

# Exploring the Development Prospects of Tibetan Medicine

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**Abstract:** Tibetan medicine is a “bright pearl in the treasure house” of traditional ethnic medicine in China. It has the benefits of a complete and time-honored theoretical development system of ethnic medicine, unique diagnosis and treatment methods with ethnic characteristics, as well as patent prescriptions that are summarized and developed for various diseases. However, obstacles such as high cost, complicated processing techniques and medication methods, as well as those in cultural exchanges are impeding the development process of Tibetan medicine. In an era where modern medical technologies and traditional Chinese medicine are advancing hand in hand, this paper proposes strategies to promote Tibetan medicine’s industrialization, policy support, social attention, and internationalization, in order to advance the use of Tibetan medicine in serving a greater number of people with its unique benefits, and thus realizing the dream of “Healthy China.”

**Keywords:** Tibetan medicine; Tibetan medicine culture; Tibetan medicine industry; Cultural analysis

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## 1. Introduction

Tibetan medicine was born in the vast and majestic snow-covered plateau. It is a valuable medical system established by diligent and kind-hearted Tibetan people who used local materials on the Qinghai-Tibet Plateau to fight against diseases and special drug processing methods to produce rich medicinal materials from unique biological and mineral raw materials in the snow-covered holy land for disease prevention, diagnosis, and treatment, while constantly summarizing, inheriting, and developing in practice. On the basis of their unique medical foundation, the Tibetan people also assimilated the essence of traditional Chinese medicine culture and integrated the medical knowledge of brother nations and neighboring countries, such as India and Persia. Through the continuous improvement of Tibetan medicine theories by Tibetan pharmacists over years, they have gradually established a national medical system with unique regional characteristics that benefits the Tibetan people.

In recent years, with the development of modern medical technologies, traditional ethnic medicine has gained attention from all walks of life, even the international community. Tibetan medicine has also been deeply studied and developed with the support of various policies and technologies. However, comparing Tibetan medicine with western modern medicine and traditional Chinese medicine, the industrial foundation of Tibetan medicine is weak, the awareness and strength of Tibetan medicine culture publicity and promotion are insufficient, and coupled with the constraints of climate, geographical environment, and other factors, it is far from reaching the level of “Tibetan medicine fever.” The development and prospects of Tibetan medicine should be studied and explored by all walks of life, so as to push past the old and usher in the new, thus shining brightly in the field of national medicine. Therefore, on this basis, this paper will

analyze the benefits and drawbacks of Tibetan medicine, formulate relevant measures for its development and prospects, as well as contribute to the inheritance and dissemination of Tibetan medicine.

## **2. Benefits of Tibetan medicine**

Looking around ancient Chinese medicine and medical environment, Tibetan medicine has been able to endure for thousands of years and offer unique diagnostic and treatment techniques with widely praised curative effects, in which the fundamental reason for this is its unique benefits.

### **2.1. A complete theoretical system that has been tested by time and practice**

Tibetan medicine has formed a systematic theoretical system for more than 3,000 years. Dating back to 8th century A.D., during the reign of Tibetan King Trisong Detsen, Tibetan medicine and pharmacy evolved unprecedentedly with the expertise of doctors of the Ben nationality. There were nine well-known Tibetan pharmacists, of whom Yundan Gongbu was known as the most accomplished pharmacist. Yundan Gongbu, based on the local Tibetan Ben medicine, visited famous doctors in the Central Plains, Nepal, India, and other places countless of times to learn medical skills, widely absorbed the essence of various medical systems, and combined with his own medical practice, wrote a work on Tibetan medicine – “The Four Medical Tantras” – for over 20 years, marking the maturation of the unique theoretical system of Tibetan medicine. In addition, “Shel Gong Shel Phreng,” written by Danzeng Pengcuo, also has high medical value; it includes a variety of medications with ethnic and regional characteristics, with relatively comprehensive research. At the same time, the book, which records numerous drugs that are primarily produced and specifically manufactured in Qinghai-Tibet Plateau, has drawn attention from many experts and scholars who show interest in national characteristic drugs and natural drugs.

Tibetan medicine is an organic combination of six flavors, eight natures, seventeen effects, and three chemical flavors based on the etiology, pathology, and attributes of diseases. Based on the principle of “monarch, minister, assistant, and envoy,” the main drug is added with supplementary drugs, synergistic drugs, anti-side effect drugs, and other drugs<sup>[1]</sup>. Doctors can combine drugs according to the nature of the disease to achieve better therapeutic effect. Through thousands of years of practice, Tibetan medicine has also accumulated a lot of experience in human physiology and anatomy, etiology, diagnosis, and treatment. Through the mastered laws and unique methods, it has made achievements in drug efficacy, diagnosis, treatment, and prevention. Therefore, a complete and reliable theoretical system is indispensable to Tibetan medicine.

### **2.2. Unique diagnostic and treatment methods**

The diagnostic methods of Tibetan medicine not only offer the same advantages as traditional Chinese medicine, but also maintain their distinct characteristics. The traditional diagnostic and treatment methods of Tibetan medicine include inquiry, observation, and palpation. Experimental diagnosis, urine diagnosis, and color diagnosis, all belong to the unique diagnostic and treatment methods of Tibetan medicine. Traditional pulse diagnosis is often used in Tibetan medicine to diagnose diseases related to the “five internal organs,” while for those related to the “six hollow organs,” urine diagnosis is preferred. Tibetan medicine believes that it is more accurate and appropriate to adopt diagnostic methods according to the location of diseases. In Tibetan medicine, urine diagnosis has an advantage in that it allows clinicians to promptly and directly assess diseases without any direct contact with patients as well as carry out syndrome differentiation and treatment based on the disease. It also provides reference for clinical medication. In short, the urine diagnosis, as characteristic diagnostic method of Tibetan medicine, is convenient and fast. Color diagnosis and experimental diagnosis are also rich in Tibetan medicine’s characteristics. In terms of treatment methods, Tibetan medicine classifies disease prevention and treatment methods into four major

methods, namely eating (food therapy), walking (living regimen therapy), medicine (drug therapy), and external treatment <sup>[2]</sup>. External treatment is one of the four basic treatments of Tibetan medicine. It is also the most effective, unique, and oldest treatment in Tibetan medicine. Additionally, it is a characteristic treatment with the least side effects. It includes three types of coarse therapies: bloodletting, moxibustion, and puncture; four types of fierce treatments: incision, resection, traction, and extraction; and three types of soft external treatments: edification, smearing, and medicinal bath. The characteristic diagnostic and treatment methods of Tibetan medicine have always safeguarded the health of Tibetan children in alpine areas with remarkable curative effects.

### **2.3. A variety of proprietary prescriptions**

For thousands of years, in the field of Tibetan medicine, there are at least tens of thousands of Tibetan medicinal compounds recorded in literatures and various medical classics. Among them, there are excellent drugs for clinical diagnosis and treatment, special drugs for various complex and miscellaneous diseases, and tonic drugs used in disease prevention, healthcare, and other fields. These are treasures created by Tibetan medical experts from long-term clinical practice, combining the existing theoretical basis of Tibetan medicine and their own experience. Although there are only a few variations of Tibetan patent medicines in clinical practice, with over 300 different categories, Tibetan medicine still has great development and utilization value. Prescriptions with abundant categories should be fully utilized to develop excellent medicines with clear therapeutic effects and higher market economic value. In addition, due to its unique medical theory, Tibetan medicine often combines numerous drugs to formulate exquisite prescriptions. Nowadays, with the increasing toxic side effects of chemicals and the prevalence of iatrogenic and drug-induced diseases, a new trend favoring traditional therapy and advocating the use of natural drugs has gradually taken shape, engendering an opportunity for the development of Tibetan medicine <sup>[3]</sup>.

## **3. Obstacles to the development of Tibetan medicine**

There are three drawbacks that affect the development of Tibetan medicine and hinder its communication with other countries, regions, and ethnic groups in the field of medicine.

### **3.1. High cost**

Tibetan medicine should, without a doubt, be manufactured primarily in the Qinghai-Tibet Plateau. As known to all, the plateau's natural environment is characterized by a large temperature difference between day and night, long periods of sunshine, strong photosynthesis, and ultraviolet radiation, all of which contribute to the high activity, high content, low pollution, and high drug potency of the plateau's characteristic drugs <sup>[4]</sup>. However, in high-altitude areas of Qinghai-Tibet Plateau, rainfall is scarce, the temperature is low all year-round, and there is widespread frozen soil. The perennial medicinal materials widely used in Tibetan medicine grow slowly in these areas. Overexploitation damages the local natural ecological environment and easily depletes Tibetan medicinal resources. In addition, precious materials such as gold, silver, coral, pine stone, pearl, agate, saffron, and musk, which are specially processed, are often used in prescriptions. These make Tibetan medicine different from ordinary Chinese medicine and western medicine, often having high economic value. Considering households with average incomes, the price of Tibetan medicine is relatively high. It is for this reason that illegal conducts are encouraged, including the overexploitation of medicinal resources, the poaching of endangered species, and the indiscriminate deforestation, resulting in the depletion of resources and a serious damage to the ecosystem. In addition, the Tibetan medicine market is rife with counterfeits and shoddy products, from which criminals make huge profits. In this context, the treatment effectiveness of Tibetan medicine is greatly

reduced, and its reputation is tarnished.

### **3.2. Complicated processing techniques and medication methods**

According to the records of “Shel Gong Shel Phreng,” the processing methods of Tibetan medicine include selecting, screening, scraping, planing, washing, bleaching, splitting, grinding, frying, boiling, calcining, and making; the drugs that require special processing are also described. Tibetan medicine is extremely rare because it often takes several months to process it into finished products in order to assure its curative effect and quality. Additionally, different processing and processing methods will be used for different diseases. If the processing steps and processing itself are changed without authorization, the therapeutic effect of the drug may be affected, and toxicity is highly likely to result, thus endangering patients’ lives. In addition, the methods of consuming Tibetan medicine are also very complex. According to the records of the four medical classics, Tibetan medicine has its own unique medication methods. According to different diseases, there are ten different types of methods, which can be further subdivided based on specific time, dose, combination, and other factors, and then used in line with the drug’s category itself. The complicated processing techniques and medication methods make it difficult for Tibetan medicine to be mass produced. At the same time, patients are less inclined to opt for Tibetan medicine for these reasons, which has also become an obstacle to the development of Tibetan medicine.

### **3.3. Obstacles in cultural exchanges**

As far as culture is concerned, there are vast differences in Tibetan culture itself. However, the foundation of Tibetan medicine is Tibetan culture. The Tibetan communities of Weizang, Kangba, Anduo, Jiarong, and Gongbu have their own characteristics in terms of geographical location, customs, language and culture, body posture, and other factors. Exemplifying the communication between Chinese and Tibetan, language is the most important carrier for cultural exchanges between two nations. Although both belong to the Sino–Tibetan language family, they are from separate language branches, and communication between them poses a challenge. This has become a major obstacle for Tibetan medicine to extend beyond the snowy plateau and conduct in-depth research in the medical field with other countries, ethnic groups, and regions. Even if it is limited to the field of medicine, cross-cultural communication is still a challenge in the development of Tibetan medicine and pharmacy. The existing medical classics with national characteristics, processing methods, ready-made prescriptions, diagnostic and treatment methods, and other aspects cannot fully integrate in the process of communication and dissemination. This makes it difficult for Tibetan medicine to effectively integrate existing medical resources and rapidly promote its industrialization and scale with the help of foreign investment, thereby limiting its development prospects.

## **4. Development strategies of Tibetan medicine**

### **4.1. Vigorously develop the Tibetan medicine industry**

The industrialization and large-scale development of Tibetan medicine are the impetus for promoting its healthy development. At present, there are more than 100 Tibetan medicine enterprises in China, with more than 20 in Qinghai, more than 40 in the Tibet Autonomous Region, and varied distributions in Gansu, Yunnan, Sichuan, Xinjiang, and other places. The number of Tibetan medicine manufacturers in the Tibet Autonomous Region has grown to 18, and all of them are GMP certified. They produce more than 360 varieties of Tibetan medicine in eight dosage forms, such as pills, powders, capsules, and granules. Among them, there are 307 varieties in the national standard, 318 have obtained the national drug registration number, 20 have obtained the “Certificate of Variety of Traditional Chinese Medicine Under Protection”<sup>[5]</sup>, and 18 have been listed in the 2010 edition of the Chinese Pharmacopoeia<sup>[6]</sup>. Although the Tibetan medicine industry has begun to take shape, there are still many shackles. First of all, it is difficult to mass

produce perennial medicinal materials in high-altitude areas while assuring their efficacy. It is also difficult to carry out in-depth regional research on artificial planting technology in high and cold regions. Secondly, there is an extreme shortage of technical talents in the cultivation of medicinal materials, management talents in the management and operation of Tibetan medicine, and even professional talents in Tibetan medicine. Finally, as far as the current market situation is concerned, most Tibetan medicine enterprises are small, medium, and micro enterprises, in which their market shares are not high. Today, with the increasingly fierce market competition, it is urgent to vigorously promote the industrialization, marketization, scale, and specialization of Tibetan medicine. Therefore, under the existing conditions, Tibetan medicine enterprises should first focus on integrating resources and establishing production and planting bases. On this basis, we will try our best to set up Tibetan medicine hospitals, promote Tibetan medicine education, and even establish professional research institutes to provide all-round support for the sound development of the Tibetan medicine industry. Of course, it is also necessary to carry out further research in light of the changes in market demand and the condition of ensuring adequate supply of Tibetan medicine enterprises. In addition, a marketing strategy in line with the promotion of Tibetan medicinal products should be formulated based on comprehensive market research.

#### **4.2. National support and attention from all walks of life**

Tibetan medicine, which is founded on Tibetan culture, is shrouded by a mysterious veil in the hearts of Chinese people. However, with the spread and blending of culture, people from all walks of life are beginning to show interest in the medical culture born on this pristine soil of mankind. Therefore, in order to promote the development of Tibetan medicine and broaden its prospects, first of all, we should make use of new media technology. In the era of highly developed information technology, the internet has formed indissoluble bonds with many aspects of life. Chinese people seldom opt for Tibetan medicinal products when treating or preventing diseases; in the same way, when medical students learn medical knowledge and experts and scholars conduct research in the medical field, they pay minimal attention to Tibetan medicine. The reason is that they know nothing about Tibetan medicine and have never dabbled in it. Therefore, it is an effective method to use WeChat Official Account and other information platforms, TikTok and other short video we-media platforms, as well as Weibo and other social platforms to promote the culture, industry, and products of Tibetan medicine, so as to gain people's attention and recognition of Tibetan Medicine <sup>[7]</sup>. Secondly, relevant state departments should be advised to increase the variety and proportion of Tibetan drugs in the national catalogue of essential drugs and the national catalogue of drugs for basic medical insurance and work-related injury insurance, increase the support for the application of new Tibetan drugs and the production of generic drugs, as well as provide support to Tibetan pharmaceutical research institutes and leading Tibetan pharmaceutical enterprises in terms of scientific research projects, funds, personnel training, and other facets. Finally, in view of the overexploitation of medicinal materials in Qinghai-Tibet Plateau, the destruction of the ecological environment, and the counterfeiting of Tibetan medicines in the market, it is recommended that the relevant departments should improve relevant laws and regulations, increase punishment, and create a good market operating environment. In the management of Tibetan medicine enterprises and research, a work coordination organization should be established to clarify relevant responsibilities and pay close attention to implementation!

#### **4.3. Internationalization of Tibetan medicine**

Tibetan medicine belongs to China's traditional ethnic medicine, and its industrialization started late. In terms of international research in the field of medicine, neither the research on Tibetan medicine pharmacology and drug properties, nor the research on the Tibetan medicine industry has been systematic.

In addition, most international associates do not recognize traditional Chinese medicine and China's traditional ethnic medicine. The main countries engaged in Tibetan medicine research are Southeast Asia, Russia, Japan, the United States, and parts of Europe. Therefore, in order to promote the development of Tibetan medicine and broaden its development prospects, it is necessary to promote the internationalization of Tibetan medicine today when the wave of globalization is sweeping across the world. First of all, we can start with cultural communication. It is vital to gradually expand traditional Chinese medicine culture and expand it to Tibetan medicine by relying on international Chinese education and worldwide cultural exchange and cooperation organizations. It is necessary to take into consideration of its psychology and attempt to present and demonstrate its characteristics and benefits with facts, data, and logic. At the same time, scholars at home and abroad are encouraged to publish papers, periodicals, monographs, and patents related to Tibetan medicine. They can also translate traditional Tibetan medicine classics, such as "The Treasure House of Nectar" and "Three Hundred and Sixty Medical Discrimination," into multinational languages for publication. Exchanges and cooperation between domestic and foreign universities can also be carried out in the field of Tibetan medicine, and a systematic and professional exchange and research system can be established. Secondly, beginning with the Tibetan medicine industry, existing Tibetan medicine enterprises should not only confine themselves to the local market, but also emphasize that Tibetan medicine is mostly natural and carries the characteristics and benefits of ethnic medicine, so as to appeal to foreign consumers. For countries with high recognition of traditional Chinese medicine, we will focus on promoting the industrialization and scale of OTC drugs and monomer products on the basis of complying with international laws because the recognition of these drugs is relatively high according to current international market research. Finally, we can also focus on international cooperation. While gaining financial backing, the Tibetan medicine industry may attract investment from all around the world through legitimate channels, engage in international exchanges and collaboration, as well as assist in the globalization of Tibetan medicine. Of course, in the face of the developing pharmaceutical industry, China's Tibetan medicine enterprises need to establish a strong sense of property rights and protect the interests, property rights, and trademarks of China's traditional ethnic medicine during the collaboration period.

## **5. Conclusion**

Tibetan medicine, as an excellent national cultural resource in Qinghai-Tibet Plateau, is also a significant health and medical resource in Tibet and even in China. It is also an economic resource with great development potential, which can vigorously promote the development of ethnic regions. From hibernating on the vast snow-covered plateau to spreading the love of doctors around the world, Tibetan medicine, under the guidance of the new era, has shifted from the reform and opening-up to comprehensively deepening reform, providing a solid support for the "introduction" and "going-out" of the Qinghai-Tibet Plateau. It is true that the development of Tibetan medicine in the new era is facing many challenges, but there are also great opportunities ahead of us! On the road of development, Tibetan medicine has broad prospects. While vigorously carrying forward China's excellent traditional ethnic medicine culture, it will enrich and improve the existing medical system and make remarkable contributions to healthcare, disease diagnosis and treatment, as well as other health-related endeavors in ethnic areas and across the country.

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