

# Hui Medicine: The Sinicized Philosophical Islamic Medical System

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## Abstract

Chinese Hui medicine is a unique Chinese traditional medicine system formed by the integration of traditional Islamic Arabia medicine and China traditional Chinese medicine. It is also the cream of ancient Eastern and Western traditional medicine. Hui medicine is based on its unique concepts of Hui medical philosophy, such as the theory of Zhenyi Vitality and the theory of seven elements. It is the only traditional national medicine developed by inheriting Islamic Arab medical philosophy and integrating Chinese traditional Chinese medical philosophy theory. Hui medicine likes to use the application method characterized by aromatic Hui medicine (also known as ship medicine). It has high traditional treatment effect in Hui orthopedics and traumatology, Hui medicine of brain, Hui medicine of gynecology, Hui medicine of ophthalmology, Hui medicine of dermatology, Hui medicine of anorectal, etc. There is a relatively complete traditional medical system of Hui medicine. The Sinicized Islamic philosophical system guides the philosophical concept of Hui medicine. Hui medicine absorbs and combines the essence of traditional Chinese medicine, which forms the theoretical system of “Zhenyi (True one)”, “Vitality”, “Yin and Yang”, “Qixing”, “Four natures”, “Four body fluids” “Viscera Qi activity” and “Four parts and seven diseases” systems, which have been formed in the diagnosis and treatment of diseases. The characteristics of Hui medicine application are based on the formulation of aromatic drugs, and the nature of cold, hot, dryness, and humidity is conducted for each drug, as well as the drug strength (toxicity) of each drug is graded in grades 1 - 4. Therefore, Hui medicine is a traditional ethnic medicine combined with Chinese and Western medicine.

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## Keywords

Hui Medicine, Sinicized Islamic Philosophy, Zhenyi, Vitality, Yin and Yang, Qixing

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## 1. Introduction

Hui traditional medicine (hereinafter referred to as Hui medicine) is an important cultural heritage on China's ancient Silk Road and the crystallization of Islamic Arab medicine and ancient Chinese medicine (Zhang, 2018). The theoretical system is mainly composed of "Zhenyi (True one)", "Vitality", "Yin and Yang", "Qixing" of four theoretical systems; Water, Fire, Air (Qi), Earth, Gold, Wood and Live of seven Elements; black, red, yellow and white body fluid of four body-fluid theories, Cold, Heat, Dryness and Humidity of four nature theories, and, viscera Qi mechanism theories, etc. (Shan, 2005a). Hui traditional medicine was considered that the pathogenesis of human diseases stems from two major factors. One is congenital factors; there are potential pathogenic factors in the human body, such as the imbalance between the quality and quantity when constituting the four body fluid and four natures of the human body. There are different effects on the acquired human temperament due to the invasion of adverse factors such as geographical environment, modern biomedical etiology, microbiology, physics, chemistry, etc., even during the mother's womb; the second is acquired factors. The imbalance of Yin and Yang, four body fluids and Four Natures are caused by the actual pathogenic factors (Four pathogenic factors: cold, heat, dryness, and humidity, eight internal causes, eight external causes, and four other causes of neither internal nor external causes, which leads to the decline of the temperament of Viscera (Zang-Fu) organs and becomes the four parts and seven disorders (Shan, 2005a). Return to Hui medical treatment, firstly, adjust the temperament and humeral temperament to regulate the imbalance of Yin and Yang, Four natures, and Four body fluids. Support the True one (Zhenyi) Yuanyang, and then eliminate the pathogenic factors (cold, heat, dryness, and humidity) to promote the body's recovery. Hui medicine application is guided by aromatic herbs. Each drug is qualitatively divided into "Cold, Hot, Dryness, and Humidity", and is divided into 1 - 4 levels according to drug strength (Zhang, 2018). The advantageous specialties of Hui medicine with unique curative effects include Tianfang brain disease, oncology, orthopedics and traumatology, ophthalmology, obstetrics and gynecology, cardiovascular, gastrointestinal and others. Hui medicine is one major part of traditional Chinese medicine. There is a broad and profound medical theory and unique clinical effectiveness.

## 2. Ethnic and Regional Characteristics of Hui Medicine

The Sinicized Islamic nationality (including Hui, Sala, Dongxiang, and Baoan) is

a Chinese Muslim national community formed in the long history of the Silk Road. Its common characteristics are: believing in Islam; advocating Chinese civilization, especially Confucian culture; using Chinese characters; Chinese as a mother tongue. Due to historical reasons, it is relatively concentrated in North-west China, but it also forms the distribution characteristics of large dispersion and small aggregation in China. Hui medicine is inherent to the Sinicized Islamic nationality. It is a traditional national medicine gradually formed by combining the Islamic Arab medical system with traditional Chinese medicine in the formation, survival, reproduction, and growth of the Hui nationality and the continuous struggle against diseases for a long time. It is also an important part of the traditional medicine of the Chinese nation (Shan, 2005b).

### 3. Development History of Hui Medicine

The formation and development of Hui medicine (see **Table 1**) are accompanied by the exchange of Chinese and Arab medicine through the Silk Road. Since the Silk Road can be divided into five stages, the emergence and development of Hui medicine began in the second stage of the Silk Road and developed with the rise and fall of the Silk Road (Shan, 2005b).

**Table 1.** The development history of Hui medicine and the classic works and theories of Hui medicine.

Time	Channel	Connotation
The middle of the seventh century (early Tang Dynasty)	Islamic medical culture was introduced into China along the silk road	True monism, four body fluid theory, “30 books of thebi medical classics, and spices” and drugs in avisennal “medical code”
Late Tang Dynasty and early Song Dynasty	Classic medicine of Hui medicine	“Chinese herbal medicine”
Yuan dynasty	Islamic medicine combined with Chinese medicine to form Hui medicine classics	“Huihui prescription” “Food and drink” “Ruizhu hall experience square”
Ming Dynasty and early Qing Dynasty	The philosophical works of Hui medicine were formed by means of Confucianism, Buddhism and Buddhism and Confucian interpretation of scriptures	Wang Daiyu’s “true interpretation of orthodox religion” Ma Zhu’s “halal Guide” Liu Zhi’s “theory of nature”
Qing dynasty	Restrained by the Qing government	Integration of traditional Hui medicine into traditional Chinese Medicine
Republic of China	Hui nationality has no right to speak	A few inherited the great arch north medicine of the Qing temple
Modern	Reform and opening up to promote the exploration and development of ethnic traditional medicine	Construction of theoretical system of Hui medicine (Zhenyi, vitality, yin and Yang, seven elements, four natures and four body fluids) Zhang Jianqing’s “Chinese Practical Medicine” Silk Road drug recovery: guided by aromatic drugs Shan Yude’s “Modern Hui pharmacy”

### 3.1. 1st to 7th Century B.C.

Hui medicine can be traced back to the Western Han Dynasty more than 2000 years ago when Zhang Qian and Gan Ying successively sent envoys to the western regions and began to import drugs from Arabia (Philip, 2008). Among them, there are more than 90 kinds of aromatic drugs, such as cardamom, wood, incense, ambergris (also known as gray amber), which filled and enriched the Chinese herbal medicine at that time.

### 3.2. 7th to 12th Centuries A.D.

At that time, the Tang Dynasty of China had formal friendly exchanges with the Arab Empire by land or sea routes flowing back and forth between China and Arab Empires. Arab countries sent ambassadors to the Tang Dynasty as many as 36 times. Due to the flourishing trade between the Sino-Arab medical exchange, sometimes the import of incense and medicine can reach as much as 500 kg at that time. Hui medicine originated at this stage (Stavrianos, 2005). In the late Tang and Five Dynasties, Li Xun, the most famous Hui pharmacist, was known as Persia Li. He wrote the pioneering work of Hui medical herbs named Haiyao Materia Medica. As the name suggests, Haiyao is a drug from abroad on the maritime Silk Road. This work is a herbal work summarizing the clinical application of overseas drugs in the Tang Dynasty. It has high literature and academic value and is an important classical book of Huiyao Materia Medica (Diao & Diaoyao, 2014). In addition, Zheng Qian's Hu Bencao and a non-medical book of Youyang essays (Youyangzazu) recorded many overseas drugs such as Arabia and Persia (Duan, 1981). At the same time, some Islamic Arab medical techniques were also introduced into China. For example, the "counter powder Decoration, or called BOSANTANG" in the Thousand Golden Wings formula—nourishing nature or called QIANJINYIFANG in YANGXING was originally a Persian and Daqin medical prescription, which was widely spread and had a good effect on Qi disease and strengthening the spleen and stomach. Since the Tang Dynasty, the use of fragrant drugs to prevent and treat diseases has gradually spread.

### 3.3. After the 12th Century

From the Mongol Yuan Empire to the Ming Dynasty, the Silk Road was dominated by cultural exchanges. From the Mongol Yuan Empire to the Ming Dynasty, Western countries were very welcome to trade and cultural exchanges. Many Semu people (mainly believers of Islam and Christianity) were appointed as local administrators in the Yuan Dynasty. They often enjoyed the same treatment as Mongolian nobles, laying an excellent political foundation for the wide and in-depth dissemination of Islamic Arab medicine and the formation and prosperity of Hui medicine. At the same time, the members of the Semu people's Corps (mainly Muslims) stationed in military fortresses in various Provinces and Cities marry with local people and women, affect relatives and friends, and

gradually expand the groups of people who believe in Islam, to form a Hui ethnic community and become a “Hui all over the world” pattern of large dispersion and a small gathering of Hui ethnic groups in China. From then on, the name “Huihui” began to replace “Dashi Peoples”. The emperors of the Yuan Dynasty had a high degree of trust in Islamic Arab medicine. In particular, Kublai Khan once employed Ali Xue, an Islamic Arab physician and famous doctor, as a royal doctor. He was served as the first national “Guanghui Department,” in charge of Ministry of health, administration of medical treatment (Ma & Chen, 2005). At the same time, he was also in charge of the Capital Medical College called Royal Imperial Academic Hospital. In the 29th year of the Yuan Dynasty (AD 1291), he successively established the “Huihui Medical College” in Dadu and Shangdu, becoming the headquarters of Huihui doctors with Guanghui department established in all Provinces, combining Islamic Arab medicine with traditional Chinese medicine, laying a foundation for the formation of Huihui medicine. During this period, Huihui prescription, a large-scale comprehensive medical work with Chinese Huihui characteristics, came out. In Tao Zongyi’s record of farming in the South Village, there are examples of Hui medical officials treating diseases for the people. Ding Henian, a famous scholar at the end of Yuan Dynasty, is a well-known Hui doctor with extensive knowledge and talent.

The 36 volumes of the Encyclopedia of Huihui Prescriptions, only four volumes left, is an encyclopedia of Huihui medicine. It has complete disciplines and categories. It is a model of the combination of Islamic Arab medicine and traditional Chinese medicine (Niu, 2010). The book is mainly expressed in Chinese characters and annotated with Arabic, Persian, and children’s brocade. Children’s Brocade is the earliest Pinyin letter of Chinese characters in China. The book has a rich cultural connotation and is an important ancient book of Hui medicine.

Principle of correct diet (Yinshan Zhengyao) was written in the third year of Tianli of the Yuan Dynasty (1330 AD). This was China’s first monograph on nutrition (Hu, 2012). The author Hu Sihui is proved to be the imperial physician of Mongolian Muslims in the Yuan Renzong period. In the book, Huihui beans, Huihui green, Huihui green onions, etc. are cited, and they are labeled with flax, pepper, etc. A large number of formulas are used in dietary therapy. The experience prescription of Ruizhu hall was written by Shatumusu Shaqianzhai, the imperial historian and governor of the Yuan Dynasty, which was published in the third year of TAIDING (1327 A.D.). The famous scholar Mr. Chen Yuan verified the author of this book as a Chinese Style Hui doctor in the Ligeng Bookstore series—A Study on the Chinese culture of people in the western regions of the Yuan Dynasty (Shatumusu, 2012).

During the Jin and Yuan Dynasties, the academic field of medical culture was active and a hundred schools of thought contended. The four Universities of Jin and Yuan Dynasties appeared in Chinese medicine, and the Hui medical culture also developed to its peak. The above classic works integrating Islamic Arab medicine and Chinese traditional medicine emerged, forming the characteristics

of Hui medicine.

The Ming Dynasty was the stage of theoretical induction, summary, and promotion of Hui medicine. In terms of Hui medicine theory, the sages of Hui medicine philosophy paid more attention to the introduction of Islamic Arab philosophy. They absorbed the nutrients of Chinese traditional culture and Confucianism, Buddhism, and Taoism, to lay a solid foundation for the philosophical theory of Hui medicine. The books of Halal University, Right Answer of Xizhen and Orthodox interpretation of really was written by Wang Daiyu (1584-1657); The halal guide was written by Ma Zhu (1640-1711); The philosophical basis of Hui medicine was further enriched through the Theory of heaven's prescription and nature by Liu Zhi in the Qing Dynasty. From the understanding of human physiological and pathological changes and medical philosophy, the sages put forward the unique philosophical and theoretical viewpoint of "Zhenyi", "Vitality", "Yin and Yang", "Qixing" of Hui medicine, and creatively summarized the Four body fluids of Islamic medicine (black bile fluid, bile fluid, mucus and blood) as a Chinese Four body fluid of Hui medicine (black fluid plastid fluid, yellow fluid plastid fluid, white fluid plastid fluid, red fluid plastid fluid) and innovatively adopt the methods of "returning to Buddhism by Confucianism" and "interpreting scriptures by Confucianism". It integrates the theory of Islamic philosophy with Chinese Confucian culture and Taoist philosophy, interprets the concepts of "Vitality" and "Yin Yang" in different ways, and creatively gives play to Hui medicine's complete and unique philosophical, theoretical system.

In the Ming Dynasty, the establishment of Hui medicine's philosophical and theoretical system combined with the unique business and economic consciousness of Hui nationality promoted the development of Hui medicine clinics and pharmacology. Hui doctors had operated pharmacies since the Tang and Song Dynasties, especially turning experienced prescriptions with remarkable curative effects into finished drugs, making and selling them in batches, and diagnosing and selling drugs simultaneously. According to the dialectical formula of diagnosis, the economic benefit is better than the traditional Chinese medicine mode of self-collecting, self-processing, and self-dispensing. Due to the introduction of the manufacturing process of finished drugs in Islamic Arab medicine, finished drugs such as powders, pills, paste, and syrups are operated in pharmacies, making the medical patients feel convenient to take, carry and store. Therefore, the finished products of Hui medicine developed well in the Ming Dynasty. Taking Bai Jingyu eye medicine as an example, it was founded in the reign of Yongle in the Ming Dynasty and spread widely. By the end of the Qing Dynasty and the Republic of China, more than 90 kinds of Melon Seed eye medicine, Stick, Caoku eye medicine, powdered advanced eight treasures eye medicine, Red Lingdan, Mingmu pill, Coptis Shangqing pill, Bezoar detoxification pill and Zhufeng ointment were formed. After the continuous expansion of the scale, it once formed the Chinese medicine brand of the Chinese nation, affecting the whole country and even surrounding countries.

### **3.4. The Qing Dynasty**

Due to historical and practical factors, the Qing government suppressed the traditional culture of the Hui nationality. Some Hui native Arabic speakers were gradually replaced by Chinese, and Arabic was only retained in mosques and religious ceremonies. Therefore, Sinicization of Islamic culture has been established (Stavrianos, 2005). The characteristic culture, including Hui medicine and pharmacy, has gradually integrated into Chinese traditional Chinese medicine and pharmacy. Hui medical culture has changed from official to scattered among the folks, although some medical theories and skills have been inherited in mosques in Western China; or in the form of ancestral inheritance and mentoring, but without the support of the government, the whole is in a state of gradual natural weakening, so that it is on the verge of extinction. Therefore, Hui medicine system has been gradually integrated into the traditional Chinese medicine system for hundreds of years.

### **3.5. After the Establishment of New China and the Reform and Opening up**

With the state's strong support for the development of national medicine, under the guidance of a series of national policies and national traditional medicine policies of the government, and with the efforts of many people of insight, Hui medicine has received renewed attention and gained a new life in the Long River of history, which has provided Hui medicine with the opportunity to revitalize again, developed rapidly and achieved many major achievements.

Professor A. N Andiguang, a pioneer of Hui medicine research in China, also a famous Chinese traditional Chinese medicine research scholar, Chinese Academy of Traditional Chinese Medicine and Hui editor, is the founder of the theoretical research field of modern Hui medicine. He published several works, including exploring Hui medicine culture; the draft of the history of Chinese Hui medicine; outline of the history of Chinese medical thought; and the proof of clinical evidence of Hui medicine; Introduction to physical research of meridians and collaterals; trying to solve the doubt of Jiyidongtong and other influential theoretical works of Hui medicine.

## **4. The Medical Department Returns to the Medical and Pharmaceutical System**

The four classical works of Chinese Hui medicine in ancient times (Tang, Song, and Yuan Dynasties), such as the herbal medicine of sea medicine; the prescription of Hui medicine, the recipe of diet, and the experience prescription of Ruizhu Hall, all have unique views on the integration of Islamic Arab medicine and Chinese medicine, making Hui medicine as close as brothers and sisters with traditional Chinese medicine. In the philosophical theory, the Islamic Philosophical Works such as Halal University, halal guide, and nature of heaven in the Ming and Qing dynasties have become the philosophical theory guiding Hui

medicine (Ma, 1989; Liu, 1993). Therefore, these seven classic works of Chinese Hui medicine have formed a complete system foundation of traditional medicine from medical practice to philosophical theory and then to clinical application (Niu, 2014).

Hui medicine, centered on the theory of the harmonious unity of man and nature, belongs to the category of Heshun medicine of non-antagonistic medicine. Based on the “vitality” theory of the two ancient medical cultural heritages of the East and the west, Hui medicine improves the “Yin-Yang” theory of Taoist philosophy of Chinese medicine and takes the “Zhenyi and Seven elements” of Islamic philosophy of Islamic medicine as the theoretical framework. The “four-fluid” theory, including mucus, blood, bile fluid, and black bile fluid originally introduced from Islamic Arab medicine in ancient Greek medicine, was innovatively improved to the “white, red, yellow and black” four-body fluid theory of Hui medicine (Hamulati, 2003). At the same time, the four properties of “cold, heat, dryness, and homunity” were combined with the four elements of “water, fire, gas, and soil” as the etiological and pathological part of the disease, based on the four elements theory, the “four parts and seven diseases” theory of Hui medicine is formed, and then under the guidance of Zhenyi Yuanyang, the characteristic medical treatment of “Zhenyuan treatment method” is formed, to guide clinical practice and make it more practical, with the typical oriental color of the blending of Chinese and Iranian medical culture.

The innovative theoretical system of the combination of East and West created by Chinese Hui medicine is the core and fundamental feature of the Sinicized Islamic philosophy connotation “Zhenyi and seven elements theory”. It has become a national traditional medicine with a complete system and a relatively unique, ancient, and innovative natural philosophy and Shun model (Philip, 2008).

## 5. Characteristics and Advantages of Hui Medicine

### 5.1. Hui Medical Characteristics

Hui medicine is characterized by its complete philosophical theory, system, and unique treatment methods, which is different from other ethnic medicines.

#### 5.1.1. Unique and Complete Theoretical System

##### 1) Zhenyi (True One)

Hui medicine believes that the Islamic philosophy of the Zhenyi (True one), especially the “theory of the overflow of the true one”, is a bright light to guide Hui medicine. In the halal University of Ming Dynasty, Wang Daiyu (Wang, 1999) said “the True one (Zhenyi), the number one, and the body one are the three meanings of one, and the true one: initiate creation; number one: complete creation; the body one returns to creation.” The beginning of the operation of cosmic creation shows the wonderful function of creation from the body of the True one, first of all, it shows the great destiny, that is, the innate concept of perfection and all things. Based on this and following the Theory of true one and



seven elements, Hui medicine believes that True one Yuan Qi (Zhenyi Yuan Yang) is the foundation of human life, and everyone is a unique individual with individual differences. Therefore, in the diagnosis and treatment of diseases, we should adhere to monism to explain the etiology of diseases.

## 2) Vitality

The philosophical view of Hui medicine holds that Yuan Qi can live the activities of all things and promote their growth, which is the driving force for the formation of the material world of “acquired shaped organs (tangible organs)”. It not only produces the big universe but also produces biological life, including the small universe of man, due to the role of Yuan Qi in controlling life activity. The philosophy of Hui medicine emphasizes that Yuan Qi echoes with the only true one of innocence. The essence of Yuan is one, Yuan is Qi, and Qi is Yang. Both Yuan Yang and True One have the connotation of “the unification of all dharma”, which is the truth of “although the names are different, the rationale is one”. The Qi of True one Yuan Yang is not only “one seed of all things in heaven and earth”, but also the “mother of all things” of nature (Liu, 1993).

## 3) Yin-Yang

The Yin-Yang theory of Hui medicine comes from the integration and innovation of the Yuan Qi life activities of Islamic medicine and the Yin-Yang theory of traditional Chinese medicine, which makes the complementary relationship of Yin-Yang theory clearer and clearer. According to the philosophy of Hui medicine, Yuan Qi is the solemn and perfectly true one, which shows the popular innate residue of fortune. Yuan Qi is combined and divided into Yin and Yang according to the surplus of self-sufficiency and wisdom to divide Yin and Yang. What moves in Yuan Qi is called Yang, and what static is called Yin. Yin converges inside and Yang develops outside. Yin can evolve into water and Yang can evolve into fire.

The Yin-Yang theory of Hui medicine is characterized by “Yang dominates and Yin follows”, “Yang is the root of Yin” and “Yang density is solid”. This is different from traditional Chinese medicine in that Yin and Yang are rooted in each other, Yin and Yang are balanced, and Yin and Yang are in the same position. Hui medicine believes that in the process of growth and decline of Yin and Yang, “Yang dominates and Yin follows” is dominated by Yang and followed by Yin. Only when Yang Qi is dense outside, can Yin essence stick to inside. Therefore, “with Yang, you will live, without Yang, you will die” and “Yang is the root of Yin”. Therefore, Hui medicine advocates the characteristic treatment of using aromatic, pungent (dry) and hot medicine to support the true and Yuan Yang, to cultivate vitality (support the true and Yuan and consolidate the foundation (Li et al., 2000)).

## 4) Tetrahedral fluid

Hui medical philosophy holds that the beginning of the small universe of the human body is derived from a bit of seed “hidden in the father’s ridge and given to the mother’s palace”. After development, under the nourishment of Yuan Yang and Yuan Yin (Yin and Yang), “Qing” and “turbidity” are transformed in-

to four levels of liquid (Hamulati, 2003). From the outside to the inside, they are “black liquor”, “red liquor”, “yellow liquor” and “white liquor”. From the inside to the outside, white liquor belongs to water, which is the clearest; yellow liquid belongs to fire, clear, and turbid; red liquid belongs to gas, turbid, and clear; black liquor belongs to soil, which is extremely turbid.

The four are the essence of human flesh and blood. The “invisible” Yin and Yang vitality of parents becomes a “tangible” body of flesh and blood. If the four body fluids are filled and balanced, health will be maintained. If the proportion of four body fluids is unbalanced, the rise and fall variation would lead to disease.

### 5) Four Qi and four nature and seven elements theory

The four Qi and four nature of Chinese Hui medicine are clearly discussed in the classics of Chinese Islamic philosophy. There is the theory of four Qi and four natures in Wang Daiyu’s true interpretation of orthodox religion in the Ming Dynasty. For example, “what exists are the turbidity in the clear, which is Taiji and can turn into water and fire”. The water stores gas and invades each other. Fire is better than water-water foams. The light clear rises and turns into the form of heaven; the heavy turbid falls and turns into the form of earth. The formation of water, fire, gas, and earth has been clearly shown here. The four elements in Liu Zhi’s “nature of heaven” in the Qing Dynasty (Liu, 1993), states that “Qi comes from water, the earth comes out of the fire, and air, earth, water, and fire are the four elements. The four act as the mother of all things, and each line has a place of concentration. If the four are mixed, all things will be transformed and born in this”. These are the four Qi (water, fire, air, and earth) of Hui medicine, also known as four elements, four images, four elements, and four strange elements, which lays a solid philosophical and theoretical foundation for the four nature theory.

Hui medical philosophy holds that the four elements of Qi, earth, water, and fire, which produce three sons of gold, wood, and life, are seven elements, which have become the general principle of development. Gold comes from the condensation of earth and water, and from the refining of air and fire. Wood comes from the combination of Qi and fire, and from the cultivation of soil and water. Living is derived from the aggregation of gas, fire, water, and soil, which gives birth to the activity full of life. Gold, wood, and life are the three sons born of the four elements. When the three sons are formed, all things form the seven elements from the four elements, becoming the mother of all things and the source of life. Among them, life is the activity of life, showing perception, movement, and activity, which is the fundamental and main function of human life color.

Return to the four natures of Hui medicine, namely, cold, heat, dryness, and humidity. The so-called cold and heat is the expression of water and fire development of the human body. Therefore, various diseases of the human body are related to the metagenesis of water and fire out of balance. When the fire is full, it produces dry heat; when the water is full, it produces wet cold, when the water is too full, it produces cold, and when the fire is too large, it produces heat. Cold

and heat can nourish dryness and dampness, and dryness and dampness are also formed by water and fire. Therefore, water, fire, cold, and heat are innate Qi, and earth, gas, dryness and dampness are acquired. According to the philosophy of Hui medicine, the order of the cultivation functions of the four Qi and four natures are: heat (fire), cold (water), wet (gas), and dryness (soil). Fire is above, soil is below, and fire, water, gas, and soil are from top to bottom. Hui medicine divides the four natures corresponding to people's temperament into hot, wet, cold, and dry. According to their nature, they are divided into cold and hot and can be divided into dry and hot temperament, wet and hot temperament, and dry and cold temperament, a total of eight kinds. As a dynamic organism, the essence of pathological changes in the human body is related to the functional disorder and decline of the four natures of "cold, heat, dryness, and humidity" and the imbalance of life activity reactions of the four body fluids, resulting in "flood disease at the root of white disease", "fire disease at the root of yellow disease", "Qi disease at the root of red disease" and "soil disease at the root of black disease".

#### **6) Theory of visceral Qi mechanism**

Hui medical theory inherits Galen's understanding of the different functions of the human body 1700 years ago (Cheng, 1985), and summarizes four forms of "living" force in human life phenomena in combination with the "Truth, one and seven elements" theory of Islamic philosophy. The first is the living power of the human body, that is, the human soul, which is located in the brain and meridians. It dominates the four dimensions, feelings, and consciousness; the second is the activity of the human body, which is located in the heart and has the function of driving force. It controls the heartbeat, blood circulation, pulse, and body temperature of the person in charge; third, the vitality of the human body, located in the liver, is the "plant" life activity of the human body, which has the functions of nutrition supply, metabolism, growth and development and reproduction; fourth, the human body's walking (living) power, located in the lung, is the place where the human body inhales the heaven and earth aura (oxygen) and exhales the waste gas in the blood collateral. It has the function of breathing the aura of life and being transported to the whole body.

Hui medicine inherits the brain theory of heaven's prescription related to human viscera in Islamic and Arab medicine, which is also influenced by the Zengyang (visceral Xiang) theory of traditional Chinese medicine (Cai, 2006). It takes the brain and heart as the dominant viscera and jointly dominates the four body viscera (liver, spleen, lung, and kidney), forming the temperament division theory of Hui medicine, in which the brain and heart are the main viscera and the liver, spleen, lung and kidney are dominate. Hui medicine believes that the viscera are all natural knowledge and energy, "gathered by the essence of the four elements of air, earth, water, and fire, and contained by all tangible essence (marrow, blood, essence and liquid)". Therefore, the invisible air and tangible things accumulated in the viscera and tissues are the main sources of the four body fluid of the human body. The movement process of the Zangfu Qi machine

is the gasification activity of human life. The gasification function of the viscera of the living human body is normal, which is reflected in normal life activities. If the gasification function of the viscera is insufficient, it will show the abnormality of the living human body and produce disease.

### **7) Pathogenesis in Hui Medicine**

In clinical practice, Hui medicine requires to pay attention to the identification of the patient's body temperament and its pathological roots, not only according to the relevant relationship between the body temperament and the four-nature four-body fluids but also to the overall function of the human body (Gao, 2014). The Theory of four parts and seven diseases is put forward based on the disease position of returning to the hospital: the Qi part includes the respiratory system, skin, and other organ parts in contact with the outside air, as well as muscle, bone, sports system and peripheral nerves, which is equivalent to the epitope of traditional Chinese medicine; The fire part includes cardiovascular circulatory system, liver, gallbladder, endocrine system, nervous system and other viscera and tissues that transmit energy seven signals, which is equivalent to the half exterior (Biao) and half interior (Li) position of traditional Chinese medicine, also known as the pivot part; The earth part includes the viscera (spleen, gastrointestinal tract) dominated by the digestive system, which is equivalent to the medial position in the traditional meaning; The Ministry of water includes the viscera dominated by the urogenital system, which is equivalent to a part of the traditional Chinese medicine. Hui medicine believes that the drug is not to treat the pathogen itself but to help the human body support the right and eliminate the evil and eliminate the disease. The human body mainly has three disease elimination channels: one is discharged from the body surface and respiratory tract of the Qi part, the other is discharged from the gastrointestinal tract of the earth part, and the third is discharged from the fire part into the urinary system of the water part through the four body fluid (mainly red body fluid and white body fluid). According to the different attributes of yin and yang, the four parts of Qi, fire, earth, and water (the division of body structure level and disease location), except the water part, can be divided into positive diseases and their series of positive syndrome groups and negative diseases and their series of negative syndrome groups. There are six diseases in the three parts of air, fire, and earth, while the water part is dominated by negative diseases with insufficient Yang and a series of negative disease syndromes. Therefore, the four parts of air, fire, earth, and water belong to the category of major diseases, and the seven diseases are the pathological reactions occurring in the four parts, indicating the disease's time, space, and attributes.

### **5.1.2. Unique Diagnostic Methods**

#### **1) Five-step diagnostic method**

Following the true one concept of Hui medical monism, the five-step diagnosis method is formed by observing the truth (observation), Qishi (smell), true communication (pulse diagnosis), miracles (technical diagnosis) and speculation

(judgment). The disease is diagnosed through the comprehensive diagnosis method of dialectical constitution, disease location, and etiology.

### **2) Return to hospital for urine diagnosis**

Through the diagnosis and identification of the patient's urine, we can understand the patient's temperament and body fluid to judge the functions of liver, kidney, spleen, bladder, and urethra. Doctors mainly distinguish the color, smell, turbidity, thinning, precipitates, foam, and quantity of urine, to identify the source of disease and provide the basis for clinical diagnosis.

### **3) Stool diagnosis**

According to Hui medical theory (Gao, 2014), stool color, shape, dry, thinning, odor difference, quantity and quantity, food residue, whether with pus, blood, mucus properties, foam, and so on, is normal and abnormal to diagnose the stool. It is often an important significance to distinguish and distinguish various diseases of the viscera of the whole body.

### **4) Sputum diagnosis**

The book of Huihui prescription states (Niu, 2010) that phlegm disease occurs due to cold, which cannot become blood from food. It is cost-effective, but it becomes phlegm. Phlegm is half dissipated blood. Therefore, Hui medicine believes that phlegm is not only the turbid matter of abnormal body fluid and water valley that is not fully digested in the body and does not become the essence and blood but also a thick, turbid and sticky pathological product formed by the accumulation and condensation of water dampness in the body, which is related to the abnormal wet temperament of the body. Therefore, it is said that "the four-body fluid is the source of phlegm and the lung is the device for storing phlegm". According to the color (white, yellow, red, and black), shape, viscosity, and concurrent symptoms of sputum, abnormal temperament of four-body fluids was diagnosed.

### **5.1.3. Safe and Effective Treatment**

Hui medicine is based on Islamic philosophy and emphasizes the Heshun precision medicine model. Under the conditions of conforming to human vitality, self-healing, and resistance, it guides the disease elimination ability of self-energy. The Heshun precision method also adopts the concept of minimum trauma, minimum toxic and side effects, best curative effect, shortest time, and fastest recovery. It includes adjusting the maladjusted temperament and four-body fluid balance, correcting shape changes and structural damage, specimen urgency, helping harmony and eliminating evil diseases, seven certain principles (according to time, place, person, disease, disease level, disease period and disease danger), and formulating safe and effective treatment plans.

### **5.1.4. Halal Features Guided by Natural Aromatic Drugs**

The drug properties and functions of Hui medicine are derived from the philosophical theory of Islamic quaternion and Sanzi (seven elements), which holds the growth and existence of drugs are derived from the biochemical process of

all natural things, that is, the development and aggregation of a quaternion (gas, fire, water and soil) and Sanzi (gold, wood and live). Therefore, drugs obtain different temperaments, divided into “Cold, heat, dryness, and dampness” of different temperaments that have become qualitative Qi, fire, water, earth, gold, wood and living medicine at the same time. The four properties of Hui medicine (cold, heat, dryness, and dampness) are different from those of traditional Chinese medicine.

Hui medicine believes that the growth and development of drugs come from the “four Qi”. Therefore, the four properties (four natures) of Hui drugs are cold, hot, dryness, and humidity. At the same time, Hui medicine divided the four properties of drugs into low to high property levels (Level 4). According to the strength of drug properties, they are divided into four levels. The first level has the weakest property and is nontoxic. It is a drug and food homologous drug. The fourth level has the strongest property and the greatest toxicity. Therefore, going back to the doctor to understand the level of drug properties of each drug is of great significance to clinical and safe drug use.

In the prescriptions for returning to medicine, firstly, establish the energy drugs of Yang dominating and Yin following, which must be guided by aromatic drugs (Li et al., 2000), mobilize the energy of the human body to really one Yuan Yang Qi (Yang dominating and Yin following), to adjust the balance of the four body fluids (black, red, yellow and white), improve the self-healing ability, resistance and vitality of the human body, enhance the disease elimination ability, and finally expel diseases (Hamulati, 2013).

The halal view of Hui medicine has three characteristics: one is the exclusive characteristic of Hui medicine, that is, the theoretical basis of Hui medicine is rooted in Chinese Islamic philosophy, which belongs to the exclusive of Hui nationality; second, it is universal, that is, like halal food, Muslims and non-Muslims are equally suitable for the application of Hui medicine and Hui medicine; The third is Jiamei, which ensures that the drugs are genuine, clean and clear, especially the aromatic drugs have a short validity period, and it is more necessary to ensure the real materials and validity period.

### 5.1.5. Various Routes of Administration

There are many ways to use medicine in Hui medicine, including Hui health preservation and treatment, including food therapy, oral administration, aromatherapy, bathing, immersion, enema, umbilical therapy, application, suppository, nasal inhalation, eye drops and so on; special methods include cauterization, blowing, formulation, sticking, nose dropping, cigarette lighting, cutting, bloodletting, fasting and others.

## 5.2. Advantages of Hui Medicine

Like other national medicines, Hui medicine belongs to the traditional medical system and is one of the important members of the Chinese traditional medicine family. China’s ancient silkroad, one belt, one road, made the integration of Is-

lamic Arabia medicine and traditional Chinese medicine into one. Therefore, it can be called the first combination of Chinese and Western medicine in our history. It is more advanced, safer, and more reliable. If we make the silkroad back to the drug brand bigger, we will go all way to the world. In particular, it has a strong advantage to carry out medical and cultural exchanges with Muslim countries along the line. One belt, one road can play an important role in constructing the whole area and make greater contributions to the rejuvenation of the country and the Chinese nation.

Hui medicine is made into a finished drug with the characteristics and advantages of small adverse reactions, convenient administration, and low price. It is called “Silk Road Hui medicine”, and will become one of the most promising drugs in today’s pharmaceutical field.

## 6. The Education of Hui Medicine

Due to the war in the Qing Dynasty and the suppression policy of the Qing government, Hui medicine was greatly influenced by the relatively perfect and Chinese solid medical system, and under the great role of the strong identity of the two medical cultures, Hui medical culture gradually integrated into the long history of the Chinese medical system, making Hui Chinese medicine as a body. Although there are still a small number of Hui medicine physicians who stick to it, there is a lack of Hui medicine professionals. In the past, before China’s reform and opening up, it was the same as traditional Chinese medicine, Tibetan medicine, and other national medicine. It was mainly cultivated in the form of teachers leading apprentices or parents passing on children. There is a great shortage of high-end talents, and most of them are in the state of self-birth and self-destruction (Zhu, 1988). Over the past 30 years since the reform and opening up, Hui medicine has been gradually valued, rediscovered, and promoted. Hui medicine research institutions and Hui medicine and medical institutions have been successively established in Ningxia, Qinghai, Shaanxi, Gansu, Yunnan, Beijing, Nanjing, and other places with both public and private. People of insight are looking for the source of Hui medicine from the vast sea of Islamic and Arab medicine on the ancient Silk Road, and inheriting excellent medical traditional culture from the medical treasure of ancient Hui medicine sages.

Represented by the postgraduate education of Hui medical history of Ningxia Medical University, it started for several years, mainly medical history and literary talents. More than 10 people have become the main force to study Hui medical history and culture. The undergraduate education with an annual enrollment of more than 30 people will train a new force for the clinical practice of Hui medicine.

Qinghai Hui Medicine Research Association gives lectures in the form of training courses to ethnic medicine institutions such as county-level traditional Chinese and Hui hospitals to train traditional Chinese medicine and Hui medicine. The medical personnel with licensed doctor certificates and master relevant

knowledge of Hui medicine has been applied the theory and practice of Hui medicine in clinical practice. At present, more than 120 people in 10 medical institutions (5 secondary hospitals and 5 primary hospitals) have been trained.

Other provinces and cities still carry out clinical practice and training of Hui medicine in varying degrees, dominated by public hospitals and supplemented by private medical institutions.

## 7. Development of Hui Medical Institutions

At present, more than 40 public and private medical institutions have been established throughout the country, including Beijing, Nanjing, Xi'an, Ningxia, Qinghai, Gansu, Yunnan, Inner Mongolia, Jilin, Shandong and Henan, and there are three grade III B or above. Representative ones are:

- 1) Chinese Hui Medical Hospital Affiliated to Ningxia Medical University (class III, grade B).
- 2) Qinghai Red Cross Hospital (class III, grade A) is a comprehensive hospital, which provides outpatient services, gynecology, and general internal medicine.
- 3) Qinghai Kangle hospital (class III, grade B) has opened a general department of Huiyi and a department of Huiyi Gynecology, which is developing in the direction of turning into a Huiyi hospital as a whole.
- 4) Xining Hui nationality hospital, Qinghai Province (class II, rank A).
- 5) Harbin Muslim Hospital (class II, grade A) is a general hospital for Hui medicine.
- 6) Nanjing Hui people's Hospital (class II, grade A) is a Hui characteristic ethnic hospital dominated by Hui orthopedics.
- 7) Beijing Huimin hospital (class II, grade A) is a general hospital.

## 8. Industrialization of Hui Medicine and Brand Construction of Hui Medicine

At present, there is no Hui medicine pharmaceutical factory with Hui medicine characteristics in China, and some private hospitals only have their own in-hospital preparations. Although Qinghai Hui Medicine Research Association put forward the concept of "Silk Road Hui medicine", it has not yet formed industrialization.

- 1) Zhang's Hui medical orthopedics department in Ningxia won the second batch of national intangible cultural heritage projects in 2008: "Hui medicine · Zhang's Hui medical bone setting Therapy". The construction unit of the inheritance studio of the National Academic School of Traditional Chinese Medicine: "Ningxia Zhang's Hui Medical Bone Setting Therapy school".
- 2) Ningxia Hui Medical Pharmacy and Professor Yang Huaxiang's family unique knowledge "soup bottle eight diagnoses" was "listed in the national key protection project of intangible cultural heritage in 2008, and was awarded the management demonstration unit by the China Medical Exchange Foundation",



and was listed as the “Hui Health care technology research base” by the “national sub-health science and technology professional committee” and the “Hui Medical Research Institute of Ningxia Medical University”.

3) Qinghai “Zhang’s medical Gynecology” was approved as the second municipal intangible cultural heritage batch by Xining Municipal Government in January 2016.

## **9. The Rescue, Excavation, Protection, Inheritance, and Development of Ancient Medical Books and Documents in Hui Medicine**

In the past 10 years, due to the establishment of Hui medical research institutions in some provinces and regions, significant achievements have been made in exploration, sorting, inheritance, improvement, and innovation. At present, we have reached a consensus on the ancient books of Hui medicine, including the “herbal medicine of sea medicine” in the Tang Dynasty, the prescription of “Huihui medicine” in the Yuan Dynasty, “the empirical prescription of Ruizhu hall” and the ready for “The drinking and eating”. Other ancient Hui medical books such as “The record of medicine and pharmacy” in the Ming Dynasty, include a compendium of *Materia Medica*, “*materia medica Zheng*”, “Puji formula” and “Yuan history” in the Ming Dynasty; “Primitive medicine” in the Qing Dynasty, “new yuan history” in the Republic of China, etc., have been also reorganized and published.

1) Huihui prescription textual research and interpretation written by Song Xian, published by Zhonghua Book Company in 2000. This book makes a systematic and detailed textual research and annotation on the existing four volumes of Huihui prescription for the first time.

2) Ancient Persian medicine and China written by Song Xian, published by the Economic Daily Press in 2001. This book discussed the influence of Persian medicine on traditional Chinese medicine and some minority medicines, especially Hui medicine, after it was introduced into China along the silkroad.

3) The Research on Huihui prescription, edited by Niu Yang and published by Sunshine Publishing House of Yellow River Publishing Media Group in 2010, this book systematically arranges and studies Huihui prescription and expounds it in detail from four aspects: characteristics, overall research, theoretical system and disease diagnosis and treatment.

4) The prescription of “The Ruizhutang experience”, “The Herbal medicine of Haiyao”, the prescription of “The Medical Diet” and “The Huihui Prescription”, which were edited by Gao Ruhong and published by the Sunshine Publishing House of the Yellow River Publishing Media Group in 2014, made the structure more reasonable and standardized, the content more clear and rigorous, and fully reflected the academic thought of the original work, It has important practical and academic value and lays a theoretical foundation for the accelerated development of Hui medicine.

5) Jia Menghui, the author of the commentary on the remnant of “The Huihui Prescription”, was published by Sunshine Publishing House of Yellow River Publishing Media Group in 2015. This book makes a comprehensive annotation and comments on the fragments of Huihui prescription word by word, sentence by sentence, citing scriptures and interpreting meanings, categorizing and briefly. It is concise and comprehensive, with clear meaning. It is a masterpiece to carry forward the academic thought of Huihui medicine.

## **10. Back to the Excavation, Transmission and Promotion of Hui Medicine and Hui Medical Insurance**

The prescriptions, methods, and father-son inheritance of Hui medicine exist in the folk. The Hui people are famous for paying attention to hygiene, healthy diet and daily life, and advocating marital fitness. In the long-term production and life practice, the ancestors of the Hui ethnic community formed traditional medical knowledge to fight against diseases with distinctive national characteristics, and accumulated many folk prescriptions and methods, which provided fertile soil for the self-care and traditional treatment of the Hui people and the inheritance of Hui medicine.

The traditional health care concepts of Hui medicine include the health care principles of “living in peace”, “using for benefit”, “clothing for health” and “food for maintenance”. Representative works include:

1) “Chinese Hui folk practical prescriptions”, which was edited by Ma Yingguai and published by the International Culture Publishing Company in 1993. This book is the first folk medicine prescription of Hui medicine. It briefly introduces single, experimental and dietary prescriptions for the prevention and treatment of Hui folk diseases in 19 provinces and cities in China. It is clinically practical and highlights the medical characteristics of Hui nationality. It is simple, practical, safe, and effective. It has high clinical practical value and research and promotion value.

2) Ma Yingguai, the author of “Chinese Hui medicine prescription”, was published by Guangxi Normal University Press in 2011. This book is revised and supplemented by Dr. Ma Yingguai on the basis of the original Chinese Hui folk practical prescription to make it more perfect and sophisticated. The book integrates prevention, health care, diet therapy, and pharmacotherapy, and has excellent use value, research value, and collection value.

## **11. Modern Research on Hui Medicine**

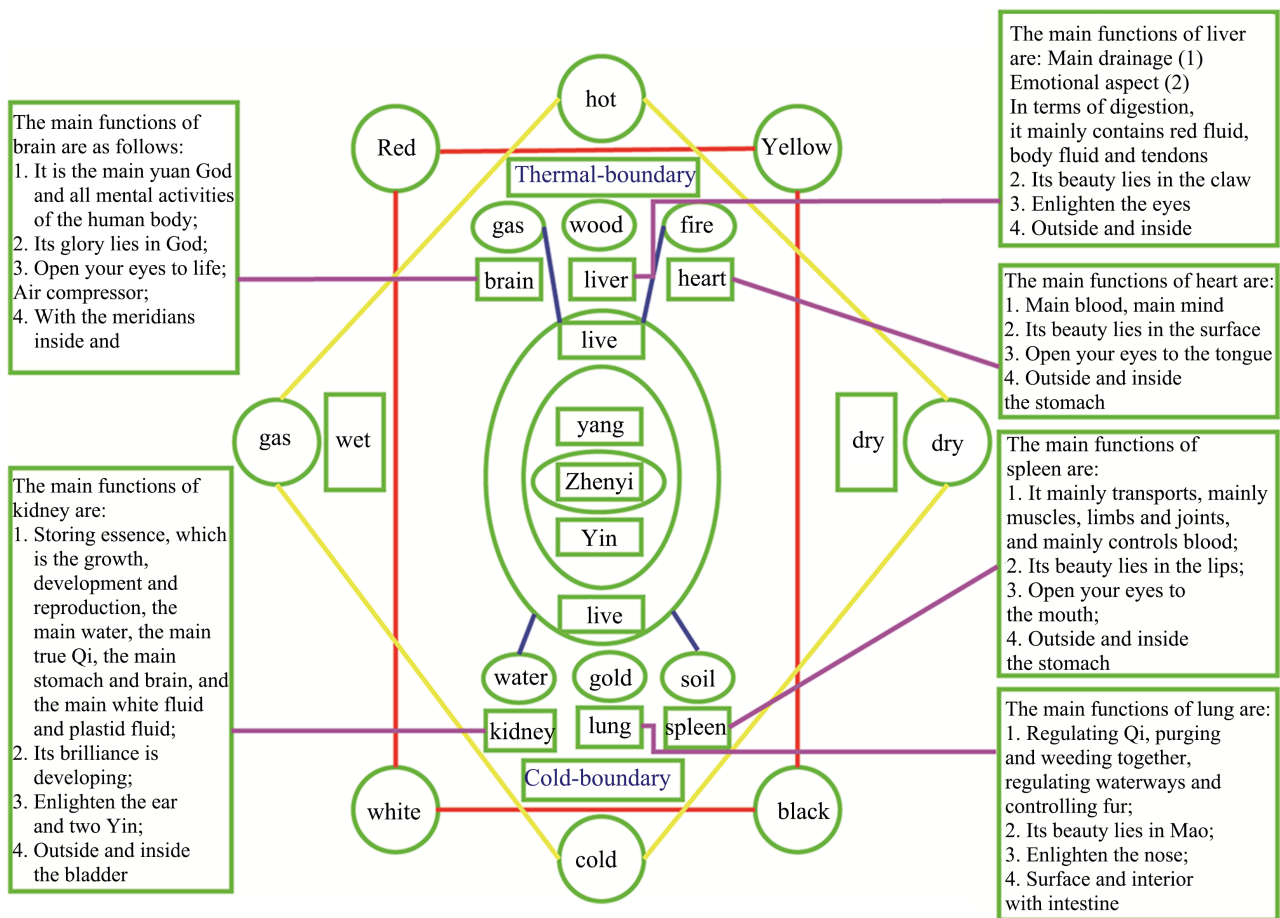
Under the guidance of the state’s preferential policy with strong support for ethnic medicine, many provinces and cities across the country have successively established Hui medicine research institutions. The influential ones include Hui Medicine Research Institute of Ningxia Medical University, Qinghai Hui Medicine Research Association, Qinghai New Silk Road Hui Medicine Research Institute and Qinghai Hui Medicine Research Institute. They adhere to academic

innovation by the requirements of the national innovation system; a series of applied research and basic research have been carried out and works on the history and culture, basic theory (see **Figure 1**) and clinical application of Hui medicine have been written. Exemplary achievements have been made in clinical practice, application, and specialized disease treatment. Influential works include:

1) “The brief history of Hui medicine”, “The profound meaning of Hui medicine”, and “The Hui medicine Materia Medica”, written by Shan Yude. “The collection of Hui medical prescriptions”, written by Gao Ruhong and Chen Weichuan. “The Chinese Hui medicine” written by Ma Chengyi and Chen Weichuan. All of them were published by Ningxia People’s Publishing House in 2005. These works are the first time to appear in the Hui medical system, systematically discuss the theoretical system of Hui medicine, and reveal the connotation of Hui medicine and Materia Medica at a high level.

2) “Basic theory of Hui medicine”, written by Niu Yang, published by Sunshine Publishing House of Yellow River Publishing Media Group in 2014, systematically combs the basic Theory of Hui medicine.

### Philosophy and basic theory of Hui medicine



**Figure 1.** The skeleton of philosophy and basic theory of Hui Medicine.

3) “Practical Chinese Hui medicine”, written by Zhang Jianqing and published in 2018 by the Ancient Books Publishing House of Traditional Chinese Medicine, with more than 630,000 words, is China’s first nine chapters on Hui medicine history, Hui medicine basic theory, Hui medicine etiology, Hui medicine diagnostics, Hui medicine therapeutics, Hui medicine pharmacology, drug classification, Hui medicine and health care, Hui medicine and Shun Precision medicine, Comprehensive and systematic scientific and accurate discussion, accompanied by the study of Hui medical culture so that Hui medical and the pharmaceutical system is integrated comprehensively, and the basic Theory is closely combined with clinical practice, realizing the purpose of integrating clinical application and modern research.

4) “Hui medicine”, written by Diao Hongtao and Diao Xiaolu, was published by Gansu Nationalities Publishing House in 2014. The whole book is divided into two parts. The first part summarizes the theoretical basis of Hui medicine and the second part is some medical cases. It is an innovative work characterized by the combination of Chinese and Hui medicine.

5) Zhang Jianqing, the author of “Zhang’s Medical Gynecology”, has been finalized with more than 500,000 words and is scheduled to be published in 2019. The book is a traditional ethnic medicine work that uses the basic theory of Hui medicine and modern scientific and technological methods to study the characteristics of Hui medicine in women’s physiology and pathology, prevent and treat unique diseases. It has a strong specialty in obstetrics and gynecology. It is of great clinical significance to ensure women’s reproductive health of all ethnic groups.

## **12. Study on Standardization of Diagnosis and Treatment of Common Diseases in Hui Medicine**

The diagnostics and therapeutics of Hui medicine are based on the theory of natural philosophy combined with Islamic philosophy, follows the true one concept of monism, and inherits Islamic medicine that “human health is the harmonious unity of body, psychology and soul”. Not only has absorbed the essence of traditional Chinese medicine, but also inherited the essence of Islamic medicine in Arabia, and formed a comprehensive system consisting of treatment concepts, treatment principles, treatment methods and characteristics, and a series of special treatment measures, and gradually standardized and scientific, making it more efficient and safe. The important works include practical Chinese “Hui medicine” written by Zhang Jianqing and “Hui medical diagnostics” written by Gao Ruhong.

## **13. Medical Association**

With the state’s strong support for ethnic medicine, societies and associations related to Hui medicine research have been established in many parts of the country. The more influential social groups are:

Hui medicine branch of Ningxia Medical Association was established in 2011;

Qinghai Hui Medical Research Association was established in 2012 and became the first provincial society in China;

Hui Medicine branch of the Chinese Society of Ethnic Medicine was established in 2012;

Hui medicine branch of China Ethnic Medicine Association was established in 2015;

Qinghai New Silk Road Hui Medical Research Institute;

Qinghai Hui Medical Research Institute;

Hui medicine branch of the World Federation of Traditional Chinese Medicine.

#### **14. Assistance of Research Fees and Funding of Various Scientific Research Funds**

The scientific research funding is mainly supported by Ningxia Medical University. It has been supported by the Ministry of Science and Technology and the State Administration of Traditional Chinese Medicine many times and achieved satisfactory results.

The series of Hui medicine books published by Ningxia Medical University and Ningxia Hui Medicine Research Institute have been approved and financially supported by the State Administration of Traditional Chinese Medicine.

#### **15. Excavation and Inheritance of Academic Thoughts of Famous and Old Experts**

Chen Weichuan, the chief physician of Ningxia Zhonghui Medical Hospital and Zhonghui Medical Research Institute, is the first national famous traditional Chinese medicine and Ningxia famous traditional Chinese medicine, the second batch of national old traditional Chinese medicine experts' academic experience inheritance work instructor, and won the achievement award of the Chinese society of traditional Chinese medicine.

Professor Gao Ruhong, director of Ningxia Hui Medicine Research Institute, is the Secretary-General of the Hui medicine branch of China's ethnic medicine society. He is the guiding teacher for the inheritance of academic experience of the fifth batch of national old traditional Chinese medicine experts and the academic leader of Dermatology, a key discipline of the State Administration of traditional Chinese medicine.

Professor Zhang Jianqing, President of Qinghai Hui Medicine Research Association, is the vice president of the Hui medicine branch of China's ethnic medicine society. Zhang's Hui medicine gynecology is recognized as the second batch of the Intangible Cultural heritage of Xining city. In 2016, he was awarded the title of a good doctor in obstetrics and Gynecology at the 4th Lin Qiaozhi Cup by the Obstetrics and Gynecology branch of the Chinese Medical Association.

#### **16. Existing Problems**

First, Hui medicine was interrupted in history, especially after the Qing Dynasty,

it gradually integrated into the Chinese medical system, and began to put forward the concept of history and culture, and began to explore and sort out after the reform and opening up. Therefore, the overall work started later than other ethnic medicines, with scattered historical documents and fewer classics. It is relatively difficult to explore and develop Hui medicine than other ethnic medicines.

Second, although the Hui medicine research talents are relatively concentrated in Western China, the Hui medicine medical workers are scattered in many cities across the country, and the academic, professional, and cultural exchanges have not been unified. It is hoped that the National Hui Medicine Society will organize academic conferences and academic exchanges to jointly promote the development of Hui medicine.

Third, there is still a shortage of Hui medicine talent. At present, only Ningxia Medical University has graduate education, undergraduate education has just started, and the number of enrollment is very small, but various regions cannot supplement young Hui medicine talent. In some regions, when the older generation of pioneers retire or die, they are faced with the “self-survival” of Hui medicine excavation.

Fourth, in addition to the shortage of talents, because the state has not yet opened the examination for the practice of Hui medicine industry and has no Hui Medicine Practitioner Certificate, the doctors engaged in Hui medicine are practitioners of Western medicine and traditional Chinese medicine, who are performing clinical work. There is a problem that they cannot really appear under the banner of Hui medicine so that the brand formation of Hui medicine cannot be realized. Therefore, relevant national departments must pay attention to it.

## 17. Future Perspectives

One belt, one road, is a crucial part of Chinese medicine. It has a solid medical theoretical foundation and practical system and has a unique, safe, and efficient medical system. In the development strategy of “one belt and one road” advocated by the state, the return of medicine can spread. The role of the Silk Road culture would be “peace and friendship, harmony and unity, exchange and integration, win-win and sharing, inheritance and innovation, and carrying forward the ancient”. At the same time, the essence of Hui medicine is the fruit of the unity of Hui and Han nationalities, which is of great significance to promote national unity and social harmony.

Taking medicine as a platform, Hui medicine studies the Sinicized Islamic culture and the integration of Hui and Han medical culture, which undoubtedly opens up another new field of Chinese medical culture research. It can save the endangered Hui traditional medical cultural heritage, make contributions to the excellent health, disease prevention and treatment of all Chinese Nationalities, based on national unity, and enhance the cohesion of the Chinese nation.

## Conflicts of Interest

The authors declare that they have no competing interests.

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## Authors' Contributions

Junming Luo and Jianqing Zhang designed the research; Li Lu, Yiman Cai, and Bin Luo collected the data and performed the analysis; Junming Luo and Jianqing Zhang wrote the paper. Li Lu, Yimam Cai and Bin Luo critically reviewed the manuscript content.

## Availability of Data and Material

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

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