

The Significance of Qin Medicine Research for The Development of Traditiongal Chinese Medicine

Quanyi Li, Shaolin Li*

Shaanxi University of Chinese Medicine, Xianyang 712046, Shaanxi, China

*Correspondence Author

Abstract: *As the ancient capital of thirteen dynasties, Shaanxi has a long history and culture, and is also an important birthplace of traditional Chinese medicine culture and history. The Qinling Mountains, which crosses the land of Sanqin, starts from the Danjiang River in the east, ends at the Jialing River in the west, and crosses the two major water systems of the Yangtze River and Yellow River in the north and south. It provides good drug resources for doctors to cure disease and save people, thus help more patients get rid of the disease as soon as possible. Qinling Mountains, known as the reputation of natural medicine storehouse, has a very distinctive Qinling Seven Drugs, whose unique efficacy in clinical prevention and treatment has been verified for thousands of years and widely and deeply studied in the medicine community in recent years.*

Keywords: Traditional Chinese Medicine, Qin Medicine, Qinling Seven Medicine.

1. Introduction

Shaanxi is a big province of Chinese medicine production, and there is a famous saying that "there is no idle grass in Qin, there are wonderful medicine everywhere", that is, most grass and tree in Qinling Mountains has a very high medicine value. among the 2020 kinds of Chinese medicines included in the National Survey report of Traditional Chinese Medicine, 1368 kinds of Chinese medicines are continuously distributed in Qinling Mountains. Among them, *Salvia miltiorhiza*, *Bupleurum*, *Scutellaria baicalensis*, *Cornus officinalis*, *Forsythia* and *Schisandra chinensis* are repersentative and are called the Six Qin medicine. There are also "Seven Medicines" produced in Taibai Mountain of Qinling Mountains, which is the essence of Qin medicine and is known as an important and special geographical indication of Chinese herbal medicine in Qinling Mountains of China.

2. Historical and Cultural Background of Qin Medicine

Shaanxi has a long history and culture, since the Western Zhou Dynasty is the ancient capital of the twelve dynasties, countless history from here, the cultural wisdom of various schools of thought gathered and flourished here. Medical source of Qihuang has a very long history, Chinese medicine culture has been connect with the blood of Chinese civilization for thousands of years. Shaanxi is one of the main birthplaces of traditional Chinese medicine culture, and the cultural heritage of tradition Chinese medicine is very profound [1]. In ancient times, there was a legend of "Shennong tasting all kinds of herbs". In the Qin and Han Dynasties, there was a masterpiece of traditional Chinese medicine, Hunagdi Neijing, chich clarified the basic theory of traditional Chinese medicine with Huangdi, Qibo and Guiyu. The Han and Tang medicine formed on the land of the Three Qin Dynasty is the pearl of traditional Chinese medicine theory. The King of Medicine, Sun Simiao, not only left behind rich theories of medication and health preservation methods for future generations [2], but also proposed the

humanistic idea of "doctors should strive for excellence in medical skills, ethics, and honesty" in his book "Beiji Qianjin Yaofang" (Prescriptions Worth a Thousand Pieces of Gold for Emergencies). This idea is known as the core value system of traditional Chinese medicine culture [3]. In Tang Dynasty, the Xin Xiu Ben Cao (Newly Revised Materia Medica) compiled by Zhangsun Wuji and others in Qinling Mountains was the first official herbal medicine in China, which has a very important historical significance in the history of Chinese medicine. Ben Cao Gang Mu (Compendium of Materia Medica.) compiled by Li Shizhen inin the Ming Dynasty, which collects the great achievements of Materia Medica before the Ming Dynasty, not only leaves valuable and important materials for China, but also occupies an important position in the international academic circles. Darwin called it "Encyclopedia of China". The most precious medicine, the Qinling Seven Medicine, are first published in the "Panax notoginseng" section of Volume 12 of Compendium of Materia Medica.

3. The Unique "Qinling Seven Medicine"

The "Seven Medicines" of the Qinling Mountains refer to herbs with unique therapeutic effects, which can not only treat diseases with a single herb, but also play a leading role in treating diseases with the use of traditional Chinese medicine. The ancients said: Seven are extraordinary changes; Shuowen Jiezi said: Seven, the positive in the yang, and a slight yin emerging from the diagonal. The explanation of seven in the Xinhua Dictionary also has a special and rare meaning. Therefore, any herb with a "seven" at the end of its name refers to a Chinese herbal medicine with unique effects. The Qinling Seven Medicines often play a unique role in the clinical treatment and prevention of diseases, and have been continuously verified by famous doctors throughout the thousands of years of medical history.

The medicinal functions of the Qinling Seven Medicines can be summarized into seven characteristics: they can treat bleeding; Two can treat pain; Can treat blood stasis and

swelling; Four can treat animal bites; Five can treat snake and insect bites; Six can treat rheumatism and pain; Seven can cure five labor and seven injuries. In addition, it also has the functions of tonifying qi, blood, yin and yang, relieving diarrhea and defecation, promoting diuresis and reducing swelling, and relieving cough and asthma. Due to the wide variety and different functions of the "Seven Medicines", the head of modern pharmaceutical research has divided them into 13 specific functions: diaphoresis, clearing heat, promoting the circulation of qi, regulating blood, purgation, tonifying, removing dampness by promoting diuretics, warming the internal, resolving dampness, subduing the liver-wind and arrest convulsion, smoothing the nerves, dispelling wind-dampness, preventing phlegm to stop coughing [3].

4. The Unique Geographical Advantages of the Qinling Mountains

The distribution of the "Seven Medicines" in the Qinling Mountains has the characteristics of being relatively poor in the western region, the most abundant in the central region, and second in the eastern region. The main reason for the distribution differences of the "Seven Medicines" plants in the Qinling Mountains is the different growth conditions. The growth conditions that affect drug efficacy mainly include the following factors:

4.1 Topography and Landform

The Qinling Mountains originate from the Dashan Mountains in Baoji City and are connected to the Huashan Mountains through important mountain ranges such as the Taibai Mountains. The mountains are characterized by overlapping peaks and valleys, with a peak height of approximately 2500m. The deep rivers in the mountains have formed alluvial fans rich in nutrients, and the terrain along the banks of the Wei River is flat, known as the "800 mile Qinchuan" in history [4]. The land here is also fertile, providing an excellent soil environment for the growth of medicine.

4.2 Climate and Hydrology

The Qinling Mountains span across the land of Sanqin and serve as the boundary between the warm and humid climate of the Pacific and the dry and cold climate of Siberia. The average annual temperature is around 14 °C, and precipitation is often unevenly distributed due to seasonal influences. Due to the influence of terrain and environment, terrain rain is formed on the windward slope of mountainous areas with high precipitation, while rain shadow areas are formed on the leeward slope of mountainous areas with 7% less precipitation. The difference in total precipitation between the two slopes is significant, with the southern slope roughly 3.8 times that of the northern slope. The annual relative humidity on the Qinling Mountains reaches 70-80%, making it humid and often accompanied by rain and fog, creating a beautiful and unique landscape painting. The Tang Dynasty calligrapher Zhang Xu once described the Qinling Mountains as wet and foggy in his book "Visiting the Mountains to Stay", hence the famous saying "Even if it is clear and bright, it will be like rain, and if it enters the depths of the clouds, it will be covered in clothes [5]."

4.3 Other Reasons

The types of soil, including organisms, climate, and human activities, have a profound impact on the formation conditions of soil. Under the influence of multiple composite factors, different types of soil are formed. The distribution of soil types in the Qinling Mountains is almost the same as that in its climate zone, with the northern foot being a brown soil zone and the southern foot being a yellow brown soil zone. The brown soil at the northern foot of the Qinling Mountains is formed under the forest and grassland vegetation that alternates between cold, hot, dry, and wet. After long-term cultivation, the active soil layer is thick and has strong water and fertilizer retention abilities. It has become an ancient mature soil, which is very conducive to plant growth.

5. Advantages of Traditional Chinese Medicine

Traditional Chinese medicine has the advantages of simplicity, convenience, affordability, and efficacy, which makes many patients very receptive to traditional Chinese medicine treatment. As we all know, Chinese medicine is a comprehensive discipline, which combines the strengths of many families, reflects the development of Chinese traditional culture and technology, and plays a very important role in the treatment and prevention of COVID-19 infection.

6. Precious Medicinal Resources Need to be Carefully Protected

The Qinling Seven Medicines have important medicinal and research value. In the 1950s, the United States had already used the purified Taoerqi from the Qinling Seven Medicines for the treatment of cancer and included it in the US Pharmacopoeia. The excellent efficacy and widespread application of the "Seven Medicines" have attracted the attention of medical personnel both domestically and internationally. With the continuous in-depth research on the Seven Medicines, their application scope is becoming increasingly widespread, and the demand for them is also increasing. This has put enormous pressure on the wild plant resources of the Seven Medicines. The expansion of human activities and the plundering and destructive exploitation of forest resources have caused great harm to the ecological environment in the Qinling Mountains, posing a great threat to the survival of species in the mountains; Moreover, due to the unique reproductive and seeding methods of some plants, their own seed setting rate is low; The decline of genetic genes leads to some plants being unable to adapt to environmental changes, resulting in extremely low survival rates; The above three points have led to a significant portion of the seven medicinal herbs in the Qinling Mountains being on the brink of extinction.

In order to protect such precious traditional Chinese medicine resources, we must take effective protection measures for the Qinling Seven Medicines and other traditional Chinese medicines. Firstly, we should investigate the quantity, distribution area, and survival status of rare and endangered medicinal resources, fully study the distribution characteristics and transformation laws of plants, and formulate scientific protection plans. Secondly, there are a wide variety of rare and endangered plants born in the Qinling

Mountains. If they are all protected without priority, it will consume a lot of manpower, material resources, and financial resources. In order to avoid wasting resources and funds, rare and endangered plants should be classified and prioritized to protect plants with high genetic value and utilization value and the most threatened, and drug classification protection should be implemented. Thirdly, for traditional Chinese medicine varieties that have slow response to soil environment, strict requirements, and cannot adapt in a timely manner, on-site protection should be implemented, and the development of natural reserves should be adopted to vigorously protect precious drug resources; Establish multiple drug protection bases and carry out relocation protection; And actively apply modern technology, quote big data thinking, establish a plant gene database, and implement ex vivo protection of precious medicinal species. Fourthly, actively promote local pharmaceutical farmers, establish "Seven Medicines" wild plant domestication parks, carry out artificial breeding and cultivation, and strengthen research on cultivation techniques and methods of wild plant resources, expand the population of Seven Medicines plants in the Qinling Mountains, and minimize the exploitation and damage to wild plant resources. Fifthly, the application scope of some "Seven Medicines" plants is relatively large, and in the development and utilization, it is necessary to achieve in-depth and thorough development and comprehensive utilization of drug functions and applications. At the same time, the collection and processing technology of drugs should be optimized to improve the utilization rate of plant resources. Finally, we should vigorously promote education on the protection of traditional Chinese medicine resources, enhance people's awareness of resource and environmental protection, make reasonable use of medicinal plant resources, and achieve long-term protection of rare medicinal resources [6].

7. Conclusion

The Qinling Mountains have no idle grass, and the unique geographical environment and climate humidity of the Qinling Mountains provide a good ecological environment for many Qin medicines. We must protect the traditional Chinese medicine resources in the Qinling Mountains, and on this basis, conduct more in-depth and thorough research and investigation on Qin medicines in order to better, more efficiently, and widely protect and apply Qin medicines. Let traditional Chinese medicine become the key to unlocking the treasure trove of Chinese culture, enabling traditional Chinese medicine culture to go global and contribute to the realization of the Chinese Dream of national rejuvenation.

Fund Project

Exploring the Effects of Kidney Tonifying Formula on Learning and Memory, as well as Hippocampal Pathology in Rats with Kidney Deficiency Constitution Kidney Deficiency Syndrome, based on the cAMP-PKA-CREB Signaling Pathway Key Laboratory of Traditional Chinese Medicine Constitution and Disease Prevention and Control of Shaanxi Provincial Department of Education Project Number: 23JS007.

References

- [1] Zhao Renlong. The New Era Value of Historical and Cultural Resources of Traditional Chinese Medicine in Shaanxi [J]. Journal of Shaanxi University of Traditional Chinese Medicine, 2021, 44 (01): 21-26.
- [2] Li Jingwei. Sun Simiao's Health Preservation Thoughts and Contributions [J]. Journal of Chinese Medical History, 1981, 1 (14): 193-200.
- [3] Xin Bao. Analysis of Sun Simiao's "Mischievous God" Health Preservation Thought [J]. Chinese Journal of Basic Traditional Chinese Medicine, 2012, 18 (7): 711-712.
- [4] Chen Mingrong et al. Climate and Agriculture in the Qinling Mountains. Beijing: Science Press, 1983.
- [5] Wang Mei A Study on the Plant Resources and Geographical Distribution Patterns of the Seven Medicines in the Qinling Mountains [D]. Northwest A&F University, 2014.
- [6] Liu Qinshe, Tang Zhishu. Developing the "Qin medicine" industry to promote targeted poverty alleviation [N]. Chinese Journal of Traditional Chinese Medicine, November 10, 2016 (006).