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## Discussion Kernel

## Integrative practice in Asia – India and China

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## ABSTRACT

Traditional medical practice in the world has maintained its popularity in spite of the challenges of the rapid development of modern medicine. The World Health Organization observed that 80% of world population still rely on traditional practices of special cultural heritages.

In Asia, the traditional practices include mainly that of the Middle East, India and China. The 3000 years of development in the three different regions has resulted in cross-cultural influences and exchanges, particularly revealed in the rich collections of medicinal herbs.

Ayurveda medicine has well maintained its traditional philosophy and practice. It has enjoyed very substantial governmental support on the national level and has remained popular. Traditional Chinese Medicine, likewise, has kept its popularity and vibrance. However, with the ever advancing modern medicine which is giving efficient acute care and specific solutions to known target areas of clinical concern, are unavoidable obstacles to an integrative practice.

Besides India, China is the only country in the world where Traditional Medicine is still playing a major role in national health care. During the COVID-19 pandemic both Ayurveda and Chinese Medicine practitioners tried hard to contribute by offering integrative treatment to the infected patients. They were getting a lot of national and professional endorsements. One would speculate that with this unknown virus and diverse clinical presentations, a better integrative program would be able to provide better outcome.

On the prevention side, medicinal herbs are expected to be able to boost up the innate immunity of the individual so that infection could be better resisted.

Given the similarities between the Indian and Chinese Systems of traditional practice, it is suggested that Ayurveda and Chinese Medicine could develop a joint mission with combined efforts, to collaborate in research and trials, with the aim of consolidating Integrative Practice. This article concentrates on the Indian and Chinese areas of traditional practice, viz. Ayurveda and Chinese Medicine.

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## 1. Introduction

According to the World Health Organization (WHO), 80% of World's population still rely on traditional medicine related to their culture and native area for their health needs [1]. However since over a century ago, modern medicine has been the main source of disease eradication and extension of human longevity [2]. Traditional medicine has such a strong cultural link that when people

feel that their health is being challenged, they tend to use some traditional remedy before going to the modern clinic. When they get disappointed with modern treatment, they also revert to traditional practices [3,4].

The firm trust attached to traditional medicine in spite of the overwhelming successes of modern medicine may be explained as follows:

1. In spite of major advances in the pharmaceutical industry, disappointment in the process of treatment are still common.
2. Specialization and over-specialization in Modern Medicine could be confusing to disease victims and certainly have made the treatment costs unaffordable to a lot of people.

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3. The aging population suffers from many degenerative conditions affecting multiple organs, making specific therapy unsatisfactory [5,6].
4. Traditional medicine offers a general promise of physiological balance and a state of holistic harmony which particularly favors disease prevention and the elderly people.

## 2. Asian Traditional Medicine

In the Middle East: Iran and Islamic Regions, Traditional Medicine has a remarkable history. It actually inherited the ancient European Hellenistic – Greco – Arabic Medical practices, thence settled in Persia as Yunani medicine and elsewhere as Islamic or Arabic Medicine. The complexity of Traditional Medicine in the Middle East is therefore comparable to Ayurveda and Traditional Chinese Medicine [7].

The consequences of Industrial Revolution followed by the Development of Science and Technology in Europe had overwhelming influences on Traditional Medicine in the Middle East. Its decline was much more rapid and devastating than what happened in India and China. In spite of the very rich collection of records and books (which are hardly quoted today outside the Middle East), and the practical value, international recognition appears slim. A classical record written in Chinese: “Islamic Treatise of Prescriptions” of the Yuen Dynasty (1260–1368) has demonstrated the close connections between Arabic Islamic District and China: nearly 40% of the documented herbs were imported from the Middle East and Persia [7]. One century later the World-Renowned Encyclopedia on Medicinal herbs of the Ming Dynasty in China, contain over 10% of herbal items of Middle East and India origin [8].

Indian and Chinese Traditional Medicine could have developed around the same period over 3000 years ago. Today, we do find similarities and differences between them when we study their ways of thinking: philosophy of life and health; diagnostic techniques; treatment principles and outcome assessments [9,10].

When WHO advocates the importance of traditional medicine, in its recent determination to bring it more in line with modern practice, it particularly reviewed the diagnostic aspects of Traditional Chinese Medicine in an attempt to make the specific terms more acceptable to the medical public [11]. Two other regions in Asia, viz Japan and Korea, also retain the popularities of their regional traditional medical practices and philosophies which are closely related to ancient China. Both Japan and Korea are highly developed in modern medicine in the clinical and research areas. It might appear natural that a declining trust on traditional medicine should exist. On the contrary, in spite of the affluencies and remarkable advances in hospital practices and medical education, Japanese and Korean people have retained their trust on traditional medicine. Kampo medicine in Japan and Korean medicine in Korea have never lost peoples' trust and expectations. They are fervently accepted as supplementary treatment options parallel to standard hospital practice.

## 3. Ayurveda and Chinese Medicine

The philosophical basis of both traditional practices is to prolong life and maintenance of wellbeing [10]. The Chinese side stresses the importance of Yin and Yang which refers to balance and harmony. Whether in physiological good health or under pathological conditions, opposing forces presenting as heat or cold, deeply or superficially, real or apparent, are keeping the individual in a balanced state, manifested in a spiritual attitude called ‘Qi’ [12,13]. There are apparently equivalent lines of thought in Ayurveda, and the interpretation of the living state has obvious resemblances.

Indian philosophers believe that everything under the Universe, including the human body is composed of five elements: Wood, Fire, Earth, Metal, Water, and the elements are kept at a balanced state to provide well-being [14].

Chinese Medicine likewise, respects the same five elements when the interactions between the different physiological functions and related organs are defined [15]. Ayurvedic interpretations of the five elements tend to be more sophisticated in that, not only are they related to different organs under special circumstances, but the loss of balance affects clinical presentations and management. In addition, the spiritual attitudes of the individual are very much emphasized [16].

Thus, the management given by Traditional Chinese Medicine practitioners very much depends on the judgement of the loss of balance: deficiency or over-activity. Whereas Ayurveda advocates a more structured identification of problems, followed by more spiritual orientated managements [11,17], sometimes reaching a religious state.

## 4. Current state of Ayurveda and Traditional Chinese Medicine

People might understand Ayurveda as Yoga, and Traditional Chinese Medicine as Acupuncture, since outside India and China, Yoga training and Acupuncture treatment are indeed hallmarks for either stream. A better way to understand the two most important traditional practices, after identifying their philosophical similarities would include a careful look at their respective current situations: from practice, education, commercial activities to research.

### 4.1. Ayurveda (AYUSH)

The India Government is actively encouraging traditional medical practice. Ayurveda (being the best known Indian Traditional Medicine) has been united with four other related and yet different traditional practices, viz. Unani, Siddha, Sowa Rigpa and Homeopathy to form the consortium AYUSH. The author is unable to obtain the most update statistics but according to data of 2012 the achievements of AYUSH in India has been tremendous [18].

AYUSH hospitals in India amounted to 27.5% of all hospital; providing 58,000 beds which represented 9.7% of all hospital beds.

AYUSH practitioners amounted to 720,000 which were equivalent to 43.7% of all clinicians.

In the rural areas, community set ups providing AYUSH services were plentiful, well superseding those providing modern services (51.6% vs 35.7%).

It was estimated that there were 25.9 AYUSH hospitals every 10 million people; 0.3 AYUSH clinic per 10,000 people; 0.5 hospital bed per 10,000 people, and 5.9 AYUSH clinicians per 10,000 people.

In 2012, there was a flourish of new AYUSH hospitals and clinics, amounting to 90% of the overall new hospitals and 89.8% of overall new clinics in India.

This medical system of traditional origin has been providing education, services, industrial support and Research promotions [19].

### 4.2. Traditional Chinese Medicine

In China, Traditional Chinese Medicine services are wide-spread. The National Policy, for over half a century, has been insistent that at least 20% of national resources for health care need to be allocated to Traditional Chinese Medicine. Regarding infrastructures, over 3000 municipal level hospitals for Chinese medicine have been built. Over 330,000 beds are provided, and over 160 special units are established. 90% of general hospitals are providing special

Chinese medicine services. The number of registered Chinese medicine practitioners is ranging from 520,000 (certified) to 237,000 (registered). Over 240 millions out-patient visits per year have been recorded. 18.5% emergency care are provided by traditional practitioners. Data quoted were those of late last century [19–22].

Currently there are 32 Chinese Medicine Universities and 52 medical Universities also offer short Chinese medicine courses. The total number of Chinese medicine students is estimated to be around 270,000 while senior respectable Traditional Chinese Medicine experts are still taking graduates under special apprenticeship programs [2].

Industry involvement related to Traditional Chinese Medicine in China has always stayed strong and active [22,23]. Many pharmacologists are interested at medicinal herbs which form their major target of drug discovery. An estimate of 30,000 pharmacologists are involved [24–26]. Although, one important challenge related to medicinal herbs in China has been related to their variable quality.

## 5. Integrative practices as shown in the pandemic

The strong tradition of Ayurveda and Chinese Medicine practices has been helping to maintain their popularities, particularly with regard to common ailments and the use of proprietary drugs. Serious life-threatening health problems and diseases obviously require the support from modern medicine in the relevant clinics and hospitals. However, when difficulties are met, people resort to traditional medicine as integrative support.

During this pandemic, the integrative care offered by Health Authorities in India and China well illustrates the current situation.

### 5.1. In India

There is the Ministry of AYUSH in the Indian government which is responsible for the job of promoting Traditional Indian Medicine. The Indian Government in May 2020, has suggested measures that included the use of a herbal formula consisting of Ginger, Curcumin, Cloves, Honey, Fennel, Cumin, etc., called “Kadha” as an immunity booster [27]. Pharmacological and nonpharmacological instruction are advocated in Ayurveda for infection control [28]. Some Ayurvedic herbal preparations containing garlic, turmeric, carom and again have been used as oral disinfectants against COVID-19. Research has started on the use of Ayurvedic medicine for the pandemic [29]. Specific antifu preparations using *Arsenicum album* and *Bryonia* have also come into active and popular use [30,31].

Combined use of hydroxychloroquine and homeopathic medicine is widely practiced in Pune area, Indian, in the hospitals. More importantly, the combination has been given to over 2000 people under quarantine. Gujarat government has issued guidelines on the use of Ayurvedic medicine as immune boosters [32]. The government of Kerala interlinked the framework of Traditional Indian Medicine with the public health administrative system to overcome the pandemic. The refined directives include the use of “Sukhayusham” for the elderly; “Swasthyam” for the under 60’s; as well as using the Ayur Raksha Clinic to help the recovering patients [33]. For the symptom-free isolated people, a number of specific preventive herbal formulae were actively given [34,35].

Dr. Abhishek Shanker and experts from Delhi, India, have reported in detail the current situation of Traditional Indian Medicine being used for the prevention and treatment of COVID-19 in India [36]. The active practice on Traditional Indian Medicine for prevention and treatment resembles very much what is happening in China today since the out-break in December 2019. Experts in India advocate the active use of Indian herbal medicine for a better prevention and control of the pandemic [37,38].

### 5.2. In China

From the very early stage of the pandemic in January 2020, different Chinese Medicine Universities and Institutes in different provinces started to give open advice to the public on the use of classical herbal formulae for COVID-19 sufferers. A total of 20–30 classical herbal formulae were recommended as anti-viral agents under different clinical situations when people felt threatened by viral attack, while Traditional Chinese Medicine experts still insisted on herbal consumption only after their proper diagnosis and recommendation [39].

Later it has been reported that all over China 630 hospitals serving COVID-19 patients have been using Traditional Chinese Medicine inclusively with standard treatment. Nearly 600 top Chinese Medicine experts over the country have been involved in the planning and treatment. 10 classical formulae are most frequently used and the choice has followed the need for easing pulmonary problems of “heat” and “dampness”. For the mild cases, much preference on using Chinese Medicine alone has been obvious: only 10% patients use modern pharmaceuticals together. In the more severe hospitalized cases, around 5% are also prescribed Chinese Medicine. The overall observation has been that over 90% of all documented treatment programs have involved Traditional Chinese Medicine [40].

Chinese Academician Zhang Bo-li carefully analysed the results of different herbal formulae used for the treatment of COVID-19 patients and concluded that one effective formula could be constituted from the present experiences and he has prepared proper drug trial protocols to get proper endorsement from the Health Authority (China Press April 2020).

On the other hand, the highly reputed Clinical Expert, Dr. Zhong Nan Shan, advocated the use of one popular herbal proprietary product “Lianhua Qingwen capsule” as a good treatment option for very mild cases as well as for the prevention of getting infected. The capsule has been popular in China, well known as an anti-influenza proprietary drug and has undergone many clinical trials for influenza patients. One meta-analysis of the reports has concluded that: when compared with the anti-virus drug oseltamivir, it showed superiority in the relief of fever, headache, throat discomfort and cough [41].

## 6. Discussion

The two Asian Systems of Health and Medical Treatment could jointly discuss about their modernization because of the obvious similarities. Both Systems are ancient, with over 3,000 years of history. Both have strong cultural and philosophical background: Ayurveda with Hinduism and Chinese Medicine with Buddhism and Taoism. They have been providing practical services to the people of related regions ever since they are known, throughout their development, and to-date.

Both Ayurveda and Chinese Medicine emphasis on Holism, i.e. taking the complicated human bodily functions as a physiological summation between the different organs. Totally balanced bodily functions result in harmony and perfect health. The dysfunction of some parts leads to loss of the harmony manifested as different sets of disorders, syndromes and symptoms related to different organs. To remove the symptoms, not only are specific measures targeting towards the symptoms important, instead, to maintain the harmony of whole body is considered of utmost significance.

The rich collections of medicinal herbs in Ayurveda and Chinese Medicine would form a vast base for the provision of appropriate agents to supplement deficiencies in modern clinical management. It is appropriate time that the Ayurvedic experience could be shared with the Chinese Tradition and vice versa in the early mission of collaboration, aiming at synergistic effects [42].

## 7. A Common Mission

Both the traditional systems are facing similar challenges [43]. Firstly, the strong cultural adoration has maintained the popularity of the traditional practice, but at the same time, discouraged the traditional practitioners to communicate with modern scientists and clinicians. Sticking firmly to old theories and rigid practices have hindered the endorsement of Evidence-Based Research and Practice. Secondly, clinical and bio-scientists insist on the absolute scientific approach of the reductionist stream. They do not believe that traditional medicine can be up-graded to the Evidence-Based level. Their interest on medicinal herbs stick firmly on the single target Drug Discovery approach. Thirdly, although there have been State Policies of integrating traditional medicine with modern medicine, both in China and India, the progress has been extremely slow. A new paradigm shift is required to initiate a genuine state of collaboration, which expectedly will lead to a gradual integration in the true sense. [44–47].

Specific medicinal supplements aiming at disease targets and specific health needs could be developed from medicinal herbs and formulae used in traditional settings, through the procedures of the Evidence-Based requirements as have been established in Europe and America [48–50]. The well accepted “Functional Food” category could be up-graded to a medicinal supplement level using appropriate herbs from the Traditional Practice [51].

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