A brief analysis of clinical studies on acupuncture moxibustion and massage in health preservation

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Abstract: Acupuncture and massage is not only an important means to treat diseases, but also has significant advantages in health care, which is widely used in daily life. However, there is still a lack of comprehensive summary of acupuncture and massage in health preservation. With the improvement of living standards, the public’s demand for health care has increased, and with the promotion of the market, acupuncture and massage are more and more widely used in health care. However, due to the insufficient understandings and regulatory loopholes, sometimes, acupuncture and massage are not used correctly, which not only costs the economy, but also brings health risks. This paper introduces the concept of health maintenance of traditional Chinese medicine (TCM) combined with the concept of modern sub-health, and expounds the core ideas and theoretical basis of health maintenance of TCM. In addition, through the discussion of the historical documents and modern clinical research on the application of acupuncture and massage in health preservation, the role of acupuncture and massage in health preservation is affirmed, and also provides theoretical and clinical basis for the use of acupuncture and massage in health preservation. And further introduced the attentions and contraindications of moxibustion in health preservation, to help the public to form a correct and good view of health.

Keywords: Health preservation; physique; sub-health; acupuncture; massage

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“Health preservation” means to follow the nature, maintain the body and mind, compared with disease treatment, its main categories are disease prevention, strong tonic and longevity. With the continuous improvement of living standard in modern society, people are paying more and more attention to health. “health maintenance” has gradually become a trend. Various health maintenance centers are blossoming everywhere in the streets and alleys, and various health maintenance programs are also omnipresent. However, despite the increasing awareness of health preservation among the public, the knowledge of health care is still relatively lacking. Some industries or products under the guise of health preservation in traditional Chinese medicine (TCM) are easy to mislead the public, and sometimes fail to benefit and cause damage. TCM health care is based on the theoretical guidance

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of yin and yang, zang-fu organs, qi and blood, meridians and collaterals, etc., through acupuncture, medicine, food treatment, massage and other traditional health care methods to achieve the purpose of improving health and promoting longevity. Among, acupuncture and massage are favored by the public for their effectiveness, practicability and convenience. However, it should be pointed out that TCM health care emphasis syndrome differentiation and treatment. Although acupuncture and massage are popular methods of health care, they also have their indications and should not be abused. Therefore, we need to understand the TCM health care thoughts, and combined with modern clinical research, reasonable application of acupuncture, massage. So as to establish a correct view of health.

The understanding of health preservation in ancient Chinese medicine

The thoughts of “health maintenance and health care” in TCM, originated from the earliest extant medical classic “The Inner Canon of Huangdi”, can be summarized as the concept of “preventive treatment of disease”. It can be roughly concluded as “three prevention”, that is, preventing the occurrence of the disease, preventing the change of the disease and preventing the recurrence of the disease. Prevent the occurrence, refers to the health care measures taken in advance in the absence of disease. The aim is to improve health, strengthen the body and avoid the invasion of disease. Prevent the change, refers to measures taken to prevent progress and promote recovery after the occurrence of disease. Treating the disease as soon as possible, to prevent the mild disease to turn serious. Prevent the recurrence, refers to after treatment, the disease has just been cured, and the patient's physique is weak, at this time we should guard against disease recurrence (1). The thought of TCM health care runs through all stages of disease development, which embodies the idea of “holistic view” in TCM.

Furthermore, the TCM concept of health care is closely related to the constitution theory. Physique phenomenon refers to the comprehensive and relatively stable inherent characteristics of morphological structure, physiological function and psychological state formed on the basis of innate endowment and acquired in the human life process. and it is the human personality characteristic formed in the process of human growth and development and adapted to the natural and social environment (2). “The Inner Canon of Huangdi” said “illness starts from overuse”. “Overuse” of factors such as diet, emotion, external environment, daily life, and work, etc., is an important cause of the disease, and it is also closely related to the strength of a person’s constitution. Just as it is said in “Miraculous Pivot”, a person with a strong constitution will be healthy and free from disease in a normal climate. However, when he is weak and encounters an abnormal external environment, he will suffer from disease. In a word, the strength of the physique is closely related to the occurrence of diseases. Therefore, TCM health care attaches great importance to the physique factors. Considering the difference in the endowment of the human body and the difference between chills and fever, TCM emphasize the individuality-concerned treatment, by conditioning the physique to achieve the purpose of preventing diseases.

TCM health preservation and sub-health

In 1984, WHO said “health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity” (3). In August 2001, the sub-health research institute of geriatric pharmacy of Chinese pharmaceutical association said that sub-health should be in the middle state that can be transformed between health and disease, and its state is normally distributed (4). There is no such term as “sub-health state” in TCM, but “prevention before disease” in TCM theory of “treating before disease” and “sub-health intervention” have the same ideological basis, both of which are to use various methods to treat and intervene the early signs when there is no clear disease (5). Classics of TCM, such as “The Inner Canon of Huangdi”, “Treatise on Febrile Diseases”, “Treatise on Warm Heat Disease”, etc. all had a discussion on the theory and methods of the preventive treatment of disease. Reflecting that the ancient doctors’ attention to the “before-disease”, that is, the state of sub-health. Under the guidance of “holistic view” and “syndrome differentiation and treatment”, TCM can deeply understand the pathological and physiological functional status of the sub-healthy body, so as to carry out effective intervention and treatment for “before-disease”.

The theoretical basis of acupuncture moxibustion and massage

The core thoughts of acupuncture moxibustion and massage is to regulate the meridian system of the human body, to make qi and blood unobstructed, coordinate the functions.
The curative effect of moxibustion is related to moxibustion materials, acupuncture points, moxibustion methods and moxibustion quantity. In clinical practice, study have shown that acupuncture at zusanli can prevent influenza. Relevant data showed that the incidence of influenza in zusanli acupuncture group of 150 cases was significantly lower than that in the control group (9). What's more, in a study, Lai xinsheng treated 31 patients with vascular dementia by taking the main acupoints of si shen cong, feng chi and neiguan, with body needles. The total efficiency of the experiment reached 88.9 percent (10). Another, Gu xiaobo, through relevant studies, showed that acupuncture at shuifen, daheng, shangwan, zhongwan, xiawan, zusanli, tianshu, sanyin jiao and other points, combined with massage, treated 67 cases of simple obesity female patients, the total effective rate was 92.5% (11). After treatment, the symptoms and signs of the patients, such as abnormal diet, fatigue, irregular menstruation, edema, abnormal urine and feces, and weak waist and knee, were improved significantly.

Modern clinical study of moxibustion

Moxibustion is a kind of treatment method which uses moxibustion materials made of moxa leaves to stimulate acupoints on the surface of the body or specific parts, and to adjust the physiological and biochemical functions of the human body by stimulating the activity of meridians, so as to achieve the purpose of disease prevention and treatment. Zhang (12) treated 89 children with enuresis by moxibustion on guanyuan, baihui, the total effective rate was 97.8%. Tang (13) conducted moxibustion treatment on 100 children with common diarrhea, cold, growth and development lag, etc., indicating that moxibustion therapy is simple to operate and has a significant clinical effect on children's rehabilitation and health care. Besides, by using moxibustion to treat 96 patients with primary dysmenorrhea, Zhu (14) found that moxibustion can reduce the pain level of patients with primary dysmenorrhea, as well as relieve depression and anxiety during menstruation. In other studies, Luo et al. (15), Zhang (16), Ren (17), etc. found that moxibustion has a significant effect on health care of middle-aged and elderly people, and can improve their insomnia. Another, Xu (18) used moxibustion to treat 60 patients with sub-health state, and the results showed that moxibustion was effective in preventing sub-health conditions such as chronic fatigue, chronic pharyngeal pain and recurrent cold.

Modern clinical studies of acupuncture

Moxibustion and massage in health preservation

Modern clinical study of acupuncture

Zhou (2) discussed the health prevention and intervention of acupuncture combined with diet and exercise on people with nine constitutions: mild constitution, qi-deficiency constitution, yang-deficiency constitution, yin-deficiency constitution, warm-hot constitution, phlegm-dampness constitution, blood stasis constitution, special endowment constitution and qi-depression constitution. It explains the guiding role of TCM syndrome differentiation and treatment on acupuncture under the theory of constitution. Fang (8) put forward five groups of acupuncture health points. He pointed out that acupuncture at dazhui and guanyuan can balance Yin and Yang of the body and prolong life, acupuncture at baihui (sishencong) and yongquan can strengthen brainpower and refresh mind, acupuncture at shenshu, mingmen, taixi and taichong can regulate the vital energy and benefit the joints. For women, acupuncture at yangbai, sibai and taibai can moisturize the skin. Another
in order to obtain the best curative effect, it is necessary to arrange the interval of moxibustion reasonably and master the appropriate moxibustion quantity. Liu (19) thinks moxibustion time is 5–10 minutes, the longest 20–30 minutes is appropriate, usually health moxibustion time can be a little short, disease and after the recovery of moxibustion time can be a little longer; In spring and summer, moxibustion time should be short, in autumn and winter should be long; The moxibustion time of limbs and chest should be short, the abdomen and back should be long. The moxibustion time of old people, women and children should be short, and the time of young adults should be slightly longer. It should also be noted that moxibustion is a warming therapy with specific indications and contraindication. Its use must be under the guidance of the basic theoretical knowledge of TCM, with the principle of syndrome differentiation and treatment. “The Inner Canon of Huangdi” indicated that the moxibustion should be performed according to the specific conditions such as age, constitution, gender, fat and thin.

**Modern clinical study of massage**

Chinese massage therapy is guided by the basic theories of TCM. Based on the holistic view and syndrome differentiation, different therapies are applied to the human meridians and acupoints to prevent and treat diseases. In a study, by treating with back meridian massage, Lei et al. (20) found that the visual simulation score of fatigue degree of 50 patients with sub-healthy fatigue state was not only significantly different before and after treatment, but also significantly different from that of the observation group. And the comprehensive efficacy was better than that of the observation group, too. Indicating that back massage has a good intervention effect on sub-healthy fatigue state. Furthermore, through clinical studies, Zeng et al. (21) found that the use of thumb kneading, palm kneading and chiropractic kneading on the back had a good effect on patients with sub-health state of physical pain. Besides, under the guidance of the meridian theory, Li et al. (22) directly stimulated the body surface of the twelve regular meridians and the governor and conception vessels by pressing, kneading, kneading and tapping, which can obviously improve the ability of psychological adjustment under the sub-health condition. And Fang et al.’s (23) study found that the use of abdominal massage in the treatment of generalized anxiety disorder patients, the efficacy is similar to paroxetine hydrochloride, but the long-term effect of abdominal massage is better and the side effect is smaller. What’s more, there is a clinical observation shows that massage can improve sleep and eliminate fatigue of sub-health people, and also can improve the somatization symptoms, depression, anxiety, psychosis and other symptoms of sub-health (24).

**International clinical study of acupuncture and moxibustion in the treatment of related diseases**

The foreign studies on acupuncture and moxibustion are mainly reflected in the treatment of diseases. Brinkhaus et al. studied on 422 patients with seasonal allergic rhinitis and found that acupuncture led to significant improvements in disease-specific quality of life and antihistamine use measures after 8 weeks of treatment compared with sham acupuncture and with rescue medication (RM, cetirizine) alone (25). Moreover, acupuncture also plays an important role in the treatment of cancer. Hershman DL found that among postmenopausal women with early-stage breast cancer and aromatase inhibitor-related arthralgias, true acupuncture compared with sham acupuncture or with waitlist control resulted in a significant reduction in joint pain at 6 weeks (26). Molassiotis et al.’s study found that acupuncture can also improve the cancer-related fatigue symptoms of breast cancer patients and improve their quality of life (27). And Enblom et al. studied 215 patients with cancer radiotherapy, found that both acupuncture and sham acupuncture had a relieving effect on nausea and vomiting caused by radiotherapy, and had positive effects on relaxation, mood, sleep and pain relief (28). On the other hand, in some diseases, the therapeutic effect of acupuncture is still unclear. Hinman RS researched 282 patients with moderate or severe chronic knee pain aged ≥50 years in Victoria, Australia, and found that neither laser nor needle acupuncture conferred benefit over sham for pain or function (29). Its findings do not support acupuncture for these patients.

**The status quo of acupuncture moxibustion and massage in health preservation industry**

The idea of health preservation of TCM has been deeply rooted in the hearts of people. In some ways, the operations of TCM such as acupuncture, moxibustion, massage and cupping are indeed more effective in preventing diseases than in treating diseases. They have significant advantages in health care and are deeply loved by the public. However,
what needs to be faced is that there are also many problems in TCM health care, and the abuse of acupuncture moxibustion and massage is widespread. The reasons can be summarized as follows: (I) The health care market is vast and developing rapidly, but the industry level is uneven. There is a big gap in the health care industry, but the cultivation of health care talents still cannot keep up with it. There are fewer regular employees, and various health centers and health halls are mixed with different levels of expertise. In order to pursue benefits, some of them ignore the principle of syndrome differentiation and treatment and abuse of acupuncture moxibustion and massage, which is not only not conducive to the health of people, but also may cause damage. (II) Although the public's concept of health preservation has been enhanced, the knowledge of health preservation is lacking. The ordinary people's understanding of health care is superficial, and it is often easy to follow the trend. For example, in recent years, the “dog-days paste” has become more and more popular. Every year when it comes to the hot days, the public's enthusiasm for “dog-days paste” is extremely high. However, it should be noted that “dog-days paste” has its indications and is not suitable for all people. In addition, in ancient times, there was a saying that “even if without disease, we can often moxibustion guan yuan, qi hai, ming men and zhong wan”, but it was actually designed for the people of Yang deficiency and Qi deficiency, not for healthy people. However, the public still has insufficient knowledge in this area. (III) Health care industry lacks legal norms. At present, the state strongly supports the development of Chinese medicine, but the relevant laws and regulations are still not perfect. The health care industry has problems such as low market access, lack of industry standards, incomplete regulatory systems, and inadequate punishment measures. Some enterprises or private individuals are exploiting legal vacancies to pursue interests, abuse TCM operation, which is not conducive to the overall healthy development of the industry.

Therefore, in order to promote the long-term development of TCM health preservation, the following suggestions are made on the countermeasures to the above problems: (I) Change the concept, recognize the status of health care physicians in the industry, encourage the establishment of relevant disciplines in colleges and universities, train specialized and high-knowledge talents, and increase the salary of moxibustion and massage therapists, so as to attract outstanding talents into the health care industry. On the other hand, we should also tighten the industry access mechanism and improve the relevant qualification examination system. Provide professional guarantee for health-care related operations from the personnel in the industry. (II) Popularize health-related knowledge to the public. For the ancient literature, on the basis of in-depth research, spread to the public in popular language. With the help of the Internet, TV, comics, entertainment activities, etc., to popularize the theory of TCM health care to the masses. Make them understand the indication and contraindications of acupuncture and massage, so as to choose the way of health care that suits oneself. On the other hand, translating classic international papers into Chinese. Through the understanding of the development of acupuncture and massage at home and abroad in the theoretical and clinical research, clarifying the clinical evidence. (III) At the national and government levels, on the basis of the TCM law, we should further elaborate the legal issues in the implementation of acupuncture and massage, establish TCM health care industry standards, improve the management system of TCM health clinics, strengthen industry supervision while providing policy support, and strictly examine the qualification of practitioners.

**Summarizes**

The concept of TCM health preservation is based on the basic theory of TCM and has a long history. The methods of health care have its own features and various forms. Among them, the advantages of acupuncture moxibustion and massage are obvious and widely accepted by the public. Furthermore, the curative effect of acupuncture moxibustion and massage have been confirmed by the modern clinical studies and experimental studies, which can effectively improve the sub-health status, improve the quality of life, and treat related diseases.

In terms of external communication, as a part of traditional culture with Chinese characteristics, acupuncture and moxibustion have been widely spread and developed in the world. According to the survey of 202 countries and regions in the world by the world federation of acupuncture and moxibustion societies, by 2015, acupuncture and moxibustion had been used in more than 180 countries. In Japan, China’s neighboring country, acupuncture moxibustion has undergone a long process of spread and development, with a history of more than 1,500 years. It is an important part of Japanese hanfang medicine (30).

All in all, acupuncture moxibustion and massage has a clear effect on disease prevention and treatment,
which has been recognized both domestically and internationally. In the development of the future, internally, we should formulate strict access standards of acupuncture moxibustion and massage industry, perfect the relevant laws and regulations, improve the treatment of acupuncture moxibustion and massage technician. On the other hand, externally, we should strengthen international communication, promote cultural transmission, draw lessons from excellent experience, seek international cooperation, establish international standards of acupuncture moxibustion and massage therapy, so as to promote the development of acupuncture moxibustion and massage in the international.

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