involves “gentle exercises for the breath, body, mind, and the voice” (McCaffrey, 2003). Involving redirection of energy flow within the body, qigong utilizes meditation and deep breathing in order to regulate balance and equilibrium. Qigong may include other methods such as

meditation, deep breathing, mental imagery, visualization, or Tai chi. Similar to yoga or other gentle exercises, qigong claims to increase an individual's range of motion, muscular strength, and flexibility. Traditionally, this method has been used to treat a myriad of issues, including allergies, arthritis, asthma, diabetes, gastritis, headache, heart disease, sleeplessness, Parkinson's disease, and chronic pain (McCaffrey).

Reflexology

With origins in Indian, Chinese, and Egyptian culture, reflexology has been used for hundreds of years. Reflexology involves the belief that “parts and organs of the body are mirrored by specific reflex points in the feet and hands” (Anderson, 2005). If the body has an issue, the corresponding area of the foot should be extra sensitive. During treatment, the practitioner uses his thumbs to apply pressure on the bottom of the patient's foot. The sensitive areas receive more time and attention. Used to improve balance and facilitate quicker healing, this method is used in an attempt to reduce stress, reduce inflammation, eliminate tension, improve circulation, and enhance sleep patterns. However, due to lack of proof, reflexology should not be subscribed to as a diagnostic tool or “quick fix” for any problem (Anderson).

Reiki

Reiki, translated “universal life-force energy,” is another method that utilizes energy in healing and treatment (Swann, 2009). In this method, the practitioner positions his hands on or near the body of the patient (Barnes, 2008). He then attempts to redirect the flow of energy in the patient's body (Swann). Though practiced for hundreds of years, there is an absence of evidence supporting the use of this treatment.

Therapeutic Touch

Therapeutic touch is a relatively new non-religious method in which a practitioner lays hands on a patient. Treatment begins with focused breathing and relaxation, followed by the practitioner attempting to alter the patient's energy (Daley, 1997). Therapeutic touch is "holistic therapy that purports to work within the human energy system to clear blockages and restore balance in the body" (Wilkinson, 2002). In one trial, it was suggested to help reduce stress, increase IgA, IgG, and IgM, and decrease depression (Wilkinson). However, because this method is so novel, very few scientific studies have experimented with the efficacy of therapeutic touch (Daley).

Vitamins/Minerals

Vitamins and minerals are generally considered safe and cost effective. These methods attempt to supply the body with any nutrients that it lacks. Some have suggested that consuming vitamins and minerals help boost the immune system. During an infection, less food is consumed, so less nutrition is absorbed by the body, possibly leaving an individual with deficiencies. This theory suggests that especially when the immune system is under attack, taking more vitamins or minerals will aid in healing. Some studies suggest that vitamins or supplements may facilitate healing after surgery or possibly prevent further infection (Stephen, 2006).

Many practicing physicians have personally witnessed the effectiveness of various vitamin and mineral supplements in treating a variety of diseases or disorders. According to Doctor Michael Janson, Vitamin E in large enough doses, "enhances immunity in healthy elderly subjects." Vitamin C in large doses "significantly reduces allergic rhinitis and asthma and speeds the recovery from airway constriction induced by

histamine.” Vitamin B1 “was used successfully to treat trigeminal neuralgia” (“Doctors Say Vitamins are Safe and Effective,” 2012).

Doctor James Jackson frequently recommends vitamin supplements to patients, finding it effective in treating “headache, joint and muscle pain, chronic fatigue syndrome, and ADHD” (“Doctors Say Vitamins are Safe and Effective,” 2012). Doctor Robert Jenkins has been practicing chiropractic for over 50 years, treating patients for “hypertension, diabetes, hypercholesterolemia, metabolic syndrome, irritable bowel syndrome, and many others” (“Doctors Say Vitamins are Safe and Effective”). Of the thousands of patients he has treated with vitamin or mineral supplements, he has yet to encounter “adverse patient reactions from taking nutritional supplements” (“Doctors Say Vitamins are Safe and Effective”).

Doctor William Grant claims that supplements of sufficient Vitamin D may be “effective in reducing risk of many types of diseases, as shown in a number of randomized controlled trials, such as cancer, falls and fractures, type A influenza, and pneumonia” (“Doctors Say Vitamins are Safe and Effective,” 2012). Doctor W. Todd Penberthy, who has treated patients with Vitamin B3 or niacin, found that, “People are amazed how quickly simply taking supplemental niacin corrects high cholesterol, high triglycerides, low HDL (the good cholesterol) and VLDL” (“Doctors Say Vitamins are Safe and Effective”).

According to Doctor Robert Smith, vitamin or mineral deficiencies can cause a plethora of diseases, including heart disease, cancer, diabetes, arthritis, osteoporosis, or dementia. In addition, vitamin and mineral supplements are safer, more effective, and less expensive than prescription drugs. As a result of the profit to companies, prescriptions as

opposed to supplements, are more advertised and promoted (“Doctors Say Vitamins are Safe and Effective”, 2012). Doctor Karin Munsterhjelm-Ahumada has been practicing medicine for over thirty-five years, and claims that, “progressive doctors prescribe vitamins because they work” (“Doctors Say Vitamins are Safe and Effective”).

Yoga

Gaining popularity in the western culture, yoga is an “ancient discipline designed to bring balance and health to the physical, mental, emotional, and spiritual dimensions of the individual” (Ross, 2010). Yoga is claimed to have a myriad of health benefits. Practice of this method may reduce inflammation, decrease nausea or vomiting in chemotherapy patients, decrease heart rate, and decrease blood pressure. It also claims to prevent or aid in the treatment of diabetes, multiple sclerosis, menopause, kidney disease, schizophrenia, depression, obsessive compulsive disorder, and anxiety (Ross).

Research Study

Introduction

In 2002 and 2007, the Center for Disease Control and Prevention (CDC) conducted the National Health Interview Surveys. These questionnaires to health care providers involved exploration regarding acupuncture, ayurveda, homeopathic treatment, naturopathy, traditional healers, chelation therapy, natural products, diet-based therapies, chiropractic manipulation, massage, movement therapies, biofeedback, meditation, guided imagery, progressive relaxation, deep breathing exercises, hypnosis, yoga, tai chi, Qigong, and energy healing (Barnes, 2008).

Hypothesis

This survey follows a similar format as the 2002 and 2007 National Health Interview Surveys. As a result, this survey of medical professionals was believed to obtain similar results: that the most popular treatment methods were projected to be natural products, chiropractic care, diet, and yoga.

Method

A brief survey was conducted with forty-six individuals in the medical field (See Appendix). This included MD, DO, RN, CRN, Nurse Practitioner, Massage Therapist, Pharmacist, Hospital Administrator and a License Practical Nurse. Surveys were given or sent to professionals in Michigan, Ohio, Virginia, and Florida. Each participant confirmed that he or she understood that the survey was completely voluntary and any answers he or she provided would remain anonymous. Then the participants were asked their opinion regarding experience with the various CAM methods, their personal opinion regarding the effectiveness of the methods, and their recommendations of the various methods. The CAM methods chosen for investigation in this study were acupuncture, acupressure, aromatherapy, ayurveda, biofeedback, chelation, chiropractic, diet, dietary supplement, energy healing, folk remedies, herbal therapy, homeopathy, humor, hypnosis, imagery, iridology, massage therapy, meditation, naturopathy, prayer, qigong, reflexology, reiki, therapeutic touch, vitamins and minerals, and yoga. Participants were then asked how CAM use will change over the next five years, in which instances they would recommend a CAM treatment, and to what resources their knowledge of CAM could be attributed.

Results

Of the forty-six respondents, 85% were female, and approximately two-thirds of the total responses were from registered nurses. Of the respondents, the most commonly used CAM methods were prayer and diet (83%), followed by dietary supplement (80%), vitamins and minerals (78%), humor and massage therapy (67%), and meditation (59%). The medical professionals rated prayer (87%), diet (93%), massage therapy (89%), vitamins and minerals (93%), humor (85%), dietary supplements (85%), meditation (85%), yoga (78%), and chiropractic (78%) as either very or somewhat effective. Following this trend, diet (74%), humor (67%), vitamins and minerals (67%), prayer (65%), massage therapy (65%), yoga (57%), and dietary supplements (54%) were the most recommended methods. As expected, the methods that participants declared as least used or least effective were those that lacked the most significant scientific data. According to the respondents of this survey, the least effective or recommended methods include hypnosis, chelation, energy healing, iridology, and naturopathy.

Respondents stated that they would be most likely to recommend complementary and alternative medicine if an individual possess a philosophical viewpoint more consistent with CAM practices, if a patient does not respond to a treatment, or if the patient is dissatisfied with a conventional treatment. Less common reasons for CAM recommendation include the cost of conventional medicine being too high, unavailability of conventional treatment, always recommending CAM first, and CAM used with conventional care. Less than 5% of survey participants said they would never recommend a CAM treatment.

Nearly 83% of respondents stated that they believe in the next five years, CAM will become more prevalent. They stated the reason for this to be more recommendations from health professionals, more individual research and exploration, patients becoming savvier, and better insurance coverage.

Journals and print resources as well as personal research were the most common source of CAM knowledge. Health professionals, seminars, professional schooling, classes, and other formal educational settings also contributed to that knowledge. A few respondents stated that the source of their knowledge and opinions were due to personal experience, word of mouth, and osteopathic training.

Discussion

With a majority having experienced multiple methods of CAM, they can speak not only from observation, but also experience. As expected, the methods with more supporting scientific data (prayer, diet, vitamins, humor, massage therapy) were most commonly used or recommended. Another aspect that may have influenced results was lack of knowledge of various treatments. If a participant had never been exposed to a type of CAM, such as chelation, iridology, or reiki, it would be impossible for him or her to form an opinion or make a recommendation.

A convenience sampling was used to obtain the data, so limitations could greatly influence the results. Only practitioners in certain cities were chosen, and only certain professions received surveys. However, because at least four different states were represented, the results can better describe the opinion of medical professionals. Because each individual chose to participate in completing the survey, response bias was definitely a factor in the results as well. The respondents were more likely to have

stronger opinions either in favor of or opposed to the use of complementary and alternative treatments. Non-response was also a factor in that nearly one hundred more surveys were distributed than were collected or returned.

Analysis of Future Projection of CAM

There is still endless research to be done to find evidence either in favor, or against the use of complementary and alternative medicine. Though some methods have existed for hundreds, if not thousands, of years, more data needs to be compiled. Individuals are willing to try complementary and alternative medicine because they believe it will be effective. However, there is always a chance that the results could be due to the placebo effect rather than the actual treatment.

Like so many medical professionals have stated, the future of CAM depends largely on the political, social, and economic status of the country. As more personal financial resources are exhausted, more people will likely look elsewhere for a solution, and may turn to CAM. According to Doctor Thomas Levy, “money always rules the day: properly-dosed vitamins would eliminate far too much of the profit of prescription-based medicine” (“Doctors Say Vitamins are Safe and Effective”, 2012). Similarly, most other complementary or alternative methods are not well publicized, researched, or recommended because of the lack of profit potential for pharmaceutical companies or the medical industry.

CAM is generally most useful as a preventive method, especially regarding diet, dietary supplements, and vitamins. If many diseases or issues can be avoided in the first place, so much money, time, and stress of treatment could be avoided. Certainly, if a method may be effective and is not harmful, there is no harm in retaining it as an option.

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Appendix

COMPLEMENTARY AND ALTERNATIVE MEDICINE (CAM) – SURVEY

I understand that this survey is completely voluntary and any answers I provide will remain anonymous.

Gender:

Male
 Female

Role in the health care field:

MD
 DO
 RN
 Technician
 Medical Student
 Nursing Student
 Other: _____

Experience with CAM methods:

	I have used	I might consider using	I would not use	(Not familiar with this method)
Acupuncture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acupressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aromatherapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ayurveda	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biofeedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chelation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chiropractic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dietary supplement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Energy healing/ Reiki	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Folk remedies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Herbal therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Homeopathy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Humor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hypnosis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Imagery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Iridology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Massage therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meditation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Naturopathy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prayer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Qigong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reflexology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reiki (energy healing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Therapeutic touch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Vitamins/minerals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yoga	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Personal opinion regarding the effectiveness of CAM methods:

	Very Effective	Somewhat Effective	Not at all Effective	(Not Familiar With This Method)
Acupuncture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acupressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aromatherapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ayurveda	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biofeedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chelation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chiropractic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dietary supplement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Energy healing/ Reiki	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Folk remedies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Herbal therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Homeopathy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Humor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hypnosis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Imagery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Iridology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Massage therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meditation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Naturopathy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prayer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Qigong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reflexology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reiki (energy healing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Therapeutic touch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vitamins/minerals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yoga	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Over the next 5 years, I believe complementary and alternative medicine use will:

- Become more prevalent due to more recommendations from health professionals
- Become more prevalent due to individual research and exploration
- Remain about the same
- Decrease in use due to fewer recommendations from health professionals
- Decrease in use due to lack of effectiveness of a CAM treatment
- Other: _____

Any additional comments:

Recommendation of CAM methods:

	I would recommend	I might recommend	I would not recommend	(Not familiar with this method)
Acupuncture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acupressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aromatherapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ayurveda	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biofeedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chelation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chiropractic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dietary supplement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Energy healing/ Reiki	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Folk remedies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Herbal therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Homeopathy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Humor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hypnosis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Imagery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Iridology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Massage therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meditation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Naturopathy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prayer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Qigong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reflexology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reiki (energy healing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Therapeutic touch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vitamins/minerals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yoga	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I would use or recommend a CAM treatment in the following circumstances [Select all that apply]:

- Cost of conventional medicine is too high
- Lack of response to a treatment
- Dissatisfaction with a conventional treatment
- Conventional treatment is not available
- Individual possesses a philosophical viewpoint more consistent with CAM practices
- Other: _____
- I would never use or recommend a CAM treatment*

My knowledge of CAM treatments can be attributed to:

- Books, encyclopedias, newspapers, or journals
- Schooling, classes, or other formal educational settings
- Health Professionals
- Personal research
- Other: _____

Survey Results:

I understand that this survey is completely voluntary and any answers I provide will remain anonymous.

Answer Choices	Responses
yes	100% 46
Total	46

Gender:

Answer Choices	Responses
Male	15.22% 7
Female	84.78% 39
Total	46

Role in the health care field:

Answer Choices	Responses
MD	4.35% 2
DO	6.52% 3
RN	67.39% 31
Technician	0% 0
Medical Student	2.17% 1
Nursing Student	0%

Answer Choices	Responses
	0
Other (please specify) Massage Therapist Pharmacist Hospital Administrator Quality CRN PTA Nurse practitioner RN, Risk Manager (LPN) Licensed Practical Nurse Chiropractor DC	19.57% 9
Total	46

Experience with CAM methods:

	I have used	I might consider using	I would not use	(Not familiar with this method)	Total
Acupuncture	13.04% 6	60.87% 28	15.22% 7	10.87% 5	46
Acupressure	17.39% 8	43.48% 20	17.39% 8	21.74% 10	46
Aromatherapy	43.48% 20	30.43% 14	19.57% 9	6.52% 3	46
Ayurveda	2.17% 1	13.04% 6	8.70% 4	76.09% 35	46
Biofeedback	10.87% 5	43.48% 20	19.57% 9	26.09% 12	46
Chelation	0% 0	8.70% 4	39.13% 18	52.17% 24	46
Chiropractic	36.96% 17	28.26% 13	32.61% 15	2.17% 1	46
Diet	82.61% 38	15.22% 7	2.17% 1	0% 0	46
Dietary supplement	80.43% 37	8.70% 4	8.70% 4	2.17% 1	46
Energy	15.22%	32.61%	17.39%	34.78%	

	I have used	I might consider using	I would not use	(Not familiar with this method)	Total
healing/Reiki	7	15	8	16	46
Folk remedies	30.43% 14	23.91% 11	21.74% 10	23.91% 11	46
Herbal therapy	39.13% 18	34.78% 16	15.22% 7	10.87% 5	46
Homeopathy	26.09% 12	36.96% 17	19.57% 9	17.39% 8	46
Humor	67.39% 31	26.09% 12	4.35% 2	2.17% 1	46
Hypnosis	15.22% 7	39.13% 18	39.13% 18	6.52% 3	46
Imagery	41.30% 19	32.61% 15	10.87% 5	15.22% 7	46
Iridology	10.87% 5	2.17% 1	13.04% 6	73.91% 34	46
Massage therapy	67.39% 31	21.74% 10	10.87% 5	0% 0	46
Meditation	58.70% 27	26.09% 12	13.04% 6	2.17% 1	46
Naturopathy	4.35% 2	26.09% 12	21.74% 10	47.83% 22	46
Prayer	82.61% 38	2.17% 1	15.22% 7	0% 0	46
Qigong	6.52% 3	8.70% 4	10.87% 5	73.91% 34	46
Reflexology	17.39% 8	41.30% 19	17.39% 8	23.91% 11	46
Reiki (energy healing)	17.39% 8	32.61% 15	15.22% 7	34.78% 16	46
Therapeutic touch	39.13% 18	36.96% 17	13.04% 6	10.87% 5	46
Vitamins/minerals	78.26%	19.57%	2.17%	0%	

	I have used	I might consider using	I would not use	(Not familiar with this method)	Total
	36	9	1	0	46
Yoga	41.30% 19	47.83% 22	6.52% 3	4.35% 2	46

Personal opinion regarding the effectiveness of CAM methods:

	Very Effective	Somewhat Effective	Not at all Effective	(Not Familiar With This Method)	Total
Acupuncture	28.26% 13	41.30% 19	8.70% 4	21.74% 10	46
Acupressure	26.09% 12	28.26% 13	8.70% 4	36.96% 17	46
Aromatherapy	23.91% 11	41.30% 19	13.04% 6	21.74% 10	46
Ayurveda	0% 0	13.04% 6	6.52% 3	80.43% 37	46
Biofeedback	17.39% 8	32.61% 15	6.52% 3	43.48% 20	46
Chelation	2.17% 1	8.70% 4	19.57% 9	69.57% 32	46
Chiropractic	34.78% 16	43.48% 20	8.70% 4	13.04% 6	46
Diet	63.04% 29	30.43% 14	4.35% 2	2.17% 1	46
Dietary supplement	45.65% 21	39.13% 18	8.70% 4	6.52% 3	46
Energy healing/Reiki	17.39% 8	23.91% 11	6.52% 3	52.17% 24	46
Folk remedies	10.87% 5	39.13% 18	10.87% 5	39.13% 18	46
Herbal therapy	17.39% 8	47.83% 22	8.70% 4	26.09% 12	46

	Very Effective	Somewhat Effective	Not at all Effective	(Not Familiar With This Method)	Total
Homeopathy	15.22% 7	34.78% 16	8.70% 4	41.30% 19	46
Humor	52.17% 24	32.61% 15	6.52% 3	8.70% 4	46
Hypnosis	10.87% 5	34.78% 16	21.74% 10	32.61% 15	46
Imagery	21.74% 10	34.78% 16	8.70% 4	34.78% 16	46
Iridology	2.17% 1	4.35% 2	13.04% 6	80.43% 37	46
Massage therapy	60.87% 28	28.26% 13	2.17% 1	8.70% 4	46
Meditation	41.30% 19	43.48% 20	2.17% 1	13.04% 6	46
Naturopathy	8.70% 4	15.22% 7	13.04% 6	63.04% 29	46
Prayer	67.39% 31	19.57% 9	8.70% 4	4.35% 2	46
Qigong	2.17% 1	8.70% 4	8.70% 4	80.43% 37	46
Reflexology	10.87% 5	32.61% 15	8.70% 4	47.83% 22	46
Reiki (energy healing)	13.04% 6	23.91% 11	6.52% 3	56.52% 26	46
Therapeutic touch	28.26% 13	43.48% 20	6.52% 3	21.74% 10	46
Vitamins/minerals	54.35% 25	39.13% 18	2.17% 1	4.35% 2	46
Yoga	39.13% 18	39.13% 18	6.52% 3	15.22% 7	46

Over the next 5 years, I believe complementary and alternative medicine use will:

Answer Choices	Responses
Become more prevalent due to more recommendations from health professionals	36.96% 17
Become more prevalent due to individual research and exploration	45.65% 21
Remain about the same	23.91% 11
Decrease in use due to fewer recommendations from health professionals	2.17% 1
Decrease in use due to lack of effectiveness of a CAM treatment	0% 0
Other (please specify) Patients are becoming more savvy Become more prevalent due to better insurance coverage	4.35% 2

Recommendation of CAM methods:

	I would recommend	I might recommend	I would not recommend	(Not familiar with this method)	Total
Acupuncture	32.61% 15	41.30% 19	10.87% 5	15.22% 7	46
Acupressure	34.78% 16	23.91% 11	10.87% 5	30.43% 14	46
Aromatherapy	36.96% 17	23.91% 11	21.74% 10	17.39% 8	46
Ayurveda	4.35% 2	8.70% 4	15.22% 7	71.74% 33	46
Biofeedback	17.39% 8	23.91% 11	17.39% 8	41.30% 19	46
Chelation	2.17% 1	10.87% 5	23.91% 11	63.04% 29	46
Chiropractic	39.13% 18	28.26% 13	21.74% 10	10.87% 5	46
Diet	73.91% 34	13.04% 6	4.35% 2	8.70% 4	46

	I would recommend	I might recommend	I would not recommend	(Not familiar with this method)	Total
Dietary supplement	54.35% 25	23.91% 11	8.70% 4	13.04% 6	46
Energy healing/Reiki	19.57% 9	19.57% 9	23.91% 11	36.96% 17	46
Folk remedies	15.22% 7	32.61% 15	15.22% 7	36.96% 17	46
Herbal therapy	34.78% 16	28.26% 13	15.22% 7	21.74% 10	46
Homeopathy	23.91% 11	23.91% 11	21.74% 10	30.43% 14	46
Humor	67.39% 31	17.39% 8	6.52% 3	8.70% 4	46
Hypnosis	19.57% 9	28.26% 13	30.43% 14	21.74% 10	46
Imagery	21.74% 10	34.78% 16	13.04% 6	30.43% 14	46
Iridology	4.35% 2	4.35% 2	17.39% 8	73.91% 34	46
Massage therapy	65.22% 30	21.74% 10	2.17% 1	10.87% 5	46
Meditation	47.83% 22	30.43% 14	6.52% 3	15.22% 7	46
Naturopathy	10.87% 5	15.22% 7	10.87% 5	63.04% 29	46
Prayer	65.22% 30	21.74% 10	8.70% 4	4.35% 2	46
Qigong	4.35% 2	6.52% 3	8.70% 4	80.43% 37	46
Reflexology	19.57% 9	21.74% 10	15.22% 7	43.48% 20	46
Reiki (energy healing)	15.22% 7	19.57% 9	17.39% 8	47.83% 22	46

	I would recommend	I might recommend	I would not recommend	(Not familiar with this method)	Total
Therapeutic touch	26.09% 12	43.48% 20	13.04% 6	17.39% 8	46
Vitamins/minerals	67.39% 31	23.91% 11	4.35% 2	4.35% 2	46
Yoga	56.52% 26	34.78% 16	2.17% 1	6.52% 3	46

I would use or recommend a CAM treatment in the following circumstances [Select all that apply]:

Answer Choices	Responses
Cost of conventional medicine is too high	28.26% 13
Lack of response to a treatment	47.83% 22
Dissatisfaction with a conventional treatment	45.65% 21
Conventional treatment is not available	28.26% 13
Individual possesses a philosophical viewpoint more consistent with CAM practices	58.70% 27
I would never use or recommend a CAM treatment	4.35% 2
Other (please specify) No response Adjunct for conventional medicine Conventional medicine generally ineffective. I almost always recommend CAM With conventional care If appropriate. CAM should always be one's first line of health care.	13.04% 6

My knowledge of CAM treatments can be attributed to:

Answer Choices	Responses
Books, encyclopedias, newspapers, or journals	56.52% 26
Schooling, classes, or other formal educational settings	36.96% 17
Health Professionals	41.30% 19
Personal research	56.52% 26
Other (please specify) No response Personal experience and word of mouth Word of mouth Patients Personal experience Osteopathic training	13.04% 6