

# Medicinal Characteristics of Jing Medicine

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## Abstract

In the long process of living, working and fighting against diseases, the Jing people have formed a medical system with their own characteristics, which has made great contributions to the hygiene and health of the ethnic group and is still playing an important role today. As an indispensable part of Chinese traditional medicine system, Jingzu medicine has its own unique advantages and characteristics, which need to be further explored and sorted out. In this paper, the characteristics and advantages of Peking medicine were summarized from the characteristics of medicine use.

## Keywords

Jing Nationality, Nationality Medicine, Oceanic Medicine

## 1. Introduction

The Jing ethnic group is the only maritime ethnic group in China, mainly residing on three islands in Fangchenggang City, Guangxi Zhuang Autonomous Region, namely Mawei, Shanxin, and Wutou. The total population is approximately 30,000 people. Due to the geographical isolation and limited transportation options caused by being surrounded by water, the residents on these islands face long-term challenges in accessing healthcare services and medications, making it difficult for them to seek medical treatment outside their communities. In their

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prolonged battle against diseases, the Jing people have developed a distinctive medical system deeply rooted in their culture, utilizing marine and coastal medicinal resources for disease prevention and treatment. This article summarizes the therapeutic characteristics of Jing ethnic medicine, focusing on five aspects: the extensive use of marine medicines, the utilization of fresh herbs, expertise in detoxification, emphasis on external treatments, and the significance of dietary therapy for prevention and health maintenance.

## **2. Extensive Use of Marine Medicines**

The most significant characteristic of Jing medicine is the extensive use of marine drugs. The Jing people have a wealth of experience in using marine drugs to treat diseases [1]. Some of these unique medicinal practices have their distinctive features compared to traditional medicine practices of other ethnic groups.

### **2.1. Abundant Marine Medicinal Resources**

The Beibu Gulf is located south of the Tropic of Cancer and has a subtropical climate with abundant sunshine. The region is characterized by lush vegetation and diverse topography, including plains, hills, and coastal mudflats. These factors have contributed to the rich and ancient medicinal resources in the area [2]. Professor Deng Jiagang's book, "Marine Medicinal Resources of Guangxi," meticulously catalogs 404 marine medicinal species found in the waters of Guangxi, including 252 primary medicinal species and 152 secondary medicinal species. These include rare species such as Hepu pearls, sea cucumbers, Chinese horse-shoe crabs, and sea snakes with green rings, all of which are commonly used marine medicinal resources in the "Jing Ethnic Three Islands" [3] [4].

### **2.2. Mangrove Medicinal Plants**

Due to their prolonged coastal existence, the "Jing Ethnic Three Islands" have access to rich mangrove medicinal plant resources. The Jing people have been utilizing medicinal plants from the mangroves, locally referred to as "Hailan-shan," for the treatment of various common ailments such as rheumatism, skin diseases, bruises, fever, and hepatitis. Statistical data reveals that there are 19 species of mangrove plants from 14 different botanical families around the Jing ethnic islands, with 15 of them belonging to the 10 families used commonly in Jing ethnic medicine. These include 10 species of true mangroves, four species of semi-mangroves, and one associated plant, accounting for approximately 79% of the total mangrove plant species in the surrounding area. The Jing people have accumulated a rich experience in using medicinal plants from mangroves. For example, *Cerbera manghas* root decoction can be taken orally to treat rheumatoid arthritis, and the bark decoction of the silver leaf tree can be taken orally to treat hematuria [5]. Additionally, the same mangrove species can also be used to treat various common diseases [6]. For instance, *Mulan* bark decoction can be taken orally to treat diarrhea, spleen deficiency, kidney deficiency, and malaria.

The fruit can be used to treat diabetes, and the leaf decoction can treat dysentery. Research has shown that the isolated components from *Mulan* have anti-inflammatory, anti-tumor, and antibacterial effects [7]. Among these, *Acanthus ilicifolius* is the most commonly used mangrove species by the Jing people. According to the “National Compendium of Chinese Herbal Medicine,” it has the functions of clearing heat and detoxification, reducing swelling and dispersing lumps, and relieving cough and asthma. It is widely distributed in China’s coastal areas. The Jing people often use *Acanthus ilicifolius* to make decoctions or stews to treat common diseases such as hepatitis B, hepatosplenomegaly, and lumbar muscle strain. In Fujian and Hainan, it is also commonly used to treat lymphadenopathy, acute liver and spleen pain, jaundice, stomach pain, and asthma [8]. Pharmacological studies have identified various components in *Acanthus ilicifolius*, including sterols, alkaloids, flavonoids, lignans, and phenolic compounds. Its extracts are not only hepatoprotective and antioxidative but also exhibit anti-tumor and antibacterial effects. Moreover, root extracts of *Acanthus ilicifolius* have antiviral activity [9].

### 2.3. Unique Medicinal Practices

While people in other coastal regions of Fujian, Guangdong, Hainan, and other areas also possess rich knowledge and experience in using mangrove plants for medicinal purposes, some of the specific uses of mangrove plant medicines in Jing ethnic medicine are not commonly observed in other coastal regions. For example, the fruit of the false mangrove is soaked, de-astringed, and stir-fried before consumption to treat dysentery [10]. This mangrove plant is widespread along China’s coasts, but the practice of using its tender leaves as a topical anti-inflammatory agent or its bark for relieving skin itching is not reported in other coastal areas [11]. Current research suggests that the medicinal knowledge of mangrove plants among the Jing people is believed to have originated from the Vietnamese region. Their ancestors had already acquired this knowledge before migrating to Fangchenggang, which is why their experience in using medicinal plants from mangroves may differ from other coastal regions in China. However, there is limited research on mangrove plants in Vietnam, making it difficult to establish the relationship between the medicinal knowledge of mangrove plants among the Jing people and those in Vietnam.

### 3. Proficient Use of Fresh Herbal Remedies

The adept use of fresh herbal remedies is one of the distinctive characteristics of Jing ethnic medicine. The Jing Ethnic Three Islands fall within a subtropical humid monsoon climate, boasting abundant wild resources due to lush vegetation. This unique environment has enabled the Jing ethnic medicine to make use of fresh local herbs, accumulating rich experience in their use [12]. For example, fresh crushed leaves of *Clinacanthus nutans* can be applied topically to treat herpes zoster, while fresh crushed leaves of *Bryophyllum pinnatum* can be ap-

plied topically to treat external bleeding from wounds. Fresh herbal remedies are favored for their strong medicinal effects, quick efficacy, and ease of procurement. They are widely employed in the region, resulting in a wealth of knowledge regarding their utilization [13].

#### **4. Expertise in the Use of Detoxification Remedies**

Jing ethnic medicine possesses extensive expertise in using detoxification remedies to treat common diseases. Situated in a subtropical humid monsoon climate zone, the region is often plagued by miasma, various malarial diseases, insect bites, and snakebites. This has led to a relatively high incidence of skin diseases, malaria, abscesses, swelling and toxins, arthritis, rheumatism, and paralysis among local residents. Jing ethnic medicine holds that any illness caused by pathogenic toxins must have a corresponding detoxification remedy—this embodies the principle of “treating like with like.” In their long-standing battle against diseases, the Jing people have mastered a plethora of detoxification methods. For instance, the leaves of water lemon tree are used to treat inflammatory conditions resulting from external injuries, while its seed oil is effective against scabies and ulcers. Hibiscus can be employed to counteract cassava poisoning, and Dao Guqiang is used to treat injuries from jellyfish stings. Alsinacea bark is used to address injuries from poisonous fish spines, and mashed “luodi shenggen” (a type of plant) is applied externally to treat infected wounds, among other remedies [3].

#### **5. Emphasis on External Treatment Methods**

In addition to internal remedies, Jing ethnic medicine places a strong emphasis on external treatment methods, including moxibustion with artemisia (ai rong), external applications, external washing, topical ointments, cauterization, droplet therapy, powder application, nasal administration, alcohol extraction, soaking in alcohol, and hot fomentation, among others. These methods are known for their simplicity, patient acceptance, and efficacy and are favored by the local population. Two notable examples are artemisia moxibustion and seawater baths.

##### **5.1. Artemisia Moxibustion and Herbal Baths**

In resource-limited environments, artemisia moxibustion is a commonly employed and cost-effective medical treatment in Jing ethnic medicine. Depending on the region and season, different varieties of artemisia leaves are selected, including April artemisia, May artemisia, large artemisia, and small artemisia [14]. In the Jing ethnic region, wild May artemisia is often used due to its fresh and plump leaves during May. These leaves possess properties such as clearing heat, detoxification, nourishing yin, tonifying the kidneys, promoting blood circulation, and dispersing stasis. In the Jing ethnic area, every doctor is proficient in the preparation and storage of artemisia moxa, and many Jing ethnic physicians have long used artemisia moxibustion in disease treatment [3]. Additionally, ar-

temisia moxibustion is employed as a preventive health measure to enhance immune function. In the diagnosis and treatment of diseases, Jing people not only utilize artemisia moxibustion but also have the habit of using herbal baths. Herbal baths are effective for treating conditions such as postpartum wind-cold syndrome, characterized by soreness and pain in the limbs, lumbosacral region, and knee joints. Herbal baths have the functions of promoting meridian circulation, dispelling wind and cold, and preventing various postpartum diseases [15].

## 5.2. Seawater Baths

According to the “Compendium of Materia Medica,” “boiling baths can treat wind, rheumatism, and scabies.” Seawater baths have a wide range of effects, including anti-inflammatory, antibacterial, antipruritic, pus-expelling, and wound-healing properties. Therefore, they are frequently used to treat various dermatological conditions such as eczema, prickly heat, and surgical diseases, as well as to alleviate rheumatic pain. Seawater baths are a natural and effective remedy [16]. The Jing people have lived along the coastal areas for generations and, after a long period of life and struggle against diseases, have verified the effectiveness of seawater baths in disease prevention and treatment [3].

## 6. Emphasis on Diet Therapy for Prevention and Maintenance

The Jing people place a strong emphasis on using diet therapy for prevention and maintenance and are skilled at using medicinal foods to nourish and regulate the body. Over the years, Jing ethnic medicine has developed distinctive dietary therapy methods to treat various common illnesses, including gastritis, seafood poisoning, ulcers, irregular menstruation, and infantile malnutrition. They also incorporate foods or medicines into their daily diets for preventive health measures and targeted dietary adjustments.

Numerous dietary therapy methods for common illnesses are passed down among the Jing people. For example, during the treatment of vomiting and diarrhea, it is advisable to avoid oily and seafood-rich foods. Instead, a diet of light, liquid foods like lotus root powder can be consumed, in addition to medication and warm boiled water. For treating hematemesis (vomiting of blood), fresh lotus root juice mixed with a little saltwater can be ingested. The diet should avoid excessive heat, and after the bleeding stops, the patient can consume a moderate amount of liquid foods such as milk. When cooking fish, shrimp, and other seafood, adding fresh perilla leaves can effectively prevent food poisoning. During the scorching summer, preparing soups with honeysuckle and goji leaves can prevent heatstroke, while in winter, choosing dishes with beef and cinnamon can provide warmth. Taking 30 to 50 grams of fresh cockscomb flowers and consuming 2 to 3 boiled eggs before the onset of menstruation can help prevent irregular menstruation and related diseases [17].

Ginger is an essential seasoning in Jing cuisine and cannot be overlooked.

When used in fish soup, an appropriate amount of ginger not only removes fishy odors but also softens fish bones. Adding an adequate amount of ginger when cooking braised pork makes the dish more refreshing and delicious. Ginger also has extensive medicinal uses. It is known by various names such as shanai, san-laizi, shanla, and sanlai and is the dried rhizome of the ginger family plant *Alpinia oxyphylla*. Ginger has various medicinal properties, including promoting qi circulation, resolving phlegm, reducing swelling and pain, dispelling stasis, and reducing fever. It is used primarily to treat symptoms such as chest and abdomen distension, cold pain in the epigastric region, and indigestion. For the treatment of childhood fever, crushed white ginger can be applied externally to the fontanelle (can also be rubbed on the body). For conditions where qi rises excessively, an appropriate amount of white ginger can be crushed, mixed with cold water, and ingested. Stir-frying pig lungs with an adequate amount of white ginger can treat coughing, among other uses. Modern pharmacological research has shown that shanai phenols found in ginger can induce cell apoptosis, regulate the cell cycle, inhibit angiogenesis, and suppress tumor metastasis. While inhibiting the proliferation and invasion of tumor cells, it can effectively reduce the risk of cancer by controlling oxidative stress reactions and inhibiting the production of inflammatory factors, holding significant promise in the field of cancer prevention and treatment [18].

## 7. Conclusions

In this compilation of the distinctive medication characteristics of Jing ethnic medicine, including the extensive use of marine drugs, the skillful use of fresh herbs, expertise in detoxification, emphasis on external therapies, and the focus on diet therapy for prevention and maintenance, we can see the advantages and characteristics of Jing ethnic medicine deeply rooted in the community and benefiting the people.

Due to historical reasons, Jing medicine has not been able to form a systematic theoretical system. The decrease in local doctors practicing medicine has made it difficult to inherit Jing medicine. At the same time, marine organisms have gradually become a new hotspot in drug research, leading to excessive exploitation and misuse of drug resources. Various factors have led to the potential loss of a large number of prescriptions and formulas accumulated in Jing medicine. If the theoretical system of Jing medicine is not explored, organized, and rescued in a timely manner, Jing medicine is likely to disappear from the family of traditional Chinese medicine culture in the next decade or even a few years.

In recent years, with the efforts of the government of Fangchenggang City, Fangchenggang Traditional Chinese Medicine Hospital, and various institutions and individuals, many experts and scholars have been dedicated to exploring the unique theories of Jing ethnic medicine, classic formulas and prescriptions, advantageous diseases, and classic medicines. They have conducted in-depth research on the diagnosis and treatment experiences of Jing ethnic medicine. While preserving and developing the culture of Jing ethnic medicine, they are

actively constructing a standardized diagnosis and treatment system for Jing ethnic medicine. This promotes the standardization of diagnosis and treatment in Jing ethnic medicine and is of great significance in enriching the treasure trove of Chinese medicine and enhancing Chinese medical culture.

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## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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