

Ayurveda Across Asia: Understanding Traditional Practices in India and China

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Abstract

Ayurveda, rooted in India's cultural and philosophical traditions, has flourished for millennia, deriving wisdom from the Rigveda and Atharvaveda. This ancient healthcare system, fostering a holistic lifestyle, emphasizes the interconnectedness between individuals and their environment, promoting equilibrium and well-being. Traditional Chinese Medicine (TCM), Traditional Indian Medicine (TIM), and Ayurveda persist as the world's oldest practiced traditions, drawing global interest. Ongoing initiatives seek to regulate traditional medicine and herbal remedies. While Ayurveda gains international recognition, this paper emphasizes the need for extensive scientific inquiry and a robust evidence base, comparing China's research-oriented approach to therapy promotion. To facilitate international competitiveness, we explore critical success factors and delineate fundamental parallels between TIM and TCM. The paper also unravels the complex tapestry of Ayurveda beyond India, spotlighting its integration and evolution in China. This examination highlights the global significance of Ayurveda and underscores the importance of harmonizing traditional practices with contemporary scientific validation.

Keywords

Ayurveda, Traditional Indian Medicine (TIM), Traditional Chinese Medicine (TCM), scientific validation.

1. Introduction

1.1 Historical roots of ayurveda in India

Ayurveda is a comprehensive medical system that addresses social welfare, environmental concerns, mental equilibrium, physical health, and spiritual well-being. It also emphasizes eating and lifestyle choices that are influenced by seasonal changes and prevailing daily patterns. By using a comprehensive approach, Ayurveda explains how to cure and manage ailments while embracing nature, life, and the empowerment of the person towards sustainable living. Ayurveda has three essential principles: Roga Vigyan, Vikriti Vigyan (science of disease process), and Chikitsa Vigyan (therapeutic approaches).

The pathological events are characterized as Panchanidana (five etiological factors): Nidana (cause), Purva Rupa (premodial symptoms), Rupa (symptomatology), Upasaya (therapeutic procedures), and Samprapti (pathogenesis) [1]

Ayurveda, India's ancient system of traditional medicine, has a rich history dating back thousands of years. Ayurveda's spread and growth can be traced back to many historical times. Figure 1a depicts significant events in the evolution of ayurveda in India. Traditional Indian medicine is one of the oldest medical systems and is still widely practiced around the world. Traditional medicine systems in China and India have historical roots in mutual learning, reference, and development, which extends from medical philosophy to the medications employed. Traditional medicine interaction between China and India began during the Qin and Han Dynasties (221 BC-220 AD), flourished during the Tang Dynasty (618-907 AD), and declined after the Song Dynasty (960-1279 AD). It was also linked to the emergence and decline of Buddhism. Because of differences in geographical conditions and the modernization of traditional medicine, the traditional medicines of the two countries are very complimentary [2].

The ministry of AYUSH, an abbreviation for the department of Ayurveda, Yoga & Naturopathy, Unani, Siddha, and Homoeopathy in India, conducts Ayurvedic research. China and India, two ancient, developed countries with sizable populations and abundant resources, have evolved unique traditional medical practices, spiritual traditions, and affluent financial status in addition to having easy access to a wide range of medical resources. Indian traditional medicine encompasses several techniques such as naturopathy, yoga, siddha, homoeopathy, and sowa rigpa. Ayurveda, traditional Indian medicine (TIM), and traditional Chinese medicine (TCM) are the oldest still in practice. These two are the "great traditions," grounded in theory, practice, and experimentation. For various reasons, such as side effects, the high expense of new drugs, microbial resistance, and emerging disorders, the public's interest in complementary and alternative medicine is growing [3]. Despite having different cultural and historical origins, traditional Chinese medicine (TCM) and Indian traditional medicine—particularly Ayurveda—share several commonalities. These are some ways that TCM and Ayurveda are similar. Other factors include the fact that conventional medication does not adequately cure many chronic illnesses. In various ethnic groups, more than 1500 herbs are available for sale as nutritional supplements or traditional remedies [4]. A significant portion of these therapies rely on locally produced, naturally occurring cures.

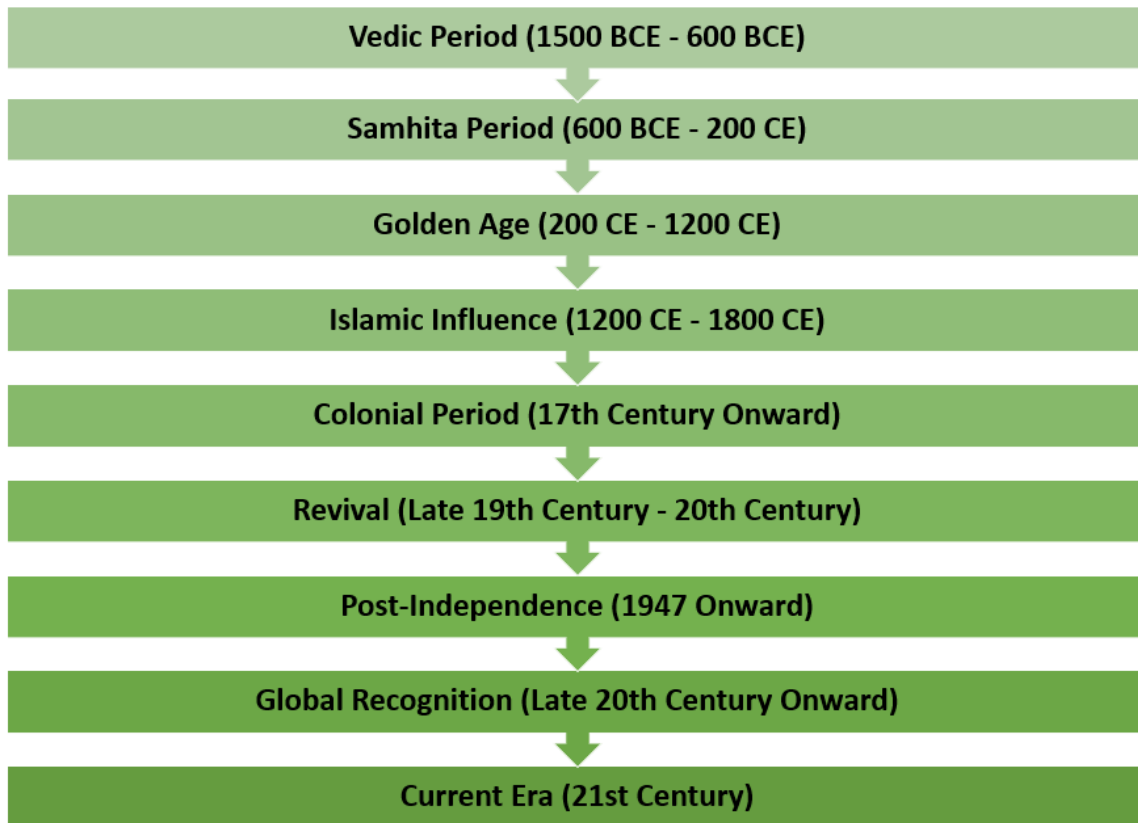


Figure 1a: Timeline of the Evolution of Ayurveda in India

2. Contrasts and similarities between Ayurveda in India and traditional Chinese medicine

Ayurveda, Yoga and Naturopathy, Unani, Siddha, Sowa Rigpa, and Homoeopathy are all forms of traditional Indian medicine. Traditional medicine is overseen by the Government of India's Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha, and Homoeopathy (AYUSH). TCM and Ayurvedic medicine share certain commonalities [5]. In both systems, herbs are prescribed based on their warm or cool nature, the symptoms they can cure, and their influence on body fluids. TCM is closely related to the yin-yang theory, the five elements theory, the idea of qi, internal organ systems (Zang Fu organs), and other vital systems such as blood, essence, and fluids [6].

There are many correlations between TCM and Ayurveda. In both systems, the patient is given more attention than the illness. Similar concepts in both systems allow for the classification of things, diseases, and people. In a nutshell the goals of both systems are to enhance quality of life and promote health. Earth, metal, wood, fire, and water are the five elements that make up the material universe. The internal organ systems and the four physiological humors—qi, blood, moisture, and essence—are essential for maintaining the equilibrium of yin and yang in the human body. Proper generation, upkeep, and circulation of these energy are necessary for health. When the two energies lack equilibrium, disease emerges. The physician keeps this in mind while treating patients. In order to correct this yin-yang disparity in the human body, medications or herbal remedies are used [10,11].

According to Ayurveda, the universe is composed of different combinations of the five elements (pancha mahabhutas). These are akasha (ether), vayu (air), teja (fire), aap (water), and prithvi (earth). On all scales of life, in both biological and inanimate objects, the five elements are seen in the material universe. All aspects of existence are governed by three forces that are encoded in biological systems like humans. These three forces (kapha, pitta, and vata) are referred to as the three doshas or simply the tridosha. Each of the doshas is composed of one or two components. Vata is composed of the elements of space and air, Pitta is composed of the elements of fire, and Kapha is composed of the elements of earth and water. The three doshas interact harmoniously to create balance and health; an imbalance, which may be an excess (vriddhi) or deficiency (kshaya), manifests as a sign or symptom of disease [12,13].

TM therapy encompasses a broad spectrum of therapeutic approaches, such as acupuncture, manual therapy, and herbal medicine. A medical professional's subjective evaluation of the patient—which includes observation, listening, questioning, and palpation—forms the basis of a TM diagnosis. Herbal remedies used in Traditional Chinese Medicine (TCM) usually combine several different medicinal herbs; the ingredients' combined action produces the intended therapeutic benefits. The broad treatment procedure corrects the outer disturbance of the body and restores the inside balance [14, 15]. In TM therapy, the therapeutic strategies utilized to address a particular condition are specifically customized to each patient's health. In contrast to other medical traditions that alter their therapeutic technique based on the illnesses, this method can provide the patient with personalised and tailored treatment [16]. While Ayurveda focuses more on enhancing the patient's constitutional health status, TCM places more emphasis on the symptoms or symptomatic manifestation [17].

An individual is classified by Ayurveda into one of the seven main constitutional types, or prakriti, based on the inherent imbalance of the three energy forces, or doshas, that are collectively known by the names Vatta, Pitta, and Kapha. People are classified into one of four constitutional kinds according to the Sasang Constitution Model (SCM), which has its roots in the quaternity at the centre of that ideology: the Taeyang type (TY), the Soyang type (SY), the Taeum type (TE), and the Soeum type (SE). The constitutional type's shortcomings are exacerbated by the TIM's intrinsic predisposition for imbalances, which leads to distinctive patterns of sensitivity to specific diseases. concentrated on eliminating these defects in order to restore the internal balance. [18,19]. Figure 2a depicts comparative analysis between traditional system of Indian and Chinese medicine.

S.NO.	ASPECT	TRADITIONAL INDIAN MEDICINE (TIM/AYURVEDA)	TRADITIONAL CHINESE MEDICINE (TCM)
1	Philosophical Foundation	Rooted in the Vedas, Three Doshas (Vata , Pitta, Kapha), Harmony with Nature	Based on Taoist philosophy, Yin and Yang, Five Elements (Wood, Fire, Earth, Metal, Water).
2	Diagnostic Methods	Pulse, tongue, eyes, overall appearance	Pulse, tongue, questioning, listening, palpation
3	Treatment Modalities	Dietary recommendations, herbal medicines yoga, meditation, lifestyle modifications	Acupuncture, herbal medicine, dietary therapy, Qi Gong, Tui Na, cupping, moxibustion
4	Herbal Medicine	Wide range of herbs, doshic balance	Herbs, minerals, animal products, herbal formulas based on specific TCM pattern
5	Geographical Influence	Indian subcontinent, Indian culture	China, Chinese philosophy, cosmology

Figure 2a: Comparative Analysis of Ayurveda and Traditional Chinese Medicine

3. Medical Practices Based on Syndromes and Constitution

Individuals inherit many characteristics and traits. These two medical traditions are built on the recognition and comprehension of the underlying constitutional differences that exist between people [18,19]. TCM prioritises the clinical condition of the patient at the time of the examination; other factors, such as illness progression, family history, and congenital diseases, are considered, but only secondarily. TCM, SCM, and Ayurveda all focus on the whole person and share other facets of holistic medicine, but they all approach the issue in different ways. In contrast to TCM therapy, which employs lowering and tonifying techniques to address external pathogenic factors such blood stasis and qi insufficiency, TIM therapy aims to restore balance and reduce imbalance in the quadrifocal organ plan. Despite the fact that some therapeutic techniques and materials are similar in both TCM and TIM, they are employed for very distinct purposes and according to very different justifications. Based on the underlying imbalance of the three energy forces, or doshas, Vatta, Pitta, and Kapha, Ayurveda ategorises a person into one of the seven major constitutional kinds, or prakritiphilosophy divides people into one of four constitutional types based on their genetic make-up: the Taeyang type (TY), the Soyang type (SY), the Taeum type (TE), and the Soeum type (SE). The inherent proclivity in constitutional imbalances exacerbates the weaknesses of the constitutional type, leading to specific patterns in susceptibility to pathologies. [18,19].

4. The quality of the herbal medicines

The standards of quality, which relate to methods and metrics for evaluating and confirming the potency of botanical extracts, formulations, or raw materials, are seldom met by botanical preparations [20]. For herbal medications, quality is a crucial determinant of both safety and effectiveness. There is no assurance of continuous biological activity or stability when characterizing botanicals with chromatographic techniques and chemical markers [21]. Quality herbal medicine production is currently a challenge for producers, research institutions, and government bodies. UN [22], FDA [23]. In India, conventional pharmaceuticals are produced in about 9000 licensed facilities, either with or without the necessary standardization [24]. Indian producers frequently follow WHO guidelines in terms of quality assurance. For Indian herbal products, market sample adulteration is still a major problem in both the home and export markets.

Chemical examination of various Ayurvedic antiarthritic remedies has revealed the use of synthetic anti-inflammatory drugs such corticosteroids, indomethacin, and phenylbutazone [25]. Market botanicals are occasionally falsified or contaminated with other compounds, which reduces their effectiveness and can occasionally make them more poisonous. Over time, these circumstances remain unfavorable. China has successfully addressed these issues by modernizing the field of traditional medicine using government-sponsored Good Agricultural Policies (GAPs) and Good Manufacturing Practices (GMPs). The farming methods provide Standard Operating Procedures for the use of fertilizers, irrigation systems, disease control, along with the prevention and treatment of insects and pests. Additionally, GAPs set criteria for microorganisms, pesticide residues, and other hazardous pollutants in plants. China's State Drug Administration (SDA) has mandated that by the year 2004, all TCM producers must adhere to its rules, and by the year 2007, farms that produce raw ingredients must comply. In the end, 1470 businesses met the requirements for GMPs, while 570 businesses did not [28]. There are unique restrictions for the marketing of herbal medicines in China, including the need for a quality dossier, a safety and efficacy assessment, and specialized labeling standards. Drug Administration regulations require new herbal medications to be licensed. To improve the perception of Ayurvedic medicines in the worldwide market, similar comprehensive initiatives are required. To raise the caliber and standard of Ayurvedic, Siddha, and Unani medications in pharmacies, the Indian government has issued GMP requirements for traditional medical systems. The Drugs and Cosmetics Act of 1940 [29], which was amended in 2000, now includes new regulations that outline the necessary infrastructure, labor, and quality control criteria. According to the Act, Ayurvedic Patent and Proprietary medications must only contain the components listed in the suggested books. Safety and efficacy data are required for any new herbal treatment. For the cultivation, processing, and production of herbal medicines, verified agro-industrial methods should be used. The production of legitimate, standardized raw materials devoid of hazardous contaminants is necessary for the Indian herbal medication industry. Evidence for therapeutic efficacy, safety, and shelf life is also required for processing technology advancements, GMP compliance for all activities, and maintenance of in-process quality control for producing high-quality goods. The promotion of Ayurveda on a global scale continues to depend on such strategies.

5. Comparisons and contrasts in the aspects of pathology, physiology, and treatment within the contexts of Traditional Indian Medicine and Chinese Medicine.

The foundation of physiological and pathological concepts is the quadrifocal system, also referred to as the quaternary. A seesaw-like model of the internal organ structure is possible. The spleen and kidney, respectively, regulate food intake and waste product discharge in the SE and SY types. Lung and liver, respectively, control qi and fluid storage and consumption in the TE and TY types [4]. The SE type is characterized by a strong kidney system and a weak spleen system, while the SY type has a strong spleen system and a weak kidney system. The TE type is characterized by a strong liver system and a weak lung system, whereas the TY type is characterized by a strong lung system and a weak liver system [3, 4]. The idea of the lung, liver, spleen, and kidney in SCM was first inspired by TCM doctrines but eventually developed into a distinct, independent physiopathological idea. The fundamental energy required to maintain homeostasis is thought to reside in the viscera of each constitutional type that is the weakest or most hypoactive. The main therapeutic objectives of SCM are to maintain and strengthen these necessary energy [30].

The ultimate therapeutic objectives of SCM are the strengthening and preservation of these necessary energy [30]. The theory of the five elements (ether, air, fire, water, and earth) proposed in the Vedic philosophy serves as the foundation for Ayurvedic physiology and pathology [31]. Although they can appear to be similar at first look, the five elements in Ayurveda are entirely distinct from the five elemental phases idea found in TCM. The five elements in the Ayurvedic theory are only shown to have a progressively strengthening relationship, whereas the TCM elemental phases interact with one another in aiding and controlling relationships. The two theories deal with similarly titled but essentially distinct elements. Asian Traditional Medicine (TM) therapies are mostly based on botanical sources. Although the medicinal plants used in SCM and TCM are comparable, the fundamental usage guidelines and underlying rationale are entirely different. In SCM, the patient's constitutional type is the main factor taken into account while choosing the medicinal herbs and treatment formulas. There is only one unique constitutional type that a certain medicinal herb is compatible with, hence it can only be utilised for that constitutional type and blended with other medicinal herbs that are also compatible with that constitutional type. When a medical herb is used on a constitutional type that is incompatible, the results may be minimal or even harmful. For instance, it is not advisable to combine the medicinal herbs Radix Ginseng (SE) and Radix Rehmanniae Glutinosae (SY) together. Additionally, a medicinal plant can only be applied to one constitutional type; but, it can be applied to several diseases or symptomatology within that constitutional type [32,33]. TCM medicinal plants, in contrast, are categorised in accordance with the herb's own curative properties, such as dispersive quality, Yin tonifying quality, and so forth. As a result, regardless of the patient's constitutional type, any patient suffering from the same ailment or pathology can benefit from the use of a certain medicinal herb. As an illustration, some TCM formulations combine Radix Ginseng and Radix Rehmanniae Glutinosae [34].

Ayurvedic and SCM therapies are based on a constitutional approach, and medicinal herbs are included or disregarded in accordance with their compatibility or incompatibility with a particular person's constitutional make-up. While SCM medicinal herbs are categorised based on their effects on the various constitutional types, Ayurvedic medicinal plants are classified by their effects on the three doshas. For example, a common medicinal herb called Cortex Cinnamomi is said to be able to suppress Vitta and Kapha while promoting Pitta in Ayurvedic practise, yet in SCM it is said to be compatible with the SE type and incompatible with the SY type. On a different note, due to variations in regional flora, the real specimens of medicinal plants employed in Ayurveda and SCM are likely to differ from one another [4,29].

6. Conclusion and future directions

After much consideration, we have concluded that raising awareness of the benefits of ayurveda will assist to further collaboration and exchange in the field of traditional medicine between China and India, as well as the continued adoption of the Indian medical system in China.

Through the study of ethnopharmacology and conventional medicine, many medications have made their way onto the world market. research and development in medicines and pharmaceuticals Understanding the scientific foundation of individual variation has been made easier because to advances in our understanding of the human genome. There are much fewer commercially viable pharmaceuticals or phytochemicals that have made it into evidence-based treatments. With appropriate scientific justification for the international community, China has effectively pushed its own treatments and medications, such as ginseng, ma huang, and ginkgo. In China, the integrative medicine approach that selectively combines TCM ingredients with contemporary diagnostic techniques has had remarkable success. [33] India requires a clear strategy for such integration that does not compromise on science-based tactics. Pharmacoepidemiological evidence about the efficacy and use of Ayurvedic medicines must be established and validated [35]. Although research on TCM and TIM is few, it can shed light on the cost-effectiveness and cost-benefit of conventional treatment. TCM examples would aid India in all of these endeavours on a variety of levels, including policies, quality standards, integration procedures, research models, and the complementary integration, where public health is given priority. Both TIM and TCM are wonderful traditions with solid philosophical underpinnings and have the potential to be important in the creation of new treatments and pharmaceuticals.

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