

Thinking and Methodology

Identification of Chinese Medicine Constitution in Public Health Services*

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ABSTRACT Public health is the science and art of preventing disease, prolonging life and prompting physical and mental health through evaluation, policy development and sanitary measures. The development of public health has become an important part of health care reform in China, and it requires the participation of Chinese medicine (CM) in the practice of public health. This study analyzed the problems of CM services in public health, suggested that the identification of CM constitution could propose an application paradigm of CM services in public health, and described from aspects of theory, technology and application. The identification of CM constitution gained national approval and support of government and industry. With the application and popularization of this technology, it will promote the establishment of characteristic CM preventive care system and the development of public health.

KEYWORDS constitutionology of Chinese medicine, identification of constitution, public health

Public health is the science of preventing disease, prolonging life and prompting physical and mental health through evaluation, policy development and sanitary measures. The development of public health has become an important part of health care reform in China. In 2009, it was clearly pointed out in the State Council's Opinions on Supporting and Promoting the Development of Traditional Chinese Medicine,⁽¹⁾ that giving full play to the advantages of Chinese medicine (CM) preventive care characteristics, bringing CM into public health services project and using the methods and techniques of CM actively in disease prevention and control, to promote the CM preventive care services of CM hospitals and primary health care institutions.

Though there are some unique advantages of CM for the development of public health, it still faces two issues during participation in public health. One is, the need of theoretical guidance of public health related, CM characteristic, academic theories to externalize the CM idea of "preventive treatment of disease". The other is, the need of pathway and key technology for transforming from individual prevention of "preserving health and avoiding pathogenic factors" into group prevention, a need of practical technology for implication of prevention care on a large area of population.

Identification of Constitution Providing CM Characteristic Theoretical Guidance for CM Services in Public Health

Concept of Identification of CM Constitution

CM always attached importance to the state

of human constitution. It selects interventions from specific persons for prevention and treatment of disease, which reflects people-oriented idea, and the idea of suiting measures to different persons. Constitution is the relatively stable inherent characteristics formed on the basis of innate endowment and acquired characteristics, integrated with morphological structure, physiological function and psychological state in the process of human life.⁽²⁾ The identification of constitution regarding human constitution as cognitive object, from feature of constitution state and classification of different constitutions, masters the overall factors and individual differences between health and disease, develops the principles of prevention and treatment, and selects the appropriate methods of treatment, prevention and health preservation, to intervene by "suiting measures to different persons". Therefore, the identification of constitution is the hands of CM for preventive treatment of disease, which provides a method, tool and evaluation system for preventive treatment of disease.

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Concept of Three-Level Prevention for CM Constitution

We proposed the concept of "three-level prevention for CM constitution", which provided method and pathway to realize the preventive treatment of disease from the group perspective.⁽³⁾

Primary prevention, namely the prevention of diseases before their biological onset, is preventive measures against pathogenic factors. The specificity of individual constitution often causes body's susceptibility to a specific pathogenic factor. For example, the phlegm-dampness constitution is susceptible to pathogenic dampness and is liable to diseases related to phlegm-dampness such as vertigo, chest impediment and phlegm-fluid retention. Therefore, some measures should be taken actively to improve constitution for people with unbalanced constitution and enhance their immunity, in order to realize the etiology prevention for particular group to avoid occurrence of related diseases.

Secondary prevention, namely early treatment upon occurrence of disease, is measures to detect, diagnose and treat extant disease in early stages before it causes significant morbidity. For sub-health people with normal physical and chemical indicators and discomfort feeling of body and people with physical and chemical indicators in a critical state, such as hypertension critical point and impaired glucose tolerance, Western medicine is lack of effective methods for prevention and treatment. However, prevention and treatment based on identification of constitution can be established according to constitution types, to make prescription intervention for high-risk group and adjust unbalanced constitutions, for prevention of related disease.

Tertiary prevention, namely avoiding negative impact of extant disease, is measures of timely treatment to prevent disease development for patients. The constitution differences of patients are helpful to determine the trend of syndrome changes. The trend of syndrome changes is determined by constitution. Therefore, in the development of disease process, attention always should be paid on the constraints and impacts of constitution on syndrome, to grasp the principle of syndrome change for better treatment services. During treatment actively improving the unbalanced constitution of patients can radically

improve the syndromes and cure diseases.

Identification of Constitution Provides Pathway and Key Technology for CM Transforming from Individual Prevention into Group Prevention

Technology of Constitution Information Collection

Under the guidance of CM constitution theory, the Constitution of Traditional Chinese Medicine Scale⁽⁴⁾ was established as the measurement tool for constitution, which can collect constitution information from several aspects. Information on biological aspect collects morphological and physiological parameters and genetic information involving gene expression, leucocyte antigen and single nucleotide polymorphisms (SNPs); information on psychological aspect collected through epidemiological surveys can be used to analyze the psychological characteristics of different constitutions (outward, inward, positive, negative, depression, etc.); information on adaption to natural and social society collects information of natural environmental suitability to season, climate, temperature and geographic distribution, and living and social environmental suitability the Constitution of Traditional Chinese Medicine Scale, as the measurement tool for classification of CM constitution, can provide quantitative evaluation on constitution of population and individual.⁽⁵⁾

In addition, a three-dimensional model of CM constitution is established. On the basis of nine basic constitutions, the application of multimedia technology and computer graphics realizes visual description and dynamic display of external detail characteristics of specific constitution, providing the visual method for modeling of constitution characteristics and promotion of constitution health, which can be applied in teaching, scientific research and clinical practice.⁽⁶⁾

Evaluation Methods of Constitution Identification

Based on scientific evaluation on the reliability and validity of scales, through several tests conducted by experts, large-scale epidemiological surveys and statistical analysis, the standard of Classification and Determination of Constitution of Chinese Medicine was established,⁽⁷⁾ officially released by the China Association of Chinese Medicine on April 9, 2009, which was the first document that could guide and standardize the study and application of CM constitution. It provided the basis of constitution identification and related disease control, health preservation and

health management, and the constitution classification become more scientific and standard. It provided the theoretical and practical supports for individualized diagnosis and treatment. The standard of Classification and Determination of Constitution of Chinese Medicine also provided an effective method, tool and evaluation system of constitution identification for "preventive treatment of disease".⁽⁸⁾

Intervention Plans of Constitution

Nine kinds of interventions were established, to guide the identification of constitution in clinical practice for preventive treatment of disease. At present, the 103 centers of preventive treatment in the whole country all have set up health files, providing intervention plans of constitution. A number of medical units such as Zhejiang Hospital of Traditional Chinese Medicine developed Bianti Tiaoli Crea (辨体调理膏) for constitution treatment based on the nine constitutions, which gained good clinical benefit.⁽⁹⁾

Current Application Situation of Identification of CM Constitution in Public Health Services

Physical Examination with CM Characteristics of Constitution Identification Entering National Public Health Service System

The National Basic Public Health Service Standard (2009 edition) promulgated by Ministry of health, adopts identification of CM constitution in the "The Standard of Managing Health Files of Urban and Rural Residents" that is the only item of CM examination, which realizes CM enters the national public health serve for the first time.⁽¹⁰⁾ In Notice on Publishing Basic Standard for Developing Preventive Care Service Platform of Traditional Chinese Medicine (Trial) and Notice on Publishing Basic Standard of Health Care-Service Model of Traditional Chinese Medicine (Trial) promulgated by State Administration of Traditional Chinese Medicine, the identification of constitution was the core content.⁽¹¹⁾

Application in CM Field

The medical institutes with physical service characterized by CM constitution identification have covered 30 provinces (autonomous regions or cities) and Hong Kong, except Tibet. All of the 103 medical institutions of "preventive treatment of disease" pointed by State Administration of Traditional Chinese Medicine in the whole country established constitution identification centers to conduct CM constitution

identification and provide individual health guidance based on intervention plans of constitution adjustment, which exploited health services market of CM hospitals and gained good social benefit and economical benefit. Identification of constitution benefits many people, covering common people, soldiers, pregnant women, infants, young children and special population with chronic diseases or in sub-health state.⁽¹²⁻¹⁴⁾ By grasping the constitutional characteristics of the above people, individualized health guidance and intervention were given, prevention and control of chronic diseases were effective, and constitution fitness bias condition and the quality of life were improved.⁽¹⁵⁾

Promotion and Application in Governments at All Levels

In 2011, State Administration of Traditional Chinese Medicine set up CM public health service pilots (covering about 62,870,000 people) in 74 districts or counties of China. According to reports of various newspapers and news media, provinces adding identification of CM constitution to basic public health service of government cover: Beijing, Shanghai, Guangdong, Inner Mongolia, Ningxia, Shaanxi and Gansu, and cities (counties) adding identification of CM constitution to basic public health service of government cover: Hangzhou, Shijiazhuang, Qingdao, Changchun, Cixi of Zhejiang, Nanhai of Guangdong, Yancheng of Jiangsu and Ning county of Shandong. Only Qingdao, as one of them, covers population of 170,000 benefited from identification of CM constitution.

Application in Hong Kong, Taiwan and Overseas

The Donghua Third Hospital of Hong Kong established "Senior Hospital of Traditional Chinese Medicine" and clinics of constitution identification; they provided services of constitution identification for people of Taiwan, especially analyzing the stagnant qi constitution. The Japanese edition of CM Constitution Scale functions well, which was developed by cooperation with Japanese Toyama University and Toyama International Center of Traditional Chinese Medicine. Academic exchange was done with Korean medicine institute in South Korea; at present, the English edition of CM Constitution Scale has been developed,⁽¹⁶⁾ providing CM constitution identification and health guidance progressively in countries of European and America.

Outlook and Prospects of Application

The content of constitution identification has

been included in the CM health care system. The State Administration of Traditional Chinese Medicine proposed to promote "preventive treatment of disease" actively. The constitution identification as the important method will be promoted and applied comprehensively in medical centers, communities, rural areas and families in the whole country. Therefore, common people might manage and adjust their constitutions according to the constitution state of themselves, in order to "know oneself", "ask for oneself" and "benefit oneself". At the same time, the constitution identification expands the service ability of CM medical institution. Through establishing the CM preventive care service system which meets people's different levels of demand, the multivariate CM preventive health care service pattern was established, providing safe, effective and convenient CM preventive health care service for people, which vigorously promoted the development of public health service.⁽¹⁷⁾

Nowadays the medicine has transformed from medicine focusing on diseases to medicine focusing on health. Research on human health has become the advanced subject in population and health field around the world. Meeting the major strategic needs of establishing basic health care system among the whole people, researches on constitution identification have obtained a number of funds supported by the state, including two national "973" projects. The "Research on original thinking of CM and health state identification method system" is still in progress. On the basis of CM original thinking and CM health state recognition theory, this project aims to propose constitution identification methods reflecting the relatively stable state of human body, and establish a system of CM health identification method suitable for Chinese people combined with identification method of organs and meridians. It has important application value for grasping the health state of Chinese people and has important significance for implementing the strategy of "human and health".

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