

The Differences, Complementarity, and Future Development of Traditional Chinese Medicine and Western Medicine

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Abstract. This article delves deeply into the differences and complementarities between the two major medical systems of traditional Chinese medicine and Western medicine, aiming to comprehensively interpret their core characteristics. By comparing and analyzing the fundamental differences in their theoretical systems and medical processes, it is found that both have their own advantages and disadvantages in different fields. For instance, traditional Chinese medicine emphasizes the mutual complementarity between humans and nature, while Western medicine relies more on precise data obtained through advanced instruments. After classifying these advantages and disadvantages and identifying the areas where both can fill the gaps (such as the different roles they play in the early, middle, and late stages of treatment), it is evident that the integration of traditional Chinese and Western medicine has become an inevitable trend in today's world. The new medical system resulting from their combination can not only provide patients with more comfortable and reliable services but also contribute to the development of global medicine. Subsequent analysis of the methods and results in handling specific cases (such as cancer) can clearly identify most of the problems that need to be solved in the future, which are mostly incurable terminal diseases. This research supports this view through the use of literature review and theoretical analysis methods, as well as drawing on a large number of domestic and international research results.

Keywords: Traditional Chinese medicine, Western medicine, Development direction, comparative study, Differences and complementarities

1. Introduction

Traditional Chinese Medicine and Western Medicine are currently the two major important systems in the global medical field. Therefore, both have their own long histories, important theoretical knowledge, and two completely different diagnostic methods and treatment approaches. For example, traditional Chinese medicine leans more towards the theory of "harmony between man and nature", believing that humans are part of the natural world and need to combine the natural environment with herbs to fight against viruses, while Western medicine is more inclined to use drugs developed based on precise data and information to treat viruses. So far, the history of traditional Chinese medicine has lasted for thousands of years, and its theoretical knowledge originated in the Spring and Autumn and Warring States periods. Therefore, it is one of the

traditional cultures of the Chinese nation. Over these thousands of years, it has been safeguarding the physical health of the Chinese people and holds an important historical position. While Western medicine originated in Western Europe, although its history is not as long as that of traditional Chinese medicine, in recent years, with the development of technology, it has also been constantly advancing and gradually becoming one of the important systems in the medical field [1]. This article aims to explore the introductions of both sides (such as theoretical systems, treatment methods, etc.) and the differences and complementarities between them in different fields, and to identify the common problems that both sides need to face in the future and propose some suggestions, which is of great significance for the development of modern medicine.

2. Introduction to traditional Chinese medicine and Western medicine

2.1. Overview of traditional Chinese medicine

2.1.1. Synopsis

The history of traditional Chinese medicine has lasted for several thousand years. Its theoretical foundation has been deeply integrated into the culture of the Chinese nation, and its core includes theories such as yin-yang and qi-blood [2]. Traditional Chinese medicine emphasizes the holistic approach. It holds that the human body is an organic and unified whole, and the occurrence of diseases is the result of imbalance in the internal environment or the deviation between humans and nature. For example, in traditional Chinese medicine, organs such as liver, heart, spleen, lung, and kidney are not merely organs but also refer to qi-blood.

2.1.2. Diagnosis type

In terms of diagnosis, traditional Chinese medicine is centered around the "Four Diagnostic Methods", namely observation (examining the patient's complexion, etc.), auscultation (listening to the patient's voice, smelling their body odor), interrogation (inquiring about the patient's medical history, etc.), and palpation (touching the pulse). Through these diagnostic methods, doctors comprehensively analyze the condition, determine the cause and seek solutions [2].

2.1.3. Therapies

In terms of treatment methods, traditional Chinese medicine tends to rely on traditional Chinese medicines, acupuncture, moxibustion, massage, cupping therapy, and qigong [2]. Traditional Chinese medicines are usually administered in the form of decoctions or pills. Doctors will prescribe medications based on the patient's condition[3]. For instance, ginseng is often used to strengthen the qi, while goji berries are used to nourish the liver and kidneys.

2.1.4. Cultural value

The history of traditional Chinese medicine is extremely long. It is deeply rooted in the traditional culture of the Chinese nation, with its core being the concept of "harmony between man and nature" [4]. It holds that humans are part of nature, and changes in nature can affect human health. Therefore, it advocates "health preservation in accordance with the seasons", such as adjusting diet and lifestyle according to the seasons. At the same time, traditional Chinese medicine emphasizes the balance of body and mind, and the theory of yin and yang balance not only applies to the

physiological level but also focuses on the psychological state. Imbalance of yin and yang may lead to physical and mental disorders, so traditional Chinese medicine treatment not only focuses on physical diseases but also pays attention to the psychological adjustment of patients [5]. At the same time, it has left very precious cultural value. People can learn from it the wisdom of the ancients and continuously write the chapters of history.

2.2. Overview of Western medicine

2.2.1. Synopsis

The history of Western medicine is relatively short, but it has developed very rapidly. Its theory is based on modern natural sciences such as anatomy, biochemistry, and pathology [1]. Western medicine focuses on studying the structure and function of the human body at the microscopic level. Diseases are usually defined as abnormal changes in organs, tissues, cells, etc.

2.2.2. Diagnosis type

In terms of diagnostic methods, Western medicine focuses on physical examination, laboratory tests, and imaging examinations as its core approaches [1]. These methods can precisely determine the location and severity of the lesion, providing a reference for targeted treatment.

2.2.3. Therapies

In terms of treatment methods, Western medicine mainly includes drug therapy, surgical treatment, etc [1]. Drug development is based on the characteristics of the disease. Different diseases require different drugs. For example, antihypertensive drugs are used to control hypertension, and insulin is used to treat diabetes, etc. Surgical treatment is often used to remove the affected area, perform organ transplantation or repair the affected area. Western medicine requires that all treatment methods be supported by scientific research evidence to ensure the safety and effectiveness of the drugs.

2.2.4. Cultural value

Although the history of Western medicine is relatively short, its cultural value is extremely significant. Western medicine embodies the values of modern Western scientific culture, with the core being the pursuit of precision [1]. Supported by many modern scientific technologies, medical practitioners can more accurately identify the causes of diseases, and it has also developed rapidly, emphasizing the effectiveness and safety of medical methods through scientific experiments and data verification [6]. It progresses and develops together with modern science, following the principles of rational thinking and experimental verification. Centering on patients is also an important value concept of Western medicine, emphasizing respecting patients' rights and choices, and providing the best medical services based on the specific conditions of patients [6]. It has created numerous milestones through its unique values and theories over the past several hundred years.

3. The limitations of traditional Chinese medicine and Western medicine

3.1. The limitations of traditional Chinese medicine

First, the diagnosis and treatment in traditional Chinese medicine are highly subjective. For instance, taking a pulse requires the practitioner to have extensive experience. Different people may have different interpretations and judgments, which can easily lead to misdiagnosis and result in the use of inappropriate medications, lacking uniformity [7].

Overall, the effect of traditional Chinese medicine takes a long time to manifest. Each medicine has a certain cycle. When dealing with emergencies, it becomes very inadequate. For instance, when acute appendicitis occurs, Western medicine can solve the problem through surgery, but traditional Chinese medicine, due to its slow effect, is unable to meet the urgent needs of patients [5].

3.2. The limitations of Western medicine

First of all, most Western medicines have side effects and prolonged use may damage organs. For instance, some antibiotics may cause symptoms such as dizziness, nausea, and diarrhea. Prolonged use may even lead to drug poisoning [8].

Then, sometimes, Western medicine pays excessive attention to local symptoms, thereby neglecting the overall condition. For instance, when treating some chronic diseases, only the surface symptoms are addressed without fundamentally improving the situation, which may lead to recurrence of the disease [5].

Thirdly, the research, production and usage costs of Western medicine are relatively high, especially for new drugs and high-end medical equipment. For instance, in the case of drug research for cancer [5].

4. The differences and complementarities between traditional Chinese medicine and Western medicine

4.1. Otherness

4.1.1. Theoretical basis

The theoretical foundation of traditional Chinese medicine stems from traditional Chinese philosophical thoughts. The theory of Yin-Yang holds that all things in the world can be divided into Yin and Yang, and maintaining the balance of Yin and Yang within the human body is the key to health; the theory of Five Elements classifies all things into five categories: wood, fire, earth, metal, and water. If the balance of the five elements is maintained, one can achieve a healthy equilibrium [2].

Western medicine, on the other hand, is supported by modern natural sciences. For instance, anatomy studies the structure of the human body; physiology explores the functions of organ systems; and biochemistry analyzes the chemical processes within the body [1]. Most of Western medicine interprets the occurrence, development and treatment of diseases from the molecular, cellular and tissue levels.

4.1.2. Diagnostic methods

Traditional Chinese medicine is centered around the "Four Diagnostic Methods". Medical students rely on direct observation and accumulated experience to collect information about patients' conditions [2]. For instance, by observing the color and texture of the tongue coating, they can infer the patient's physical condition.

Western medicine diagnoses diseases by using various scientific instruments and laboratory tests. Laboratory tests can detect various substances in the body (such as pathogens), which helps in determining the type and severity of the virus; imaging tests (such as magnetic resonance) can provide detailed information about the internal structure, assisting doctors in accurately locating the lesion [1].

4.1.3. Treatment means

In traditional Chinese medicine treatment, emphasis is placed on both treating the symptoms and addressing the root cause. The whole and the individual are inseparable. In the treatment with traditional Chinese medicine, more attention is paid to the patient's symptoms and the overall condition. The type of virus is determined, and then, based on the analysis, herbs are selected to prepare traditional Chinese medicine for treatment. At the same time, non-drug therapies such as acupuncture, moxibustion, and massage are also used. Non-drug therapies stimulate the body's functions to activate its own regulatory ability and promote the circulation of qi and blood [2].

In Western medicine, the treatment focuses more on eliminating the pathogen directly in one step. Drug therapy is the most commonly used method. It kills the pathogen through medication, prevents abnormal cell generation, and repairs damaged areas, etc. For surgical treatment, the abnormal area is directly removed and the damaged structure is repaired. When dealing with some important organs and the pathogen has spread to the point where it cannot be removed for treatment, Western medicine will choose to perform removal and organ transplantation. Physical therapy and radiotherapy are also important treatment methods in Western medicine. They use physical factors such as heat, electricity, and magnetism to treat diseases [1].

4.2. Complementarity

4.2.1. Complementary aspects at the diagnostic level

The diagnostic methods of traditional Chinese medicine and Western medicine can form an effective complementarity. For instance, the "Four Diagnostic Methods" of traditional Chinese medicine can provide information about the patient's overall condition, including physical functions and psychological status, for reference. While the scientific instruments and laboratory tests of Western medicine can precisely locate the position and severity of pathogens at the microscopic level. By combining the two, doctors can make more comprehensive and accurate diagnoses and treatments. For example, when diagnosing liver diseases, the liver function tests and imaging examinations of Western medicine can clearly show the degree and condition of liver damage, while traditional Chinese medicine can understand the overall blood and qi status and organ functions of the patient by observing the tongue coating and taking the pulse, helping to comprehensively grasp the condition and providing effective treatment methods [5].

4.2.2. Complementary at the therapeutic level

In the process of disease treatment, traditional Chinese medicine and Western medicine can also complement each other. For chronic diseases, the overall regulation and long-term conditioning advantages of traditional Chinese medicine are particularly significant [5]. For example, when treating diabetes, Western medicine can quickly control blood sugar through medication, while traditional Chinese medicine can improve the patient's overall physical condition, enhance insulin sensitivity, prevent complications, etc., through dietary guidance, exercise suggestions and herbal therapy. In the treatment of tumors, Western medicine's surgery and chemotherapy can directly kill tumor cells, while traditional Chinese medicine can enhance the patient's immune function, reduce the side effects of Western treatment, and provide patients with a more comfortable treatment process [5].

5. The common problems faced by traditional Chinese medicine and Western medicine in their development and suggestions for addressing them

5.1. Common problem

5.1.1. High degree of integration resistance

Although the integration of traditional Chinese medicine and Western medicine has significant advantages, there are still certain obstacles to its integration in the medical field. For instance, some Western medical students have doubts about the theories of traditional Chinese medicine and are skeptical about its effectiveness and scientificity. Meanwhile, some Chinese medical students are reluctant to accept the concepts and methods of Western medicine, believing that Western medicine is too objective. If pathogens cause diseases and absorb the original drugs, they cannot effectively treat the condition [5]. This resistance mainly stems from regional cultural differences, educational disparities, and differences in cultural values, etc., which seriously hinder the development of integrated Chinese and Western medicine [9].

5.1.2. Shortage of high-level talents

The development of integrated Chinese and Western medicine requires a large number of highly skilled professionals who are proficient in both medical systems. However, in the medical education system, the courses on integrated Chinese and Western medicine are not well-established. Therefore, Chinese and Western medicine are often taught separately rather than in the same classroom, which results in students lacking the time to study the theories of both systems and the opportunity to practice the combination of both medical theories in the clinical setting. As a result, in clinical practice, most medical students are unable to effectively utilize the combination of both theories, which severely restricts the progress of integrated Chinese and Western medicine [10]. At the same time, it also wastes a lot of students' time, causing many students to be unable to effectively understand and apply both treatment methods [10].

5.1.3. Slow development

The medical science resulting from the integration of traditional Chinese and Western medicine is still in the stage of research and exploration. The research on the combination of traditional Chinese and Western medicine is relatively scarce, and the effectiveness and safety of the treatment methods

based on this combination have been questioned by the majority [9]. Moreover, the investment in the research and development of this integrated medical science is relatively insufficient, which hinders the progress of scientific research and the transformation of research results. This has greatly delayed the progress and development of integrated traditional Chinese and Western medicine [9].

5.1.4. Incurable disease

Apart from these reasons, there is also a possibility that the two sides may be at a loss when facing some uncontrollable diseases. For instance, when dealing with cancer, for many years, both sides have been researching drugs related to cancer treatment. However, the research results have been very limited, and the drugs also have many side effects. Therefore, this reason has also greatly hindered the development of traditional Chinese and Western medicine.

5.2. Development proposal

5.2.1. Strengthening exchanges and cooperation

The medical communities of traditional Chinese medicine and Western medicine should enhance cooperation and exchanges. For instance, they can hold academic exchange activities to enable both sides to better understand each other's theories and apply them. They can also launch research projects to jointly study new viruses and other issues, creating opportunities for mutual communication and promoting mutual understanding and recognition [5]. For example, when holding international conferences on the integration of traditional Chinese and Western medicine, experts from both sides can form teams to jointly study new viruses and overcome them, promoting the exchange of cultural and theoretical knowledge between the two sides, and thereby facilitating integration and development [9].

5.2.2. Improve the talent cultivation system

Medical education institutions or schools can incorporate integrated Chinese and Western medicine classes into their curricula and enhance practical teaching components [10]. For instance, they can arrange for Chinese and Western professors to jointly prepare class materials and teach together, addressing students' questions. They can also allow students to exchange classes, with Chinese medicine students attending Western medicine classes to learn theoretical knowledge, and Western medicine students attending Chinese medicine classes to acquire relevant theoretical knowledge. They can also increase joint clinical experiments between the two groups of students. Additionally, they can conduct continuing education for medical staff to enhance their knowledge and skills in integrated Chinese and Western medicine [10].

5.2.3. Increase investment in research and development

The government and relevant departments should hold more academic exchange meetings between Chinese and Western medicine and launch related research projects. Those who are interested can apply for project patents, which can stimulate the curiosity of medical students in both Chinese and Western medicine and promote in-depth research on the integration mechanism of Chinese and Western medicine as well as the development of new treatment methods [9]. At the same time, establish a scientific and reasonable evaluation system for the effectiveness and safety of the

integration of Chinese and Western medicine to ensure the quality and safety of the treatment using Chinese and Western medicine together [9].

6. Conclusion

As the two largest medical systems at present, both traditional Chinese medicine and Western medicine have their own characteristics, theoretical knowledge, cultural values, advantages and disadvantages. The main differences between the two lie in their theoretical basis, diagnostic methods and treatment approaches, but they also have strong complementarity in diagnosis and treatment. In modern medical practice, the integration of traditional Chinese medicine and Western medicine has become an inevitable trend. Both sides complement each other's shortcomings to create a more complete and safe medical system, thereby providing better treatment processes for patients and promoting global medical development. However, there are still some very important issues in the integration process, such as strong resistance to integration, lack of high-end talents, and slow development, which seriously affect the speed of the combined development of both sides, and at the same time, both sides also face the same problem. For example, when dealing with incurable diseases, they are at a loss. The first three issues can be solved by strengthening exchanges and cooperation, improving the talent training system, and increasing research and development investment. This can promote the healthy development of integrated traditional Chinese and Western medicine and contribute to improving human health levels. The fourth issue requires both sides to jointly study and develop and find effective and safe drug treatments or non-drug treatments.

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