Acupuncture: EAST Meets WEST Embodied
Ancient practice yields evidence-based health outcomes

Dr. Bill Prange’s own introduction to acupuncture came about much the same way it happens for so many people: out of desperation for help and relief.

“I had contracted hepatitis while on vacation in Mexico, lost considerable weight and strength for several months, and was unable to work. My doctors assured me that my lab results had become normal and there was nothing to do but rest. I was exhausted and feeling desperate,” he recalls. “A friend referred me to acupuncture, and, while I was phobic about needles, I was willing to take a risk. Twenty minutes after my first acupuncture treatment, I had a profound appetite and knew my recovery had begun.”

Dr. Prange was so impressed by the acupuncturist’s use of simple, non-invasive tools both to diagnose and to stimulate healing, he decided to study acupuncture while in the midst of earning his doctorate in clinical psychology. “I was young, and I saw an incredible opportunity to help others with this ‘new’ medical profession that is actually more than 5,000 years old!” he says.

Dr. Prange began his formal study in 1978, just three years after the California Medical Board legalized acupuncture, earning a doctorate in oriental medicine. He became the first acupuncturist to obtain privileges in a public hospital in California when Petaluma Valley Hospital accepted him in 1997. He has been in private practice for more than 30 years (see drprange.com) and has helped launch integrative medical programs for Kaiser Permanente, Sutter Hospital, and Blue Shield of California.

For decades, acupuncture belonged to the realm of “alternative medicine” in the United States, relative to what might be considered (rather ironically) “traditional” medical care. Yet since its initial regulation in 1974, the number of acupuncture patients has continued to rise steadily and significantly every year, according to the National Institutes of Health. Currently, a coalition of acupuncture and oriental medicine associations, institutions, health care professionals, and individuals are petitioning the federal government to include acupuncture as an “essential health benefit” under the Affordable Care Act, based on acupuncture’s track record of success and unparalleled safety as a low-tech, non-invasive, cost-effective system of care.

The following conversation with Dr. Prange explores some of the history, philosophy, science, and evidence surrounding acupuncture and its ascendance within Western health care and culture.
**INTEGRATIVE MEDICINE**

How does acupuncture work?

Acupuncture involves the insertion of thin, solid, sterile needles in various patterns and combinations around the body. These needles may then be enhanced by electrical stimulation, manual stimulation, or warming. The pattern or arrangement of needles around the body is important, and is designed to address the underlying problem as seen through the oriental model: an elegant and well-designed system of diagnosis and treatment based on more than 5,000 years of continuous study.

While there are thousands of outcome studies assessing acupuncture’s benefits for a wide variety of medical conditions, acupuncture does not conform well to placebo-based, double-blind studies (where none of the participants or researchers know which participants belong to the control group versus the test group) since it is difficult to create “sham” or fake acupuncture. That being said, I believe the clinical benefit of acupuncture has been well established through conventional outcome studies.

What medical, physiological, or other principals is acupuncture based on?

The World Health Organization (WHO) produced a succinct summary on acupuncture in 1978, which still stands today. WHO identified 48 common medical conditions where acupuncture clearly demonstrated value. WHO stated that the main effect of acupuncture was due to “autonomic neural re-regulation,” which means that it stimulates the body to regain optimal balance between the fight or flight and rest and digest aspects of the nervous system. Acupuncture may help the body let go of habituated stress patterns by stimulating specific reflexes throughout the body. My private practice is approximately one third supportive care for cancer (reduces side effects associated with chemo and radiation therapy and promotes recovery following treatment), one-third chronic pain, and one-third general medicine, which includes digestive issues, allergies, and sleep/mood disorders.

Is there evidenced-based data available on the effectiveness of acupuncture in the treatment of certain illnesses and conditions?

A great preponderance of clinical research indicates that acupuncture clearly works. How often it works, how it works, and how to best study acupuncture are difficult questions. Scientifically measured effects occurring during acupuncture treatments on human and animal subjects include the following:

- Reduction of pain through stimulation of endogenous opioid and monoamine systems (the body’s natural pain-relieving systems).
- Increased blood flow and relaxation of smooth muscles through prostaglandin production.
- Vasodilation, rise in skin temperature.
- Elevated blood cortisol levels by stimulating adrenal response.
- Decrease in elevated cholesterol and phospholipids.
- Reduction of inflammation through increased phagocytic and fibrinolytic activity; increased beta-globulins; impairment of leukocyte adherence to vascular cells.
- Decrease in blood pressure.

Likely mechanisms for the effects of acupuncture in western terminology include nerve conduction, circulation, the lymphatic system, electromagnetic flow through fascial planes, and interstitial fluid. Electric current has been measured along meridians not overlying single nerve trunks or muscle layers. Chinese medicine has more than 5,000 years of continuous study with its own view of factors affecting circulation of blood, lymph, and energy that is the basis of health. Animal and human laboratory and clinical experience suggest that the majority of subjects respond to acupuncture, according to the National Institutes of Health. Based on selected studies of acupuncture considered to have sufficient data, the NIH Office of Complementary and Alternative Medicine (CAM) has concluded there is clear evidence that needle acupuncture is efficacious for adult postoperative pain, chemotherapy nausea and vomiting, and probably for the nausea of pregnancy and for post-operative dental pain. There are reasonable studies showing relief of pain with acupuncture on such diverse conditions as menstrual cramps, tennis elbow, myofascial (muscle) pain, and fibromyalgia.

In addition, ample clinical experience, supported by some research data, suggests that acupuncture may be a reasonable option for a number of clinical conditions. Examples are postoperative pain and low back pain. Journals of oriental medicine always list current research publications. Recent journals have described positive outcome studies specific to fertility, neuropathy, TMJ, Parkinson’s disease, dermatitis, and carpal tunnel, to name a few. When acupuncture may have limited value in curing a progressed disease or significant injury, it may, however, serve an adjunctive role in several of these conditions by improving quality of life, reducing pain, and potentially improving immune status.

Acupuncture treatment may be useful in difficult conditions such as asthenic states (tired all the time, low energy), autonomic dysregulation disorders (anxiety, sleep disturbance, bowel dysfunction), and immune dysregulation disorders (recurrent infections and inflammations). In this way, acupuncture embodies its traditional role of improving health rather than treating disease, and can function well within a medically supervised program integrating prescriptive medications, physical therapy, and other tools of western medicine.

Why does it work?

The central issue, from the classical Chinese medical point of view, is not why acupuncture works, but rather how and when to use it. There are acupuncture traditions from China, Korea, Japan, and Europe all based on 5,000-year-old Chinese medical tradition. The dynamic balance that Chinese medicine equates with health manifests as the smooth and constant movement of blood, lymph, and energy (Qi). When Qi, blood, or lymph stagnates, the processes of elimination and regeneration deteriorate, creating the basic condition underlying many forms of illness. The oriental model of health also embraces “shen” or “spirit,” which describes how thoughts and feelings live and move within our bodies. In fact, the Chinese did not separate mind and body. Their time-tested language of a holistic mind-body is precise, based on observation and touch.

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**A great preponderance of clinical research indicates that acupuncture clearly works.**
Acupuncture accesses a series of energy flow pathways called meridians that traverse the body. These meridians frequently run in the clefts between muscle groups containing fascial layers, blood vessels, and neurovascular bundles. The acupuncture needle enters the meridian, activating or inhibiting the flow of Qi. Fourteen major pathways traverse the body from the top of the head to the tips of the fingers and toes. Many principal acupuncture points are located below the elbow and knee, where the Qi changes its polarity from Yin to Yang (negative to positive) and gathers force as it moves from the extremities toward the core. By eliminating congestion and activating circulation of Qi, acupuncture interrupts and reorganizes patterns of illness.

A western model of acupuncture incorporates a modern understanding of neuroanatomy within the classical Chinese model. Needles are placed in muscular trigger points, or motor points, of muscles to cause lengthening of the muscle and reduction of pain. They may also be placed in a segmental pattern along the spine to correspond with radicular symptoms of the extremities (that is, pain that radiates along nerves). An excellent knowledge of anatomy and physiology is required to practice acupuncture.

**Describe a “typical” treatment session.**

An acupuncturist takes a thorough patient history including diet, exercise, sleep patterns, daily stress, and concurrent medical treatment. Acupuncturists may then assess factors contributing to a patient’s health through physical examination, which may include palpation of pulses in the wrist and abdomen, identifying tender points throughout the body, and observing color of the face and tongue. Acupuncturists are interested in syndromes that organize patterns of symptoms rather than focusing on an identified disease or injury. For example, improving sleep and digestion may help someone recover from low back pain. Whereas Western medicine prescribes a separate drug for each symptom, Oriental medicine may offer one treatment that addresses many symptoms.

Needles are then inserted in a specific pattern and retained from one to 20 minutes, depending on the technique. A second series of needles may also be applied. After acupuncture, the patient may receive medicinal herbs or supplements, learn energy exercises (Qi Gong), or review dietary and lifestyle guidelines. It may take three to six visits before the practitioner is able to prescribe a course of treatment. Many patients receive a total of six to 12 treatments. Patients’ responses vary considerably, depending upon the severity of their symptoms.

The diagnostic language of oriental medicine frequently affirms the patient’s experience of how their illness feels. Unlike clinical laboratory results, oriental medicine describes the location where one may feel hot or cold, wet or dry, empty or full, tight or weak, etc. Patients usually feel deeply relaxed and may sleep during a treatment. After insertion of acupuncture needles, patients usually feel a few minutes of enhanced alertness followed by an extended period of deep relaxation. It is not unusual for a patient to experience profound rest both during and after treatment, with increased vitality the following day. While there are different schools and styles of acupuncture, the focus is the same: to help the body heal itself.

**What education, training, licensing, etc. is available and/or required to practice acupuncture?**

A licensed acupuncturist (LAc) completes premedical prerequisites before entering 3,000 hours of formal study, which typically takes three to four years, and successfully passes a licensing exam. Some acupuncture schools require a bachelor’s degree for admission. While most acupuncturists are generalists, post-graduate studies are available in many specialties, including herbology, orthopedics, fertility, women’s health, sports medicine, and pediatrics.

While most acupuncturists work in private practice or in association with medical doctors or chiropractors, there are now more than 180 community acupuncture clinics in the United States where patients receive acupuncture in a group room while sitting in a reclining chair. This allows people to access low-fee treatments, which are particularly relevant for stress-related disorders and addiction recovery.

**What licensing or oversight body oversees the practice of acupuncture?**

Acupuncture regulation is determined on a state by state basis, with California having some of the most stringent educational and licensing requirements in the nation. Acupuncture was first licensed as a medical practice in California in 1978. It is regulated by the California Acupuncture Board, which serves under the California Medical Board. Acupuncturists (LAcs) in California are licensed to diagnose, treat, and contract with insurances without a medical doctor’s referral. California medical law allows acupuncturists to engage in the practice of acupuncture, electro-acupuncture, perform or prescribe the use of oriental massage, acupressure, moxibustion (a traditional Chinese medicine therapy using dried mugwort to stimulate circulation through acupuncture points), cupping (creating suction to promote blood flow), breathing techniques, exercise, heat, cold, magnets, nutrition, diet, herbs, plant, animal, and mineral products, and dietary supplements to promote, maintain, and restore health.
INTEGRATIVE MEDICINE

How does a Doctor of Oriental Medicine compare to an MD?

The OMD degree (Doctor of Oriental Medicine) and the DAOM (Doctor of Acupuncture and Oriental Medicine) are academic degrees that require significant postgraduate study of both oriental and western medicines – but does not expand the scope of practice beyond the LAc license, which excludes prescriptive medication and surgery. The MD has a much more rigorous study of science and western medical diagnostic techniques, and the scope of practice includes prescriptive medicine, surgery, and procedures within their area of specialty. In addition, the MD carries a heightened burden of defensible diagnosis. Medical doctors, dentists, and podiatrists are also allowed to practice acupuncture after completing training as defined by their medical boards.

How would you characterize the western medical establishment’s regard for acupuncture? Has this changed over time while you’ve been in practice?

I personally see many more physicians as patients now than 10 years ago, and find that referring physicians have become more interested in my assessment. In 2000, more than 1,700 medical doctors in the US belonged to the professional association for medical acupuncture, with perhaps 3,500 physicians practicing acupuncture to some extent. Today, doctors are becoming familiar with acupuncture and acupuncturists, and, regardless of their understanding, the value of acupuncture is becoming apparent.

When I was studying to become an acupuncturist, many students had medical backgrounds, including several dentists and nurses who wanted to work with health and healing, rather than focusing on treatment of symptoms. The average student age was 40, equally divided between males and females. Today, more than 80 percent of acupuncture students are women, the average age is 32, and many are entering their first professional career. California now leads the nation with more than 12,000 practitioners.

What is the status of insurance coverage for acupuncture? Has this changed during the time you’ve been in practice?

Private insurance companies now offer policies that provide for acupuncture, as do most HMOs. Medicare, however, still does not cover acupuncture. Most acupuncture offices operate on a cash basis, providing receipts that clients can submit for reimbursement. Insurance carriers were much more personal in the 1980s and 1990s, but I think this is generally true for most medical providers in private practice. Twenty years ago, I would call an insurance company and speak with a claims examiner who would prescribe a course of eight or ten treatments based on the patient’s condition. I would call or submit a summary of response after six treatments, and we would agree to a reasonable course of care. Today, it can be difficult to submit the right procedural and diagnostic codes and documentation to obtain payment. That being said, it is my impression that personal injury insurances and workers compensation insurance are pleased with the cost/benefit of acupuncture.

I am not sure how acupuncture will be defined within the Affordable Care Act. Acupuncture is not viewed as an essential service, and acupuncturists are not included within the health care workforce. Unfortunately, I anticipate inclusion of acupuncture may be contingent upon requiring a physician’s referral required prior to receiving care, which would remove the independent status of acupuncturists.

Common Medical Conditions Helped by Acupuncture

- Addictions
- Allergies
- Anxiety
- Arthritis
- Asthma
- Bone Pain
- Cancer Support
- Colds and Flu
- Diabetes
- Depression
- Digestive Disorders
- Diarrhea
- Dizziness
- Fatigue
- Fertility
- GERD
- Headaches
- High Blood Pressure
- IBS (Irritable Bowel Syndrome)
- Immunity
- Infertility
- Migraines
- Menopause
- Nerve Pain
- Acute and Chronic Pain
- PMS (Pre-menstrual Syndrome)
- Prostatitis
- PTSD (Post Traumatic Stress Disorder)
- Sciatica
- Shoulder Pain
- Sinusitis
- Sore Throat
- Smoking Cessation
- Sports Injuries
- TMJ
- Women’s Health

Source: World Health Organization