Ancient Respected and Modern Absorbed, Chinese Essence and Western Utility—Thoughts of the Integrated Chinese Medicine and Western Medicine

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Abstract

Traditional Chinese medicine (TCM) and Western medicine are two medical systems formed in different cultural backgrounds. The differences between them are that TCM focuses on the study of the invisible state while Western medicine focuses more on the study of the visible state of the human body; TCM pays attention to systematicity and integrity, while Western medicine pays attention to local evidence; TCM attaches importance to dialectical thinking, while Western medicine attaches importance to materialistic thinking. For the development of TCM, it is necessary to take the initiative to learn from and absorb all the advanced scientific and technological achievements in the world today. To innovate TCM, it is necessary to need to adhere to (1) the integration of “research on TCM with the thought of TCM” and “research on TCM based on the thought of Western medicine”; (2) the integration of scientization of TCM and scientization for TCM; (3) the integration of mobilization therapy and allopathic therapy; (4) the integration of treating patients and treating diseases; (5) the integration of preventive treatment and existent disease treatment; (6) the integration of individuality and commonality; and (7) the integration of the macro and the micro.

Reviewing the History of Traditional Chinese Medicine and Exploring Its Source

TCM had developed into a discipline around the 4th century BC when our country was in a period of change in social development. During that period, medicine broke through the shackles of divine right and destiny and separated from witchcraft. An epoch-making ancient medical masterpiece Yellow Emperor’s Inner Classic (Huang Di Nei Jing) was published. It was formed on the basis of condensing the excellent...
traditional Chinese culture such as Chinese meteorology, astronomy, and philosophy, representing the ideological characteristics of oriental culture and consolidating the foundation of TCM theory. At the end of the Eastern Han dynasty, Zhongjing Zhang (150–219 AD) inherited the academic thoughts in the Yellow Emperor's Inner Classic (Huang Di Nei Jing), combined it with clinical practice, and established the system of syndrome differentiation based on the six meridians in Treatise on Cold Damage and Miscellaneous Diseases (Shang Han Za Bing Lun). Fumi Huang (215–282 AD), a physician in the Western Jin dynasty, wrote The Systematic Classic of Acupuncture and Moxibustion (Zhen jiu jia Yi Jing), which identified the total number of acupoints as 349 at that time, expounded the functions and indications of the acupoints, explained acupuncture skills, etc., laying a foundation for the science of acupuncture and moxibustion. In 610, Yuanfang Chao et al compiled Treatise on the Origins and Manifestations of Various Diseases (Zhu Bing Yuan Hou Lun), the earliest extant monograph on etiology and symptomatology in China. The etiology and pathogenesis of some diseases have been described in a detailed and scientific way in this work. As it said, “Taeaniasis is caused by ingestion of undercooked meat.” The government in the Song dynasty attached great importance to TCM education and established the “Imperial Medical Bureau” as a higher-learning institution for cultivating TCM talents. Wei Yi Wang, an acupuncture expert, once designed two cast bronze figures (1026 AD) and finely carved 12 meridians and 354 acupoints, a pioneering work in Chinese medical education. During the Jin and Yuan Dynasties, various academics contended, and four distinctive schools emerged in TCM, which was one of the most active periods of academic thought in the history of TCM. Shizhen Li (1518–1593 AD), a medical scientist in the Ming dynasty, worked for 27 years and compiled The Grand Compendium of Materia Medica (Ben Cao Gang Mu) which recorded 1,892 kinds of herbs and over 10,000 prescriptions by referring to more than 800 kinds of references. This made immortal contributions to pharmacology. Around the 11th century AD, TCM performed the human pox vaccination method to prevent smallpox, providing experience for the world's immunology. In the Ming dynasty, Youxing Wu believed that the transmission of infectious diseases was from the nose and mouth, breaking the traditional understanding of TCM in diagnosing and treating exogenous diseases. Mengying Wang and Lishan Yang, et al enriched and perfected the theory of warm diseases.

From the 4th century BC to the 3rd century BC, Hippocrates, the father of ancient Greek medicine, whose work named The Collected Works of Hippocrates came out, with more than 70 chapters in it. This work collected the main ideas of ancient Greek medicine in that period and became a beacon in the world's medical field. Galen (129–199 A.D.), the most famous physician in ancient Rome, known as the "king of medicine," absorbed the academic ideas of The Collected Works of Hippocrates and further combined clinical practice. It laid the groundwork for the development of Western medicine. By the end of the 16th century, Western industry developed rapidly, in which the mining and machinery industries ushered in vitality. The invention of the microscope opened up the microscopic world for mankind and provided unprecedented convenience. Natural science began to turn to experimental research at that time. In the medical field, cells were discovered thanks to the intervention of microscopy. In the middle of the 16th century, the development of sound, light, and electricity industries provided technical support for the production of medical equipment, and basic medical research became fruitful. The emergence of constant breakthroughs in the theoretical results made Western medicine quickly stand out with a new look. Modern Western medicine consists of physiology, anatomy, pathology, biochemistry, and other disciplines closely related to clinical practice to form a scientific system based on experimental research. Every link of this system is closely related to the development of modern natural science and technology, so the system is naturally a part of modern natural science. Every invention of modern science and technology will inevitably lead to a corresponding technological breakthrough in the medical system. For example, the development of microscope and glass promoted the production of microscopes; advances in atomic physics spawned the clinical application of X-rays; radar technology provided B-ultrasound to medicine; integrated circuits provided CT tomography for medicine; isotopic techniques generated ECT. Looking back on the development history of Western medicine in the 1,500 years since Galen, the experimental research in the works of Heath and Galen has not been vigorously developed and makes it the main theme of Western medicine because there has not been a great social change in the Western world in which new productive forces break through the old production relations. On the contrary, some maxims and preachings other than experimental research are regarded as golden rules, seriously restricting the development of Western medicine. But there is one thing worth noting: in addition to the same large amount of image thinking as Treatise on Cold Damage and Miscellaneous Diseases (Shang Han Za Bing Lun) and Yellow Emperor's Inner Classic (Huang Di Nei Jing), the works of Hippocrates and Galen also had research works on anatomy, physiology, and pathology, rapidly providing a suitable soil for the development of modern medicine.

**Chinese Essence and Western Utility Being a Historical Inevitability**

TCM and Western medicine are two medical systems formed in different cultural backgrounds, and their cultural "mothers" determine the characteristics of the two medicines. This article discusses the differences between Chinese and Western medicine based on people, diseases, and ways of thinking.

**Different Understanding of People**

TCM focuses on the study of the invisible state of the human body, while Western medicine focuses more on the study of the visible state of the human body. The visible and invisible are related to subjective concerns. When people pay...
Different Understanding of Diseases

TCM attaches great importance to systematicity and integrality. The human body takes the five internal organs as the center which connects the whole body tissues and organs into an organic and systematic whole through the meridian system. When TCM recognizes and analyzes diseases both physiologically and pathologically, it connects the part with the whole and returns to the part from the whole, which fully embodies the thought of systematicity and integrality in TCM. Western medicine focuses on local evidence and the analysis of the microstructure and properties of specific human tissues. It adopts the linear analysis method of "reductionism." For instance, it performs antibiotic therapy to kill bacteria and antiviral therapy to kill virus. It is inconceivable for Western medicine that "Zusanli (ST 36) acupuncture can strengthen the spleen and stomach," "Zhiyin (BL 67) acupuncture can correct the fetal position," and "Jingming (BL 1) can treat waist sprain" in TCM acupuncture and moxibustion.

Different Understanding of Chinese and Western Medicine

The differences in ways of thinking between Chinese and Western medicine determine the speculative system of Chinese and Western medicines. TCM attaches importance to dialectics, while Western medicine attaches importance to materialism. The theory of TCM is full of original ideas of simple dialectical materialism from its emergence to its development. The objective logic of TCM dialectics is unified with the complexity of the human body. The "concept of holism," "concept of opposition and unity between yin and yang," "concept of disease occurring in the struggle between healthy qi and pathogenic factor," and the "therapeutic concept of treatment based on syndrome differentiation" in TCM theory all reflect the dialectical concept of TCM. Western medicine believes that man is a simple integration of chemical and physical substances. In the 20th century, the research on the structure of the human body was very clear. However, in terms of the concept of the human body, it still remained in the concept of anatomy in the 19th century, that is, the human body was regarded as a single linear causal relationship, lacking a holistic, systematic, and constant speculative thinking mode and understanding of the complex relationships within the human body. The integration of TCM and Western medicine is inevitable in history, and both TCM and Western medicine have their own development track.

Looking at the history of the development of TCM and Western medicine, both types of medicine have their own strengths. They learn from each other and integrate and complement each other's advantages, which is the inevitable law of medicine. In recent years, acupuncture has become more and more popular in the West, and TCM has spread all over the western land. In addition to the fact that TCM can effectively solve clinical problems, the deeper reason is that the Westerners identify the Eastern culture. Based on the TCM's way of thinking, it absorbs the experimental research of Western medicine and expounds the therapeutic and action mechanism of TCM. While respecting the brilliant achievements of the ancients, TCM should also take the initiative to learn from and absorb all the advanced scientific and technological achievements in the present world to continue to innovate and develop. That is what "ancient respected and modern absorbed, Chinese essence and Western utility" means, thus making innovations of TCM. The integration and complementation of TCM and Western medicine is an important step in the great renaissance of TCM.

Some Thoughts on Innovating Traditional Chinese Medicine

Integration of "Research on Traditional Chinese Medicine with the Thought of Traditional Chinese Medicine" and "Research on Traditional Chinese Medicine Based on Thought of Western Medicine"

"Research on TCM with the thought of TCM" and "research on TCM based on the thought of Western medicine" are two concepts with essential differences. "Research on TCM with the thought of TCM" refers to the research on TCM based on the thought of Western medicine under the guidance of the basic theory of TCM and with the TCM's ways of thinking. The characteristic of TCM lies in its analysis and adjustment of the information of the human body. "Research on TCM based on the thought of Western medicine" is to study TCM by using the thinking mode and methods of Western medicine and strive to make TCM scientific and standardized. It stresses the research on TCM concepts such as the essence of qi, meridians and collaterals, acupoints with modern advanced scientific measures, or verification of the effectiveness of a Chinese herb or a TCM prescription using animal experiments. "Research on TCM based on the thought of Western medicine" is just a pointless verification of TCM by Western medicine, and "research on TCM with the thought of TCM" based on the basic theory of TCM can really promote the development of TCM. For example, the thinking mode in the theory of turbid toxicity is a research on the theory of TCM, an innovation based on inheritance rather than using modern medicine to verify TCM or constructing it on the basis of the Western medicine system.\footnote{4}
Integration of Scientization of Traditional Chinese Medicine and Scientization for Traditional Chinese Medicine

Some people think that the science of studying human health is medicine, and medicine should be science first, so they put forward “scientization of medicine” to strive for the objectification and standardization of medicine. The same is true of TCM. The ultimate goal of scientific research of “scientization of TCM” is to solve problems. However, medicine is the one which is most closely related to human health among all disciplines, and all scientific achievements should serve medicine and be “scientific medicalization.” TCM is full of rich philosophical thinking, which has guiding significance for many disciplines. Xuesen Qian once said, “The modernization of TCM is the right way for the development of TCM. The ultimate goal of scientization for TCM should be an important proposition in today’s medical and even scientific and technological circles.

Integration of Regulation Therapy and Allopathic Therapy

TCM regulation therapy emphasizes the human body’s own immunity as the key factor in determining whether the body gets sick or not. It is believed that “accumulation of pathogenic qi can weaken healthy qi” and “healthy qi inside the body can prevent pathogenic qi from invading the body.” It means that the body’s immunity should be enhanced first, and “healthy qi” is supposed to resist and expel diseases. Allopathic therapy is a characteristic treatment of Western medicine. When a certain index of the human body is found to be abnormal, the drug intervention is immediately performed to restore it to the normal level. For the antibacterial and antiviral therapy of Western medicine, it ignores the body’s own resistance to disease. The most obvious adverse reactions of allopathic therapy are drug-induced diseases for the abuse of antibiotics and hormones. Is inflammation a bad thing, and is anti-inflammatory treatment right? Should fever and elevated white blood cells be treated by allopathic therapy? In fact, many of the body’s responses are disease-fighting responses. Studies have shown that the antibiotics only exert one-fifth of the therapeutic effect, while the other four-fifth of the effect lies in the body’s own fight against the disease in the treatment of bacterial infections. We should study how the four-fifth of the effect comes, not just how the antibiotics work. In medical science, we should shift the focus of research from the diagnosis of etiology, pathology, and disease location to how to enhance the body’s own regulation to prevent and resist disease.

Integration of the Treatment of Patients and the Treatment of Disease

The so-called treatment of patients refers to considering the individual as a whole in the process of treating the disease; the so-called treatment of disease refers to focusing on the disease that the patient suffers from, which ignores the integrity of the individual himself or herself. Western medicine mainly focuses on treating diseases, while TCM focuses more on treating patients. For example, guided by the theory of turbid toxicity, the clinical diagnosis and treatment of patients with advanced tumors cannot only improve the quality of life of the patients, but also prolong the lifespan of the patients, providing a strong clinical basis for the survival of tumor patients. The phenomenon of “human-tumor coexistence” reflects the superiority of TCM concept of treating patients. We cannot deny that early surgery and intervention of radiotherapy and chemotherapy play a certain or great role in the treatment of cancer, but not all patients are suitable for these treatments. Therefore, both TCM and Western medicine should treat both “diseases” and “patients.” This is also an issue worth exploring at the ideological level of the integration of TCM and Western medicine.

Integration of Preventive Treatment and Existent Disease Treatment

“Preventive treatment” refers to the use of preventive or therapeutic methods to prevent the occurrence and development of diseases. It is the basic principle of the theory of TCM treatment, one of the core concepts of TCM, and an important theoretical basis and guideline for TCM preventive health care. The existent disease treatment, as the name implies, refers to the treatment of the disease on the basis of the pathological information that the body has manifested. Our medical behavior mainly carries out this work at present. We begin to intervene only when the body sends out pathological information and the patient feels unwell. It would not only affect the patient’s quality of life and the treatment of disease but also be a great waste of medical resources. For example, the essence of the study on precancerous lesions of gastric cancer based on the theory of turbid toxicity is to perform preventive treatment. With the help of modern medical knowledge of physiology and pathology and dynamic observation under gastroscope and pathology, the pathogenesis can be clarified and the best TCM prescriptions for the prevention and treatment of this disease can be explored, thus enriching the basic theory of TCM.

Integration of Individuality and Commonality

People always think that only by finding commonalities and objective laws can the secrets of life be revealed. TCM pays more attention to individual differences. The clinical practice of TCM is nonrepeatable, subjective, and highly random. This requires us to break through the shackles of allopathic treatment and pay attention to the adjustment and self-healing treatment, individualized treatment, and different theories and schools, integrating adjustment and self-healing treatment, individuality, and commonality.

Integration of the Macro and the Micro

The dialectical view of the integration of macrodialetics and microdialetics is to use microindex to recognize and identify “syndromes.” From the perspective of scientific outlook and methodology, taking into account the unity of the whole and the local, the synthesis and the differentiation, and the micro and the macro is the right route to understand the essence of things. Only when the macrodialetics and microdialetics are integrated, the nature of the syndrome can be accurately recognized.
Integration of the Chinese and the Western to Make Theoretical Innovation

The development of a discipline lies in innovation, and the innovation of academic theory is the driving force for the development of TCM. Zhongjing Zhang founded the syndrome differentiation based on six meridians. The four great masters of Jin and Yuan dynasty, Wansu Liu, Congzheng Zhang, Gao Li, and Zhenheng Zhu, represent four different schools. Wansu Liu believed that diseases were mostly caused by heat, and cold and cool drugs were often used in treatment, so he is called “School of Cold and Cool.” Congzheng Zhang believed that the treatment of diseases should focus on expelling pathogenic factors. According to him, “elimination of pathogenic factors ensures health.” He had enriched and developed the three methods of diaphoresis, emesis, and purgation, which is called “School of Purgation.” Gao Li believed that “stomach qi is essential to health.” He was skilled in warming and invigorating the spleen and stomach in the treatment of diseases, which is called “School of Reinforcing the Earth.” Zhenheng Zhu believed that “Yang qi is often excessive while yin qi is often insufficient,” and he made good use of the therapeutic principle of “nourishing yin and reducing fire,” which is known as the “School of Nourishing Yin.” Jutong Wu, a master of warm diseases, created defensive phase-qi phase-nutrient phase-blood phase syndrome differentiation and syndrome differentiation based on the triple energizer in the treatment of warm diseases. All of these theories illustrate the importance of academic theoretical innovation.

Medicine is a discipline that serves the health of all human beings. Both TCM and Western medicine, with their own strengths and weaknesses, are aimed at solving clinical problems. The strengths of the two should be utilized and the multidisciplinary cross-integration should be performed to keep the right way and make innovations.

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Xiaofa Liu: Conceptualization, formal analysis, and writing—original draft. Diangui Li: Conceptualization, methodology, funding acquisition, supervision, and writing—review & editing. Shengda Lu: Collection of relevant literature, and writing—review & editing.

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Conflict of Interest
The authors declare no conflict of interest.

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