



Review and Progress

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Analysis of Diagnostic Methods, Etiology and Pathogenesis of Traditional Chinese Medicine

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Abstract The diagnostic methods and pathogenesis theory of traditional Chinese medicine are one of the core contents of traditional Chinese medicine. Through the comprehensive application of the four diagnostic methods, pulse diagnosis, tongue diagnosis, etc., doctors can obtain more comprehensive and accurate diagnostic information, thus formulating more scientific and personalized treatment plans. The theory of etiology and pathogenesis provides doctors with a basic theory for treating diseases, enabling them to better understand the essence and development laws of diseases, and formulate corresponding treatment plans. Although the diagnostic methods and pathogenesis theories of traditional Chinese medicine play an important role in clinical practice, they still need to be better adapted to the needs of modern medicine through long-term practice and continuous improvement. This review aims to explore the diagnostic methods and pathogenesis theories of traditional Chinese medicine, provide reference and reference for the development of traditional Chinese medicine, and contribute to the promotion of traditional Chinese medicine and the inheritance of Chinese culture.

Keywords Diagnostic method; Causationism; Five elements and six weathers; Future development

Traditional Chinese medicine, as a treasure of traditional medicine, has a long history and profound traditional background. It has a long history and can be traced back to ancient times. After thousands of years of development and evolution, it has formed a unique theoretical system and treatment methods. Traditional Chinese medicine, with its unique inspection methods and dialectical treatment theory, has provided valuable experience and wisdom for the health of the Chinese people for thousands of years.

The diagnostic methods of traditional Chinese medicine are mainly based on the four diagnostic methods, namely inspection, listening and smelling examination, inquiry, palpation. The four diagnostic methods are the foundation of traditional Chinese medicine diagnosis. By observing the patient's external manifestations and internal changes, combined with information such as medical history, symptoms, and signs, the nature and severity of the disease can be determined. The theory of etiology and pathogenesis in traditional Chinese medicine emphasizes the fundamental causes and pathogenesis of diseases, believing that the occurrence and development of diseases are a combination of multiple factors, such as changes in the internal and external environment of the human body, emotional factors, and improper diet. With the rapid development and technological progress of modern medicine, the position and value of traditional Chinese medicine in the field of modern medicine are increasingly valued.

However, the diagnostic methods and pathogenesis theories of traditional Chinese medicine also have certain limitations and shortcomings. On the one hand, the diagnostic methods and pathogenesis theories of traditional Chinese medicine require long-term practice and continuous improvement in order to better adapt to the needs of modern medicine. On the other hand, the diagnostic methods and pathogenesis theories of traditional Chinese medicine also need to be better integrated with modern medical theories in order to better serve human health. Therefore, this review will provide a detailed introduction to the diagnostic methods of traditional Chinese medicine, including the four diagnostic methods (inspection, listening and smelling examination, inquiry, palpation), pulse diagnosis, tongue diagnosis, face diagnosis, etc., exploring their principles and applications, elucidating the unique features of traditional Chinese medicine diagnostic methods, and conducting a detailed



exploration of the etiology and pathogenesis theory of traditional Chinese medicine, revealing the fundamental causes of traditional Chinese medicine treatment, and providing scientific basis for the clinical practice of traditional Chinese medicine. Deeply explore the diagnostic methods and pathogenesis theories of traditional Chinese medicine, provide new ideas and methods for the application of traditional Chinese medicine in modern medicine, and further expand the role and value of traditional Chinese medicine in human health. This will help promote the integration of traditional Chinese medicine and modern medicine, making greater contributions to human health and well-being.

1 Diagnostic Methods of Traditional Chinese Medicine

1.1 The principle and application of the four diagnostic methods

The four diagnosis method is the basic diagnostic method of traditional Chinese medicine, which is an important means for herbalist doctor to judge the condition and differentiate symptoms, including inspection, listening and smelling examination, inquiry, palpation (Figure 1), to identify the mechanism, location, nature, severity, and prognosis of the disease.



Figure 1 Four diagnostic methods

Inspection is the process of obtaining diagnostic information by observing the patient's appearance and physical condition. Herbalist doctor will carefully observe the changes in the patient's facial color, tongue coating, tongue texture, and eyes. For example, a pale complexion may indicate insufficiency of qi and blood, and a rosy tongue may indicate fever, etc. Through inspection, herbalist doctor can preliminarily determine the condition and distinguish the types of diseases and syndromes. listening and smelling examination is the process of obtaining diagnostic information by listening to the patient's voice, breathing, coughing, and other sounds. For example, whether a patient's cough sounds include phlegm or wheezing can reflect different changes in the condition. By smelling and diagnosing, herbalist doctor can understand the patient's qi and blood status and changes in visceral function. Consultation is the process of conducting detailed conversations with patients to understand their condition and symptoms. herbalist doctor will inquire about patients' medical history, symptoms, pain, dietary habits, and other information. Through consultation, herbalist doctor can obtain more detailed information on the condition, help with syndrome differentiation and determine treatment plans. Palpation is the process of obtaining diagnostic information by palpating the patient's pulse. herbalist doctor will carefully touch the patient's pulse to understand changes in pulse frequency, rhythm, strength, and texture. Based on different changes in pulse, herbalist doctor can determine the patient's visceral function, qi and blood status, as well as the severity of the condition (Kang et al., 2015; Li et al., 2022).

The four diagnostic methods are complementary in traditional Chinese medicine diagnosis. By comprehensively analyzing the information of the four diagnostic methods, herbalist doctor can comprehensively understand the patient's condition and make accurate diagnosis and treatment decisions. The four diagnosis method is a unique diagnostic method in traditional Chinese medicine, with rich clinical experience and a unique theoretical system. It is one of the important skills of herbalist doctor. In the practice of traditional Chinese medicine, the application of the four diagnostic methods is indispensable, which helps to improve the diagnostic level and treatment effectiveness of herbalist doctor.



1.2 The role of pulse diagnosis and tongue diagnosis in traditional Chinese medicine diagnosis

Pulse diagnosis and tongue diagnosis are two important diagnostic methods in traditional Chinese medicine, and they play an extremely important role in clinical practice of traditional Chinese medicine. Pulse diagnosis is the process of touching a patient's pulse to understand changes in pulse conditions, in order to reflect the function of the patient's internal organs, qi and blood status, and changes in the patient's condition; Tongue diagnosis, on the other hand, involves observing the patient's tongue coating and texture to understand their physical condition, visceral condition, and disease manifestations. These two diagnostic methods are unique techniques of traditional Chinese medicine, with a long history and rich clinical experience, and are one of the important basis for traditional Chinese medicine diagnosis (Wang et al., 2014).

Pulse diagnosis is one of the important methods for syndrome differentiation in traditional Chinese medicine. According to the different changes in pulse, herbalist doctor can determine the patient's visceral function and qi and blood status, and then make a decision on syndrome differentiation and treatment (Figure 2). For example, a weak pulse may indicate qi deficiency, and a slippery pulse may indicate dampness and heat. Pulse diagnosis can help herbalist doctor understand the severity of a patient's condition. The changes in pulse speed, strength, and weakness can reflect the acute or chronic degree of the disease, which helps herbalist doctor formulate corresponding treatment plans. Pulse diagnosis can be used to observe the therapeutic effect. During the treatment process, herbalist doctor can understand whether the treatment is effective by palpating changes in pulse, which helps to adjust the treatment process, herbalist doctor can understand whether the treatment is effective by palpating changes in pulse, which helps to adjust the treatment plan in a timely manner.



Figure 2 Pulse diagnosis

Tongue diagnosis is one of the important basis for traditional Chinese medicine syndrome differentiation. The color, thickness, dampness, and dryness of the tongue coating, as well as the changes in the shape and color of the tongue material, can reflect the patient's condition and constitution, which is helpful for herbalist doctor in dialectical treatment. Tongue diagnosis can help herbalist doctor understand the severity of a patient's condition. The thickness and color of the tongue coating, as well as the degree of dryness of the tongue, can reflect the acute or chronic severity of the disease. Tongue diagnosis can be used to observe the therapeutic effect. During the treatment process, herbalist doctor can observe the changes in tongue coating and tongue substance to understand whether the treatment is effective, which helps to adjust the treatment plan in a timely manner. Tongue diagnosis can also be used to remind patients to pay attention to their own health status. Traditional Chinese medicine believes that changes in tongue coating and tongue texture are closely related to the health status of the body. Patients can understand their own health status and take timely measures by observing their own tongue coating and tongue texture.

Pulse examination and tongue examination are two indispensable and important methods in traditional Chinese medicine diagnosis. They complement and confirm each other, helping herbalist doctor comprehensively



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understand the patient's condition and constitution, and thus carry out accurate diagnosis and treatment. The application of pulse and tongue diagnosis can help improve the diagnostic level of herbalist doctor and ensure that patients receive better treatment outcomes. Meanwhile, with the progress of modern technology, the application of pulse and tongue diagnosis is constantly innovating and developing, providing new possibilities for the modernization of traditional Chinese medicine (Zhang et al., 2021).

1.3 The skills and applications of traditional Chinese medicine face diagnosis and symptom diagnosis

Traditional Chinese-medical face diagnosis and symptom diagnosis is one of the important methods in traditional Chinese medicine diagnosis, which obtains diagnostic information by carefully observing the patient's facial features and physical symptoms.

During face diagnosis, herbalist doctor carefully observe the patient's complexion, including whether it is rosy, pale, or yellowish red. Changes in complexion can reflect the state of qi, blood, and visceral function. Observing the patient's eyes, including their brightness, expression, and whether the lacrimal sac is swollen, can reflect the patient's mental state and liver and kidney function. Observe the patient's lip color, including whether it is rosy, pale, or dark purple. Changes in lip color can reflect qi, blood, and heart and lung function. Observing the patient's nasal shape, including whether the nasal tip is red and swollen, and whether the nasal wings are open, changes in nasal shape can reflect lung function and fluid metabolism. Observing the color and shape of the patient's earlobe can reflect renal function and blood circulation.

In symptom diagnosis, herbalist doctor will carefully inquire about the patient's symptoms, including the main complaint, medical history, pain location, nature, and degree, in order to comprehensively understand the condition. Through detailed inquiries, herbalist doctor will identify the causes, including the impact of factors such as diet, emotions, and environment on the condition. herbalist doctor will analyze the relationship between symptoms and determine the pathogenesis, including the invasion of pathogenic factors and dysfunction of visceral functions. Based on the characteristics of symptoms, herbalist doctor will determine the nature of the disease, including cold, heat, deficiency, and excess, providing a basis for treatment.

Through face diagnosis and symptom diagnosis, herbalist doctor can perform syndrome differentiation and treatment, that is, based on the patient's facial features and symptoms, determine the pathogenesis of the disease, and then choose corresponding treatment methods. Traditional Chinese medicine face diagnosis and symptom diagnosis can also be used for disease prevention. By observing facial features and symptoms, herbalist doctor can identify patients' physical weaknesses and potential health problems in advance, and take timely preventive measures. During the treatment process, herbalist doctor can observe the changes in facial features and symptoms of patients, judge the effectiveness of treatment, and adjust the treatment plan in a timely manner.

Traditional Chinese medicine face diagnosis and symptom diagnosis are important methods of traditional Chinese medicine diagnosis. They comprehensively utilize various information to help herbalist doctor comprehensively understand the patient's condition and physique, so as to carry out accurate diagnosis and treatment, improve treatment effectiveness and efficacy observation. At the same time, face and symptom diagnosis also provide important basis for disease prevention, which helps to improve the health level and quality of life of patients.

2 The Theory of Etiology and Pathogenesis of Traditional Chinese Medicine

2.1 The basic concept and classification of traditional Chinese medicine etiology

Traditional Chinese medicine etiology is an important component of traditional Chinese medicine, which studies the causes and laws of disease formation and development. The basic concept of traditional Chinese medicine etiology is "causality", which believes that diseases are the result of the interaction between internal and external factors. In traditional Chinese medicine etiology, etiology is mainly divided into two categories: external causes and internal causes.



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The external causes can be divided into evil invasion and traumatic injury. Exogenous diseases are caused by external pathogens invading the human body. External pathogens can be the six qi types of wind, cold, heat, dampness, dryness, and fire, which invade the human body under specific seasonal and environmental conditions, causing corresponding diseases. Trauma is caused by accidents or external forces that damage the structure of human tissues, leading to diseases. The internal causes can be divided into emotional disorders, improper diet, improper exercise, and congenital endowments. Emotions are the internal emotions and psychological states of the human body, and excessive emotional disorders such as worry, sadness, anger, and fear may lead to dysfunction of the internal organs, leading to diseases. Poor dietary habits, such as overeating and eating spicy and greasy foods, can damage the spleen and stomach, leading to digestive dysfunction. Excessive fatigue or lack of appropriate physical exercise can lead to dysfunction of the organs and poor circulation of qi and blood, leading to diseases. Congenital endowment refers to the genetic factors that affect the human body during fetal development, which have a certain impact on an individual's physical constitution and susceptibility to diseases. The comprehensive etiology can be divided into yang deficiency with cold coagulation, yin deficiency with excessive fire, and accumulation of dampness and heat. Yang deficiency and cold coagulation refer to the prolonged illness caused by insufficient Yang Qi and the invasion of cold pathogens, resulting in the weakness of Yang Qi. Yin deficiency and excessive fire refer to the symptoms caused by insufficient yin fluid and inflammation of fire evil, leading to yin deficiency and excessive fire. The accumulation of dampness and heat refers to the interaction between dampness and heat evil, which blocks the meridians and leads to complex conditions.

The classification of traditional Chinese medicine etiology is an important component of the theoretical system of traditional Chinese medicine, which is the foundation of diagnosis and treatment in traditional Chinese medicine. In clinical practice, herbalist doctor will comprehensively consider various factors such as the patient's external environment, physical condition, emotional state, dietary habits, etc., analyze the causes of the disease, in order to develop a reasonable treatment plan. At the same time, the concept of traditional Chinese medicine etiology also emphasizes the prevention and treatment of diseases, encouraging people to adjust their lifestyles and prevent the occurrence of diseases (Tang et al., 2008). The theory of etiology and pathogenesis in traditional Chinese medicine is a comprehensive, systematic, and dynamic theoretical system that provides strong theoretical basis for the diagnosis and treatment of traditional Chinese medicine. In practice, doctors need to develop personalized treatment plans based on the specific situation of patients, combined with the theory of etiology and pathogenesis, in order to maximize the treatment effect.

2.2 The concept and main content of traditional Chinese medicine pathogenesis

Traditional Chinese medicine pathogenesis is one of the important disciplines in traditional Chinese medicine, which studies the occurrence, development, and pathological changes of diseases, mainly including etiology, pathogenesis, syndrome differentiation, and pathology (Tian et al., 2023). Traditional Chinese medicine pathogenesis is an important component of traditional Chinese medicine, which studies the occurrence, development, and pathological changes of diseases, providing an important theoretical basis for the differentiation, treatment, and treatment of traditional Chinese medicine. The study of traditional Chinese medicine pathogenesis not only helps to improve the diagnostic level and treatment effect of herbalist doctor, but also provides scientific basis and guidance for people's health.

Traditional Chinese medicine pathogenesis studies the causes of diseases, including internal and external factors. Internal factors mainly refer to internal factors in the human body, such as emotional disorders, improper diet, weak physique, etc., while external factors mainly refer to external factors such as the invasion of the six qi factors such as wind, cold, heat, dampness, dryness, and fire. Etiological research provides an important basis for the differentiation and treatment of traditional Chinese medicine. Pathogenesis is the study of the laws and mechanisms of disease occurrence and development, including the development process, course changes, pathological changes, etc. Traditional Chinese medicine believes that diseases are caused by dysfunction of the internal organs, poor circulation of qi and blood, resulting in an imbalance of yin and yang, forming the



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pathogenesis and ultimately leading to diseases. Syndrome differentiation is the core content of traditional Chinese medicine pathogenesis, which is the foundation of diagnosis and treatment in traditional Chinese medicine. Traditional Chinese medicine syndrome differentiation is the analysis of the etiology and pathogenesis of a disease based on the patient's symptoms and constitution, in order to determine a treatment plan. Traditional Chinese medicine syndrome differentiation can be divided into various types, such as the 'Ba Gang' Syndrome (eight-principle pattern identification), 'Zang Fu' Syndrome (viscera syndrome differentiation), 'Qi Xue Jin Ye' Syndrome (differentiation of qi, blood, and body fluid), etc. Each type has corresponding diagnostic criteria and treatment principles. Traditional Chinese medicine pathology studies the pathological changes and mechanisms of diseases. Traditional Chinese medicine pathology believes that the occurrence of diseases is due to dysfunction of the organs, leading to obstacles in the movement of qi, blood, and body fluids, resulting in pathological changes. The study of pathology helps to gain a deeper understanding of the essence and pathogenesis of diseases, providing scientific basis for traditional Chinese medicine treatment.

2.3 The relationship between five elements and six weathers and the etiology and pathogenesis of traditional Chinese medicine

Five elements and six weathers are important theories in traditional Chinese medicine etiology, closely related to the etiology and pathogenesis of traditional Chinese medicine. Five elements refer to the laws of the movement of the five elements of 'Mu, Huo, Tu, Jin, Shui' while six weatherss refers to the six climate changes of wind, cold, heat, humidity, dryness, and fire. Five elements, six weathers are closely related to the etiology and pathogenesis of traditional Chinese medicine, and together they constitute the theoretical system of traditional Chinese medicine etiology. In clinical practice, herbalist doctor will conduct comprehensive analysis and judgment based on the changes in five elements and six weathers, combined with the specific symptoms and constitution of patients, in order to develop a reasonable treatment plan based on syndrome differentiation, improve treatment effectiveness, and prevent the occurrence of diseases. At the same time, people can also take corresponding preventive and health care measures based on the changes in five elements and six weathers, promoting health and longevity.

Five elements and six weathers are natural climate change patterns that directly affect the physiological and pathological changes of the human body. The theory of etiology and pathogenesis in traditional Chinese medicine believes that the invasion of external pathogens is one of the main causes of diseases. The changes in five elements and six weatherss can affect the body's resistance and adaptability. When the body has poor adaptation or decreased resistance, it is easy to be attacked by external pathogens, leading to diseases. According to the changes in five elements and six weathers, herbalist doctor will differentiate and treat patients based on their specific symptoms and constitution. For example, in summer, due to the influence of heat, fever is prone to occur, and treatment should be carried out to clear heat and detoxify; In winter, due to the influence of cold, it is easy for cold pathogens to invade, and treatment should be carried out by warming the interior and dispersing the cold. The changes in the five elements and six weatherss also remind people to adjust their lifestyle and carry out corresponding preventive health care. For example, in spring, it is easy to be affected by wind evil, so clothing can be added appropriately to avoid catching a cold (Figure 3); In autumn, it is easy to be affected by dryness. You can drink plenty of water to keep your skin moist.

3 Future Development and Challenges of Traditional Chinese Medicine

3.1 The development and evolution of traditional Chinese medicine diagnosis method theory

The development of traditional Chinese medicine diagnostic methods has undergone a long historical evolution and accumulation. From the initial observation and understanding of nature, to the theoretical establishment of classical medicine, to the formation of the medical school and the accumulation of medical experience, it continuously enriches and develops. These traditional diagnostic methods still have important value and applications in modern medicine, serving people's health (Li et al., 2021).





Figure 3 Cold

The early diagnostic methods of traditional Chinese medicine were mainly based on people's observation and understanding of the natural environment and human physiology. Ancient physicians identified the causes and mechanisms of diseases based on changes in weather conditions, natural phenomena, and patient symptoms. With the gradual formation of traditional Chinese medicine theory, a series of important medical classics have emerged, such as Huángdì Nèijīng (Inner Canon of Huangdi), Nán Jīng (Classic on Medical Problems), etc. These classics provide an important theoretical foundation for the development of traditional Chinese medicine diagnostic methods, systematically elaborating on the theory and practice of diagnostics. At different periods in Chinese history, a group of famous traditional Chinese medicine practitioners emerged, such as Zhang Zhongjing, Wang Shuhe, etc. They summarized their experience in clinical practice and formed different schools of thought and diagnostic methods. For example, Zhang Zhongjing's syndrome differentiation and treatment method has become one of the important methods for traditional Chinese medicine diagnosis and treatment. With the development of traditional Chinese medicine and the accumulation of clinical practice, the diagnostic methods of traditional Chinese medicine have been continuously enriched and developed. Doctors from various regions have summarized and innovated, forming many distinctive local diagnostic methods. Since modern times, traditional Chinese medicine has gradually integrated with modern medicine, and some modern scientific technologies have been applied to traditional Chinese medicine diagnosis, such as medical imaging and laboratory examinations. Meanwhile, some traditional diagnostic methods of traditional Chinese medicine have been re evaluated and applied, providing new ideas and methods for the development of modern medicine.

3.2 The application of modern technology in traditional Chinese medicine diagnosis

The application of modern technology in traditional Chinese medicine diagnosis has brought many new technologies and methods to medical diagnosis, further improving the accuracy and scientificity of diagnosis. Medical imaging techniques such as X-ray and computed tomography can be used to observe and detect the structure and function of internal organs in the human body, which plays an important role in the diagnosis of tumors, visceral organ diseases, and other aspects in traditional Chinese medicine (Figure 4). Modern laboratory examination technology can analyze biochemical indicators through samples such as blood and urine, helping herbalist doctor understand the patient's constitution and condition, and assisting traditional Chinese medicine in syndrome differentiation and treatment. Bioinformatics technology can study biomolecules such as genes and proteins, providing new ideas and methods for traditional Chinese medicine syndrome differentiation and personalized treatment. Modern technology has developed many specialized instruments and equipment for traditional Chinese medicine, such as electronic pulse diagnostic instruments, tongue diagnostic analyzers, etc., which can assist herbalist doctor in diagnosis and inspection. Artificial intelligence technology is gradually being



applied in traditional Chinese medicine diagnosis, which can help herbalist doctor make diagnosis and treatment decisions through big data analysis and machine learning algorithms.



Figure 4 Computed tomography

Although modern technology has brought many conveniences and advances to the diagnosis of traditional Chinese medicine, traditional diagnostic methods of traditional Chinese medicine are still the cornerstone of traditional Chinese medicine. herbalist doctor should continue to inherit and develop traditional diagnostic methods while applying modern technology, combining modern technology with traditional medicine, and providing patients with more comprehensive, scientific, and personalized diagnosis and treatment services (Chen et al., 2018).

3.3 The development prospects of traditional Chinese medicine research

With the support of contemporary science and technology, traditional Chinese medicine research has shown broad prospects and potential. As people's understanding of traditional Chinese medicine gradually deepens, its unique treatment concepts and methods are receiving increasing attention both domestically and internationally. The organization and inheritance of traditional Chinese medicine knowledge is an important direction in traditional Chinese medicine research. We need to strengthen the organization and research of traditional Chinese medicine classics, formulas, and the experience of famous doctors, and inherit these valuable traditional knowledge to provide useful reference for future generations.

The application of modern technology in traditional Chinese medicine research will promote the development of traditional Chinese medicine. For example, the application of technologies such as genomics, bioinformatics, and artificial intelligence can help reveal the molecular mechanisms and pathways of traditional Chinese medicine treatment, providing new ideas and methods for the research of traditional Chinese medicine. The clinical research of traditional Chinese medicine will be more in-depth and comprehensive, and the efficacy and safety of traditional Chinese medicine will be verified through large-scale clinical trials and randomized controlled studies, providing scientific basis for its application in modern medicine (Xu et al., 2009; Ma et al., 2019). The integration of traditional Chinese and Western medicine is one of the important directions for future research on traditional Chinese medicine. Traditional Chinese medicine, as a treasure of traditional Chinese medicine, will be combined with modern Western medicine to form a more comprehensive and diverse medical model, providing more comprehensive protection for people's health. The international influence of traditional Chinese medicine is gradually increasing, and more countries and regions will be interested in traditional Chinese medicine. International cooperation and exchange will promote the development of traditional Chinese medicine and promote its dissemination and application internationally.

The prospect of traditional Chinese medicine research is very broad, and it will continue to lead the development of the medical field in the future. By inheriting and developing traditional knowledge, applying modern technology, deepening clinical research, integrating traditional Chinese and Western medicine, and international cooperation, traditional Chinese medicine will make greater contributions to the cause of human health.





4 Summary and Outlook

Traditional Chinese medicine has a rich and diverse diagnostic methods, including the four diagnostic methods of looking, smelling, asking, and cutting, as well as pulse, tongue, and face examinations. These methods complement each other and together constitute a comprehensive and unique diagnostic system of traditional Chinese medicine. By observing the external manifestations of patients, listening to their complaints, inquiring about medical history, and palpating pulse signals, herbalist doctor can identify the pathogenesis and etiology of diseases, providing a basis for formulating effective treatment plans. Traditional Chinese medicine emphasizes the fundamental causes of treating diseases, and its theories of etiology and pathogenesis include five elements and six weatherss, yin-yang and five elements. These theories construct the unique disease concept and treatment concept of traditional Chinese medicine. By identifying the causes and mechanisms of diseases, herbalist doctor can develop personalized treatment plans tailored to individual differences, promoting patients' recovery.

Traditional Chinese medicine, as a treasure of traditional Chinese medicine, has important modern medical significance and value. Traditional Chinese medicine emphasizes individual differences, and each patient is considered a unique individual, so the treatment plan is personalized. This concept of individualized treatment is increasingly valued in modern medicine and is in line with the trend of modern medical development. Traditional Chinese medicine emphasizes the holistic nature of treatment, treating diseases as a whole disorder rather than a single local problem. In modern medicine, the concept of comprehensive treatment is also widely applied, recognizing the importance of multidisciplinary collaboration for disease treatment. Traditional Chinese medicine emphasizes "preventive treatment of disease" and focuses on preventing the occurrence of diseases. In modern medicine, preventive medicine is becoming increasingly important, and disease prevention has become an important component of health management. Traditional Chinese medicine has accumulated rich experience in treating complex chronic diseases, stubborn diseases, and these diseases still pose challenges in modern medicine. Therefore, the research and application of traditional Chinese medicine will provide new ideas and methods for treating these diseases.

The diagnostic methods and pathogenesis theory of traditional Chinese medicine provide a solid theoretical foundation for the development of traditional Chinese medicine. Its personalized treatment, comprehensive treatment, and emphasis on prevention and treatment of complex diseases have important significance and value in modern medicine. In order to better develop traditional Chinese medicine, we should continue to strengthen the research and inheritance of traditional Chinese medicine, promote the integration of traditional Chinese medicine and modern medicine, and make greater contributions to the cause of human health.

Authors' contributions

HQK was responsible for the relevant literature and material researching, organizing, and the writing for the first draft of this review; WJN participated in discussions and paper revisions; WJN was the person in charge of this review, guiding the writing and revision of the paper. Both authors read and approved the final manuscript.

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