



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Traditional Chinese and Thai medicine in a comparative perspective



Ke He*

Faculty of International Studies, Prince of Songkla University (Phuket Campus), 80 Moo 1, Vichitsongkram Rd., Kathu, Phuket 83120 Thailand

ARTICLE INFO

Article history:

Received 6 January 2015
Received in revised form
23 September 2015
Accepted 15 October 2015
Available online 23 October 2015

Keywords:

Traditional medicine
Modern development
Comparative studies

ABSTRACT

The work presented in this paper compares traditional Chinese medicine and traditional Thai medicine, expounding on origins, academic thinking, theoretical system, diagnostic method and modern development. Based on a secondary analysis of available literature, the paper concentrates on two crucial historical developments: (1) the response to, and consequences of, the impact of the Western medicine; and (2) the revival of traditional medicine in these two countries and its prospects. From a comparative perspective, the analysis has led to the conclusion that the rise and fall of traditional medicine is an issue closely related with social and political issues; and the development of traditional medicines requires national policy and financial support from governments, human resource development, the improvement of service quality, and the dissemination of traditional medicine knowledge to the public. In addition, this paper also suggests deepening exchanges and cooperation between China and Thailand, strengthening cooperation between traditional medicine and medical tourism.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

Traditional medicine (TM) has been used for thousands of years in some countries.¹ The history of Traditional Chinese medicine (TCM) dates back to antiquity, traditional Chinese medical science and medicine has been spread to many places all over the world.² Similarly, evidence shows that Thai people began to use herbal medicine for the treatment of various symptoms and diseases and health promotion before the Sukhothai period or before 1238 A.D. The Kingdom of Thailand also has its own system of traditional medicine which is called “Thai traditional medicine” (TTM) and it had been a means of national health care for the Thai people until the early 20th century.³

Among the TMs in the world, there are Chinese, Korean, Japanese traditional medicines which originated from ancient China. Besides,

the Ayurvedic medicine has Indian origin and Unani medicine is used in Arabic countries.⁴ Although TTM is not considered to be a major traditional medicine in the world, it is worth a study because there is much comparability between TCM and TTM. Both China and Thailand are developing countries with similar climatic and geographical environment. Both countries are rich in medical resources and have distant historical and cultural backgrounds. Besides, there have been many overseas Chinese people in Thailand for a long time and TCM has been accepted and developed in Thai society.

The TM of China and Thailand differ in their origins, academic thinking, theoretical system and diagnostic method. And yet, the modern development of these two medicines strikingly manifests a historical similarity: The spread of modern medicine from the Western world to the East led to a decline in the practice of traditional medicine both in Thailand and China. Based on a secondary analysis of available literature, this paper aims to do comparative studies between TCM and TTM, and concentrates on two crucial historical developments: (1) the response to, and consequences of, the impact of the Western medicine; and (2) the revival of traditional medicine in these two countries and its prospects. In this ever-changing globalization age, the practical significance of the comparison is to discover the objective laws of the development of TM, to fully identify the similarities and differences between the two medicines, to create a necessary platform for securing cultural sensitivity and enhancing mutual understanding and cooperation between the two countries.

Abbreviations: TM, traditional medicine; TCM, traditional Chinese Medicine; TTM, traditional Thai medicine; FDA, Thai food and drug administration; KMT, the nationalists; MOPH, Thailand's ministry of public health; WHO, world health organization; PHC, primary health care; ITTM, institute of Thai traditional medicine; DATM, department for the development of Thai traditional and alternative medicine; DSHEA, dietary supplement health and education act; SARS, severe acute respiratory syndrome; UNESCO, united nations educational, scientific and cultural organization; ICD-11, the 11th version of international classification of disease.

* Fax: +66 0 76276263.

E-mail address: hezudaophuket2013@gmail.com

2. TCM and TTM

2.1. Legal definition and brief history

Committee for Terms in TCM defined TCM as “a comprehensive science to study transformation between health and disease in human life and the prevention, diagnosis, treatment, rehabilitation and health care based on Chinese medicine theory and practical experience”.⁵ However, TCM is born of Chinese culture and there are a lot of enlightening views in Daoism, Confucianism, and Buddhism, the major schools of philosophy in Chinese civilization. They are thought to be essential to healthy living and development of TCM. TCM originated from the legendary clan leader Fu Xi (2593 BC) period, established its theoretical system during the late years of the Warring States period to Chin and Han dynasties (475 BC–AD 220).⁶ So the Comprehensive academic system of TCM had been formed more than 2500 years. During the Jin and Tang dynasties (265 AD–907 AD), TCM experienced great development and absorbed much medical information from Arabian countries, Japan and India. During the Song and Yuan dynasties (960 AD–1368 AD), the invention of printing technology and further advances in papermaking caused TCM to spread widely and to be deeply researched. During the Ming and Qing dynasties (1368 AD–1911 AD), every part of TCM was enriched and TCM spread to the countries of Europe and the Americas. From the beginning of the Opium War in 1840, China was continually defeated by outside forces. There were some Chinese people who, as a result of the national crisis, developed a cultural inferiority complex and produced a tide of complete opposition to their own culture. Western medicine took root, and Chinese medicine went into a hundred year decline.

According to the “Protection and Promotion of Thai Traditional Medicine Wisdom Act B.E. 2542” (1999), TTM is defined as “the medical processes dealing with the examination, diagnosis, therapy, treatment, or prevention of diseases, or promotion and rehabilitation of the health of humans or animals, midwifery, Thai massage, as well as the preparation, production of Thai traditional medicines and the making of devices and instruments for medical purposes”.⁷ TTM is a holistic and natural approach of health care that is derived from Buddhist beliefs, the observation of and respect for nature, and the wisdom of Thai ancestors. In addition, traditional knowledge of TTM was also built through the processes of “selection”, “adoption”, “adaptation” and “utilization” of traditional medicine of some countries with which Thailand had contact in the past, e.g., India and China, to suit the Thai way of life. TTM knowledge was gradually developed, systematized, revised, recorded, and passed on from generation to generation throughout the country’s history, from Sukothai to Ayutthaya (1350–1767), Thonburi (1767–1782), and the early Ratanakosin period (1782–1916), as a means of health care for the Thai people. After Burma destroyed Ayutthaya in 1767, Kings Rama I–III of the present Chakri Dynasty played an important role in the revival of TTM. Over 1000 drug recipes and the body of knowledge of TTM regarding the origin of diseases and their treatments were gathered and inscribed on marble tablets and placed on the walls of two temples, namely Wat Po and Wat Raja Oros. The purposes of the Kings’ orders were to compile collective knowledge of TTM that was partly lost or destroyed during the Burmese–Siamese War (1765–1767) and to give health education to the Thai people so that they could take care of their health using TTM. Unfortunately, the influence of Western medicine, which was introduced into Thailand by missionaries and western physicians since the reign of King Rama III (1787–1851), gradually increased and eventually led to the abandonment of the systematic teaching of TTM in the medical school in 1916. This sparked the decline in TTM acceptance, especially among people in the urban areas, and the status

of TTM practitioners in the country’s health care system for over 60 years.

2.2. Academic thinking and theoretical system

TCM is based on the view that man and the universe are one unity or, in other words, the relation between man and nature is harmonious. According to TCM, people become ill because they do not know the laws of nature, of society, or of relations among people. So TCM aims for balances in three major aspects because all illnesses are caused by imbalance. This is rather similar to the Galenic medicine in ancient Rome and Greece. The three balances are balance between man and nature, balance between an individual and the society, balance between the functions of the body organs. TCM is a dialectical and dynamic system which integrates theories such as the theories of *yin* and *yang* (the positive and negative forces, they not only depend on each other and oppose each other, but also tend to transform and alternate in waxing and waning), and *wuxing* (the five elements –water, fire, metal, wood and earth, the relations between them are inter-promotion, interaction, over-action and counter-action), and *jingluo* (Channels and Collaterals), of visceral manifestation, of treatment based on the differentiation of symptoms and signs, of pharmacology, of acupuncture and moxibustion, etc. The theoretical system explored in the earliest-extant *Huangdi Neijing* remains the mainstay of TCM up to this day.⁶ *Huangdi Neijing*, the theoretical work on TCM that emerged in the Warring States Period (475–221 B.C.), marks the establishment of Chinese medicine’s unique theoretical system. Another classic work, *Shennong’s Herbal Classic* sums up medical experiences prior to the Qin (221–207 B.C.) Dynasty, records 365 varieties of medicinal herbs and it is the earliest pharmacopoeia ever found in China.

TTM, by contrast, is an integrated system of medicine incorporating the Indian derived Ayurvedic system and the Chinese system amalgamated with a deep-rooted belief in the supernatural, mystique and astrology.⁸ Buddhism has a great influence upon TTM and its many principles are used for medical analysis.⁹ However, the principal philosophy of TTM leans heavily toward the Ayurvedic teaching and Buddhism thoughts which are the attainment of equilibrium among the four basic elements, namely earth, water, wind and fire. These elements are called as “*tards*” in Thai language, which are the very essence of human life. In order to stay healthy, the four elements must be in perfect balance and harmony, and TTM seeks to restore health by overcoming imbalances in the system. TTM also states that everyone has one’s own dominant element called “*tard-chao-ruan*” in Thai language, which is basically determined by the date and month of one’s conception. The *tard-chao-ruan* of a person plays an important role with regard to one’s characteristics and appearance as well as the weak point in one’s health (Vichai and Anchalee).¹⁰ According to TTM, the seasons, age, geography, time and behavior can affect one’s health as well. Illness can be caused by supernatural powers (ancestor souls, evil spirits, and punishment from spirits for misbehavior), powers of nature (imbalance of *tards*, imbalance of hot and cold, imbalance of body equilibrium), powers of the universe (influence of sun, moon and stars) and *Kimijati*, which is the equivalent of microorganisms or parasites.¹⁰ During the reign of King Narai the Great (1656–1688), the doctors that served the king united to compile a textbook of King Narai’s medicines or *Tamra Phra Osod Phra Narai*, which was the first official textbook of Thai drug recipes. During the reign of King Rama V (1868–1910), the first medical textbook *Tumra Paetsart Sonkrau* and the first Thai national formulary called *Tumra Paetsart Sonkhraue Chabub Luang* as well as *Tumra Vejasuksa*, the first TTM textbook for medical students, were published. They are still official textbooks of TTM accepted by the Thai Food

and Drug Administration (FDA) for the registration of traditional medicines.

2.3. Diagnosis and treatment

Sizhen (observation, auscultation and olfaction, interrogation, palpation) are the principal four diagnostic methods of TCM. Observation is the method to see the patient's expressions, complexion, physique, posture, tongue and the fur on it and the color of secretion and excrement in order to know the situation of the internal organs. Auscultation and olfaction are the method to listen to the patient's sounds and to smell the odor of his/her breath and discharge. The change of his/her sounds through his/her talking, breathing and coughing and his/her odor can tell chills, fever, hypo function and hyper function. Interrogation is the method to inquire the patient or his/her companions about the onset, the cause and course of the illness, the chief complaints (especially pain), the past history, the living habits and other relevant conditions. As to palpation, pulse feeling is the chief item.² *Bagang* (eight principles) are important principles of treatment of TCM. They are *yin* and *yang*, exterior and interior, cold and heat, deficiency and excess. In spite of the complexity of diseases, they could be basically summed up into *bagang*. Of *bagang*, *yang* includes exterior, heat and excess while *yin* covers interior, cold and deficiency. Whenever there is a correct analysis of *bagang*, there will be precise diagnosis and a satisfactory treatment.⁶ Last but not least, TCM puts emphasis on "curing illnesses that have not yet happened rather than curing illness". Guan Qingwei, the director of Tongrentang Traditional Chinese Medicine Clinic stated that by improving people's health at the "pre-illness" stage, TCM helps people avoid illness in the first place and when illness does come, TCM will stop it from becoming worse or cure it.¹¹ During its long practice and evolution, TCM has developed a complete and independent theoretical system and unique and effective methods of clinical treatment centering on Chinese herbal medicines, supplemented by acupuncture and moxibustion, medical massage and *qigong*, that is, deep breathing exercises.

Similarly, TTM practitioners require patient's history, symptoms, chief complaints and usual behaviors or habits; they do such physical examinations as heart rate, pulse, temperature, visual and manual examination of affected organs or areas of the body, structure of the body, degree of movement of joints and the *extremities*. Besides, based on the "*tards*" principle, TTM practitioners need to know a patient's date, time, month and year of birth in order to figure out the patient's "*tard-chao-ruan*" and determine which element is causing the imbalance and illness. Then a diagnosis is made to treat a patient with some practitioners also performing an astrological examination as well. Treatment of TTM also emphasizes adjusting the balance of the body elements using the health promotion approach. Naturally determined factors, such as the "*tard-chao-ruan*", seasons, external elements and the power of the universe, are also considered in order to give appropriate treatments. Treatments prescribed for patients can be herbal medicine preparations, Thai traditional massage or "*Nuad Thai*", hot herbal compresses, or herbal steam baths.¹⁰

For the convenience of readers to compare TCM and TTM, Table 1 summarizes some important characteristics of these two traditional medicines.

3. Modern development of traditional medicine in comparative perspective

3.1. Major events about TCM of modern times

In 1914, the government of the Northern warlords put forth the "Abandon Chinese Medicine" statement.¹²

In 1929, at the central committee on hygiene, the Nationalists (KMT) put through a resolution to "Abolish Chinese medicine in order to remove the obstacles to the cause of medicine and hygiene". However, the KMT government revoked the resolution after the TCM circles held mass demonstrations.

After the establishment of the People's Republic of China in 1949, the newly established Ministry of Health continued the Nationalists' practice of supporting western medicine, outlawing the use of TCM in hospitals.¹²

The new government however, later changed their minds. In 1954, the central government sent out a memo throughout the entire country that Chinese medicine was to be supported and saved. Beginning in Nanjing, a Chinese medicine hospital and a Chinese medicine university was established, with other cities following their lead in the next two years.

In 1958, it was suggested by the government that western medicine doctors should learn about Chinese medicine.¹²

During the Cultural Revolution (from 1966 to 1976), unfortunately, TCM, as a reflection of traditional Chinese culture, underwent a period of extreme hardship and traditional doctors were purged from the schools, hospitals and clinics. Practice of TCM was not allowed and a great deal of expertise was lost.

In 1976, under the auspices of Lu Binkui, the man who established the first hospital and university in Nanjing, a document was submitted to the central government. Its message was simple: there were almost no traditional doctors left, and that without immediate action, it would be impossible to assemble any teaching staff and the last of the living practitioners would be dead. Again, the central government took note, and a memo was sent throughout the country to support TCM. The Central Secretariat put forward the policy called "lay equal stress on TCM and Western medicine" after the Cultural Revolution.¹³

In 1979, the National Association for Chinese Medicine was established, and many of the traditional texts underwent editing and were republished.¹²

In 1988, in order to strengthen the management of traditional medicine, the State Administration of Traditional Chinese Medicine of the People's Republic of China was set up and under the control of the Ministry of Health. In the last few decades, while TCM has existed in a fragile state, hope has also sprouted as interest in it grows both in China and abroad.

TCM began to show signs of recovery after the outbreak of "SARS" (Severe Acute Respiratory Syndrome). On April 7, October 2003, "The Chinese Medicine Ordinance of People's Republic of China" which clearly demonstrated the guiding ideology, basic principles and specific methods to develop TCM was approved by the State Council. It was then implemented since October 1, 2003.

On April 21st, 2008, "State Council's Several Opinions on Supporting and Promoting the Development of TCM" was officially released. It provided five basic principles to develop TCM as "lay equal stress on TCM and Western medicine", "adhere to the dialectical unity of inheritance and innovation", "integration of Chinese traditional with Western medicine", "promote the comprehensive development of TCM" and "strengthen governmental support".

On November 16, 2010, in Nairobi, on the fifth meeting of the UNESCO Intangible Cultural Heritage Administration Committee, Chinese acupuncture was included in the "Representative List of the Intangible Cultural Heritage of mankind". Nowadays, TCM is still one of the common methods of treating disease in China. Most of China's one million general hospitals have TCM sections and there are more than 100 TCM institutions and research centers in China.

3.2. Major events about TTM of modern times

Meanwhile developments occurred in TTM in the 20th century. In 1923 and 1936, the "Medical Act B.E. 2466" and the "Control of

Table 1
Characteristics of TCM and TTM.

	TCM	TTM
Theoretical basis	<i>Yin and yang, wuxing, jingluo</i>	<i>Tards and tard-chao-ruan</i> from Buddhism and Ayurvedic teaching
Diagnostic methods	<i>Sizhen, bagang</i>	Symptoms and with an astrological examination
Classic writings	<i>Huangdi Neijing, S hennong's Herbal Classic</i>	<i>Tamra Phra Osod Phra Narai, Tumra Paetsart Sonkrau</i>
Treatment	Decoction, Herbal medicine preparation, acupuncture and moxibustion, qigong, massage	Herbal medicine preparations, Thai traditional massage, hot herbal compresses, herbal steam baths

the Practice of the Art of Healing Act B.E.2479" were promulgated respectively and the status of TTM practitioners in the country's health-care system became worse.

In 1979, Thailand's Ministry of Public Health (MOPH), in response to the World Health Organization (WHO)'s call for the revival of indigenous medicines, recommended a policy on promoting the use of medicinal plants in primary health care (PHC) to be included into the Fourth National Economics and Social Development Plan (1977–1981). A meeting on "Thai traditional medicine" among TTM practitioners, medical doctors and university professors was held at Siriraj Hospital to discuss ways to revive TTM and improve the role of TTM in the health system.

In 1980, the National Economic and Social Development Board commissioned the faculty of Pharmacy, Mahidol University to conduct a study on the strategies for the development of Thai medical plants.

In 1981, the government made a commitment to survey and implement the use of raw material from indigenous sources for the local drug industry in order to be self sufficient. A new division called "the Medicinal Plants and Traditional Medicine Section" was set up under the jurisdiction of the MOPH.

In 1982, "The Foundation for the Promotion of Traditional Thai Medicine" was established by Professor Dr. Ouy Ketusingh to revive, promote and upgrade TTM, as well as to promote the research and usage of medicinal plants.

In 1987, MOPH published a book called "Traditional Thai Medicine- the Art of Self Reliance" which acted as a guideline for future development.

In 1989, MOPH established the "Collaborating Center for the Development of Thai Traditional Medicine and Pharmacy" under the Office of the Permanent Secretary to devise strategies and coordinate activities leading to the advancement of Thai medicine and herbal drugs.

In 1993, the Collaborating Center was upgraded to the division level as the "Institute of Thai Traditional Medicine" (ITTM).

In October 2002, as a result of the Bureaucratic Reform Act, the "Department for the Development of Thai Traditional and Alternative Medicine" (DTAM) was established as a new department under the Ministry, comprising ITTM, Division of Alternative Medicine, and the Office of the Secretary. This clearly showed the commitment of the government to promote TTM as another means of health care for the Thai people.

On 12 June 2007, the Cabinet approved "National Strategic Plan on the Development of 'Tai' Wisdom, 'Tai' Ways of Health B.E. 2550–2554 (2007–2011)" which determines the directions and the roles of indigenous medicine, TTM and alternative medicine in the national health system and requires the participation from various sectors involved to implement the plan. This National Strategic Plan is composed of five strategies, namely: knowledge development and management, development of health service system, human resource development, TTM and herbal medicines development, protection of Thai traditional knowledge related to TTM and Thai herbs.

In the fiscal year 2009, based on the data of the Bureau of Health Inspection, it was found that the percentage of people covered by health security systems that received treatment or rehabilitation by TTM in the public health service facilities was 9.03%.

3.3. Similarity and difference

Viewing the major events about TCM and TTM in modern times, it seems that though both traditional medicines differ in historical origins, academic thinking, theoretical system and diagnostic methods, the modern development of them strikingly manifests a historical similarity. That is: the spread of modern medicine from the Western world to the East led to a decline in the practice of traditional medicine both in Thailand and China from the early 19th century. TCM and TTM used to be the mainstream medicine in their respective countries, but they underwent many years of rejection and were confined to limited areas because of the impact of the Western medicine. Yet TTM and TCM were not eradicated and have been integrated into their National Health Service system at last, because in treatment and health preservation, they produce outstanding results that are difficult to substitute, and have always enjoyed a high degree of popularity among the common people, especially in the vastness of rural areas.

Where the modern development of TCM and TCM is concerned, there are also some differences between these two traditional medicines as shown in the following [Table 2](#).

3.4. Prospects

TCM and TTM have been integrated into their National Health Service system respectively. It has been widely accepted that a person should have the option of choosing between traditional and western forms of treatment when taken ill. The revival and preservation of TM necessitates the commitment and cooperation of all parties concerned, including knowledgeable traditional practitioners, interested individuals, scientists, and law enforcement agencies, etc. Such endeavor will not only help to perpetuate the national inheritance but will also result in the improvement in the quality of life for humanity. Besides, following the development of modern science and philosophy, there have been some medical specialists in both the East and West who also believe that TM will open a new pathway for Western medicine. It is likely that in the future this will bring about a new phase in the work of unearthing and researching TM. There is also continuing interest in the pharmacology of natural medicines known to be effective to identify the active compounds. It is definitely a milestone in development of TM that WHO is incorporating TM into the 11th version of its International Classification of Disease (ICD-11).⁴ The ICD-11 project will promote the integration of Western and traditional medicines and provide a better health care system to the world.

Table 2
Differences during modern development.

	TCM	TTM
Time of revival	Around 2003, after the outbreak of “SARS”	Around 1978, after the proclamation of the Alma-Ata Declaration when WHO urged its member countries to include traditional medicine and medicinal plants in their PHC program.
Major reasons for revival	Growing national strength and revival of Chinese culture Outstanding medical results and high degree of popularity among the common people Awareness of the limitations of modern medicine Governmental support and help	WHO policy on indigenous medicine and PHC High cost of modern medicine and loss of self-reliance in health care Awareness of the limitations of modern medicine Potential of herbal products and the practice of TTM for economy Good example of success of China and India concerning the integration of traditional medical knowledge with modern medicine in their national health systems
Responsible Government Agency	State Administration of Traditional Chinese Medicine of PRC	Department for the Development of Thai Traditional and Alternative Medicine (DTAM)
Status in the National Health System	Same as western medicine	Traditional and alternative medicine
National Development Policy	Five basic principles: “lay equal stress on TCM and Western medicine”, “adhere to the dialectical unity of inheritance and innovation”, “integration of Chinese traditional with Western medicine”, “promote the comprehensive development of TCM” and “strengthen governmental support”	Five strategies: knowledge development and management, development of health service system, human resource development, TTM and herbal medicines development, protection of Thai traditional knowledge related to TTM and Thai herbs

4. Conclusions and suggestions

TCM and TTM are both holistic medicine, both of them have long history and enjoy a high degree of popularity among common people, they used to be the mainstream medicine in their country, they all underwent many years of rejection and were confined to limited areas because of the impact of the Western medicine from the early 19th century. Instead of being eradicated, TCM and TTM began to revive during recent decades and have been integrated into their National Health Service systems. The rise and fall and later revival of traditional medicine are not only an academic issue, but an issue closely related with social and political issues. The revival and development of traditional medicines requires national policy and financial support from the governments, human resource development, the improvement of service quality, the dissemination of traditional medicine knowledge to the public, etc.

This author comes out with following two suggestions on developing TCM and TTM.

Deepen exchanges and cooperation between China and Thailand in terms of Research & Development of traditional medicine. First of all, health has always been an old problem which lacks respect to the national boundaries.¹³ In this era of globalization, health care, because of its dual functionalism common-standards interests and cooperation between technical experts, has become one of the first areas of international cooperation. Secondly, China and Thailand have built a long-term good relationship; there are many similarities between Chinese leader’s “Scientific outlook on development” and King Bhumibhol Adulyadej’s philosophy of “Sufficiency Economy”. So it is hoped that bilateral collaboration among China and Thailand that have a long and successful experience on the use of traditional medicine in the health care system will help both countries improve the quality of traditional medicine practices and medicinal products even further.

Strengthen cooperation between traditional medicine and tourism and promote healthcare tourism. After the Dietary Supplement Health and Education Act (DSHEA) took effect in 1994 in the United States, a global trend of exercise, eating well and the use of dietary supplements for health promotion gradually spread all over

the world. The health treatment of TCM and TTM such as acupuncture and moxibustion, *qigong*, Thai traditional massage, hot herbal compresses, and herbal steam baths provide a wealth of resources for healthcare tourism. In addition, the global boom in the spa and wellness business during the last decades has not only kept high the demand for herbal products, but it has also created new job opportunities for TCM, TTM and tourism practitioners. Besides, China is now the biggest source-market of visitors to Thailand, so the cooperation between traditional medicine and healthcare tourism is beneficial to development of traditional medicine and upgrading healthcare tourism in China and Thailand.

Conflict of interest

The author has no conflicts of interest in regard to this paper.

Acknowledgment

The author is grateful to Dr. FengYao Wang of Phuket Bangkok Hospital and Dr. Steven Andrew Martin, Dr. Raymond J. Ritchie of Prince of Songkla University for their kindly help and encouragement.

References

1. World Health Organization. Available at: <http://www.who.int/mediacentre/factsheets/factsheets/fs134/en/>.
2. Jin NL. *A hundred questions on the Chinese culture*. Beijing: Beijing Language and Culture University Press; 1999.
3. Department for the Development of Thai Traditional and Alternative Medicine, Ministry of Public Health of Thailand. Report of 2005 the Integration of Thai Traditional Medicine in the National Health Care System.
4. Gao PF, Kenji W. Introduction of the world health organization project of the international classification of traditional medicine. *J Chin Integr Med*. 2011;9(11):1161–1164.
5. Committee for Terms in TCM. Available at: <http://www.cttcm.com.cn/zyyjbmc01.htm>.
6. Luo XW. *Introductory study of Huangdi Neijing*. Beijing: China Press of Traditional Chinese Medicine; 2009.
7. Department for the development of Thai traditional and alternative medicine, ministry of public health of Thailand. Available at <http://www.wipo.int/wipolex/en/details.jsp?id=5790>.

8. Promjit S, Wongsatit C, Rungravi T, Terry C. *Medical plants in Thailand*. Bangkok. Amarin Printing and Publishing Public Co., Ltd.; 1996.
9. Chris, R., Mamta, C., DeAnna, C., Available at <http://maytermthailand.org/2011/05/01/traditional-thai-medicine/>.
10. Vichai, C., Anchalee, C., The role of Thai traditional medicine in health promotion. 6th Global Conference on Health Promotion 2005.
11. Cheng Y. Health living and the philosophy of Chinese medicine. *Confucius Inst.* 2011;4:42–47.
12. Wang, J.H., Available at <http://www.traditionalstudies.org/historical-timeline-of-chinese-medicine>.
13. Liu ZY. (2003 September): thinking after learning Chinese medicine ordinance of PRC. *Hunan Guiding J TCM.* 2003;2003(9):1–2.