

The Regulating Effect of Taiji Cloud Hand on Sub-health State

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Abstract: Sub-health refers to an intermediate state between health and disease. With the popularization of information technology, the acceleration of the pace of life, a great change has taken place, the vast majority of people work from "manual labor" into "sedentary", and sedentary caused by sub-health problems not only more and more complex, and involves people also more and more widely, almost become the norm of modern people, it seriously affects the quality of life and physical and mental health. If it is not prevented in advance, the sub-health state will gradually change into a disease state, which is bound to increase the burden of manpower, material resources and medical insurance finance in China's medical system. Taiji is a traditional Chinese health care method, cloud hand is the most representative of the harmony of Yin and Yang in Taiji, its gentle and gentle moves, not only easy to learn, and is not limited by the site, can be practiced anytime and anywhere, often practice Taiji cloud hand can effectively solve the sub-health problems caused by sitting. Based on this background, the analysis of sub-health on the analysis of the causes of sub-health.

Keywords: Taiji, Cloud hand, Sub-health, Preventive treatment of disease

1. The Thought of Preventive treatment of disease and Sub-health

The thought of preventive treatment of disease is an advanced and intelligent preventive medicine thought in traditional Chinese medicine. Tracing its origin, the idea was first seen in the "Huangdi Neijing". In the "Plain Questions Four Qi Regulating Spirits", it was pointed out that "The saint does not cure the people who has been ill, but treat who are not ill". It implies that people should pay attention to health preservation when they are not ill, so as to take preventive measures. Sun Simiao, the ancient medical master, divided the disease into three different stages, namely "before sickness", "to disease" and "being ill", and put forward the view of "preventive treatment of disease, treatment of disease in traditional Chinese medicine, treatment of disease". After thousands of years of continuous summary and development of countless doctors, the system and theory of preventive treatment of disease have become more and more perfect. This theory is a high generalization of the prevention thought of traditional Chinese medicine and is of great significance in disease prevention and diagnosis and treatment. The meaning of "preventive treatment of disease" in traditional Chinese medicine is mainly reflected in the following four aspects: health preservation, disease prevention first; prevent micro gradually, to save the disease; early treatment of the disease to prevent its transmission; after the disease, to prevent its recurrence^[1].

In the report "Meeting the Challenges of the 21st Century", the World Health Organization also pointed out that the main research focus of medicine in this century should be adjusted from disease-centered to human physical and mental health-centered^[2]. "The Clinical Guidelines for Sub-health Chinese Medicine" issued by the Chinese Association of Traditional Chinese Medicine points out that sub-health refers to a state between health and disease, which is manifested as a decrease in vitality, function and adaptability within a certain period of time, but does not meet the clinical diagnostic criteria of modern medicine^[3]. The sub-health state is that the body has some functional changes without organic lesions. Although there is no obvious disease, the vitality is low and the physiological function is reduced, which seriously affects the individual's living standards and quality of life. Relevant statistics show that the proportion of healthy people in the Chinese population is equivalent to the proportion of people with physical diseases, accounting for about 15% of the total population in China, and the remaining population is in a sub-health state. At the same time, a health

survey in several cities with more than one million people in China found that the higher the degree of development of the city, the more the number of sub-health people, the higher the social status of the population, the greater the proportion of sub-health^[4].

The diversification of symptoms is an important feature of sub-health, so domestic and foreign researchers have different classifications of it. According to the body symptoms, Zhao Ruiqin et al.^[5] divided into three types: physical, psychological and interpersonal sub-health. Professor Fan Xinrong^[6] participated in the formulation of sub-health classification and intervention standards. From the perspective of the trinity, the sub-health state was determined as six types of activity-rest type: the nutrition-metabolism type, the excretion type, the perception type, the sex-reproduction type and the cognition-response-relationship type. Zhang Zhaoquan^[7] divided sub-health into 11 types of sub-health such as the qi and blood deficiency type, the liver depression and qi stagnation type, the meridian stasis type and so on, by combining the clinical manifestations of sub-health with TCM symptoms. According to the syndrome differentiation of eight principles and zang fu organs, Professor Yang Zongbao^[8] summarized 15 types of sub-health status from different perspectives of deficiency and excess, cold and heat and allergy, such as the qi deficiency type, the phlegm dampness type, the zang-heat type, the deficiency heat type, the allergy type and so on.

2. Causes of Sub-health

The fast-paced lifestyle and working style in modern society are the main causes of sub-health. It has become the daily life of most people to sit in bed for a long time and have a small amount of activity. Over time, it will lead to the blockage of human meridians and collaterals, and the obstruction of qi and blood in the body, which will lead to the weakness of qi and blood and the inability to nourish the limbs and bones, and the occurrence of pain due to obstruction, resulting in neck, shoulder, waist and leg discomfort, scoliosis, muscle soreness, dizziness, fatigue, weakness, lack of energy, insomnia and other sub-health status. With the progress of science and technology, computers and mobile phones have gradually become our “hands”. More and more people have joined the ranks of phubbing. These behaviors unknowingly increase the pressure of the cervical spine. In addition, sedentary leads to long-term bending of the hip, which makes the lumbar muscles of the human body loose. This unbalanced posture will cause the lumbar spine to be pulled by the muscles and make the curvature straightened. The lumbar curvature becomes smaller, lightly the lumbar muscle strain, heavy. The intervertebral disc bulges and even compresses the nerves. The spine of the human body is a whole. While the curvature of the vertebral body of the cervical spondylosis patient changes, the curvature of the lumbar vertebral body will also change accordingly. According to the clinical and experimental conclusions, Professor Wei Yizong^[9] put forward the theory of vertebral curvature, and believed that the change of lumbar curvature caused by sedentary will affect the physiological structure of cervical curvature, which is an important cause of cervical spondylosis and cervical lumbar syndrome. Studies have shown that more than half of the sedentary population have experienced problems related to neck, shoulder and back pain, and the cause is sedentary^[10]. Such sub-health status is not only common but also difficult. How to prevent such problems has become more urgent and important. According to the symptoms, this belongs to the activity-rest sub-health proposed by Professor Fan Xinrong, that is, the sub-health state of people in daily activities, sleep, cardiopulmonary function and so on. Common manifestations include: lack of energy, physical weakness, fatigue, frequent colds, muscle soreness, limb stiffness, insomnia, fatigue, chills, cold limbs, panic, cold hands and feet, dizziness, many dreams, black eyes when sitting up, and so on^[6]. In order to regulate such sub-health, it is necessary to have moderate, appropriate, easy-to-master and easy-to-operate exercise, and Taiji cloud hand has its unique advantages in preventing and improving such sub-health status.

3. Overview of Taiji

Since ancient times, there has been a saying that medicine and martial arts are inseparable. Taiji, as one of Chinese excellent traditional culture, is a kind of health preservation method of “combining movement in silence and seeking silence in movement”. Taiji and traditional Chinese medicine are based on the theory of Yin and Yang and the five elements as the core, the integration of traditional Chinese medicine meridian theory, tonify the guidance of Qigong, and to the mind as the leading, the idea to guide qi and blood, to promote the shape of qi, section through. Each move in Taiji embodies Yin and Yang, which is embodied in the big opening and closing in the boxing style, the virtual and real center of gravity, the retraction of the moves, the light and heavy steps, the forward and reverse

movements, and the upper and lower left and right symmetry of the movements. By practicing these actions, it has the effect of soothing and regulating qi and promoting the unity of form and spirit^[11]. Practicing Taiji is also very helpful to the operation and generation of human qi and blood. Qi and blood are the basic substances that constitute and maintain human life activities, and play a vital role in human life activities. Qi controls the movement of blood, and blood is the mother of qi. Qi and blood breed and depend on each other. Taiji moves with the intention, and moves with the action, thus driving the operation of qi and blood. Through continuous changes in the actual situation, the whole body qi and blood are unobstructed.

Taiji requires “virtual collar top strength” for each action, that is, the Baihui acupoint is slightly raised, the Huiyin acupoint falls naturally, and the two points are pulled up and down with it. Like a straight rope, the whole body of the human body is always kept in the straight line of the rope, so that the human body and the spine are always in a healthy state of dynamic balance. To direct the motion of qi by moving the body, smooth the Ren meridian and Du meridian, so that the blood runs to the whole body. Taiji pays attention to the mind and mind, guides the action to form, moves slowly and softly, and stretches lightly. It is suitable for both men and women, old and young, and is not limited by time and season. All movements are in line with the movement law of the human body and the natural Yin and Yang conversion law. It has the effect of dredging the meridians, running qi and blood, regulating emotions, and can realize the combination of form and spirit, reconciling the five internal organs, and calming Yin and Yang. Negative mood is the main reason for the formation of sub-health state^[12], and practicing Taiji has a positive impact on people's personality and emotions. Studies have shown that middle-aged women who practice for a long time have significantly reduced anxiety and significantly increased happiness index, which can effectively improve negative emotions, makes people more calm and cheerful, cheerful and optimistic^[13], and have positive guiding significance for the regulation and treatment of sub-health.

4. Overview of Taiji Cloud hand and its treatment of sub-health

Taiji cloud hand, also known as “twining silk”, is one of the basic movements of Taiji, and it is also one of the movements that can best reflect Yin and Yang in Taiji. It is divided into active step cloud hand and fixed step cloud hand, and can be subdivided into single cloud hand and double cloud hand. Because of its spread in various Taiji, it is also known as the “basic style” of Tai ji. There has always been a legend of “the one who grasps Taiji cloud hand means who grasps the essence of Taiji”. For beginners, the practice process is generally from the step single cloud hand to the step double cloud hand, then to the live step single cloud hand, and finally the live step double cloud hand.

Taking the fixed step right single cloud hand as an example, the preparatory left foot opens to the left side, the center of gravity is in the right leg, the center of gravity ratio of the left and right legs is three to seven, the left hand has a fork in the waist, the left shoulder is naturally relaxed, the right arm is bent, the shoulder is sinking and the elbow is falling, the right elbow is above the right knee, the right hand is standing, the finger height is about the same as the right shoulder, and the eyes are watching the right hand. The center of gravity of the right leg moves slowly to the left leg, and the body turns slightly to the left. At the same time, the right hand moves arcwise to the left with the center of gravity of the body from top to bottom. The palm is oblique to the left front, and the palm is facing outward. When it comes to the left crotch, the right hand turns over, and the body slowly turns back to the right with the center of gravity. The right hand becomes a circle, and the eyes look at the right hand. The finger height and the eyebrow are flat. The distance between the hand and the body is about 20 centimeters. The knee tip must not exceed the toe^[14] and return to the preparatory type. In this process, the Baihui acupoint is slightly collared, loosening waist and sinking shoulder and falling elbow, fingers are naturally straightened, hands are not high but eyes, and low but hips^[15].

Taiji cloud hand drives the arm and cervical vertebra with the shoulder joint, and drives the lumbar vertebra and thoracic vertebra with the waist and hip joint. The shoulder joint combines the body, mind and breathing to induce qi and blood, and stimulates Jianjing acupoint, Jianzhen acupoint, Jianyu acupoint and the Hua Tuo Jiaji acupoint, with the hands of the three yin, the three yang meridians of the hand, the governor vessel, and the bladder meridian qi and blood operation, and then stimulates the five internal organs from the outside to the inside. At the same time, the neck, shoulder and back muscles are fully stretched, which has the function of relaxing the neck, shoulder and waist, improving the flexibility, coordination and stability of the limbs. With the slow and gentle movement of the cloud hand, the breathing rhythm will become more stable, so that the contraction and expansion of the five internal organs, tissues and organs, and muscles will be more rhythmic. The spiral strength generated

by the cooperation of the waist and hips and the limbs will help to transport the Dantian Qi (Yuan Qi) to the whole body. Practice to a certain stage, the neck and shoulder, palm will have acid, numbness, swelling, heat and other feelings, which is often said “Qi sense”^[16]. For example, the results of the controlled trial of patients with periarthritis of shoulder carried out by Wang Yudi et al.^[17] showed that the improvement of symptoms in the cloud hand group of Taiji was better than that in other treatment groups. The patients in the cloud hand group could move the shoulder joint in an all-round way by doing the circular exercise of cloud hand, which slowed down the tension of antagonistic muscles. It could not only reduce the adhesion of tissues around the shoulder joint, but also reduce the tension of ligaments near the joint, and improve the flexibility of tissues near the joint.

Although the Taiji cloud hand is mainly based on the hand movement, but from the point of view of Taiji itself, everything changes, and the waist exercise is its core. When practicing Taiji cloud hand, the Baihui acupoint will rise up, the Huiyin acupoint will fall down, the whole spine is in the state of rise up-fall down, so that each vertebral body is fully stretched, effectively reducing the pressure of intervertebral disc. At the same time, qi sinks into dantian, takes the waist as the axis, loosens the waist and spins the spine, transforms the center of gravity, stretches the waist and back tendons, stimulates the kidney acupoints and mingmen acupoints, stimulates the waist qi and blood, dredges the bladder meridian, and finally achieves the effect of loosening the waist and hip.

The whole process of practicing Taiji cloud hand is to bear the weight of the body by the legs through the conversion of deficiency and excess, which can promote the strength and coordination of the lower muscles and bones, enhance the muscle strength of the quadriceps and hamstring muscles, and maintain the stability of the joints^[18]. At the same time, the meridians of the three yin and three yang of the foot are pulled, so that the movement of qi and blood in the upper and lower limbs is more smooth, and the metabolism of the human body is enhanced. It can also greatly strengthen the movement of the body to the skeletal system, thereby increasing the bone density of the human body and preventing osteoporosis^[19]. Such as Wu Dong's^[20] research shows that the Taiji cloud hand can have a considerable training effect on the curvature and activity of the spine, and the people who have practiced the Taiji cloud hand for a long time are significantly higher than those who have practiced the Taiji cloud hand for a short time. The reason is that practicing Taiji cloud hand can improve the physiological curvature of the spine, balance the stress of the intervertebral disc, and also promote the deep muscles of the body to be trained, thus effectively reducing spinal pain and other symptoms. The breathing method used in Taiji is the abdominal breathing, which uses the characteristics of the deep diaphragm, and has the effect of stabilizing the lumbar spine than the chest breathing, because the abdominal breathing can not only increase the oxygen uptake, but also strengthen the tension of the diaphragm and the spinal micro muscle. It also plays an important role in lumbar fixation, which is the increase of thoracolumbar fascia tension and intra-abdominal pressure caused by abdominal respiration^[21]. Not only that, Taiji can also exercise intervention for people at risk of exercise. For example, patients with heart disease are limited in doing a lot of exercise, and Taiji is suitable for patients with heart disease because of its slow and gentle characteristics. Exercise is a safe mean of exercise intervention^[22]. It is also applicable to people with knee joint problems. Studies have found that Taiji can also effectively improve the symptoms of joint pain and stiffness in patients with knee osteoarthritis and restore joint function^[23]. Long-term practice in the elderly can also delay the process of natural decline of limb motor function. Because a single cloud hand is easier to practice and accept, the short-term effect will be more obvious^[24]. In addition, compared with the whole set of Taiji, Taiji cloud hand is simple and easy to learn. According to the size of the venue, you can choose the active cloud hand or the fixed cloud hand, and you can practice anytime and anywhere. In summary, practicing Taiji cloud hand can not only stretch the tense limbs, but also relax the mind, and significantly improve the negative emotions such as anxiety, depression and stress, which is conducive to people's physical and mental health^[25]. This practice is of great benefit to the long-term sedentary sub-healthy people.

5. Conclusion

At present, sub-health has become the norm under the modern lifestyle. With the gradual strengthening of people's health awareness, people's desire to improve sub-health is getting stronger and stronger. The elimination of sub-health status by practicing Taiji has been widely recognized in Chinese medical science and sports disciplines. It can not only dredge the meridians, reconcile the viscera, run qi and blood, but also regulate emotions and cultivate morality. Studies have shown that practicing Taiji can improve interpersonal relationships to a certain extent, so as to obtain more life satisfaction and improve happiness^[26]. With its unique advantages of easy to learn, easy to practice,

safe and convenient, “Taiji cloud hand” is very suitable for people of all ages in the fast-paced state of society to practice, and can effectively play a role in regulating sub-health status. As a concrete practice of the idea of “preventive treatment of disease” in traditional Chinese medicine, it is worth promoting. This kind of fitness exercises will play an important role in the field of sub-health treatment of traditional Chinese medicine in the future.

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