



Traditional Chinese Medicine

Traditional Chinese Medicine, also known as **TCM**, includes a range of traditional medical practices originating in China. Although well accepted in the mainstream of medical care throughout East Asia, it is considered an alternative medical system in much of the western world.

TCM practices include such treatments as herbal medicine (中药), acupuncture, acupressure, dietary therapy, and both Tui na and Shiatsu massage. Qigong and Taijiquan are also closely associated with TCM.

TCM claims to be rooted in meticulous observation of nature, the cosmos, and the human body, and to be thousands of years old. Major theories include those of Yin-yang, the Five Phases, the human body Channel system, Zang Fu organ theory, six confirmations, four layers, etc. Modern TCM was systematized in the 1950s under the People's Republic of China and Mao Zedong.

Ancient (classical) TCM history

Taijitu

Much of the philosophy of traditional Chinese medicine derives from the same philosophy that inform Taoist and Buddhist thought, and reflects the classical Chinese belief that the life and activity of individual human beings have an intimate relationship with the environment on all levels.

In legend, as a result of a dialogue with his minister Qibo (岐伯), the Yellow Emperor (2698 - 2596 BCE) is supposed by Chinese tradition to have composed his *Neijing: Suwen* or *Inner Canon: Basic Questions* (《内经·素问》). The book *Huangdi Neijing* (《黄帝内经》, Yellow Emperor's Inner Canon)'s title is often mistranslated as *Yellow Emperor's Classic of Internal Medicine*. Modern scholarly opinion holds that the extant text of this title was compiled by an anonymous scholar no earlier than the Han dynasty just over two-thousand years ago. Also another Chinese index book of herbs is "Ben Cao Gang Mu" (《本草纲目》) written by Li Shi Zhen.

During the Han Dynasty (202 BC –220 AD), Zhang Zhongjing (张仲景/張仲景), the Hippocrates of China, who was mayor of Chang-sha toward the end of the 2nd century AD, wrote a *Treatise on Cold Damage*, which contains the earliest known reference to *Neijing Suwen*. Another prominent Eastern Han physician was Hua Tuo (c. 140 – c. 208 AD), who anesthetized patients during surgery with a formula of wine and powdered marijuana. Hua's physical, surgical, and herbal treatments were also used to cure

headaches, dizziness, internal worms, fevers, coughing, blocked throat, and even a diagnosis for one lady that she had a dead fetus within her that needed to be taken out. The Jin dynasty practitioner and advocate of acupuncture and moxibustion, Huang-fu Mi (215 - 282 AD), also quoted the Yellow Emperor in his *Jia Yi Jing* (甲乙经/甲乙經), ca. 265 AD. During the Tang dynasty, Wang Bing claimed to have located a copy of the originals of the *Neijing Suwen*, which he expanded and edited substantially. This work was revisited by an imperial commission during the 11th century AD.

There were noted advances in Chinese medicine during the Middle Ages. Emperor Gaozong (r. 649–683) of the Tang Dynasty (618–907) commissioned the scholarly compilation of a *materia medica* in 657 that documented 833 medicinal substances taken from stones, minerals, metals, plants, herbs, animals, vegetables, fruits, and cereal crops. In his *Bencao Tujing* ('Illustrated Pharmacopoeia'), the scholar-official Su Song (1020–1101) not only systematically categorized herbs and minerals according to their pharmaceutical uses, but he also took an interest in zoology. For example, Su made systematic descriptions of animal species and the environmental regions they could be found, such as the freshwater crab *Eriocheir sinensis* found in the Huai River running through Anhui, in waterways near the capital city, as well as reservoirs and marshes of Hebei.

Contact with Western culture and medicine has not displaced TCM. While there may be traditional factors involved in the persistent practice, two reasons are most obvious in the westward spread of TCM in recent decades. Firstly, TCM practices are believed by many to be very effective, sometimes offering palliative efficacy where the practices of Western medicine fail or unable to provide treatment, especially for routine ailments such as flu and allergies, or when Western medicine fails to relieve patients suffering from chronic ailments. TCM has been shown to be effective in the treatment of chronic, functional disorders, such as migraines and osteoarthritis, and is traditionally used for a wide range of functional disorders. Secondly, TCM provides an alternative to otherwise costly procedures whom many can not afford, or which is not covered by insurance. There are also many who turn to TCM to avoid the side effects of pharmaceuticals.

TCM of the last few centuries is seen by at least some sinologists as part of the evolution of a culture, from shamans blaming illnesses on evil spirits to "proto-scientific" systems of correspondence; any reference to supernatural forces is usually the result of romantic translations or poor understanding and will not be found in the Taoist-inspired classics of acupuncture such as the *Huang Di Nei Jing*. The system's development has, over its history, been analysed both skeptically and extensively, and the practice and development of it has waxed and waned over the centuries and cultures through which it has travelled - yet the system has still survived thus far. It is true that the focus from the beginning has been on pragmatism, not necessarily understanding of the mechanisms of the actions - and that this has hindered its modern acceptance in the West. This, despite that there were times such as the early 18th century when "acupuncture and moxa were a matter of course in polite European society"

The term "TCM" describes the modern practice of Chinese medicine as a result of sweeping reforms that took place after 1950 in the People's Republic of China. The term "Classical Chinese medicine" (CCM) often refers to medical practices that rely on theories and methods dating from before the fall of the Qing Dynasty (1911). Advocates of CCM portray it as less influenced by Western and political agendas than TCM.

Basic theory and model of the body

Traditional Chinese medicine is largely based on the philosophical concept that the human body is a small universe with a set of complete and sophisticated interconnected systems, and that those systems usually work in balance to maintain the healthy function of the human body. The balance of yin and yang is considered with respect to qi ("breath", "life force", or "spiritual energy"), blood, jing ("kidney essence", including "semen"), other bodily fluids, the Wu Xing, emotions, and the soul or spirit (**shen**). TCM has a unique model of the body, notably concerned with the meridian system. Unlike the Western anatomical model which divides the physical body into parts, the Chinese model is more concerned with function. Thus, the TCM spleen is not a specific piece of flesh, but an aspect of function related to transformation and transportation within the body, and of the mental functions of thinking and studying.

There are significant regional and philosophical differences between practitioners and schools which in turn can lead to differences in practice and theory.

Theories invoked to describe the human body in TCM include:

- Channels, also known as "meridians"
- Wu Xing
- Qi
- Three jiaos also known as the Triple Burner, the Triple Warmer or the Triple Energiser
- Yin and Yang
- Zang and Fu

The Yin/Yang and five element theories may be applied to a variety of systems other than the human body, whereas Zang Fu theory, meridian theory and three-jiao (Triple warmer) theories are more specific.

There are also separate models that apply to specific pathological influences, such as the Four stages theory of the progression of warm diseases, the Six levels theory of the penetration of cold diseases, and the Eight principles system of disease classification.

Diagnosics

Following a macro philosophy of disease, traditional Chinese diagnostics are based on overall observation of human symptoms rather than "micro" level laboratory tests. There are four types of TCM diagnostic methods: observe (望 wang), hear and smell (闻/ wen),

ask about background (问/ wen) and touching (切 qie). The pulse-reading component of the touching examination is so important that Chinese patients may refer to going to the doctor as "Going to have my pulse felt."

Traditional Chinese medicine is considered to require considerable diagnostic skill. A training period of years or decades is said to be necessary for TCM practitioners to understand the full complexity of symptoms and dynamic balances. According to one Chinese saying, *A good (TCM) doctor is also qualified to be a good prime minister in a country.* Modern practitioners in China often use a traditional system in combination with Western methods.

Techniques

- Palpation of the patient's radial artery pulse (pulse diagnosis) in six positions
- Observations of patient's tongue, voice, hair, face, posture, gait, eyes, ears, vein on index finger of small children
- Palpation of the patient's body (especially the abdomen, chest, back, and lumbar areas) for tenderness or comparison of relative warmth or coolness of different parts of the body
- Observation of the patient's various odors
- Asking the patient about the effects of their problem.
- Anything else that can be observed without instruments and without harming the patient
- Asking detailed questions about their family, living environment, personal habits, food diet, emotions, menstrual cycle for women, child bearing history, sleep, exercise, and anything that may give insight into the balance or imbalance of an individual.

Methods of treatment

The following methods are considered to be part of Chinese medicine:

1. Acupuncture(针灸/針灸) (from the Latin word acus, "needle", and pungere, meaning "prick") is a technique in which the practitioner inserts fine needles into specific points on the patient's body. Usually about a dozen acupoints are needled in one session, although the number of needles used may range anywhere from just one or two to 20 or more. The intended effect is to increase circulation and balance energy (Qi) within the body.
2. Auriculotherapy (耳灼療法/耳燭療法), which comes under the heading of Acupuncture and Moxibustion.
3. Chinese food therapy (食疗/食療): Dietary recommendations are usually made according to the patient's individual condition in relation to TCM theory. The "five flavors" (an important aspect of Chinese herbalism as well) indicate what function various types of food play in the body. A balanced diet, which leads to health, is when the five functional flavors are in balance. When one is diseased

- (and therefore unbalanced), certain foods and herbs are prescribed to restore balance to the body.
4. Chinese herbal medicine (中草药/中药/中藥): In China, herbal medicine is considered as the primary therapeutic modality of internal medicine. Of the approximately 500 Chinese herbs that are in use today, 250 or so are very commonly used. Rather than being prescribed individually, single herbs are combined into formulas that are designed to adapt to the specific needs of individual patients. A herbal formula can contain anywhere from 3 to 25 herbs. As with diet therapy, each herb has one or more of the five flavors/functions and one of five "temperatures" ("Qi") (hot, warm, neutral, cool, cold). After the herbalist determines the energetic temperature and functional state of the patient's body, he or she prescribes a mixture of herbs tailored to balance disharmony. One classic example of Chinese herbal medicine is the use of various mushrooms, like reishi and shiitake, which are currently under intense study by ethnobotanists and medical researchers for immune system enhancement.
 5. Cupping (拔罐): A type of Chinese massage, cupping consists of placing several glass "cups" (open spheres) on the body. A match is lit and placed inside the cup and then removed before placing the cup against the skin. As the air in the cup is heated, it expands, and after placing in the skin, cools down, creating a lower pressure inside the cup that allows the cup to stick to the skin via suction. When combined with massage oil, the cups can be slid around the back, offering what some practitioners think of as a reverse-pressure massage.
 6. *Die-da* or *Tieh Ta* (跌打) is usually practiced by martial artists who know aspects of Chinese medicine that apply to the treatment of trauma and injuries such as bone fractures, sprains, and bruises. Some of these specialists may also use or recommend other disciplines of Chinese medical therapies (or Western medicine in modern times) if serious injury is involved. Such practice of bone-setting (整骨) is not common in the West.
 7. Gua Sha (刮痧)
 8. Moxibustion: "Moxa," often used in conjunction with acupuncture, consists in burning of dried Chinese mugwort (*Artemisia vulgaris*) on acupoints. "Direct Moxa" involves the pinching of clumps of the herb into cones that are placed on acupoints and lit until warm. Typically the burning cone is removed before burning the skin and is thought, after repeated use, to warm the body and increase circulation. Moxa can also be rolled into a cigar-shaped tube, lit, and held over an acupuncture point, or rolled into a ball and stuck onto the back end of an inserted needle for warming effect.
 9. Physical Qigong exercises such as Tai chi chuan (Taijiquan 太极拳/太極拳), Standing Meditation (站樁功), Yoga, Brocade BaDuanJin exercises (八段錦/八段錦) and other Chinese martial arts.
 10. Qigong (气功/氣功) and related breathing and meditation exercise.
 11. Tui na (推拿) massage: a form of massage akin to acupressure (from which shiatsu evolved). Oriental massage is typically administered with the patient fully clothed, without the application of grease or oils. Choreography often involves thumb presses, rubbing, percussion, and stretches.

12. Some TCM doctors may also utilize esoteric methods that incorporate or reflect personal beliefs or specializations such as Fengshui (风水/風水) or Bazi (八字).

Branches

Traditional Chinese medicine has many branches, the most prominent of which are the Jingfang (经方学派) and Wenbing (温病学派) schools. The Jingfang school relies on the principles contained in the Chinese medicine classics of the Han and Tang dynasty, such as Huangdi Neijing and Shennong Bencaojing. The more recent Wenbing school's practise is largely based on more recent books including Compendium of Materia Medica from Ming and Qing Dynasty, although in theory the school follows the teachings of the earlier classics as well. Intense debates between these two schools lasted until the Cultural Revolution in mainland China, when Wenbing school used political power to suppress the opposing school.

Scientific view

Efficacy

See also: **Acupuncture: Scientific research into efficacy**

Much of the scientific research on TCM has focused on acupuncture. The effectiveness of acupuncture remains controversial in the scientific community, and a review by Edzard Ernst and colleagues in 2007 found that the body of evidence was growing, research is active, and that the "emerging clinical evidence seems to imply that acupuncture is effective for some but not all conditions". Researchers using the protocols of evidence-based medicine have found good evidence that acupuncture is moderately effective in preventing nausea. A 2008 study suggest that combining acupuncture with conventional infertility treatments such as IVF greatly improves the success rates of such medical interventions. There is conflicting evidence that it can treat chronic low back pain, and moderate evidence of efficacy for neck pain and headache. For most other conditions reviewers have found either a lack of efficacy (e.g., help in quitting smoking) or have concluded that there is insufficient evidence to determine if acupuncture is effective (e.g., treating shoulder pain). While little is known about the mechanisms by which acupuncture may act, a review of neuroimaging research suggests that specific acupuncture points have distinct effects on cerebral activity in specific areas that are not otherwise predictable anatomically.

The World Health Organisation (WHO), the National Institutes of Health (NIH), and the American Medical Association (AMA) have also commented on acupuncture. Though these groups disagree on the standards and interpretation of the evidence for acupuncture, there is general agreement that it is relatively safe, and that further investigation is warranted. The 1997 NIH Consensus Development Conference Statement on acupuncture concluded:

...promising results have emerged, for example, showing efficacy of acupuncture in adult postoperative and chemotherapy nausea and vomiting and in postoperative dental pain. There are other situations such as addiction, stroke rehabilitation, headache, menstrual cramps, tennis elbow, fibromyalgia, myofascial pain, osteoarthritis, low back pain, carpal tunnel syndrome, and asthma, in which acupuncture may be useful as an adjunct treatment or an acceptable alternative or be included in a comprehensive management program. Further research is likely to uncover additional areas where acupuncture interventions will be useful.

Much less scientific research has been done on Chinese herbal medicines, which comprise much of TCM. Some doubts about the efficacy of many TCM treatments are based on their apparent basis in sympathetic magic (causation due to analogy or similarity) — for example, that plants with heart-shaped leaves will help the heart. While the doctrine of signatures does underlie the selection of many of the ingredients of herbal medicines, this does not necessarily mean that some substances may not (perhaps by coincidence) possess attributed medicinal properties. For example, it is possible that while herbs may have been originally selected on erroneous grounds, only those that were deemed effective have remained in use. Potential barriers to scientific research include the substantial cost and expertise required to conduct double-blind clinical trials, and the lack of financial incentive from the ability to obtain patents.

Pharmacological compounds have been isolated from some Chinese herbal medicines; Chinese wormwood (*qinghao*) was the source for the discovery of artemisinin, which is now used worldwide to treat multi-drug resistant strains of falciparum malaria, and is also under investigation as an anti-cancer agent. It was one of many candidates then tested by Chinese scientists from a list of nearly 200 traditional Chinese medicines for treating malaria. It was the only one that was effective. Many Chinese herbal medicines are marketed as dietary supplements in the West, and there is considerable controversy over their effectiveness

Safety In practice

Acupressure and acupuncture are largely accepted to be safe from results gained through medical studies. Several cases of pneumothorax, nerve damage and infection have been reported as resulting from acupuncture treatments. These adverse events are extremely rare especially when compared to other medical interventions, and were found to be due to practitioner negligence. Dizziness and bruising will sometimes result from acupuncture treatment.

Some governments have decided that Chinese acupuncture and herbal treatments should be administered by persons who have been educated to apply them safely. One Australian report said in 2006, "A key finding is that the risk of adverse events is linked to the length of education of the practitioner, with practitioners graduating from extended traditional Chinese medicine education programs experiencing about half the adverse event rate of those practitioners who have graduated from short training programs."

Allergy

Certain Chinese herbal medicines involve a risk of allergic reaction and in rare cases involve a risk of poisoning. Cases of acute and chronic poisoning due to treatment through ingested Chinese medicines are found in China, Hong Kong, and Taiwan, with a few deaths occurring each year. Many of these deaths do occur however, when patients self prescribe herbs or take unprocessed versions of toxic herbs.¹ The raw and unprocessed form of aconite, or fuzi is the most common cause of poisoning. The use of aconite in Chinese herbal medicine is usually limited to processed aconite, in which the toxicity is denatured by heat treatment.

Toxins and contaminants

Potentially toxic and carcinogenic compounds such as arsenic trioxide (三氧化二砷) and cinnabar (called zhūshā, 朱砂) are sometimes prescribed as part of a medicinal mixture, in a sense "*using poison to cure poison*". Unprocessed herbals are sometimes adulterated with chemicals that may alter the intended effect of a herbal preparation or prescription. As with the 2008 Chinese milk scandal, tampering with food and medicine to boost profit is rampant despite knowledge of the dangers and strict regulations in place that are circumvented often due to corruption and profit motive. However, knowledge of processing is being improved with more empirical studies of Chinese herbals and tighter regulations are being put in place, whether heeded to or not, regarding the growing, processing, and prescription of various herbals.

A medicine called *Fufang Luhui Jiaonang* (复方芦荟胶囊) was taken off shelves in UK in July 2004 when it found to contain 11-13% mercury.

In the United States, the Chinese herb *MaHuang* 麻黄; lit. "hemp yellow") — known commonly in the West by its Latin name Ephedra — was banned in 2004 by the FDA, although the FDA's final ruling exempted traditional Asian preparations of Ephedra from the ban. The Ephedra ban was meant to combat the use of this herb in Western weight loss products, a highly modern phenomenon and well removed from traditional Asian uses of the herb. There were no cases of Ephedra based fatalities with patients using traditional Asian preparations of the herb for its traditionally intended uses. This ban was ordered lifted in April 2005 by a Utah federal court judge. However, the ruling was appealed and on August 17, 2006, the Appeals Court upheld the FDA's ban of ephedra, finding that the 133,000-page administrative record compiled by the FDA supported the agency's finding that ephedra posed an unreasonable risk to consumers.

Lack of standardization

Chinese herbals are often not standardized from one pill to the next, or from one brand to the next, and can be reformulated, remixed, or otherwise altered by any company. To avoid such issues, standardized Japanese Kampo medicine for sale worldwide is a safer alternative based on classical Chinese traditional medicine and strict enforced regulations

and is regulated as pharmaceuticals coupled with extensive after-market testing and monitoring.

Vague naming

Many Chinese medicines have different names for the same ingredient depending on location and time, ingredients with different medical properties have shared similar names. For example, there was a report that mirabilite/sodium sulphate decahydrate (芒硝) was misrecognized as sodium nitrite (牙硝), resulting in a poisoned victim. In some Chinese medical texts, both names are interchangeable. The Chinese Medicine Registration Board of the Australian state of Victoria issued a report in 2004 which noted this was a problem that needed to be addressed.

Relationship with Western medicine

As an example of the different roles of TCM in China and the West, a person with a broken bone in the West (i.e. a routine, "straightforward" condition) would almost never see a Chinese medicine practitioner, whereas this is routine in China.

Most Chinese in China do not see traditional Chinese medicine and Western medicine as being in conflict. In cases of emergency and crisis situations, there is generally no reluctance in using conventional Western medicine. At the same time, belief in Chinese medicine remains strong in the area of maintaining health. As a simple example, you see a Western doctor if you have acute appendicitis, but you exercise or take Chinese herbs to keep your body healthy enough to prevent appendicitis, or to recover more quickly from the surgery. Very few practitioners of Western medicine in China reject traditional Chinese medicine, and most doctors in China will use some elements of Chinese medicine in their own practice.

A degree of integration between Chinese and Western medicine also exists in China. For instance, at the Shanghai cancer hospital, a patient may be seen by a multidisciplinary team and be treated concurrently with radiation surgery, Western drugs and a traditional herbal formula. A report by the Victorian state government in Australia on TCM education in China noted:

Graduates from TCM university courses are able to diagnose in Western medical terms, prescribe Western pharmaceuticals, and undertake minor surgical procedures. In effect, they practise TCM as a specialty within the broader organisation of Chinese health care.

In other countries it is not necessarily the case that traditional Chinese and Western medicine are practiced concurrently by the same practitioner. TCM education in Australia, for example, does not qualify a practitioner to provide diagnosis in Western medical terms, prescribe scheduled pharmaceuticals, nor perform surgical procedures. While that jurisdiction notes that TCM education does not qualify practitioners to prescribe Western

drugs, a separate legislative framework is being constructed to allow registered practitioners to prescribe Chinese herbs that would otherwise be classified as poisons.

It is worth noting that the practice of Western medicine in China is somewhat different from that in the West. In contrast to the West, there are relatively few allied health professionals to perform routine medical procedures or to undertake procedures such as massage or physical therapy.

In addition, Chinese practitioners of Western medicine have been less affected by trends in the West that encourage patient empowerment, to see the patient as an individual rather than a collection of parts, and to do nothing when medically appropriate. Chinese practitioners of Western medicine have been widely criticized for over-prescribing drugs such as corticosteroids or antibiotics for common viral infections. It is likely that these medicines, which are generally known to be useless against viral infections, would provide less relief to the patient than traditional Chinese herbal remedies. A more popular and reliable explanation is the financial benefits doctors receive from pharmaceutical companies for prescribing medication that may not be necessary.

Traditional Chinese diagnostics and treatments are often much cheaper than Western methods which require high-tech equipment or extensive chemical manipulation.

Modern TCM practitioners will refer patients to Western medical facilities if a medical condition is deemed to have put the body too far out of "balance for traditional methods to remedy.