

# Relationship Research between the Chinese Medicine Constitution and Sub-Health\*

## Xiufeng Liu, Bo Xu, Zhenhu Chen

School of Medical Information Engineering, Guangzhou University of Chinese Medicine, Guangzhou, China Email: liu\_xf@gzucm.edu.cn

Received 2013

#### **ABSTRACT**

With further development of the bio-psycho-social medical model, people began to re-examine the knowledge of disease and health. The concept of sub-health has also been proposed in western medicine. Because of the lack of a specific standard, it is difficult to make clinical diagnosis and treatments for sub-health. Chinese medicine constitution theory has been widely accepted in China, and has a set of executable standards. This paper puts forward a new research method that connects the sub-health in western medicine and Chinese medicine constitution theory together. The potential relationships and influences between Chinese medicine constitution theory and sub-health were analyzed and key content and research progress were discussed. The research method in this paper will provide new ideas for sub-health research.

Keywords: Chinese Medicine Constitution; Sub-Health; Relationship

#### 1. Introduction

The concept of Sub-health State was first proposed by the scholar Beckman of the former Soviet Union in the 1980s. It is called the "third State" which is the physiological state between health and illness. It means that the body has no apparent disease, but the adaptive capacity reduced physically, so as to resulting in a poor mental state. In 1988, United States Centers for disease control and prevention identified a group of chronic persistent or recurrent fatigue symptoms of mental and physical, which continue for 6 months or more, as the main characteristic of the syndrome. This syndrome was officially named for Chronic Fatigue Syndrome (CFS), and the diagnostic criteria for CFS were also set subsequently. The CFS standards were also further developed in Australia and United Kingdom on the basis of the works of United States.

# 2. Influence Factors and Research Progress of Sub-Health

1) Sub-health Influence factors

The cause of sub-health can be summed up as: 1) excessive stress, imbalance of physical and mental state; 2) unreasonable diet, unhealthy eating habits; 3) disordered

\*This paper is supported by Guangdong Province Technology Project in Social Development Field of Guangdong Provincial Department of Science and Technology, China (201102). The corresponding author is Zhenhu Chen.

biological rhythm, unscientific lifestyle; 4) increasingly serious environmental pollution, small living space; 5) reduced quality of emotional life, interpersonal tensions; 6) bad mood, bad character [1]. In short, personality factors, psychosocial factors, poor bad living habits and unhealthy environmental factors are associated with the sub-health state, embodying much tension, strong pressure, recurrent frustration, excessive fatigue, environmental pollution, and so on. These all are the key risks of the formation of sub-health.

### 2) Sub-health Research progress

Wang Qi suggested that the sub-health state was a low-quality state of body and mind between the health and morbid state. Although the body has no clear sign of disease, people's physical and/or psychological feelings were not really well, resulting in a pathological state of reduced vitality and adaptability to the outside world. Wang Qi focused on the subjective feelings of the human body and mind [2]. However Wang Yuxue believed that sub-health is an intermediate state between health and illness. It is not only a separate stage but also a dynamic process, and it means that body begins to show signs or symptoms, but has not reached to the standards of disease. Wang Yuxue focused on the process of development [3]. Liu Baoyan set a time limit when introducing the concept of Sub-health State. Liu stressed the persistence and repetition of sub-health and pointed out that sub-health was a state with no clear diagnosis, but the adaptive capacity that has being reduced significantly for

Copyright © 2013 SciRes.

at least three months or longer [4]. Currently no common standard is available for sub-health diagnose, however, a conclusion was reached that sub-health is a state or a process between health and disease featuring with usually reversible psychosomatic disorders. The development of sub health is often closely related to the social and psychological factors. Sub-health associates with a variety of symptoms which often cannot be detected with existing methods or shows inconsistence test results [5, 6].

#### 3. Chinese Medicine Constitution

The concept of "Constitution" has been put forward since the Spring and Autumn period by the ancient scholars in China, but it was not accepted by general physicians until the Qing dynasty, which has been being developed continuously since then. Scholars from different schools hold different opinions on the concepts of traditional constitution. Mr. Kuang [7] and Mr. He [8]'s point of views are more or less similar: the factors affecting the formation of constitution consist of the congenital physical form and acquired influence factors, the physiological state and pathological characteristics. The two scholars' conception of Chinese constitution is based on the physiology and pathology areas. In the early 90's, Wang Qi studied the Constitution theory in ancient and modern times systematically, proposing his constitution concept: "the Constitution is developed in the course of individual lives, finally forming a integrated, relatively stable state of morphological, physiological and psychological characteristics on the basis of congenital genetic and acquired factors [9]." Concept of constitution contains the psychology category. Mental State mainly refers to the individual and unique personality which is persistent and comprehensive characteristic of behavior and psychology. Wang's views are finally accepted widely and agreed with to a point that the theory of traditional Chinese medicine constitution is led by traditional Chinese medicine theory, its goal is to explore various kinds of constitution features and the relevant physiological and pathological characteristics, and basing on which to analysis the disease reaction, lesions and trend, thus guiding people to prevent and treat illness.

## 1) Classification of Chinese Medicine Constitution

Wang Qi and his followers consulted 168 kinds of literature, analyzed 12,471 cases of epidemiological information, and then summarized 408 kinds of physical characteristics. They specified that Chinese medicine constitution includes nine basic types: constitution of yinyang harmony, constitution of qi asthenia, constitution of yang asthenia, constitution of yin asthenia, constitution of phlegm-dampness, constitution of damp-heat, constitution of blood stasis, constitution of qi stagnation, and allergic constitution [10]. In order to uniform the stan-

dards, the research group of classification on Chinese Medicine constitution leaded by Wang Qi establishes a standardized scale and form the Classification Criteria of Chinese Medicine Constitution [11]. These criteria have been listed as the Chinese medicine standards of Chinese Association (for trial implementation), and can be applied to the health assessment directly.

#### 2) Effect factors of Chinese Medicine Constitution

Formation of the Constitution is closely associated with the congenital genetic and acquired geographical factors, it is interacted with the climate condition, diet habit, emotion state, work environment, rest efficiency and so on. Graduate student Gao Fei in Beijing University of Chinese Medicine studied 624 copies of medical information during December 31, 2008 and December 31, 2008 from the Beijing Chinese Medicine Hospital. He classified those patients as nine kinds of types according to the above criteria and found that BMI (weight index) and three kinds of biased constitutions including yang-asthenia, blood-stasis and qi-stagnation are positive related, related coefficients are respectively 0.191, 0.099, and 0.105 upon examination of statistically significant differrences (0.05) [12]. It shows that the body weight can obviously affect the constitution formation and development, and the abnormal body weight is easy to bring about the sub-health problems.

# 4. Chinese Medicine Constitution and Sub-Health

Constitution is inherent and comparatively stable individual characteristic from innate and acquired essence. Different people have different constitution types, which have been accepted by the scholars at home and abroad. Constitution of yin-yang harmony can not only benefit people's health, but also help the transformation of subhealth into health. However the people of biased constitution may tend to be in the sub-health state due to the disordered yin-yang harmony, although it has not developed into disease. The biased constitution easily tends to develop into disease, at the same time determine to some extent the development and process of disease.

#### 1) Biased constitution and sub-health

Epidemiological survey shows that yin-yang harmony accounts for 14% of 9 constitution types, with biased constitution for 67.86% [13]. The top 3 of 8 biased constitution types are qi-asthenia, damp-heat and yang-asthenia, accounting 13.42%, 9.08% and 9.04% respectively. They are the main types of biased constitution types for human beings.

Gao Fei *et al.* studied four biased constitution types, yin-asthenia, damp-heat, blood-stasis and qi-stagnation and their potential of developing into sub-health status. The results showed that: 1) the probability of developing sub-health status for Yin-asthenia was 1.618 times higher

Copyright © 2013 SciRes.

than that for non Yin-asthenia; 2) the probability for damp-heat was 1.585 times higher than that for non damp-heat; 3) the probability for blood-stasis was 1.6 times higher than that for non blood-stasis; 4) the probability for qi-stagnation was 1.891 times higher than that for non qi-stagnation [14]. Sub-health state can be proposed by person with biased Constitution, which can develop into sub-health status under stimulation of certain conditions. Therefore, more investigations on biased system are necessary for further understanding the relationship between biased constitution and sub-health.

2) Constitution and sub-health in yin-yang harmony

The significance of constitution lies in exploring the nature of the disease in treatment. The essence of "Subhealth" Symptoms is one kind of pathological constitution. In order to harmonize "sub-health", we must identify the constitution first, which is the so-called "treatment by constitution identification". It uses the individual constitution as research object, and grasp individual differences and general whole factors of health and disease in terms of physical characteristics and different constitution classifications, on the basis of which to develop the prevention principles and select the appropriate method of treatment and prevention.

Zheng Ziqiang studied the homemade "digestant formula tea" by doing research on the 3 patients of phlegm-dampness constitution in the July 2009 - October 2009, finding that this product have a good effect on adjusting symptoms in phlegm-dampness Constitution [15]. So we can draw a conclusion that traditional Chinese medicine can recuperate biased pathological constitution significantly, so as to prevent sub-health and even the disease. Chinese medicine constitution is also considered in the same treatment for different diseases and the different treatments for the same disease. It is also strongly suggested that scholars can research the sub-health problems from the view of constitution types.

# 5. Discussion

The standard of Chinese medicine constitution has already been introduced for some time, but in fact the scholars have spared no efforts to improve the standards. Although detecting gene is a good method for constitution identification, the cost is too much for people to afford. Subjective consciousness will exist inevitably when doing questionnaire investigation of family history or life history, which will affect the accuracy of the constitution type's judgment. Therefore each clinical expert should do their best to develop simple but exact method to judge the constitution. What's more, the four biased constitution types have been proved to be pathological features, but the key point is what causes the concern of the masses and help them adjust biased constitution to yin-yang harmony constitution, so as to prevent disease effective-

ly.

# 6. Acknowledgements

This paper is supported by Guangdong Province Technology Project in Social Development Field of Guangdong Provincial Department of Science and Technology, China (201102).

# **REFERENCES**

- [1] Y. B. He, F. Shou and X. F. Zhang, "Awareness and Prevention Measures for Sub Health in TCM," *Journal of Zhejiang College of Traditional Chinese Medicine*, Vol. 25, No. 6, 2001, pp. 13-14.
- [2] Q. Wang, "Traditional Chinese Medicine Will Make New Contributions to Mankind in Treating Sub-Health Conditions in the 21th Century," *Journal of Beijing University* of Chinese Medicine, Vol. 24, No. 2, 2001, pp. 1-4.
- [3] Y. X. Wang, "New Concepts for 21st Century Health," Jiangxi Science and Technology Press, Nanchang, 2001, p. 12.
- [4] B. Y. Liu, L. Y. He and Y. M. Xie, "Concept Research on Sub-Health State," *Chinese Journal of Basic Medicine in Traditional Chinese Medicine*, Vol. 12, No. 11, 2006, pp. 801-802.
- [5] S. R. Lu and X. W. Fang, "State before Disease—A New Field of Medical Research," *Medicine and Philosophy*, Vol. 3, 1983, pp. 11-13.
- [6] G. D. Gao, "Exploring and Discussion on the Medical Ethics Problems of People in Third States," *Medicine and Philosophy*, Vol. 10, No. 6, 1989, pp. 28-29.
- [7] Y. B. Zhu, Q. Wang and H. S. Xue, "Preliminary Assessment on Performance of Chinese Medicine Questionnaire," *Chinese Journal of Clinical Rehabilitation*, Vol. 10, No. 3, 2006, pp. 15-17.
- [8] Y. B. Zhu, Q. Wang and S. T. Origasa, "TCM Heavy Tickets Edged Their Stool-History of Sideburns," *Japan Public Gathering Title kHz*, Vol. 52, 2005, p. 383
- [9] J. X. Yang, "Occurrence and Prevention of Sub Health," Shanghai Journal of Preventive Medicine, Vol. 13, No. 1, 2001, pp. 9-10.
- [10] Q. Wang, "Status and Prospect of Constitutional Theory in Traditional Chinese Medicine," *Chinese Journal of Ba*sic Medicine in Traditional Chinese Medicine, Vol. 8, No. 2, 2002, pp. 6-15.
- [11] D. Y. Kuang, "The Constitutional Pathology of Traditional Chinese Medicine," Shanghai: Shanghai Popular Science Press, 2000.
- [12] F. Gao, G. W. Wang and J. Li, "Study of the Correlation between Body Mass Index of Health—Monitoring Population and TCM-Based Constitution," World Journal of Integrated Traditional and Western Medicine, Vol. 5, No. 2, 2010, pp. 126-129.
- [13] Q. Wang, "The Constitution Theory in Traditional Chinese Medicine," People's Medical Publishing House, Beijing, 2009.

432 X. F. LIU *ET AL*.

- [14] F. Gao, "Correlation Study on Chinese Biased Constitution, Body Mass Index and Sub-Health," Beijing University of Chinese Medicine, Beijing, 2010.
- [15] Z. Q. Zheng, "Discussion on the Prevention of Sub-Health State from Constitution Theory," Nanjing University of Chinese Medicine, Nanjing, 2010.

Copyright © 2013 SciRes.