TRADITIONAL CHINESE MEDICINE

Tcm

A broad range of medicine practices sharing common concepts which have been
developed in China and are based on a tradition of more than 2000 years.

About Traditional Chinese medicine

Traditional Chinese medicine (TCM) is a style of traditional Asian medicine informed by modern medicine but
built on a foundation of more than 2,500 years of Chinese medical practice that includes various forms of herbal
medicine, acupuncture, massage (tui na), exercise (qigong), and dietary therapy. It is primarily used as a
complementary alternative medicine approach. TCM is widely used in China and is becoming increasingly
prevalent in Europe and North America.

One of the basic tenets of TCM “holds that the body’s vital energy (chi or qi) circulates through channels, called
meridians, that have branches connected to bodily organs and functions.” Concepts of the body and of disease
used in TCM reflect its ancient origins and its emphasis on dynamic processes over material structure, similar to
European humoral theory. Scientific investigation has found no histological or physiological evidence for
traditional Chinese concepts such as qi, meridians, and acupuncture points. The TCM theory and practice are
not based upon scientific knowledge, and its own practitioners disagree widely on what diagnosis and
treatments should be used for any given patient. The effectiveness of Chinese herbal medicine remains poorly
researched and documented. There are concerns over a number of potentially toxic plants, animal parts, and
mineral Chinese medicinals. A review of cost-effectiveness research for TCM found that studies had low levels of
evidence, but so far have not shown benefit outcomes. Pharmaceutical research has explored the potential for
creating new drugs from traditional remedies, with few successful results. A Nature editorial described TCM as
“fraught with pseudoscience”, and said that the most obvious reason why it hasn’t delivered many cures is that
the majority of its treatments have no logical mechanism of action. Proponents propose that research has so far
missed key features of the art of TCM, such as unknown interactions between various ingredients and complex
interactive biological systems.

TCM’s view of the body places little emphasis on anatomical structures, but is mainly concerned with the
identification of functional entities (which regulate digestion, breathing, aging etc.). While health is perceived as
harmonious interaction of these entities and the outside world, disease is interpreted as a disharmony in
interaction. TCM diagnosis aims to trace symptoms to patterns of an underlying disharmony, by measuring the
pulse, inspecting the tongue, skin, and eyes, and looking at the eating and sleeping habits of the person as well
as many other things.

Theories

The fundamental principles of TCM are based on the Yin-Yang doctrine, the symbolic way of designating
opposing forces, and the five element theory that everything in the Universe is dominated and balanced by the
five elements, wood, fire, earth, metal and water. The therapeutic mechanism of TCM focuses on enhancing
human body’s resistance to diseases by improving the inter-connections among self-controlled systems and
integrating the human body with the environment. The practice of TCM involves physical therapy such as
acupuncture and chemical therapy using materials originating from plants, minerals and animals, while TCM
natural products may comprise one or more herbs in the form of decoctions.

In Chinese philosophy, the concept of yin yang sometimes referred to in the west as yin and yang) is used to
describe how polar or seemingly contrary forces are interconnected and interdependent in the natural world,
and how they give rise to each other in turn. Many natural dualities — e.g. dark and light, female and male, low
Yin yang are complementary opposites within a greater whole. Everything has both yin and yang aspects, although yin or yang elements may manifest more strongly in different objects or at different times. Yin yang constantly interacts, never existing in absolute stasis. The concept of yin and yang is often symbolized by various forms of the Taiji symbol, for which it is probably best known in western cultures. There is a perception (especially in the West) that yin and yang correspond to good and evil. However, Taoist philosophy generally discounts good/bad distinctions as superficial labels, preferring to focus on the idea of balance.

**Diagnostics**

In TCM, there are five diagnostic methods: inspection, auscultation, olfaction, inquiry, and palpation.

Inspection focuses on the face and particularly on the tongue, including analysis of the tongue size, shape, tension, color and coating, and the absence or presence of teeth marks around the edge.

Auscultation refers to listening for particular sounds (such as wheezing). Olfaction refers to attending to body odor. Inquiry focuses on the "seven inquiries", which involve asking the person about the regularity, severity, or other characteristics of: chills, fever, perspiration, appetite, thirst, taste, defecation, urination, pain, sleep, menses, leukorrhea. Palpation which includes feeling the body for tender A-shi points, and the palpation of the wrist pulses as well as various other pulses, and palpation of the abdomen. Examination of the tongue and the pulse are among the principal diagnostic methods in TCM. Certain sectors of the tongue's surface are believed to correspond to the zàng-fū. For example, teeth marks on one part of the tongue might indicate a problem with the Heart, while teeth marks on another part of the tongue might indicate a problem with the Liver. Pulse palpation involves measuring the pulse both at a superficial and at a deep level at three different locations on the radial artery (Cun, Guan, Chi), located two fingerbreadths from the wrist crease, one fingerbreadth from the wrist crease, and right at the wrist crease, respectively, usually palpated with the index, middle and ring finger) of each, for a total of twelve pulses, all of which are thought to correspond with certain zàng-fū. The pulse is examined for several characteristics including rhythm, strength and volume, and described with qualities like “floating, slippery, bolstering-like, feeble, thready and quick"; each of these qualities indicate certain disease patterns. Learning TCM pulse diagnosis can take several years.

**Chinese medicine therapies**

1. **Herbology:** It is traditionally one of the more important modalities utilized in traditional Chinese medicine (TCM). Each herbal medicine prescription is a cocktail of many herbs tailored to the individual patient. One batch of herbs is typically decocted twice over the course of one hour. The practitioner usually designs a remedy using one or two main ingredients that target the illness. Then the practitioner adds many other ingredients to adjust the formula to the patient’s Yin Yang conditions. Sometimes, ingredients are needed to cancel out toxicity or side-effects of the main ingredients. Some herbs require the use of other ingredients as catalyst or else the brew is ineffective. The latter steps require great experience and knowledge, and make the difference between a good Chinese herbal doctor and an amateur. Unlike western medications, the balance and interaction of all the ingredients are considered more important than the effect of individual ingredients. A key to success in TCM is the treatment of each patient as an individual. Chinese herbology often incorporates ingredients from all parts of plants, the leaf, stem, flower, root, and also ingredients from animals and minerals. The use of parts of endangered species has created controversy and resulted in a black market of poachers who hunt restricted animals. Most herbal manufacturers have discontinued the use of any animal parts from endangered animals.

2. **Acupuncture:** In traditional Chinese acupuncture it is thought Qi— the vital life energy found in the body’s meridians is disturbed, and an imbalance of relationships between Yin and Yang. The insertion of needles at acupoints mainly along the meridians would restore normal body equilibrium. This technique remains controversial as there are no anatomical or scientific evidence to validate the existence of Qi or meridians. A recent review claimed little convincing evidence traditional acupuncture is effective in relieving pain, and adverse events continue to be reported. However these claims are strongly contested and the counter claims that inappropriate methodology, interpretations and conclusions were reached. Acupuncture as a modality needs to be appraised, respected and require adequate proficiency gained before practice. Those who practice acupuncture approach the treatment by looking at pathology in the whole body. According to different body conditions, varied acupoints and manipulations are selected. The selection influences multiple targets and many diseases and stimulates the body to treat diseases, affecting the pathological process and improving physique. This adjustment is accomplished by the integration of the central nervous system, including cortex recombination, neural plasticity, and release of various neurotransmitters and hormones. The basis of acupuncture may be in changes in gene expression. Acupuncture anesthesia is a method used to prevent surgical pain and relieve physiological dysfunction. It is suitable for those who are allergic to narcotic drugs. Since 1958, Shanghai No. 1 People’s Hospital used it instead of narcotic drugs to perform tonsillectomies. Since
then, acupuncture anesthesia has been passed from general usage to selected application. According to its clinical effect and scientific evaluation, acupuncture anesthesia is effectively used in thyroid surgery, surgery of posterior cranial fossa, craniocebral operation, anterior cervical surgery, pulmonary resection, caesarean section, tubal ligation, and tooth extraction. It is also used in some surgeries with uncertain results like hysterectomy, Caldwell-Luc operation, subtotal gastrectomy, and strabismus surgery. It has not proved to provide effective anesthesia in limb surgery and perineal surgery.

3. **Moxibustion**: It is a traditional Chinese medicine therapy using moxa made from dried mugwort (Artemisia argyi). Available scientific evidence does not support claims that moxibustion is effective in preventing or treating cancer or any other disease, but it plays an important role in the traditional medical systems of China (including Tibet), Japan, Korea, Vietnam, and Mongolia. Suppliers usually age the mugwort and grind it up to a fluff; practitioners burn the fluff or process it further into a cigar-shaped stick. They can use it indirectly, with acupuncture needles, or burn it on the patient's skin.

4. **Chinese massage therapy (referred to as tuina)**: It is commonly defined as the ancient healing art of fingers and strength. Tuina has been practiced in China for over 5000 years. It is a well-respected treatment modality known to be helpful and safe for a wide range of conditions. For these reasons, it is rapidly gaining international favor. Tuina involves a wide range of technical manipulations conducted by a practitioner's finger, hand, elbow, knee, or foot applied to muscle or soft tissue at specific body locations. It incorporates many of the principles of acupuncture including the use of acupoints. For instance, tuina often uses manual techniques such as pushing, rubbing, kneading, or high-intensity, high-frequency patting to clear energy blocks along specific meridians associated with particular conditions. At present, Chinese massage therapy is widely accepted as a complementary and alternative medicine modality. Its efficacy has been demonstrated for the management of many medical and psychiatric conditions. These include, but are not limited to, failure to thrive in preterm infants, major depressive disorder, substance abuse and dependence, pain syndromes, and immune and autoimmune conditions. Massage therapy has been shown to be particularly effective for disorders of musculoskeletal origin. However, due to a paucity of high-quality studies, there remains controversy about the efficacy and effectiveness of massage. Many clinical trials suffer from inadequate sample size, low methodological quality, and/or sub-therapeutic massage dosing.

5. **Qi Gong**: It is a holistic system of coordinated body posture and movement, breathing, and meditation used for health, spirituality, and martial arts training. With roots in Chinese medicine, philosophy, and martial arts, qigong is traditionally viewed as a practice to cultivate and balance qi (chi), translated as "life energy".

6. **Chinese food therapy**: It is a mode of dieting rooted in Chinese understandings of the effects of food on the human organism, and centred on concepts such as eating in moderation. Its basic precepts are a mix of folk views and concepts drawn from traditional Chinese medicine. It was the prescientific analog of modern medical nutrition therapy; that is, it was a state-of-the-art version of dietary therapy before the sciences of biology and chemistry allowed the discovery of present physiological knowledge. It now qualifies as alternative medicine.

### Success or failure factors

Traditional Chinese medicine (TCM), as a large school of complementary and alternative medicines, should be evaluated, in terms of effectiveness and possible harms, in a similar way to other forms of medicine. Evidence from such research can be further summarized using systematic reviews and meta-analyses. The most rigorous method for demonstrating the effectiveness of medical interventions is the randomized controlled trial (RCT), and this has been the case for many decades. RCTs have been conducted in TCM, and some have shown very promising results such as Artemisia annua for malaria, acupuncture for low back pain, and Tai Chi for prevention of falls in the elderly. TCM trials, however, were often of relatively low methodological quality, and there was also selective publication of positive studies.

Clinical trials of TCM have been conducted for decades, and this experience has raised several major methodological issues that need to be addressed, if future trials are to produce sufficiently reliable evidence to influence medical practice both in China and elsewhere.

**First**, the RCT is most effective for evaluating relatively simple, standardized therapies, but many TCM interventions, such as herbal therapies, are considered to be most effective when tailored to the individual (which often involves a combination of different herbs, to be prepared in a specific way). This represents a major difference in the fundamental approach to prevention and treatment from conventional medicine. As a result, many different combinations of herbs may be used in the same trial and a large sample size is needed to examine many potential subgroup analyses in order to find out which treatments are effective and which are not, not to say subgroup analysis has its own problems.

**Second**, blinding is important for preventing biases but difficult to achieve in TCM trials as with other therapies such as surgical operations. This is because it is difficult to perfectly mimic acupuncture and different forms and
combinations of herbs in terms of shape, color, smell, and taste. Placebos for some proprietary TCM medicines and sham acupuncture have been designed and used in trials, but they are not widely practiced and there remain concerns over their validity.

**Third,** TCM treatments vary considerably in their stage of development. Some have been widely used and manufactured in form of proprietary medicines and are therefore likely to be safe and effective (although some may still require more thorough evaluation). Others are relatively new formulas and only used by a few TCM physicians (perhaps locally) and may thus have more uncertainty with regards to their effectiveness and safety. As a result, TCM therapies should not be considered equal when being evaluated further. For example, observational studies and routine clinical data can be used to initially screen those that have already been widely used and are likely to have some clinical benefits. Furthermore, there are no strategies in clinical evaluation for TCM, which currently exist for other forms of medicine (such as phase I–IV trials).

**Fourth,** TCM treatments are in general individualized and fall into what we call complex interventions, which have two or more components that need to work together to be effective. Methods and guidelines have been developed recently for evaluating complex interventions in other forms of medicine. How these ideas and methods can be applied to the evaluation of TCM therapies needs to be considered further.

**Fifth,** diagnosis by a TCM practitioner is usually required, so that the treatment can be tailored to the patient (although some proprietary TCM medicines for specific disorders do not require such “specialist” diagnoses). However there is a lack of widely accepted standardized methods for TCM diagnoses. Therefore, specifying and reporting how a disorder should be diagnosed and consequently treated will require careful standardization, so that it can be readily used by other clinicians.

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### Complications

From the earliest records regarding the use of medicinals to today, the toxicity of certain substances has been described in all Chinese materia medica. Since TCM has become more popular in the Western world, there are increasing concerns about the potential toxicity of many traditional Chinese medicinals including plants, animal parts and minerals. For most medicinals, efficacy and toxicity testing are based on traditional knowledge rather than laboratory analysis. The toxicity in some cases could be confirmed by modern research (i.e., in scorpion); in some cases it could not (i.e., in Curculigo). Further, ingredients may have different names in different locales or in historical texts, and different preparations may have similar names for the same reason, which can create inconsistencies and confusion in the creation of medicinals, with the possible danger of poisoning. Edzard Ernst “concluded that adverse effects of herbal medicines are an important albeit neglected subject in dermatology, which deserves further systematic investigation.” Research suggests that the toxic heavy metals and undeclared drugs found in Chinese herbal medicines might be a serious health issue.

Substances known to be potentially dangerous include aconite, secretions from the Asiatic toad, powdered centipede, the Chinese beetle (Mylabris phalerata, Ban mao), and certain fungi. There are health problems associated with Aristolochia. Toxic effects are also frequent with Aconitum. To avoid its toxic adverse effects Xanthium sibiricum must be processed. Hepatotoxicity has been reported with products containing Polygonum multiflorum, glycyrrhizin, Senecio and Symphytum. The evidence suggests that hepatotoxic herbs also include Dictamus dasycarpus, Atragirius membraneous, and Paeonia lactiflora; although there is no evidence that they cause liver damage. Contrary to popular belief, Ganoderma lucidum mushroom extract, as an adjuvant for cancer immunotherapy, appears to have the potential for toxicity.

A 2013 review suggested that although the antimalarial herb Artemisia annua may not cause hepatotoxicity, haematotoxicity, or hyperlipidemia, it should be used cautiously during pregnancy due to a potential risk of embryotoxicity at a high dose. However, many adverse reactions are due to misuse or abuse of Chinese medicine. For example, the misuse of the dietary supplement Ephedra (containing ephedrine) can lead to adverse events including gastrointestinal problems as well as sudden death from cardiomyopathy. Products adulterated with pharmaceuticals for weight loss or erectile dysfunction are one of the main concerns. Chinese herbal medicine has been a major cause of acute liver failure in China.

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### Prognosis

Holistic approaches to infertility management, such as Traditional Chinese Medicine (TCM) might address some
of the needs of women experiencing infertility, not met in the Western Medical approach. Traditional Chinese Medicine treatment encompasses herbal medicines, acupuncture and lifestyle counselling based on the individual’s underlying TCM pattern diagnosis using tools such as pulse, tongue, general physical and emotional wellbeing, and menstrual history. In TCM, different conditions such as idiopathic infertility, polycystic ovaries, recurrent miscarriage or unexplained stillbirth, may have similar underlying TCM pattern (e.g. Kidney Yin Deficiency Heat), and treatment would therefore be approached with similar therapies.

Recent meta-analyses of randomised controlled trials of TCM herbal therapy for female infertility revealed a 2 to 3.5-fold higher likelihood of pregnancy within a 4-month treatment period compared with Western Medical drug therapy. In addition, a meta-analysis of cohort studies involving more than 600 women suggested a mean clinical pregnancy rate of 50% using Chinese herbal medicine. While complementary and alternative medicines are increasingly used for infertility in western countries, herbal medicines including TCM herbal treatment, are being used only by a small proportion of affected women, e.g. 5% of those surveyed at an infertility clinic in South Australia, 10% in the UK, 18% in the USA. In contrast to the better known and increasingly established use of acupuncture as an adjunct treatment to IVF, the level of communication about and awareness of holistic TCM therapy for fertility management is low, with most women hearing about TCM as an alternative and complementary treatment option only through word of mouth.

Historically, acupuncture has received less attention as an intervention in women’s health, and the acupuncture department of a TCM hospital usually offers generalized services, and it does not usually specialize in gynecology. Interest in the usefulness of acupuncture in reproductive medicine has come from a range of sources, including from experimental studies on the mechanisms of acupuncture, reports from clinical trials, and the experience of women who incorporate nonconventional practices into their health care.

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  - **Adenomyosis**
    Medical condition characterized by the presence of ectopic endometrial tissue within the myometrium.
    Learn more at: [www.fertilitypedia.org/therapy/diag/adenomyosis](http://www.fertilitypedia.org/therapy/diag/adenomyosis)
  - **Anorexia Nervosa**
    An eating disorder characterized by the maintenance of a body weight below average, fear of gaining weight, and a distorted body image.
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  - **Pelvic Inflammatory Disease**
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Pyosalpinx
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Tubal phimosis
The type of blockage that affects the part of the fallopian tube end towards the ovary.
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Uterine fibroids
The most common benign smooth muscle tumors of the uterus encountered in women of reproductive age.
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Varicocele
An abnormal enlargement of the pampiniform venous plexus in the scrotum.
Learn more at: www.fertilitypedia.org/therapy/diag/varicocele

⚠️ Risk factors

Underweight
Underweight is a term describing a person whose body weight is considered too low to be healthy
Learn more at: www.fertilitypedia.org/therapy/rf/underweight

Poor dietary habits
Eating habits are one of the few factors within our control that impact not only our chances of failing pregnant.
Learn more at: www.fertilitypedia.org/therapy/rf/poor-dietary-habits

Gallery

Chinese Herbology
Traditional Chinese medicine shop in Tsim Sha Tsui, Kowloon, Hong Kong

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