

# Thoughts on Preventing Diseases Based on the Five Movements and Six Climates

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**Keywords:** Five-Yun and Six-Qi preventive treatment, disease pestilence, combined analysis, five evaluative phases, six climatic factors

**Abstract.** The theory of five movements and six climates has rich connotations, and its "pestilence occurring after three years" theory and "combined analysis of five evaluative phases and six climatic factors" theory can be used to predict epidemic and non-communicable diseases, and good results have been achieved, which makes the theory system of pre-disease treatment more perfect. By collecting the relevant literature reports in recent years, this paper discusses the application of the five movements and six climates in the prevention of diseases, summarizes the achievements made, analyses the existing problems in current research and the direction of future research, with a view to providing reference for the future research of the five movements and six climates in the prevention of diseases.

## 1. Overview of five movements and six climates

The five movements and six climates is a theory to study the law of climate change and its impact on biology. Under the guidance of the overall concept of traditional Chinese medicine, the relationship between human natural law, climate and phenology is expounded through the theory of Yin-Yang and five elements and the calculation of stem and branch. The theory of "five movements and six climates" originates from the "seven major theories" in Su Wen. "seven major theories" classifies the changes of climate, phenology and symptoms into two systems of "Five movements" and "six climates". It studies the relationship between them from the perspective of time and space. It also advocates that when the changes of six climates occur too much, too late and calm, the climate, phenology and symptoms will change accordingly. All kinds of climatic phenomena in nature are synthesized by two meteorological factors of "five movements" and "six climates", and the superposition of the two factors has relative stability and variability, as stated in "Five Operations Theory": "The upper and lower meet, the cold and summer come together, and the gas phase. If you get it right, if you don't get it, you will get sick "[3].

## 2 Effects of the Five Movements and Six Climates on Human Body and Preventive Treatment of Diseases

The five movements and six climates have certain effects on human congenital pregnancy endowment, acquired constitution, pathology and morbidity. Xue Lifei found that the congenital pregnancy endowment constitution of children in Southern Xinjiang was closely related to the five movements and six climates during pregnancy, and there was a correlation between the congenital constitution of children and the onset of disease [4]. "Su Wen Qi Jiao Bian Da Lun" expounds the

relationship between the cyclical climate change and the human body's morbidity in the past ten years of the Zhongyun Period, and puts forward for the first time the human body's pathological localization law, that is, the winning organs are the main contradiction of the disease, and the invincible organs are the organs of pathological localization. Professor Wang Deyun inspected 2,000 human beings who were born and acquired to experience the environment of dramatic climate change in 1978. He verified the human pathological localization of the theory of five movements and six climates. The rate of acquired verification was 20%, and the rate of congenital verification was 80%. Therefore, he believed that this theory could be applied to human congenital pregnancy. In addition, by combining this theory with meridian flow, it can be found that the viscera function reaches its peak 12 hours after the pathological localization of viscera has different degrees of pathological reflection, while other non-pathological localization of viscera rarely has pathological reflection. Therefore, by using the rule of meridian flow and pathological location of five movements and six climates, we can explore the pathological reaction of viscera in the day-and-night rhythm of human pathological location, so as to find out the diseases existing in human body and intervene and treat them in advance, so as to achieve the goal of prevention of diseases [5-7].

### **3 Application of the Five Movements and Six Climates in Preventing Diseases**

Climate change is not caused by a single factor change, but by the interaction of the five movements and six climates. Therefore, we can not analyze climate change solely from the five movements or six climates. Some scholars have found that the climate change deduced from the model of the combination of the five movements and six climates is more consistent with the actual climate change [8]. Therefore, after analyzing five movements and six climates separately, we can conclude that the climate change deduced from the model of the combination of the five movements and six climates is more consistent with the actual climate change. The five movements and six climates should be considered comprehensively, including five movements and six climates assimilation, alienation and balance, so as to more accurately and comprehensively introduce the possible annual climate change and abnormal climate. According to the theory of five movements and six climates, the year of severe climate change is Tianfu, Taiyi Tianfu, Datianfu, Tongtianfu, Buhe, Xiaoni, Tianxing, and most diseases are prevalent; while the year of relatively peaceful climate change is Pingqi, Suihui, Tongsuihui, Shunhua, with fewer diseases [1]. "Su Wen Yi Pian Ci Fa Lun" said: "If five movements and six climates change abnormally, pestilence will occur after three years", meaning that when the climate is abnormal continuously, it will lead to epidemic disease three years or so [9], which is the theory of pestilence occurring after three years. Previous scholars, based on this theory, used BP artificial neural network to establish meteorological forecasting models for some epidemic diseases 1-3 years ago, which can be used to forecast epidemic diseases. Another scholar discussed the influence of five movements and six climates on human body's physique and disease tendency from the perspective of the five movements, six climates and the both. He used the five movements and six climates to prevent diseases and took timely and well-founded measures [10-23].

#### **3.1 Application of the five movements and six climates in Preventing Epidemiological Diseases**

The theory of "pestilence occurring after three years" holds that the epidemic occurs mainly in the first to third years after the year of dramatic climate change. Based on the theory of "pestilence occurring after three years" and BP artificial neural network, Zhang Xuan et al. established meteorological forecasting models for some epidemic infectious diseases in Beijing 2-3 years ago

or 1-3 years ago, such as measles [9], dysentery [10], intestinal infectious diseases [11], tuberculosis [12], pertussis [13], mumps [14]. The results showed that the incidence of measles was concentrated in Chuzhiqi ,Erzhiqi.The most important meteorological factors affecting the incidence of measles are the average wind speed 2-3 years ago; the epidemic of dysentery is in the last three years after the emergence of abnormal climate in Wu, Gui and Xin years; the main meteorological factors affecting the incidence of intestinal infectious diseases are the relative humidity of that year and the relative humidity and wind speed 1-3 years ago; The most important meteorological factors affecting the incidence of tuberculosis were the average wind speed. The prevalence of pertussis was related to the meteorological factors 1-3 years ago, and the average relative humidity was the closest. The prevalence of mumps was related to the meteorological factors such as wind speed, low cloudiness and precipitation in that year and 1-3 years ago. In conclusion, the theory of " pestilence occurring after three years " can be used to predict epidemics. In the years of five movements-six climates assimilation, Tianfu and Taiyi Tianfu often have abnormal climate and are prone to diseases [15]. A scholar compared the incidence data of some epidemics in Changchun from 1949 to 2006, such as malaria, measles, influenza, dysentery, typhoid fever, pertussis and diphtheria, with the epidemic situation in the years of abnormal weather and peaceful weather deduced by the theory of gas phase. It was found that the climate change in the years of abnormal weather was related to some epidemic diseases, and the year of Tianfu,Taiyitianfu,which climate change fiercely . The incidence of infectious diseases in years was significantly higher than that in calm years [16]. This result coincides with other scholars' on infectious diseases based on the five movements and six climates. Therefore, we should pay close attention to the climatic conditions in these special years. Once the climate changes abnormally, we should take timely and effective measures to prevent and control epidemics[17].

### **3.2 Application of the five movements and six climates in Non-epidemic Preventive Treatment**

The emperor said, "When you are pregnant and infertile at the age of 12, you can't cure it completely. What makes it so?" Qi Bo said: the five movements and six climates have a system of mutual restriction.When they cooperate, it becomes prosperous, while they antagonize,it becomes weak[18]. It refers to the different changes of the five movements and six climates in different years, which have different effects on human fetal pregnancy. It can be inferred that human congenital pregnancy endowment and even acquired diseases are affected by the five movements and six climates. Wang Deyun [5] put forward the theory of human embryonic development period, Zhang Chenglong and others [19] supported deducing human congenital constitution and acquired disease tendency according to the characteristics of five movements and six climates at birth, and put forward the concept of "Chinese human biological clock". From this we can see that in the past, scholars mostly studied the formation of human congenital constitutional endowment from the two perspectives of gestation and birth date. In recent years, some scholars [20] have put forward a new viewpoint that 100 days after birth is the key time to determine human congenital physical endowment. Inspired by this new understanding, Zhang Xuan [21] and others have deeply explored the influence of neonatal and infant's five movements and six climates endowment on human body's physical fitness and morbidity tendency. Using logistic regression method, the 11-year case data of Dongzhimen Hospital in Beijing are classified into five viscera to determine whether or not they suffer from the disease. With heart disease as dependent variable and five movements and six climates as independent variables in four periods of pregnancy, birth, 100 days and one year old, we screened out the key factors of five movements and six climates affecting heart disease. It was found that in the two periods of birth and one year old, the"Jinyunbuji" of Yinian promotes heart

disease. Jiao Yuntao's scholar [22] found that the birth's five movements and six climates of chronic hepatitis B patients had the characteristics of Tuyunbuji.

#### 4 Discussion

Most of previous studies retrospectively explored the correlation between the five movements and six climates' characteristics of pregnancy, birth, morbidity, at 1-3 years before onset and the tendency of disease attack from a theoretical point of view, and lacked relevant research on the re-application of the conclusions. At present, the lack of support from large sample clinical data makes the understanding of the correlation between disease and the five movements and six climates from small sample clinical data incomplete and objective [23]. It may occur that similar diseases have different results in different regions. For example, Zhang Xuan and other [21] people found that the congenital endowment that affects the incidence of heart disease in Beijing during the birth period and one-year-old period is Jinyunbuji. While, Li Weiping et al. [24] found the congenital endowment that affects the incidence of heart disease in Beijing is Bingnian, Shuiyun, Huofeng. In addition, the current research results still have some limitations, because the theory of five movements and six climates emphasizes the impact of meteorological factors on the occurrence of diseases, and weakens the role of other factors such as social life and human psychology. In fact, the occurrence of diseases is affected by many factors. The author believes that in future studies, we should comprehensively analyze the various factors affecting disease occurrence, so as to properly assess the weight of climate factors in influencing disease occurrence, closer to the relationship between climate and disease described in the theory of five movements and six climates [9]. At the same time, we should carry out multi-factor optimization studies with large samples, cross-Regions and multi-diseases, and set up a control to further. Explore the unique advantages and application value of "five movements and six climates" in the prevention of diseases.

#### Acknowledgments:

Fund projects: National International Cooperation Base (2016-151), Central Plains Scholars (162101510003).

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