Lecture Series

The Advantages of Traditional Chumash Healing

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Chumash healing has been practiced in California for ~13 000 years. Chumash healers treat their patients with prayer, laughter, dreaming, phytotherapy, aromatherapy, healing ceremonies and other techniques. Healing involves first healing the spirit, then healing the body. Chumash people still maintain their unique identity. Chumash Healers still practice the ancient healing arts in California. This lecture is a brief introduction to Chumash Healing.

Keywords: healing – ethnopharmacology – Chumash

Introduction

Traditional Chumash healing starts with God. The Healer may use prayer and fasting to invite God to help with the healing. Fasting is a self-denial that enhances the spirituality of the Healer, facilitating communication with God. In fact, all healing must involve God. The spirit is always involved in the healing process. The reason for this is that many diseases start with the spirit. The spirit forgets to be well. Another way of thinking of this is that the spirit may be overstressed with work or concerns, depressed, overburdened with addictions or neglected from not enough prayer. When the spirit forgets to be well, the body becomes ill. The spirit may neglect the sick body and prevent healing. Treating the body alone leaves the spirit still sick. This may result in more illness.

The Healer is not alone in this spiritual healing process. The sick person's family, friends and other community members may aid in prayer, fasting, dancing and generally reassuring the person that he or she is loved. This reassurance is comforting and helps the spirit to feel well again. When the spirit is well, the body can recover from disease. Dancing, like singing, can be used as prayer.

This spiritual healing is very dissimilar to standard health care, where doctors, nurses, pharmacists and other health care workers may not pray with the patient, despite the fact that

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prayer has been shown to be beneficial to the majority of patients (1). Prayer comforts patients. At the very least, prayer does no harm and costs nothing. While in hospital, the patient may feel isolated from family and friends. The spirit may not become well quickly. The approach with standard health care is that the body is treated and made well. The spirit should then follow and recover as well. However, many patients complain of uncertainty with their healing even after their bodies are supposed to be well again.

Prevention of disease was a major concern of Healers in the old days. People were encouraged to work hard every day for the village. This helped keep them physically fit and helped them feel needed. Everyone had a job that was necessary for the village. Being physically fit and thin tends to lower the chances of having high blood pressure, high blood cholesterol, diabetes, heart disease and other conditions. These problems can be caused by visceral fat that secretes cortisol and induces the metabolic syndrome. Obesity was uncommon in the old days, because each person was physically fit. The Healer worked hard at keeping everyone working.

Healers of the past used humor in the healing process. Helping patients laugh at a joke can help relieve their anxiety. Sometimes when people become sick, it is almost as if they are taking on the misery of the world. They need attention and love, from their family, friends and Healer. They also need to have a different perspective on their situation. Humor can help take them away from their despair for a while and give them a new perspective. Then they can allow the healing process to begin.

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White Sage

The Healer frequently starts treatment with white sage (Salvia apiana), which purifies the central nervous system to help a person maintain integrity. White sage is wey'wey in Chumash (pronounced waykway). Chumash plant names were initially recorded by Harrington (2). White sage can help a patient become calm enough to be rational. White sage may be the foundation of treatment since it can help set the spirit back to normal. White sage tickles the spirit and sets it right again. White sage is our protection. Ideally, we should all take white sage every day to help maintain spiritual health, when used with prayer. This can be done by planting and maintaining white sage plants in gardens. Seeds or plants can be obtained from some nurseries and botanical gardens. The Tongva and other people used to plant and tend white sage near their village sites.

White sage bushes grow in full sun, in sandy soil and are drought resistant. They have long, thin leaves about 3 inches long with a silver, green color and a pleasant sage smell. The flowers are small, white, sometimes with purple, and have long anthers that emerge out of the flowers. The shiny, black or brown seeds have a pleasant sage flavor.

White sage, like any plant, should be collected with prayer. Only the amount needed should be collected. A small branch or a single leaf can be broken off for each use. Each leaf contains vital medicine for the health of the spirit. The leaves can be dried for later use, if necessary. The best way to use white sage is to put it in the water a patient drinks. Simply put an entire leaf in the water bottle the patient drinks from. Water bottles typically contain ~1 l of water. Allow the leaf to flavor the water over 30 min or so before allowing the patient to drink the water. The leaf can be re-used in four bottles of water. The water may develop a very slight sage flavor and smell. Only use the leaf for 1 day. After 1 day, the leaf will start to degrade. Another way to use white sage is to put half of a leaf in the mouth and suck on it. The leaf will fill the mouth with sage flavor and soothe the throat. White sage contains cineole (3), also called eucalyptol, which is soothing. Salvia plants contain many active compounds including many active diterpenoids that can be antibiotic or anti-allergic (4). Also present are antiinflammatory compounds, antibiotic compounds and antianxiety compounds (4). White sage can also be drunk as a tea. Start the water at room temperature. Add a white sage leaf and heat the water until it just starts to boil. It must be tended so the water does not boil, or it will lose its effect.

Of course, white sage is also used when blessing people. The traditional Chumash way to do this is to use small branches, about 6 inches long, of dried white sage. The white sage should not be bound with yarn or string. This can cause the white sage to mold. Gently suck on the end of the branch and gently touch each leaf after harvesting. Remember that white sage is spirit medicine and should not be wasted by simply burning it like incense. When white sage is smudged, everyone should be praying. The smoke brings the prayers to God. The smoke also invites God to participate in the healing process.

Certain people in each group are recognized for their ability to bless others with white sage, and are invited by the group to administer the blessings. A Healer may also smudge white sage to help with a healing process.

Mugwort

Dreams are an essential part of health. Dreams help the spirit remember to be normal, to be happy. Dreams help heal the spirit. Many patients have trouble dreaming because they are under too much stress. They cannot relax their minds at night and simply dream. Many patients use drugs to help them sleep. These drugs usually prevent dreaming and may cause patients to wake up with some lingering depression, hung over. Patients who are addicted to drugs or alcohol may have trouble dreaming. Patients with heart disease may also find it hard to dream and sleep.

Dream sage is used by Healers to promote good dreams. Dream sage is also called mugwort, Artemisia douglasiana. It is called molush in Chumash. To use dream sage, collect the stalks, leaves and seeds, dry them and sew them into a small pillow $\sim 15~\mathrm{cm} \times 15~\mathrm{cm} \times 7~\mathrm{cm}$. Place the small pillow under the normal pillow to promote dreaming. Dream sage contains camphor, linalool, cineole and other pleasant-smelling compounds (3). The pleasant, sage smell of the dream sage induces aromatherapy that will help promote dreaming. This helps heal the spirit. When the spirit remembers to be normal, the body can heal. Various sesquiterpene lactones such as absinthin and a hallucinogenic compound thujone are also present in Artemisia plants (4). These are the principle ingredients in absinthe. One of the most romantic things a young man can do for his girlfriend is to make her a small pillow of dream sage. This shows her that he cares about her and her dreams. Hopefully, she will dream pleasant dreams about him.

Dream sage is a common plant that grows in deep canyons near water (5). It is best to collect some of the seeds from this plant in the autumn, plant them in a garden and tend the plant for later use. It may also be possible to find a nursery or botanical garden that may sell the plant. The plant grows in partial or full shade and requires watering.

Californian Sagebrush

Sometimes, when the spirit is sick, just remembering pleasant thoughts can be helpful in healing. A Healer may use Californian sagebrush, *Artemisia californica*, to help promote pleasant memories. The smell of Californian sagebrush reminds many Californians of the smell of grandmother's house. A pleasant smell, like Californian sagebrush, can help the patient remember long-lost memories. Aromatherapy is a very powerful way of bringing back pleasant memories.

Californian sagebrush is a common plant. It can be purchased from some nurseries or botanical gardens to grow at home. It grows in full sun and is drought resistant. The leaves are thread-like and have a strong sage smell when crushed. There have been few scientific examinations of the active compounds

in Californian sagebrush. However, the active compounds are probably similar to those found in mugwort, such as the sesquiterpene lactone, artecalin (4). Anyone can benefit from this aromatherapy each time they walk past a Californian sagebrush.

Californian Bay

In the old days, the Chumash people bathed frequently in hot springs (6). The pool was prepared with prayer. Red maids, *Calandrinia ciliata*, called khutash in Chumash, were sprinkled onto the water. The water was treated with a few Californian bay leaves, *Umbellularia californica*, psha'n in Chumash (pronounced pshokn). People bathed in the water to soothe themselves, comfort their arthritic joints and to feel normal again. Of course, warm water is soothing to arthritic joints and can help relieve pain and swelling, at least temporarily. Patients can benefit from this therapy in their own tubs at home.

Californian bay used to be eaten as a flavoring for food and as a way of strengthening the immune system. It was eaten during the first 2 weeks or so of a new season. This means it was eaten four times each year. It was used to help people adjust to the changing seasons and to the changes of life. It can be used by Healers to help the spirit adjust to the changes needed in healing. Usually Californian bay leaves are crushed and smelled. This aromatherapy helps open the breathing passages and can relieve headaches, even migraine headaches. Since Californian bay helps people adjust to the changing seasons, it also helps enhance immunity to colds and flus.

Californian bay is a large tree that can grow to nearly 150 feet tall. The long, thin leaves are ~4 inches long and smell of bay. The fruit is a soft, green drupe about three-quarters of an inch in diameter. Californian bay trees grow in shady, moist canyons and slopes. In Oregon, this tree is called Oregon myrtle. This tree can be purchased from some nurseries.

The leaves and fruit contain many fragrant compounds (7). Sabinene smells like pine. Cineole smells like eucalyptus. Thujene smells like grass and soy sauce. There are probably many other compounds in Californian bay yet to be identified. Aromatherapy with Californian bay is comforting and recommended. However, there are some people who complain of headache from excessive aromatherapy with this plant. The leaves make a very pleasant spice in soups and stews. They are more flavorful than commercial bay leaves and have a similar flavor.

Californian Rose

When a baby cries from teething, Californian rose (*Rosa californica*) can help. It is called watiqoniqon in Chumash and can be pronounced wotteekwoneekwone. Chumash people used to mash the petals in water and rub the fluid on their baby's gums to relieve the pain of teething. Rose petals have a pleasant, sweet flavor. While chewing the petals, the nose fills with the smell of rose. Adults can chew the petals or drink a rose petal tea. Californian rose helps relieve anxiety. This helps the spirit become more receptive to healing.

Californian rose, probably like most rose species, contains many fragrances, called monoterpenes. Geraniol, nerol, citronellol and other monoterpenes are found in the petals and are used in the perfume industry (8). These wonderful fragrances have strong effects on people. Some people become happy, others soothed, when smelling rose fragrance.

Momoy

Momoy, *Datura wrightii* or Californian jimson weed, was used by sucking on part of a leaf to protect the spirit (4–6). However, it can be used in other ways to help with spiritual healing. Momoy is the Chumash name for the plant. Some patients, who do not listen well, need to breathe the aroma of the crushed stems. This opens up their breathing passages and their ears. When patients live with too much stress from jobs and relationships, they may find it difficult to take a moment to rest and breathe. Momoy helps them breathe and in general opens them to listening to God and healing.

Some patients need to soak their feet in solutions made from momoy. This is especially true of domineering people, who may be very decent, but are basically mean. The roots or stems of momoy, ~0.25 kg, are fermented in the sun in ~1 l of water for 3 days. The fluid is then heated on the stove to body temperature, or slightly warmer. The patient may then soak their feet for ~15 min. Some patients may need to soak their feet every night for a week before bed. This may help them relax and become receptive to God.

Momoy contains atropine, scopolamine and other compounds (9). This plant has been used as a way of inducing sacred dreams in order to talk to God. The dose that causes a sacred dream, hallucination, is very close to the dose that inhibits breathing. This makes the plant very dangerous. In addition, scopolamine crosses the blood-brain barrier slowly and may not penetrate adequately until up to 13 h. This makes using momoy for induction of sacred dreams very dangerous. The seeds contain ~0.1 mg of atropine and 0.05 mg of scopolamine each (4). As few as seven seeds have resulted in poisoning leading to hospitalization. Death may occur with blood levels of 47 ng/ml of atropine and 21 ng/ml of scopolamine, or urine levels of 200 ng/ml of atropine and 95 ng/ml of scopolamine. However, it is safe to use momoy for aromatherapy or as a foot soak. Momoy should also be used as part of Chumash religious practices, as protected by religious freedom laws, provided that its dangers are well understood.

Fire

Fire is a very important part of Chumash religion and healing. The Chumash religion centers around the fire. Fire is the symbol of purity. Fire purifies everything it consumes. Fire is also a symbol of joy for most people. Just looking at a fire makes most people feel happy. Since fire purifies, it can help calm patients and help them stop fretting. Since fire brings joy, it can help patients laugh and give them a new perspective. Fire can help patients accept healing.

In the old days, it was common for the patient to lie beside a fire during a healing ceremony (6). Singers stood on one side of the patient. Dancers danced on the other side of the fire. Friends formed a circle around the patient, dancers, singers and the fire. The friends were there to let the patient know that he was loved. The singers sang prayers of healing. The dancers danced prayers of healing. The fire purified and brought a new perspective for the patient. All this was directed by the Healer who also administered medicines to the patient.

The Chumash saw fire as a good force in nature. Whenever a brush fire came, the next year the plants and animals would be stronger and more plentiful than before. People would be less hungry in the next winter time. The Chumash were good farmers and grew chia sage, Californian tobacco, red maids, fire poppies and possibly other plants. Every year, they burned their fields in order to have a good harvest the next year.

Today, forest fires and fire storms fill us with the dread of people losing their houses or lives. Unfortunately, the chaparral is overgrown and is a fire hazard in many areas during dry seasons. However, when carefully controlled and tended in a proper camp fire or ceremonial fire, fire still purifies us and brings us joy.

Conclusion-Implications for CAM

The Healer is very sensitive to the needs of the patient and sees her or his first work as persuading the patient to accept the healing process. The patient must accept the Healer as medicine. In other words, the patient accepts that the Healer can cure the disease. She or he uses prayer, fire and plants to bless, purify and strengthen the patient's spirit. She or he may also fast for the patient, since the patient cannot fast. It is common for the healer, friends and family of a patient to give gifts to the patient, such as fasting for the patient. Such gifts help the patient feel comforted, needed and loved. This helps the spirit become normal again. Then the Healer may use prayer and plants to treat the body.

Standard health care treats only the body. The patient is assumed to be ready for healing and is not usually further prepared to accept healing. The doctor may not be accepted as medicine by the patient. The drugs used may be very powerful. They may be too powerful in some cases. For instance, patients who have trouble sleeping are given powerful sleepinducing agents that may be addictive. These drugs may prevent the patient from dreaming. This can leave the patient feeling uneasy and not rested. Heart disease is treated with powerful drugs that help the heart pump more efficiently. These drugs can greatly benefit the patient's body, and can help the patient feel much better. However, the doctor usually is ineffective at helping the patient lose weight, stop smoking or stop drinking alcohol, which can provide a long-term benefit for the heart. Diabetes is treated with insulin and other drugs that control blood sugar levels. These drugs are a definite benefit to patients and can help them by preventing retinal damage, leg cramps, kidney disease and other problems caused by high blood sugar levels. However, the doctor usually cannot help the patient lose weight, which would help the patient control blood sugar levels. Cancer is a disease that is treated with powerful drugs. Great improvements in the treatment of cancer have occurred over the last 20 years. Many cancers, including breast cancer, can be cured in ≥70% of patients. However, the threat of death from cancer and the threat of damage from cancer chemotherapy and radiation therapy are very frightening to most patients. Doctors do the best they can to encourage patients to accept the therapy. Yet there are some patients who let fear discourage them from therapy.

Many of the medicines that doctors use come from plant or animal sources, such as insulin, digoxin and vincristine, which are used in the treatment of diabetes, heart disease and cancer, respectively. Chemicals found in plants and animals are the basis of pharmacology. Unfortunately, Californian plants are not used as medicines in standard health care, except for paclitaxel, that comes from the Pacific yew tree.

There are a few companies that are rediscovering how to make medicines from Californian plants. They should be encouraged to use prayer, traditional and modern techniques to process plants and make tinctures and other preparations. This is similar to the way that Healers make their medicines, with prayer and attention to each individual patient. Patients need plant medicines that are made with prayer and careful attention to preparation. These are the medicines needed to help heal the spirit and body.

Californian plants have been ignored as clinical medicines. Yerba santa (Eriodictyon californicum and other species) was used as a medicine for bronchial infections until 1960. It was recognized as effective and is known to contain an antibiotic compound, eriodictyol (10). A law was passed in 1960 requiring that a medicine had to have proven efficacy. This means that clinical trials were required to prove a medicine works. No company was willing to invest in clinical trials of yerba santa. There are many Californian plants that should be investigated to find and test the active compounds in them. This may eventually lead to new drugs for clinical use. There are advantages to having drugs to treat the body. They can be carefully tested to find the diseases they work against and the safe doses that should be used. This is a long, expensive process that usually involves creating plant farms to prevent their depletion in nature. Unfortunately, California had a bad experience with the Pacific yew tree (Taxus brevifolia). The bark was harvested for paclitaxel extraction. Excessive or incorrect harvesting led to many dead trees. This sort of mistake must be avoided in the future.

There is a great need for spiritual healing among many people. Religious leaders can help with spiritual healing. However, some communities would appreciate a Healer to aid with spiritual healing. The Healer can be a great ally to doctors, pharmacists and nurses. The Healer is a religious leader and can help treat the spirit and help the patient accept healing and accept therapy. This sort of team effort is essential to many people who are uncertain about what to do for their diabetes, heart disease, high blood pressure, high blood cholesterol, cancer and other conditions. The Healer can also help patients

accept the fact that they must lose weight and stop bad habits, such as smoking and excessive drinking, in order to help their health.

There are very few Healers in California. Standard medicine is the accepted normal therapy and has displaced the Healers from most communities. Communities have accepted the loss of their Healers because standard health care provides medicines that are in many cases more powerful and sometimes safer than the traditional plant medicines, at least for treating the body. This has led to a neglect of Californian plants as medicines for the body and the spirit.

Some communities would like to have Healers again. These communities must have Healers educated in how to heal. Presently, the only way for a person to become educated in healing is to work as an apprentice to a Healer. However, finding a Healer who will teach healing may be difficult in some areas. Perhaps it is time to have a school of healing in California. Such a school could recruit Healers as instructors and recruit scientists to help teach the basics of Botany, Anatomy, Pathology, Pharmacology and other topics the Healer must know. The students could also be taught how to work as a team with other health care professionals. Of course, the students would also become apprentices to Healers, until they develop the maturity required to become Healers themselves. This would help communities regain their Healers.

Health care must start with God. This is the domain of the Healer. Then plant medicines can be used when appropriate, or standard medicines can be used. The patient should go to the doctor when necessary and accept the therapy provided. The Healer can help with this acceptance. The family, friends and Healer can also help the patient feel loved, comforted and ready to heal.

References

- Astin JA, Harkness E, Ernst E. The efficacy of 'distant healing': a systematic review of randomized trials. Ann Intern Med 2000;132:903–10.
- Timbrook, J. Ethnobotany of Chumash Indians, California, based on collections by John P. Harrington. Econ Bot 1990;44:236–53.
- Bisset NG. Max Wichtl Herbal Drugs and Phytopharmaceuticals. A Handbook for Practice on a Scientific Basis. Boca Raton: CRC Press 1994
- Garcia C, Adams JD. Healing with Medicinal Plants of the West— Cultural and Scientific Basis for their Use. La Crescenta: Abedus Press, in press.
- Adams, JD, Lemos, F. Healing plants of the Chumash. News Native Calif 2003:16:16–7.
- Walker P, Hudson T. Chumash Healing. Banning: Malki Museum Press 1993
- Goralka RJL. Schumaker MA, Langenheim JH. Variation in chemical and physical properties during leaf development in California bay tree (*Umbellularia californica*) predictions regarding palatability for deer. *Biochem System Ecol* 1996;24:93–103.
- Hashidoko Y. The phytochemistry of Rosa rugosa. Phytochemistry 1996; 43:534–49
- Miraldi E, Masti A, Ferri S, Barni Comparini I. Distribution of hyoscyamine and scopoloamine in *Datura stramonium*. Fitoterapie 2001; 72:644–8.
- Liu YL, Ho DK, Cassady JM, Cook VM, Baird WM. Isolation of potential cancer chemopreventive agents from *Eriodictyon californicum*. J Nat Prod 1992;55:357–63.

Received September 21, 2004; accepted January 18, 2005