

ACADEMIC EXPLORATION

Initiating Hehe (和合) Medical System of Traditional Chinese Medicine and Biomedicine to Realize Health Cycle of Human Beings*

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ABSTRACT This paper suggests a novel approach concerning the medical treatment of human beings, which appears to be economically and practically superior to either biomedicine or traditional medicine. A brand new medical system—Hehe (和合) medicine, has been proposed based on a preventive-biomedical-psycho-social treatment model. This is characterized by a dual approach in which life nurturing is consistently practised and medical treatment is applied when necessary in order to maintain a healthy life. Its core value would facilitate the self-restoration to health and self-adaptation to nature through health cultivation and medical means. Medical services would be firstly provided to the prevention of potential disease germinating in the human body, and clinical medical treatment would be the last resort of systematic medical practice. This paper discusses not only this new concept but also the advantages of traditional Chinese medicine and biomedicine, especially how both medical systems compare in cognitive style, on a cultural level, and on a technical level.

KEYWORDS new medical model, Hehe medical system, traditional Chinese medicine, biomedicine, health cycle

An existing problem or tendency in the present medical system is that medical practice mainly aims at treatment of diseases: treatment is sought or given after disease germination and given for cure of diseases. Hence, passivity of the mainstream medicine to diseases is frequently unavoidable. This medical model weakens human natural attributes and the coexistence and coevolution of human and nature. In this paper, Hehe (和合)⁽¹⁾ medicine is proposed. The goal of Hehe medicine would be to maintain the human health cycle. Its core value would facilitate the self-restoration to health and self-adaptation to nature through health cultivation and medical means. Medical services would be firstly provided to the prevention of potential disease germinating in the human body, and clinical medical treatment would be the last resort of systematic medical practice.

Road to Realize Health Cycle for Human Beings

There are mainly two medical models in the world: a modern medical model and traditional medical model. In addition, there is an integrative or combined medicine, which has a long-term practice characterized by modern and traditional medicine supplementing to each other. Hehe medicine proposed here is merely an exploration to achieve a great goal of realizing health circle of human being. In specific, to help people be free from diseases, suffer from fewer diseases, delay germination of diseases, alleviate disease tortures, pull through critical diseases and restore health by every preventive and curative means and ensure a lifelong

health circulation of progressive increase, repetition, and declination in terms of the biological and natural development.

Modern Medical Model (Biomedicine)

The biological–psychological–social modern medical model⁽²⁾ was proposed in 1977 by American scholar George L. Engel, who challenged and developed the biomedical model. The transformation of the biomedicine model into the biological–psychological–social medical model then indicated growing human knowledge about diseases and health.

Medical Model of Traditional Chinese Medicine

Traditional Chinese medicine (TCM) follows a man-nature-society medical model (the holism or correspondence between human and nature). The model of holism of nature and human takes theories of qi, yin, yang, and five phases (Wood, fire, earth, metal, and water) as its philosophical basis and way of thinking. This model approaches the life, health and disease through observations, analysis, and treatment, and focuses on integrity of the human body, unity

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and interrelation among man, nature, and society.⁽³⁾

Hehe Medicine of TCM and Biomedicine with the Dual Intervention of Life Nurturing and Medical Treatment to Self-Adaptation of Life

Hehe medicine of TCM and biomedicine designs methods for life nurturing and health maintenance for human beings based on the medical achievements in integration of TCM and biomedicine for the past 50 years and based on the Chinese Hehe philosophy that "integration and harmony of diversities can give birth to something new (和实生物)".⁽¹⁾ Having absorbed quintessence from both TCM and biomedicine, Hehe medicine combines preventive treatment and biomedical-psycho-social treatment, characterized by the dual intervention of life nurturing and medical treatment to self-adaptation of life. It is wise to establish at an early stage a lifelong intervention system with self-adaptability and life-nurturing capacity. In this way, the elimination of pathogens by strengthening healthy qi could be achieved; the body's function of disease resistance and immunity could be activated. In all, Hehe medicine would be founded and the health cycle of human beings would be achievable.

Classic Chinese Hehe Philosophy—Integration and Harmony of Diversities Giving Birth to Something New

The Chinese classic philosophical idea: "the integration and harmony of diversities can give birth to something new", originated from the ancient Chinese ancestors' experience in marriage and childbearing. In the Chinese classic *Guoyu · Jinyu* (国语·晋语), a principle of natural mating "to avoid the inbreeding for fear of the chaos disaster" was proposed,⁽¹⁾ which implies inbreeding must engender the extinction disaster. Hehe means that different things or factors can be united in a Hehe entity for the promotion and development of new things on the premise of recognizing contradictions and differences among various things. Things are same or similar on the one hand and different on the other, or opposite and complementary to each other. The diversity of things helps draw nutrients from each other for mutual complementation to promote changes and development hereof; on the contrary, singleness results in shortage of vitality or even suffocation of living things. Hehe philosophy stresses that heterogeneous things or factors supplement each other and are integrated to give birth to a new harmonious thing. In all, Hehe philosophy, a philosophical wisdom, pursues an "ultimate integration" on the basis of conscious, spontaneous and free creation of the subjects.

Major Advantages of TCM and Biomedicine

According to related statistics, only 15% of the world population could be defined in the healthy state

with reference to definitions of health by the World Health Organization (WHO), 15% in morbid, and 70% in the third state, sub-health.⁽⁴⁾

Preventive Treatment of Disease in TCM

Preventive treatment of disease (治未病) is an important fundamental academic concept of TCM. It targets at life nurturing and building up of health, during which the spirit life is sublimated and perfected to secure a long healthy life. As early as 2 000 years ago, in Huangdi's *Internal Classic* (黄帝内经), the preventive thought of "preventive treatment of diseases" was advanced. This classic states: "Therefore, wise men always give preventive treatment before a disease occurs and prevent disturbance before it starts...".⁽⁴⁾ This theory provides guidance for medical practitioners of later generations in China as they try to eliminate the risk of diseases, give prevention priority over treatment, and take preventive measures beforehand rather than afterward. In addition, three states have been defined as objects of medical research: the best policy is to prevent diseases; the common policy is to treat the germinating or potential diseases, and the inferior is to treat the disease after it occurs.⁽⁴⁾

Life nurturing, one of the effective ways in TCM health care, is a footing stone of preventive treatment which enables people to administer and regulate health subjectively and actively. In the context that sub-health is a common affliction in contemporary society, preventive treatment of disease becomes the first important matter to prevent sub-health and inhibit its development. Preventive treatment of disease in essence is to guide life nurturing, prevent underlying abnormal changes, and keep people healthy.

Biomedicine

Biomedicine, a mainstream medical system in modern society, develops with advance of modern science and technology. It employs materialistic methods to guide medical practice and has made significant achievements and breakthroughs in areas inclusive of the micro and fine areas, pathogenesis, pharmacology, and pharmaceutical production. Biomedicine explains implicitly morphological structures, physiological functions, pathological changes, and disease treatment of human body, having laid a good foundation for the development of modern medicine and having provided important basis for prevention and treatment of diseases.

Object of Integrative Study of TCM and Biomedicine: Entire Human Body

TCM focuses on overall characteristics of organisms and interactions between humans and their living environment. At the overall level, TCM puts more

stress on chronological status and progression and elaborates on biological characteristics. In this way, many undeniable biological phenomena have been disclosed and described by such concepts as the syndrome, constitution and sub-health. Moreover, abnormal status could be rectified accordingly.⁽⁵⁾

TCM (traditional life science) is characterized by the "way of thinking with the analogical model", which means establishing a human life system from the functional model, the relative virtual body. Regarding the model of thinking, yin-yang and the five phases are employed in TCM; thus, TCM is more of a dynamic functional model and classified composition of different functions of the body than of structural analysis of physical forms of the internal organs. In comparison, biomedicine (modern life science) is marked by "the way of thinking in prototype", which means establishing the human life system based on anatomic prototype and material entity. TCM observes Chinese philosophy of "doctrine of source qi" and "harmony between human and nature". In TCM, the cognition of life is completed on the basis of a phase model and with the help of methodology of horizontal organic synthesis. In contrast, biomedicine abides by the philosophy of "atomism" and "binary opposition". Its cognition of life is completed through analysis and reductive experimentation. In terms of life perspectives, TCM is mainly embodied in spirit, functions and the holism distinguished by the intuitive observation, spiritual perception and overall mastery of the complex phenomena of life. In contrast, biomedicine is mainly embodied at material, structural, individual, and static levels. It has more advantages in qualitative observations, quantitative analysis, and micro-control of life phenomena.⁽⁶⁾ TCM pays more attention to functions—the distinctions and capabilities demonstrated through internal and external interactions of the material system with specific structures. They work on the basis of deep internal structures and are external demonstrations.

Convergence of Cognitive Patterns in TCM and Biomedicine

Both TCM and biomedicine have witnessed the progress and transformation in social development and the accomplishment of the health cycle. TCM stresses "harmony between yin and yang", which corresponds with modern systemic biology in the prevention and treatment of diseases. TCM advocates the "harmony between human and nature"; similarly, biomedicine emphasizes the environmental influence upon health. Moreover, TCM gives treatment according to syndrome differentiation in a similar way that biomedicine gives the most suitable prescription by pharmacogenetics. In addition, affinity exists between the theory of compound prescriptions in TCM and increasingly important combination of various therapies in biomedical treatment.⁽⁷⁾

Technological Convergence of TCM and Biomedicine

TCM and biomedicine have the same research object of human health but different methodology, diagnosis, and treatment models. TCM stresses on macro-differentiation, while biomedicine on microscopic analysis; TCM belongs to "empirical" medicine by medicinals and therapies discovered and summarized from countless experiences and strenuous experimentation, while biomedicine is based on anatomy and pharmaceuticals made of chemical compounds. Thus, medical practice and pharmaceuticals are combined in TCM but separated in biomedicine. Generally speaking, TCM is more advantageous in treatment of functional disorders and prevention of diseases, while biomedicine in treatment of organic diseases and rectification of pathological changes.

Two Basic Points of Hehe Medicine

Technologically, Hehe medicine may be built on two basic points: one point or one branch, represented by genetic research, develops according to analytic approaches and reductive theory; and the other branch, represented by TCM research, develops as life science or life philosophy on the basis of holism and system theory.⁽⁸⁾ In TCM, the overall association is a mode of thinking, which regards components of a system and different systems as interrelated ones. Even when a system is reduced into every single component, these respective components are interrelated rather than isolated,⁽⁸⁾ not as the case of reduction by analytical approaches where components are isolated from each other.

Medical Values of Integration of TCM and Biomedicine

It has been 50 years since China initiated the practice of integrative medicine or rather linking factually of TCM and biomedicine. Even though the linking is mostly limited to medical behaviors—the two branches of medicine complement to each other at different stages of treatment, the linking has achieved better results than that of either medicine alone. Many great successful examples are worthy of mentioning here: Chinese medicinal arsenic to treat acute promyelocytic leukemia; Chinese herbs for activating blood and resolving stasis to prevent restenosis after coronary intervention;⁽⁹⁾ and the integrative therapy to treat diabetes mellitus, chronic renal failure and advanced lung cancer.⁽¹⁰⁾ In addition, multiple organ failure could be prevented through the clinical diagnostic model of "comprehensive judgment of disease and syndrome" and "treating both bacteria and pathogen simultaneously".⁽⁹⁾ Another impressing example of treatment by integrative medicine is the conquest of deadly infectious disease—severe acute respiratory syndrome in 2003.⁽¹⁰⁾ All these have manifested innovations in and effects on the integration of TCM and biomedicine.

Syndrome Differentiation and Treatment and Concept of Human Gene-Specific Therapy

"Syndrome" in TCM is a pathological generalization of a disease at some stage, which includes the causes, location, property, and developing tendency of the disease. It can reveal the nature of the disease. "Treatment" means planning and designing of therapeutic principles and methods according to the results of syndrome differentiation. "Different treatment for the same disease" and "similar treatment for different diseases" are the important concepts and medical approaches in syndrome differentiation and treatment. TCM is capable of manipulating and regulating an individual's abnormal functions to bring them to a relative equilibrium, which agrees with the development of modern clinical therapeutics.

Regarding researches into genetic variation and human diseases, detection of all multi-state points in many individuals and all the points of polymorphisms with functional significance have become possible, owing to the application of DNA chips and the development of automated inspection technology on a large scale. In the case that whole-genome scanning of polymorphisms or genotyping analysis is performed on large groups of people or at least on many individuals, it is theoretically possible to detect any human gene expression (phenotype), function and susceptibility to any disease by means of observing and studying single nucleotide polymorphism mapping. The genome expression profile of an individual will provide comprehensive information of genetic materials and functions. In addition, the induction of many individuals and their function maps will push forward the research of pathogenesis to a new level.

Researches into human genome share many similarities with holism and dialectical concepts in TCM. Gene regulation and modification at the micro-level reflects the overall functional status of living organisms. Genomic diversity demonstrates differences among genomes of individuals. In this way, affinity in the mode of thinking between genomics and TCM has been revealed and merging of both medicines in terms of research methods has become possible.⁽¹¹⁾

Pathogenic Concept in TCM and Investigation of Disease Causes in Modern Medicine

A human body is regarded as an organic whole in TCM where patients are studied and dealt with as a whole through macroscopic synthesis and systematic methods. In addition, the disease is an abnormal status of human body when the equilibrium between internal body and external environment is broken. In this

process, there must be a fierce fighting between internal pathogenic factors and healthy factors.

According to an epidemiological survey with large samples of pathogenic factors for top 10 diseases with the highest mortality (of population aged over 1 year in the United States), life modes and behaviors of people attribute more to non-communicable chronic diseases than biological factors. For instance, regarding top 3 diseases with the highest mortality—heart disease, cancer, and cerebrovascular disease, biological factors including inheritance account for 25%, 29%, and 21%, respectively for the germination of the 3 diseases; life modes and behaviors for 54%, 37%, and 50%, respectively; and environmental factors for 9%, 24%, and 22%, respectively. According to a global survey by WHO in 1990s, life modes and behaviors played a dominant role (60%) in determination of human health and longevity, followed by environmental factors (17%), genetic factors (15%), and health care services (8%).⁽¹²⁾ It is apparent that socialization of pathogenic factors calls for reformation of the goal of medicine and medical behavior.

Syndrome Theory and Medical Development

The syndrome theory is the core of the theoretical system of TCM. A syndrome signifies pathogenic variations due to interactions of internal and external factors. Using the modern medical technology to explore a syndrome can help clarify the material basis of the syndrome. For example, the genomics theory and methods, particularly comparative analysis of gene expression profiles and gene expression products, may be used to make insight into adjustment rules and changes in the syndrome circumstance. In the same way, differences in genetic expressions of three states—syndrome, sub-health (with syndrome manifestations), and normality, can be explored. If researches on syndromes were conducted macroscopically and microscopically, it is significant to clarify the nature of syndromes and conduct the integrative study of syndromes and diseases. It is likely to promote the development of physiology and pathology in biomedicine. The study of syndromes will also contribute greatly to the future medicine that emphasizes individual differences.⁽¹¹⁾

Cultural Basis and Background of Hehe Medicine

Different as they may be in origin and properties, TCM and biomedicine still bear the same objective of helping maintain human health. Exclusion and disharmony of both medicines may contribute to the original destruction and a breakthrough, also to the reconstruction of new structures and ways. Hehe medicine is just based on the differences and common grounds of both medicines. Without differences there would be no

need for Hehe, without common grounds there would be no conditions for Hehe. In addition, the world economic integration is the background of Hehe medicine.

Structure of Hehe Medicine of TCM and Biomedicine

In terms of structure, Hehe medicine integrates preventive treatment and biomedical-psycho-social treatment, characterized by the dual intervention of life nurturing and medical treatment to self-adaptation of life. Hehe medicine is unitary and pluralistic and with an open structure whose elements are asymmetric.

Summary

Different properties of TCM and biomedicine happen to provide conditions for integration based on the principle that "the integration and harmony of diversities can give birth to something new". Hehe medicine is an initiatively harmonious and unified one born out of complement and dependence, absorption, and integration of heterogeneous factors. The ultimate pursuit of Hehe medicine is harmony, which is based on a conscious, voluntary, and free creative process in the human body; in other words, Hehe medicine results from the development of a philosophical wisdom.

In modern medicine, a disease is regarded as an "enemy" of the human life and health. Thus, the relationship between them is conquering and being conquered. The patient's entirety, physically and mentally, becomes the battlefield. In the perspective of Hehe medicine, the human life and health/disease are regarded as inter-working outcomes of human physical and mental adjustment to the internal and external environment. Medical science or a medical practitioner acts as an assistant to improve and enhance the overall functions of people's physical and mental system, and dispelling illnesses turns out as a natural consequence of comprehensively improved functions; medical treatment of diseases is no longer the first and most important consideration but the last medical resort. Hehe medicine aims to establish an earlier and life long health intervention mechanism adaptive to nature. With Hehe medicine, it should be able to realize the ideal of keeping healthy as long as possible by "reinforcing the healthy qi to remove pathogenic factors" to activate the body's resistance to diseases and elevate self-adaptive immunity to maintain the stability, balance, orderliness, and self-rehabilitation and self-improvement of the human gifted system.

Hehe medicine pursues the harmonization between humans and the nature system, the manner and order of interaction between them, interoperability and relatively stable forms of organizations within each system. It is

committed to more investment in health and advance in medical care, actually merging a wide base of health investment and a narrow top of medical counter-attack or clinical treatment. Hehe medicine is the main manifestation of adjustment of the medical goal and transformation in the core values of medical behavior. This new medicine and social science originates from both TCM and biomedicine, and should be superior to either of them. There is a long way for Hehe medicine of TCM and biomedicine which calls for the world's great wisdom for its own accomplishment and perfection.

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