



中国科技期刊卓越行动计划高起点新刊

CHINESE 中医药文化 (英文) MEDICINE AND CULTURE

Volume 4 • Issue 1 • March 2021

www.cmaconweb.org



Zhong Xi Yi Xue Bao(《中西医学报》
The International Medical Journal)
Collected in Shanghai Museum of Traditional Chinese Medicine

Call For Papers

Research on Traditional Chinese Medicine from the Perspective of Sinology

From the arrival of Matteo Ricci in Macau in 1582 to the death of Qian Deming in 1793, the European missionaries who came to China created the first peak of cultural exchanges between China and western countries. At the same time, they also contributed to the emergence of Sinology research conducted by missionaries in China. During the period when missionaries studied Sinology, the Jesuits in China did a lot of translation and research works related to Chinese culture. These works promoted the spread of Chinese culture in Europe, and deepened European understanding of Chinese culture including traditional Chinese medicine (TCM) culture, which contributed to the birth of professional research on Sinology in Europe, and to the cultural exchanges and mutual learning between China and western countries. In the process of the development of Sinology, TCM, as an outstanding representative of traditional Chinese culture, plays an important role. It is not only an exploration of the essence of Chinese cultural history, but also a way of adhering to cultural self-confidence to research the cultural exchange and overseas dissemination of TCM on a worldwide basis from the perspective of Sinology.

Topics of interest include, but are not limited to the following:

- 1. The westward spread of TCM and the origin of Sinology
- 2. The influence of Michal Boym's TCM research on the development of Sinology in Europe
- 3. Jean Pierre Abel Remusat's research on TCM and the emergence of professional research on Sinology
- 4. The impression of missionaries in China about Chinese medicine
- 5. Research on overseas sinologists and experts in TCM
- 6. Anthropology and the westward spread of TCM
- 7. History of overseas translation and international communication of TCM
- 8. The Belt and Road Initiative and international cooperation of traditional medicine
- 9. The Belt and Road Initiative and research on TCM translation
- 10. Research on the cross-cultural communication of intangible cultural heritage of TCM

Submission Guidelines

Submitted papers should not be previously published in or be under consideration for publication in any other journal (or conference proceedings).

Submissions must include title, abstract (150-200 words), keywords (5-8 keywords), author(s) and affiliation(s) with e-mail addresses

Submission site: https://mc03.manuscriptcentral.com/cmac

Contact

Please contact me when you have any queries or require further information.

Tel: 021-5132-2295

E-mail: tcmoverseas@126.com

Editorial Office of *Chinese Medicine and Culture*Institute of Science, Technology and Humanities
Shanghai University of Traditional Chinese Medicine
March 2021

Chinese Medicine and Culture

《中医药文化(英文)》

Established in 2018

Quarterly

Editor-in-Chief

Jianguang Xu (CHN)

Academic Directors

Shiyun Yan (CHN)

Yishan Duan (CHN)

Executive Editors

Haiying Li (CHN)

Yemeng Chen (USA)

Editors

Erliang Wang (CHN)

Lin Su (CHN)

Editorial Board

Alain Touwaide(USA)

Angelika Messner (GER)

Bridie Andrews (USA)

Charles Savona Ventura (MT)

Chouping Han (CHN)

Diamantis Koukouvinos (SWE)

Donald Harper (USA)

Emanuela Appetiti(USA)

En Zhou (CHN)

Gang Lu (CHN)

Guangbo Ge (CHN)

Guolin Shen (CHN)

Haidong Wang (AUS)

Haihe Tian (USA)

Hailei Zhao (CHN)

Hongxi Xu (CHN)

Honore France (CAN) Hugh Shapiro (USA) Ioannis Solos (GRC) Jean Claude Dubois (FRA) Jie Li (CHN) Joseph A Buhagiar (MT) Jun Hu (USA) Justin Mahar (USA) Kai Wu (CHN) Li Li (UK) Li Shang (CHN) Linyun Zheng (CHN)

Marceau Chenault (FRA) Michael Stanley-Baker (SGP) Natasha Lee (CAN)

> Reginaldo Filho (BRA) Ron Zaidman (USA)

> > Tina Wu (CAN)

Sandra Hill (UK)

Sasa Balaneskovic (SRB) Sean Bradley (USA)

Sheikh Faruque Elahee (BGD)

Shelly Ochs (USA)

Shujian Zhang (CHN)

Ved Baruah (IND)

Weikang Fu (CHN)

Wei Zhang (CHN)

Xi Gao (CHN)

Xinzhong Yu (CHN)

Xun Lin (CHN)

Yan Yang (SIN)

Yemeng Chen (USA)

Yongming Li (USA)

Yuandong Shen (CHN)

Zhongzhen Zhao (CHN)

Review Editors

Hong Foong Wong (MYS)

Jiankai Wang (CHN)

Guoqi Shi (CHN)

Chinese Medicine and Culture

《中医药文化 (英文)》

General Information

Chinese Medicine and Culture is an Open-Access quarterly journal published by Wolters Kluwer. The journal covers traditional Chinese medicine, social humanities, ancient literature, historical events, multi-disciplinary research, etc. It aims to rapidly report the new progress, new insights, and research achievements on Chinese medicine, and those related to these fields. It provides a high-level platform for academic communication of researchers dedicated in Chinese medicine. Medical physicians, researchers, teachers, and students specializing in this field are the primary audience for the journal. Researchers who work in related science fields are also our target readers. Indexed by Ex Libris-Primo Central (Israel), EBSCO Publishing's Electronic Databases (US), Baidu Scholar (China), CNKI (China), Wanfang Data (China), Google Scholar (US), Hinari (Switzerland), Infotrieve (France), Netherlands ISSN Center (France), ProQuest (US), and TdNet (Israel).

COPYRIGHT

©2018 by Editorial Office of *Chinese Medicine and Culture*. Articles published by this Open-Access journal are distributed under the terms of the Creative Commons Attribution Non-commercial License, which permits usage, distribution, and reproduction in any medium, provided the original articles is properly cited and the usage is non commercial and in compliance with the license.

SPECIAL STATEMENT

All articles published in the journal reflect the views of the author and not of the journal or its editorial board or the publisher. Publication does not constitute endorsement by the journal. Neither the journal nor its publishers nor anyone else involved in creating, producing or delivering the journal or the materials contained therein, assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information provided in the journal, nor shall they be liable for any direct, indirect, incidental, special, consequential or punitive damages arising out of the use of the journal. The journal, nor publishers, nor any other party involved in the preparation of

material contained in the journal represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources.

JOURNAL TITLE

Chinese Medicine and Culture

SPONSOR

Shanghai University of Traditional Chinese Medicine

China Association of Chinese Medicine

PUBLISHER

Wolters Kluwer India Private Limited

FREQUENCY

Quarterly

LAUNCH DATE

July 03, 2018

CURRENT PUBLICATION DATE

March 31, 2021

EDITORIAL OFFICE

Address: Shanghai University of Traditional Chinese Medicine, 1200 Cailun Road, Pudong New Area, Shanghai 201203, China

Zip Code: 201203

Telephone: 86-21-51322295 E-mail: tcmoverseas@126.com

Official Website: http://www.cmaconweb.org

Manuscript Submission Website: http://mc03.manuscriptcentral.com/cmac

Edited by: Editorial Office of *Chinese Medicine and Culture* Printer: Business Book Printing Shop Shanghai Printing CO., LTD



















Chinese Medicine and Culture

Volume 4 | Issue 1 | March 2021

Contents

RESEARCH ARTICLES	
Premodern Intercultural Communication by Reanalyzing the Phrase "Da Yi Jing Cheng (大医精诚)" Jing Su	•••••
A Survey of the History and Applications of American Ginseng (西洋参) Nisma Lena Bahaji Azami, Qun Yu, Yun-Hui Shen	12
"Focusing on Treating the Spirit (神)" in Acupuncture and Moxibustion: The Dialectical Unity of Regulating the Body and the Spirit	
Bing-Li Chen, Qian Fan, Li-Xin Guan, Wen-Guang Hou, Yue-Lai Chen	19
SPECIAL SECTION ON EPIDEMIC DISEASES	
Taking Proactive Action: Introduction to the Prevention and Treatment of COVID-19 with Traditional Chinese Medicine Jian-Nan Qiu, Hong-Yong Deng	2.
Theory of Fighting the Epidemic with Traditional Chinese Medicine Qigong (气功) Therapy Dan Zhao	3
REVIEW ARTICLES	
The Introduction and Localisation of Traditional Chinese Medicine in Malaysia Shin-Wei Lee, Hai-Ying Li	3
Application of Traditional Chinese Medicine in Treating COVID-19 Meng-Cheng Liu, Hong-Yun Gao	4
NEWS AND VIEWS	
Talking about Hot Flashes (潮热) Anna Bogachko Holmblad	5
The Importance of Adopting Leadership Concepts in Communicating Medicinal Culture of	
Chinese Medicine in the Western World Tina Wu	5
Content Features of Medical Journal Zhong Xi Yi Xue Bao(《中西医学报》The International Medical Journa	1)
during the Republican Period and Its Impact on Medicine Hai-Feng Cao, Li-Li Wang	6

Chinese Medicine and Culture on Web

http://www.journalonweb.com/CMAC

The *Chinese Medicine and Culture* now accepts articles on web. It is easy, convenient and fast. Check following steps:

1 Registration

- Register from http://www.journalonweb.com/CMAC as a new author (Signup as author)
- Two-step self-explanatory process

New article submission

- Read instructions on the journal website or download the same from manuscript management site
- Prepare your files (Article file, First page file and Images, Copyright form & Other forms, if any)
- · Login as an author
- · Click on 'Submit new article' under 'Submissions'
- Follow the steps (guidelines provided while submitting the article)
- On successful submission you will receive an acknowledgement quoting the manuscript ID

3 Tracking the progress

- Login as an author
- The report on the main page gives status of the articles and its due date to move to next phase
- More details can be obtained by clicking on the ManuscriptID
- Comments sent by the editor and reviewer will be available from these pages

4 Submitting a revised article

- · Login as an author
- · On the main page click on 'Articles for Revision'
- Click on the link "Click here to revise your article" against the required manuscript ID
- Follow the steps (guidelines provided while revising the article)
- Include the reviewers' comments along with the point to point clarifications at the beginning of the revised article file.
- Do not include authors' name in the article file.
- Upload the revised article file against New Article File -Browse, choose your file and then click "Upload" OR Click "Finish"
- On completion of revision process you will be able to check the latest file uploaded from Article Cycle (In Review Articles-> Click on manuscript id -> Latest file will have a number with 'R', for example XXXX_100_15R3.docx)

Facilities

- Submission of new articles with images
- · Submission of revised articles
- Checking of proofs
- Track the progress of article until published

Advantages

- · Any-time, any-where access
- Faster review
- Cost saving on postage
- No need for hard-copy submission
- Ability to track the progress
- Ease of contacting the journal

Requirements for usage

- Computer and internet connection
- Web-browser (Latest versions IE, Chrome, Safari, FireFox, Opera)
- Cookies and javascript to be enabled in web-browser

Online submission checklist

- First Page File (rtf/doc/docx file) with title page, covering letter, acknowledgement, etc.
- Article File (rtf/doc/docx file) text of the article, beginning from Title, Abstract till References (including tables). File size limit 4 MB. Do not include images in this file.
- Images (jpg/jpeg/png/gif/tif/tiff): Submit good quality colour images. Each image should be less than 10 MB) in size
- Upload copyright form in .doc / .docx / .pdf / .jpg / .png / .gif format, duly signed by all authors, during the time mentioned in the instructions.

Help

- Check Frequently Asked Questions (FAQs) on the website
- In case of any difficulty contact the editor

Premodern Intercultural Communication by Reanalyzing the Phrase "Da Yi Jing Cheng (大医精诚)"

Jing Su

Center for Writing and Communication, School of Humanities, Tsinghua University, Beijing 100084, China

Abstract

Culture is fluid, not static. When one culture meets and blends with another, Western academic circles tend to use cultural hybridity to express a mixed state of culture. By reanalyzing the classic texts in relation to "Da Yi Jing Cheng (大医精诚)", tracing the evolution of traditional medical ethics in history, and combining the knowledge of cultural hybridity, this paper suggests that cultural hybridity is not applicable to the discussion on the phenomenon of intercultural communication in the era before the rise of national states and modernity. A new discourse is needed to express intercultural integration, one that breaks through Western values and embodies the characteristics of Asian civilization. Civilization exchange and mutual learning can become the ideal model of intercultural communication under the background of the "Belt and Road Initiative".

Keywords: Cultural hybridity, Da Yi Jing Cheng (大医精诚), intercultural communication, medical ethics, mutual learning between different civilizations

Introduction

Cultural hybridity is a main master trope in literary theory, literary criticism, and cultural studies and has gradually become the progressive research on cultural globalization and cross-cultural communication. Throughout the cultural hybridity researches in Chinese and foreign academic circles, the objective has been discussed the topic in the context of postcolonial theory. For example, Chen discussed the connotation evolution of "hybridity" in the American colonial literature from biological meaning to cultural meaning.^[1] Xue dissected the process of identity reconstruction from cultural collision to cultural mixture in Chinese-American literary works. [2] Hirschmann focused on the national and cultural reconstruction of Mauritius after gaining independence from colonial ruling.[3] Suárez analyzed the exotic atmosphere, cultural mixture, and the complex tonality of subordinate identity in Macau literature.[4]

With the prevalence of media globalization in recent years, cultural hybridity has been applied to the description of

Submitted: 20-Dec-2020 Accepted: 02-Feb-2021 Published: 31-Mar-2021

Access this article online Quick Response Code:

Website: www.cmaconweb.org

DOI:

10.4103/CMAC.CMAC 7 21

cross-cultural communication phenomena and the discussion of mass media products. For example, Zhang and Shao understood the Sino-American co-production film represented by "Kung Fu Panda" as a cultural mixture to some extent. [5] Traditional, modern, global, and local cultures have been balanced and integrated in top-grossing films. Meanwhile, Wang believed that the ideological trend of consumerism in Chinese TV dramas is the reconstruction of esthetic taste in the name of cultural mixture; the warmth of commercialism replaces the real cultural diversity and is packaged as an advanced cultural orientation.^[6]

In other countries, Prof. Kraidy from the University of Pennsylvania is the forerunner of introducing cultural hybridity from postcolonial theory to the study of journalism and communication. Using Derrida's deconstruction as a weapon of criticism, he revealed the legalization and naturalization process of cultural hybridity in mass media as represented by the Washington Post's "American Pop Culture Overseas"

Corresponding author: Dr. Jing Su,

Center for Writing and Communication, School of Humanities, Tsinghua

University, Beijing 100084, China. E-mail: sujingxw@tsinghua.edu.cn ORCID: 0000-0002-5363-0677

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

series. It has influenced the popularizations of American pop culture in developing countries and the rapid expansion of the United States' cultural industry globally.^[7] In South Korea, Lee discussed the popularity of fans culture nurtured by South Korean dramas on global new media platforms, which he believed had led to pop cosmopolitans.^[8] In South America, Ribke worried about the spread of Neo-orientalism and media imperialism in Brazil in the name of negotiated hybridity.^[9] However, whether it is the framework of postcolonialism or the perspective of media globalization, the discussion on cultural hybridity never seems to involve the phenomenon of cross-cultural communication before the rise of nation states.

From an ontological perspective, cultural hybridity is a mixture of identities and genres. [10,11] Hence, was there a phenomenon of "cultural mixture" in premodern times? If it existed, what were the similarities and differences between the "cultural hybridity" at that time and the "cultural hybridity" we discuss today? In other words, apart from cultural hybridity, are there any other concepts that can describe a phenomenon of cross-cultural mixing? Combining with the knowledge of cultural-hybrid concept, the objective of this study is to answer the above questions through the reanalysis of the "Da Yi Jing Cheng" text in the context of China's evolving traditional medical ethics history.

Qian Jin Fang (《千金方》Prescriptions Worth a Thousand Gold Pieces) and Its "Da Yi Jing Cheng" as a Cross-cultural Text

Sun Simiao (孙思邈 581-682) (Note 1), a great master of traditional Chinese medicine during the Sui and Tang dynasties, was born in Xi'an Huayuan (now Sun Jiayuan, Yaoxian County, Shaanxi Province). The Chinese people worship him in the temples of the King of Medicine. Sun Simiao firmly believed in the medical humanitarian spirit of "human life is of the utmost importance." He extensively collected many medical classics, deleted the complicated and redundant parts, treasured the simple and plain contents, and compiled into the Bei Ji Qian Jin Yao Fang (《备急千金要方》Essential Prescriptions Worth A Thousand Gold Pieces for Emergencies) (652) for urgent use. [12] 30 years later, he compiled *Qian Jin Yi Fang* (《千金翼方》 Supplement to the Essential Prescriptions Worth A Thousand Gold Pieces) to resolve the deficiency of the Essential Prescriptions Worth A Thousand Gold Pieces for Emergencies. Later, scholars considered these two books (collectively known as Prescriptions Worth A Thousand Gold Pieces) as the "Encyclopedia of Clinical Medicine." [13]

Sun Simiao and his *Prescriptions Worth A Thousand Gold Pieces* not only served as a link between past and future in the history of Chinese medicine but also played a vital role in the cross-cultural communication between Chinese and foreign medicine. Medical history experts such as

Li Jingwei, Ma Boying, and Chen Ming all had special discussions on the subject. Generally speaking, Sun Simiao was proficient at annotating the classics, interpreting the history of classics, and understanding hundred schools of thoughts. He was a savant who combined Taoism, Buddhism, and Confucianism together, "akin to today's doctor who can "converge traditional Chinese medicine and Western medicine." [14] Sun Simiao's combination of Taoist, Buddhist, and Confucianist knowledge reflected the context of the times. After the introduction of Buddhism in the Eastern Han Dynasty, Buddhism's cultural influence and infiltration reached peak in the Sui and Tang dynasties; simultaneously, it demonstrated its efforts of using medicine as a carrier to integrate the ideals of Confucianism, Buddhism, and Taoism for the purpose of preserving people's health and longevity.

The Prescriptions Worth A Thousand Gold Pieces also contains declarations of medical ethics, "Da Yi Jing Cheng (大医精诚)" and "Da Yi Xi Ye (大医习业)", which are comparable to the Chinese version of the Hippocratic Oath of Medicine. Among them, "Da Yi Jing Cheng" [Figure 1] has been integrated into Chinese medical practice for thousands of years and is regarded as a prominent representation of traditional Chinese medicine culture and, to a certain extent, even Chinese culture. In recent years, mainstream media such as Guangming Daily has appealed that the spirit of 'Da Yi Jing Cheng" needs to be carried forward for healthy China.^[15] However, a "Da Yi Jing Cheng", which "embodies the core of Chinese culture and enriches the connotation of Chinese culture,"[16] is also the result of cross-cultural communication, deeply imprinted with the influence of ancient Indian philosophy and Buddhist thought.

The cross-cultural communication of traditional medicine reflected by the *Prescriptions Worth A Thousand Gold Pieces* is mainly in two aspects: First, the influence of Jīvaka, representative of Ayurveda medicine, and second, the



Figure 1: "Da Yi Jing Cheng" in the Museum of Medical History of the Chinese Academy of Traditional Chinese Medicine

influence of Buddhist medicine. Jīvaka was a famous doctor who lived in the same period as the founder of Buddhism, Sakyamuni in the ancient India. In view that Buddhism had not yet been fully formed, let alone infiltrated into Ayurveda medicine; Jīvaka can be regarded as the representative of the early Ayurveda medicine. His medical point of view, such as that stated in Volume 9 of the "Da Fang Deng Da Ji Jing (《大方等大集经》Great Collection Scripture" or Mahāvaipulya mahāsamghāta sutra in Sanskrit), "All in the world is nothing but medicine" [17] has great influences on the extensive use of medicinal substances and the emphasis of food as medicine in Ayurveda medicine.

There are generally three kinds of views about Jivakan influences in the academic circles: the first school, represented by Prof. Chen Ming, holds that Jīvaka refers to a particular person named Jivaka Kumarabhrata in Sanskrit; in Chinese literature, the terms Oi Po (耆婆), Oi Yu (耆域), Zhi Yu (只域), Zhi Yu (祇域), and Shi Fu Jia (侍缚迦) all refer to this person.[17] Another school, represented by Prof. Ma Boying, believes that Jīvaka is the general name of monk doctors from India.[14] Those two views have a great influence. There is also a saying that Qi Bo (岐伯), who answers questions with the Yellow Emperor in the Huang Di Nei Jing (《黄帝内经》Huangdi's Internal Classic) is a transliteration of Jīvaka.[18] There is still insufficient evidence and unclear trace of historical data about the last saying; hence, it has not been resonated by other scholars. If it is true, there will be a subversive reinterpretation of the history and cross-cultural exchange results between traditional Chinese medicine and traditional Indian medicine. After all, Huangdi's Internal Classic is the foundational work of traditional Chinese medicine. Therefore, this study adopted that Jīvaka was a real person, a famous ancient Indian doctor who came to China to practice medicine in the early days. Due to his popularity, he was indeed a pioneer in the cross-cultural traditional medicine practice between China and India.

The so-called prescriptions of Jīvaka are quoted in many places in the Prescriptions Worth A Thousand Gold Pieces. In Volume 12 "Gallbladder Organs (胆腑)" of the Essential Prescriptions Worth A Thousand Gold Pieces for Emergencies, there is a chapter called "Pill Powder for Ten Thousands of Diseases (万病丸散)." Among its 13 poems, "Pill Powder for Ten Thousands of Diseases from Jīvaka (耆婆万病丸)" is the most representative one. This prescription contains 31 kinds of drugs, such as Niu Huang (牛黄 Calculus Bovis), She Xiang (麝香 Moschus), Xi Niu Jiao (犀牛角 Rhinoceros Horn), Zhu Sha (朱砂 Cinnabaris), Xiong Huang (雄黄 Realgar), Shi Xi Yi (石蜥蜴 Eumeces chinensis), etc., of which most are animal drugs. This prescription can cure "seven kinds of addiction, five kinds of epilepsy, ten kinds of leprosy, seven kinds of flying corpses, twelve kinds of demagogic poisons, five kinds of yellow diseases, twelve kinds of malaria, ten

kinds of water diseases, eight kinds of strong winds, and twelve kinds of skirt arthralgia," hence the name "Pill Powder for Ten Thousands of Diseases."

Ma Boying commented that the "Pill Powder for Ten Thousands of Diseases from Jīvaka (耆婆万病丸)" sounds like sticking plasters sold on the street, but Chen Ming considered this view to be biased. He quoted Sun Simiao's self-evaluation and found that Sun Simiao had also experienced the process from "impersonal" through "effective drug for emergency" to "knowing its divine effect" that "no wisdom can understand."[19] From this statement, we can infer that Ayurveda medicine represented by Jīvaka was a medical trend at that time, which had aroused curiosity in great traditional Chinese medicine practitioners such as Sun Simiao. More importantly, neither doctors nor patients had the understanding of evidence-based medicine before the rise of modern medicine. Physical verification such as "Shennong's Tasting of Herbs (神农尝百草)" was the primary way of recognizing and accepting new medical knowledge. In addition, traditional Chinese medicine is pragmatistic orientation.^[20] It continues to absorb and incorporate medical experience and skills from foreign culture into its own system, as it believes that treating diseases and saving lives should not be delayed. This is one of the remarkable characteristics of traditional medicine's cross-cultural communication in ancient times.

There are more medical prescriptions named after Jīvaka in the Supplement to the Essential Prescriptions Worth A Thousand Gold Pieces. For example, the Jīvaka decoction (耆婆汤) listed in Volume 12, "Dietary Therapy for the Aged (养老食疗第四)," is often prepared with ghee and honey. This is very different from the medical customs of the Central Plains but is a typical custom in Ayurveda medicine. Another example in Volume 22, "Fei Lian (飞炼)," which consisted of the prescription "Jīvaka cures all diseases in the internal organs and tonifies the old for many years (耆婆大士治人 五脏六腑内万病及补益长年不老方)." This prescription is special. "If take it continuously, one will live a 1000 years, become immortal and transcend."[21] This statement is a typical Taoist saying. Zi Shi Ying (紫石英 Fluoritum) is also a common medicine used in Taoist alchemy, but Gan Cao (甘草 Radix Glycyrrhizae), Feng Mi (蜂蜜 Honey), and other drugs with ancient Indian characteristics have been added. This prescription can be described as a combination of traditional Chinese medicine and traditional Indian medicine. Therefore, the prescription is not the creation of Jīvaka, but the naming of the prescription demonstrated the appeal of Jīvaka in the medical profession and among the people at that time.

The Supplement to the Essential Prescriptions Worth A Thousand Gold Pieces also has a dedicated chapter on "treating evil diseases by Jīvaka (耆婆治恶病)" with 11 prescriptions.

Most of the Jīvaka prescription have actually strong Taoist characteristics, for example "the fairy Mr. Huang Ling treats all leprosy with naive Baiwei pills (仙人黄灵先生用天真 白畏丸治一切癫病方)" and "Jiu Xiaojun treats ten kinds of indescribable people with all kinds of disease that cannot be cured (九霄君治十种大癞不可名状者服之病无不愈 方). Only E Wei Lei Wan Powder (阿魏雷丸)is from the ancient Indian medicine. In particular, Sun Simiao described this prescription, "Hu said, 'For Kāmalā disease, the doctor shows an arch hand, and there is no cure. This is called the right result."" "Arch hand (拱手)" is a Buddhist term. It is also mentioned in Volume 17 of the Da Ban Nie Pan Jing (《大般 涅槃经》 Mahaparinirvana Sutra), "such as Kāmalā disease, the doctor shows an arch hand." "Kāmalā disease" is also a Sanskrit term used to describe a malignant disease in ancient time. It is closely related to jaundice in modern understanding.

In addition to the inclusion of Jivakan prescriptions, the concept of Buddhist medicine had also deeply influenced Sun Simiao. Although Buddhist medicine and Ayurveda medicine are different, their basic concepts are similar. Ayurveda medicine originated from Brahmanism, whereas Buddhist medicine emphasized "precepts, meditation, and wisdom (戒、 定、慧)." Using Buddhism as the guiding ideology, Buddhist medicine focuses on consciousness, truth, and awareness. It advocates spiritual practice, homology of medicine and food and heavily incorporated essence of Ayurveda medicine. As early as the Eastern Han Dynasty, An Shigao (安世高) of the Parthian Empire and Zhi Facun (支法存) from the Tokhara introduced Buddhist medicine by means of translating the Buddhist sutras into territory of Han Dynasty at that time. However, for traditional Chinese medicine doctors, Tao Hongjing (陶弘景) was probably the pioneer to introduce Buddhist medicine to China. When he annotated (falsified, according to some scholars) Zhou Hou Jiu Zu Fang (《肘后 救卒方》Handbook of Prescriptions for Emergencies) written by his predecessor Ge Hong (葛洪), he added the Buddhist concept of 101 diseases and changed the original title into Bu Que Zhou Hou Bai Yi Fang(《补阙肘后百一方》Supplement to the Handbook of Prescriptions for 101 Emergencies). However, the content of the handbook did not state any theory of Buddhist medicine.

Sun Simiao was the first person to properly introduce the concept of Buddhist medicine into the system of traditional Chinese medicine. Been influenced by Ayurveda medicine, Buddhist medicine adopted and transformed its concept. The four major elements (earth, water, fire, and wind) and 101 (百一each element causes 101 diseases; thus, four elements cause 404 diseases) are its outstanding characteristics (Note 2). Sun Simiao attempted to integrate the four major elements in Buddhist medicine and the five elements in traditional Chinese medicine. In the fourth chapter, "The Diagnosis (诊候第四)"

of the Essential Prescriptions Worth A Thousand Gold Pieces for Emergencies, he tried to form a diagnostic theory that integrates both cultures:

The four elements, Earth, Water, Fire, and Wind, together constitute the balance of the human body. If the element of fire loses its balance, the whole body is steamed with heat. If the element of wind loses its balance, the whole body becomes stiff and the pores become blocked. If the element of water loses its balance, it will result in swelling of the body, chest fullness, and panting. If the element of earth loses its balance, then the person cannot lift the four limbs and become voiceless. If a body lives without the element of fire, then it becomes cold; without the element of wind, then the person becomes breathless; without the element of *water*, then the blood stops running; without the element of earth, then the body is broken into pieces. However, the quack doctors who do not understand the four elements' mechanisms do not pay attention to checking the patient's pulse either. When it comes to treating illness, these quack doctors only allow the five elements of the body to restrain one another. Such treatment is akin to adding oil to a flaming fire. It will result in negative consequences for the patient. Therefore, doctors cannot be too careful in handling the illness. Once the four elements achieve balance, then the spirit will be at peace. If one element loses its balance, then it will cause 101 illnesses, with the spirit losing its balance as well. If all four elements lose their balance, there will be a total of 404 illnesses that take place altogether. Thus, there is another saying that although there is a chance that 101 illnesses can be healed without treatment, it is better to treat these illnesses carefully so that the patient can fully recover. For 101 illnesses that are not easy to cure, the only occasion when no treatment is needed is when the patient dies from the illnesses.^[12]

The Supplement to the Essential Prescriptions Worth A Thousand Gold Pieces also has the characteristics of Buddhist medicine. In Volume 12, a prescription of taking sweet sedge (服菖蒲方) is recorded and translated by "Varmanmydy, the Tripitaka master of the Yituo temple in the Rajgir city of Magadha in India, who arrived with the Turkic ambassador from the 8th year of the Da Ye period of the Sui Dynasty to July 23, the 6th year of Wu De period of the Tang Dynasty for the Bhadanta master, the abbot of Jing Tu temple in Luo Zhou." [21]

Another example is the Agada prescription (阿迦陀圆方), which is the abbreviation of "Tathāgata (多陀阿迦陀)" in Sanskrit. Agada refers to Bhaisajyaraja Buddha (净眼如来), a bodhisattva that is depicted on the left of Shakyamuni Buddha. He distributes medicine to the people and delivers them from torment. Besides, the Brahmanism physical and breathing exercise, that is, yoga, was also compiled into the *Prescriptions Worth A Thousand Gold Pieces* by Sun Simiao, recorded as the

18 movements of "Indian massage" ("天竺国按摩"十八势) in Volume 27 of the *Essential Prescriptions Worth A Thousand Gold Pieces for Emergencies*.

Some of the prescriptions and skills originated from ancient India were recorded in the Prescriptions Worth A Thousand Gold Pieces and handed down. Typical examples such as the Pill Powder for Ten Thousands of Diseases from Jīvaka (耆婆万病丸) have since appeared in Wang Tao's Wai Tai Mi Yao (《外台秘要》Arcane Essentials from the Imperial Library) and Japan's Tanba Yasunori's Ishinpō (《医心方》 Formulary from the Heart of Medicine). Ma Boying believes that the famous prescription of traditional Chinese medicine "Niu Huang Qing Xin Pill (牛黄清心丸)" is inherited from the Pill Powder for Ten Thousands of Diseases from Jīvaka (耆婆万病丸).[14] Wu Jutong's Wen Bing Tiao Bian (《温病条 辨》 Systematized Identification of Warm Diseases) published in 1798 in the Oing Dynasty recorded this "Niu Huang Oing Xin Wan" prescription. Their composition is similar although the ingredients have been reduced to 17.[14] However, some cross-cultural prescriptions were gradually marginalized over the years, probably because their efficacy was no longer practical, but was also related to the dominant religious culture and its attached medical practice preferred by the ruling class.

However, "Da Yi Jing Cheng" which has been preserved for thousands of years and praised by generations is the crystallization and inheritance of cross-cultural communication between China and ancient India. "Da Yi Jing Cheng" is recorded in the second preface of the *Essential Prescriptions Worth A Thousand Gold Pieces for Emergencies*, after "Da Yi Xi Ye." It can be speculated from the position of "Da Yi Xi Ye" and "Da Yi Jing Cheng" in the book that Sun Simiao emphasized medical ethics over medical skills and pharmaceuticals, highlighting the virtues of the doctor, which had a profound impact on later generations.

The "Da Yi Xi Ye" preface is only about 200 words. Its objective is that medical practitioners must be well informed and well versed with the past medical works, such as "Su Wen (《素问》Plain Questions)," "Zhen Jiu Jia Yi Jing (《针灸甲乙经》A-B Classic of Acupuncture and Moxibustion)," "Huang Di Zhen Jing (《黄帝针经》Huangdi's Acupuncture Classics)," "Ming Tang Liu Zhu (《明堂流注》Annotation According to Acupuncture Models)," and "Ben Cao Yao Dui (《本草药对》The Herbal Pairs)." The theme focuses on the thoughts of numerous schools, especially Taoism. "If one can learn to master it, it will greatly benefit and prefect one's medical profession." [12] This extract text has an obvious undertone originated from the Confucian concept of knowledge, but because the "Da Yi Xi Ye" is relatively short, it is usually clustered under "Da Yi Jing Cheng."

The "Da Yi Jing Cheng" was written in no more than a

thousand words but manifested "the perfect integration of Confucianism, Taoism, and Buddhism."[14] For Taoism, Sun Simiao was already respected as the "immortal (真人)" who refused the appointment as well as a high post and salary offered by Emperor Taizong and Gaozong of Tang and lived in seclusion in Taibai, Zhongnan, Emei, and Wutai mountains to discuss the cultivation of good health and temperament. His actions distinctly demonstrate the Taoist characteristics of the sayings "standing aloof from the mundane affairs (出世)" and "letting things take their own course (无为)." Argument in the "Da Yi Jing Cheng" is constructed in the names of Zhang Zhan (张湛) [Note 3] and Lao Zi, reflecting Sun's Taoist natures. However, Taoism functions as the outer layer of this book only. The spiritual core of the book corresponds to Confucian and Buddhist thoughts, both of which are embodied in the text.

The Confucian thought of engaging in worldly affairs and emphasizing interpersonal relationship is also manifested in the "Da Yi Jing Cheng." This is totally different from the traditional Taoist doctors' philosophy which stresses on internal peace, as well as alchemists who incite people to become immortal via alchemy. The "Da Yi Jing Cheng" urged doctors to have a sense of compassion:

If there is a patient who comes for treatment, the doctors must not judge whether the patient is rich or poor, or whether his or her social status is high or low. No matter the patient beautiful or ugly, enemy or friend, compatriot or foreigner wise or foolish, the doctors must treat the patient without discrimination, as he/she treats with his/her closest kin.^[12]

Further, the statement that "the doctor must not be indecisive and overcautious or consider only his/her personal fortune and livelihood and thus do not treat the patient." [12] Also demonstrated the Confucian theory that people must love others. "One who undertakes medical profession must have a mastery over the origin of medicine and work hard; he/she must not believe easily on rumors and claim that the medical profession has been fully mastered;" "if a doctor happens to cure one illness and thus become arrogant, claiming himself/ herself to be unparalleled in the world, then he/she cannot be called as a doctor." [12] These sayings also represent the characteristics of modesty, search of ultimate truth, and active engagement in Confucianism.

What is more important is the introduction of Buddhist thought. It is very interesting that the saying, which bears the Buddhist overtone most, is written in the name of Taishang Laojun, who is a key figure in Taoism. It is deemed a deliberate intention of Sun Simiao Buddhist thought with Taoism due to the fact that rulers of the Tang Dynasty were in favor of Taoism and that it would be more convincing if the words were uttered from Taishang Laojun. This is also a cross-cultural strategy that aims at fitting its audience. The end of "Da Yi Jing Cheng" stated that:

According to Taishang Laojun, if one does good deeds publicly, he/she will be repaid by people who benefitted from it; however, if one does good deeds privately, then he/she will be repaid by the spirit. If one does wrongdoings publicly, he/she will naturally be revenged by people who suffer from it; however, if one does wrongdoings publicly, he/she will be revenged by the devil. When glimpsing into these two kinds of acts, is it not true that good deeds and wrongdoings will eventually be repaid either publicly or privately? Therefore, doctor must not only seek wealth with his medical skills; he/she has to make up his/her mind to save others in pain, so as to accumulate good deeds in the afterworld. When the doctor dies and goes to the underworld, he/she will be repaid by the good deeds that he/she has done. Moreover, doctor must not prescribe precious and expensive medicine that is hard to find for the patients of great wealth and high social position, so as to show off his/her medical skills. These actions do not comply with the principle of benevolence and loyalty proposed by Confucius. I aim to save life and help people; therefore, I discuss thoroughly the trivial details. Moreover, I hope people who take up medical profession will not feel ashamed of my vulgarity.[12]

The theory of Karma is influenced by Buddhism [Note 4], or to be more exact, originated from Ao Yi Shu (《奥义书》 Upanishad). It was the most characteristic philosophical concept in the South Asian subcontinent in Brahman times and has deeply influenced the whole ancient Indian philosophy.^[22] By applying the Karma theory, Sun warned doctors against using their medical skills as a way of accumulating wealth, as well as deciding to treat or not to treat based on patient's wealth. Instead, he advocated that doctors should have the original intention of easing patients' suffering, aim at saving others and treating them without discrimination. He also introduced the Confucian principle of loyalty and benevolence and Taoist thinking of living beings into medical profession, making a complete harmony of various cultures. Besides, the choices of words used in the "Da Yi Jing Cheng" such as "alleviating all people from pain," "killing other creatures to save the patient's life will only distance the patient from full recovery," and "doctors must not have even the slightest thought of displeasure," all display classic Buddhist thinking.

In summary, the *Prescriptions Worth A Thousand Gold Pieces* written by Sun Simiao, especially the "Da Yi Jing Cheng," is a typical embodiment of how cross-cultural spread happened between ancient traditional medicine. If the *Prescriptions Worth A Thousand Gold Pieces* is more of a prescription and skills exchange between China and India, then the "Da Yi Jing Cheng" has risen to the integration of ideologies. It gradually becomes the core of traditional Chinese medicine culture and is still one of the essential medical ethics with Chinese characteristics.

Cultural Hybridity or Mutual Learning among Civilizations: How to Understand Premodern Cross-Cultural Communication

Through the text analysis of Sun Simiao's *Prescriptions Worth A Thousand Gold Pieces*, it is clear that the "Da Yi Jing Cheng," which "embodies the core of Chinese culture and enriches the connotation of Chinese culture," is a cross-cultural product. It is also clear that the medical ethics contained in traditional Chinese medicine is the result of religious propagation and cultural blending, which changes in time with the dominant thought. Culture is fluid, not static.

Returning to the question raised at the beginning of this article, is the "Da Yi Jing Cheng" a cultural hybridity to some extent? If we take it literally, the "Da Yi Jing Cheng," which contains Confucianism, Buddhism, and Taoism, is obviously a hybrid or mixture, but it is not in line with the context of postcolonialism and has nothing to do with the globalization brought on by mass media communication. How should we understand and describe the premodern cross-cultural "hybridity"?

According to Prof. Kraidy's research, the earliest discussion on hybridity appeared in the 18th century, and its context was the colonial expansion of Britain, France, and even the United States. The initial worry came not from the colonized but from the colonists themselves, that is, they worried about the perceived contamination of the White European bloodlines. Thus, whether hybrid vigor theory or hybrid sterility theory, they are based on White Supremacist Theory. Therefore, Young pointed out that cultural hybridity is a symptomatic of the enlightenment's failure to come to terms with its racist underside; Chen also pointed out that biological hybridity is the predecessor of cultural hybridity.

With the rise of the decolonization movement in non-Western countries, intellectual elites tried utilizing cultural hybridity to establish an integrated national identity rather than just been recognized as an overseas state of a colonial country. In Latin America, "mestizaje" (Spanish, which contains the meaning of blood hybridity) has been gradually established as an ideology to win the recognition of Spanish colonial descendants and native population, as well as to unite the society, but its conceptual essence is still deeply racialized.^[24]

Since the 20th century, hybridity has gradually shifted to literary works and the description of cultural phenomena. Gilroy Paul's *The Black Atlantic: Modernity and Double-Consciousness* is the classic example. Bhabha Homi, the representative of postcolonialism theory, is the first person to introduce hybridity into postcolonial research. In his landmark book *Of Mimicry and Man*, Bhabha creatively understood the cultural hybridity of colonies as a kind of collusion; people's fascination with colonists' culture makes them imitate, integrate, and yet struggle.^[25]

After the rise of globalization, cultural hybridity is ushered in as a new discussion. Researchers focus on transcultural dynamics between traditional and modern, local and global, and the reconstruction of social order^[26-28] brought about by cultural hybridity. Alternatively, they would discuss how the formation of cultural hybridity has accelerated from the perspective of media and new media. No matter how it has been discussed, there are basically two orientations in the study of cultural hybridity: first, it adopts the orientation of description and ontology and holds that cultural hybridity is a phenomenon, a trend of globalization, and a communicative practice. The second orientation adopts a critical and political orientation that behind cultural hybridity is hegemony and inequality, is the extension of neoliberalism, and is the capitulation of noble culture. Kraidy called it corporate multiculturalism. ^[7]

At this point, we can confirm that cultural hybridity is an academic concept full of historical context. The rise of modernity is the premise that it can enter the academia and constitute as a research problem. Just as the critic Werbner stated, all cultures are always hybrid. The reason why cultural hybridity constitutes a problem is because the symbolic world and social order have been historically reconstructed. [29] The colonization of the West, the resistance of the non-Western countries, the imbalance cultural strength between the East and the West, and the unfair flow of global cultural communication are the reasons why cultural hybridity has always maintained its academic vitality. From biological hybridity to cultural hybridity, the discussion of hybridity also highlights the process of Western colonization from military conquest to cultural assimilation. Therefore, similar to the concept of cultural imperialism, there is a debate on optimism, criticism, naturalization, or deconstruction around the nature of cultural hybridity.

This study holds that cultural hybridity and cultural conflict can be understood as a pair of intertextuality under the dominant values of the West. The so-called cultural conflict or clash of civilizations is a classical theory put forward by Huntington in the postcolonial era. Huntington believes that cultural characteristics and differences are more difficult to change than politics and economy; they are also less easy to compromise and resolve, so cultural conflict becomes Western ideology's biggest crisis after the end of the Cold War. "In the former Soviet Union, the communist can turn into nationalist, so do the rich and the poor. However, a Russian cannot turn into an Estonian, an Azerbaijani, or an Armenian. The core issue of cultural conflicts lies in the question of "what are you?," which is predetermined and unchangeable." [30]

From this classic expression, it can be seen that the premise of Huntington's thinking is placed in the world after the emergence of the nation states and the rise of modernity. In premodern times, the rise and fall of nations and the change of identity are, in fact, a normal state, but no scholar has ever regarded it as a crisis. Therefore, the cultural hybridity and cultural conflict that we are discussing today are actually the embodiment of the typical dualism thinking mode from the West. Just like asking, are you going to be me or him? The West and the East have different cultures, either they move toward mixture or conflict. As mentioned earlier, hybridity is often a process in which cultural subjects with hegemonic status mix with cultural subjects without hegemonic status through the hard power of economy and politics. To apply Derrida's deconstruction theory, behind the clear statement of mixture lies its vague but ambitious meaning. From the perspective of discourse analysis,^[31] there is no difference between cultural conflict and cultural hybridity in epistemology.

Based on the abovementioned understanding of cultural hybridity, this study holds that there is a need to break away from the Western values and find a new discourse for cross-cultural blending that reflects the characteristics of the Asian civilization.

First, the concept of cultural hybridity does not apply to premodern cross-cultural communication and cultural integration. In premodern cross-cultural communication, cultural blending does not necessarily arise in the worry and discussion of identity crisis, whether for the culture that exports or the one that imports. Take Sun Simiao for an example; he delivered the Karma theory by means of Taishang Laojun's preaching, which became a historical classic and the oath of all Chinese medicine doctors. What is more, cultural blending is not a synchronic phenomenon of global communication by mass media. Like slow journalism, it has a longer process, which allows it to fulfill its slow, gradual, and dispersive permeation and influences both parties in the cross-cultural relationship. In fact, Anderson reveals that a national state is an imaginary community. It is because of this imaginary that the discussions of cultural identity, identity crisis, and cultural colonialism appear.[32] In other words, in the times when the imaginary community does not exist and the border of nation and state is flexible and fluid, how can there be such a thing as identity crisis?

Second, the concept of cultural hybridity does not match non-Western values and cultural orientation. Dualism is not a universal concept. China does not have such "either or relation," "self-other" Western thinking. Instead, inclusiveness, harmony in diversity, as well as respect and appreciation, for other cultures are the essence of China's traditional culture. As Prof. Kraidy rightly points out, the contemporary cultural hybridity is the company-oriented multiculturalism, beautifying the global expansion of commercialized culture as its hybridity with local culture.^[7] To put it simply, the various

cultures in the Chinese culture resemble a great bowl of mixed vegetables in harmony, but cultural hybridity has within itself a force of blending and squeezing, wishing to turn the mixed vegetables into blended juice. Although the same integration happens, the consequence of hybridity transforms the original culture beyond recognition into a totally new pattern.

At last, the concept of "cultural exchange and mutual learning" proposed by Xi Jinping concerning the Belt and Road Initiative is more suitable than that of cultural hybridity to describe premodern, non-Western cross-cultural communication and cultural integration. On March 27, 2014, President Xi delivered a speech that bears historical meaning and is renowned globally as the "new concept of civilization" and "the manifesto of civilization" in the Headquarter of the UNESCO. He put forward systematically the concept of "cultural exchange and mutual learning." In the same year of the international symposium commemorating the 2565th birthday of Confucius, President Xi delivered another speech on how to properly approach different countries, different cultures, and how to properly handle traditional culture and contemporary culture. He further explained the historic origin and practical values of the concept of "cultural exchange and mutual learning." Therefore, the concept of "cultural exchange and mutual learning" became key words of President Xi when outlining the community building with shared future for mankind in the Belt and Road Initiative. Under the new historic conditions, this concept was to emphasize first, "cultures are various, which is the reason for such mutual learning in human civilization;" second, "cultures are equal, which lays the premise of mutual learning;" and third, "cultures are all embracing, which provides the driving force of mutual learning. The exchange of culture and mutual learning is the significant force that pushes forward civilization of humankind and global peace."[33] In other words, the exchange of culture and mutual learning presents the traditional Chinese wisdom and is also endowed with new explanation and leadership in the background of globalization and the rise of "others."

The character "鉴 (Jian)" has a long history in China's traditional culture. It originally refers to the utensil that holds water. Later, it was used as a mirror because it was made from bronze. Therefore, its meaning has extended to include observing and learning. For example, the saying of "learning from history, we can know the rules of rising and falling; the studying from people, we can know the patterns of gain and loss," are deeply rooted in the critical thinking of traditional Chinese culture. In 2015, a great breakthrough has been achieved in the archaeological discovery of the Haihun Marquis Mausoleum; the earliest Confucius image was found embedded in a screen buried in the west room of the main coffin^[34] [Figure 2]. This twofold screen not only has the painting of Confucius but also has a bronze mirror carved with "Yi Jing Fu (《衣镜赋》

Prose on Clothes and Mirror)." Therefore, it can be seen that as early as the Qin and Han Dynasty, China has developed the culture of "referencing to mirror (镜鉴)." The mirror can tidy ourselves, whereas the painting of Confucius can help in providing reference to adjust our behavior. It is not difficult to tell that the culture of "Jian" is actually a kind of philosophy of knowledge, which has the critical thinking of introspection and self-examination. That is to say, we refer to other things so that we can better disseminate our culture as well as develop ourselves and improve our thinking and action.

Therefore, the exchange of culture and mutual learning includes two processes of communication: one been the communication and interaction between subjects and the other been the subject's conversation with oneself and his/her production based on the former process. To some extent, the latter will be valued more in that cross-cultural communication does not aim at adaptation or occupation but at how to improve and adjust our own cultural practice. Take China's traditional culture as an example. It develops itself during the process of continuous learning and gradually becomes perfect.

The author compared the difference between two cross-cultural communication models. It can be seen from the model of cultural hybridity [Figure 3] that first, hybridity is the product of modernity instead of ancient times. Second, when cultural practice A encounters cultural practice B, cultural hybridity always ends with one consuming the other. Cultural practice A is transformed according to cultural practice B's viewpoints of the world, values, and civilization. Therefore, it appears to have cultural practice B's characteristics but mingled with some superficial elements of its own culture. Compared with the model of cultural exchange and mutual learning [Figure 4], first, it does not happen only in modern times but continues throughout the cultural communications of humankind. In fact, the effect of cross-cultural communication is that a culture not only understands and acknowledges the traditional medicine



Figure 2: Confucius Mirror discovered in Haihun Marquis Mausoleum

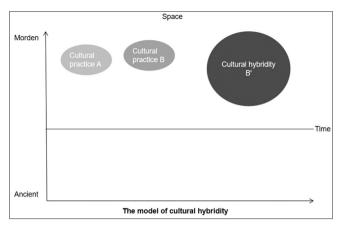


Figure 3: The model of cultural hybridity

of another culture, but integrates part of the content into its own system of knowledge and practice, and gradually develops or transforms the original culture. Thus, the developed or transformed culture can also be regarded as the product of cultural exchange and mutual learning. Second, cultural exchange and mutual learning do not aim at consuming the other party. When cultural practice A encounters cultural practice B, they may, in some degree, blend together, or they may produce a new cultural practice C that perpetually develops after mutual learning. Therefore, the effect of "mutual learning" lies in self-improvement as time proceeds.

Thus, cultural exchange and mutual learning not only position the subjects of cross-cultural communication as equal instead of being the colonist and the colonized, or the hegemonic and the inferior, but also stress the purpose of communication, that is, to learn and develop oneself, rather than hybridize, divert or worse, eliminate. To some extent, cultural exchange and mutual learning emphasize the process rather than the result. In other words, the exchange and mutual learning are not an expression based on dualism, but a representation of the saying that "every beauty is unique and worthy of our appreciation, and if this appreciation can be applied universally, then the world will be in complete harmony." This is a typical expression of multiculturalism in accordance with the spirit of China's traditional culture as well as the dialectics of the evolution of human civilization.

In this model, the outcome of cross-cultural traditional medicine communication is mutual integration, where there is a bit of you in me and a bit of me in you, and it then passes on from generation to generation. For example, "Da Yi Jing Cheng" intricately integrated the thinking of Buddhism, Taoism, and Confucianism together. Likewise, the *Prescriptions Worth A Thousand Gold Pieces* absorbed Jivakan prescriptions and Buddhist medical skills with the purpose of improving people's health. More examples such as the skill of golden edge to treat eye disease gradually assimilated to

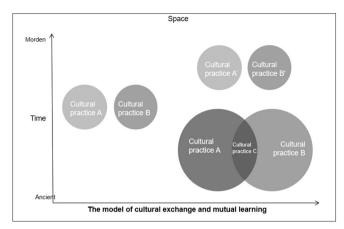


Figure 4: The model of cultural exchange and mutual learning

be part of traditional Chinese medicine and the integration of Ayurveda and Tibetan medicine in traditional Chinese medicine pulse diagnostic theory. However, chances are that the communication happened but did not last and vanished in history. For example, the practice of using honey to process a mummy prevailed in the Yuan Dynasty, but it eventually perished into history. Sometimes, there may no intersection between the two cultures even after encountering one another, and they would run parallel. Each culture would develop individually without conflict, and there is no need to argue which theory or medicine belongs to whom.

It is worth noting that cross-cultural communication that takes the model of cultural exchange and mutual learning does not mean expansion. For example, as the most powerful empire of the time, the Tang Dynasty, where Sun Simiao lived, was politically stable, economically strong and possessed military power. However, it was very interested in learning the culture, philosophy, and religion of India, a disintegrated country, which had a backward economy and could easily be defeated by Wang Xuance, an ambassador of Tang with borrowed troops. There were scholars continuously setting out for India to study its culture. This is totally different from the contemporary West that extends its culture with military power.

Based on the aforesaid analysis, cultural exchange and mutual learning can be considered as an ideal model in the study of cross-cultural communication. However, it is worth mentioning that, according to the explanation proposed by Prof. Zhao Tingyang in his reprinted book, *the Tianxia System*, "to conclude the Tianxia system from China's ancient philosophy does not mean that it sticks to the past and rejects the present, nor does it mean that the political system in ancient China is perfect. The truth is, monarchs that could really realize the concept of Tianxia are just a few only."^[37] The purpose for Prof. Zhao to put forward such system is to establish a national view or a global view that transcends nation states so that an ideal model can therefore be built to guide the

reality. Likewise, the theory of the public sphere proposed by Habermas, though originated from early capitalist Europe, does not aim at archeological discovery. Instead, it is an expression of discontent against the feudalization of the current public sphere as well as the loss of individual subjectivity. It is the intellectual's means of expressing their concern and providing remedy for the sick reality.

Using the same principle, the author has tried to extract the ideal model of cultural exchange and mutual learning from the premodern research without lingering on the past. As a matter of fact, all traditional medicines are the coexistence of the dross and the essence, the masses and nonmasses, but it is not the emphasis of this paper. The author has used traditional medicine as a starting point to discuss the future prospect of a cross-cultural communication under the guidance of non-Western thinking. By rediscovering and researching into the cross-cultural communication practice throughout the history of Eastern civilization, the author has provided a new theoretical paradigm and a new way of thinking. In this way, we can expect future cross-cultural communication along the civilizations of Belt and Road Initiative to shake off the yoke of political influence and economic powers. Let civilization to return to its subjectivity. Let the intersubjectivity between civilizations to be recovered. Let us march toward the belief of "one world with different kinds of voices and glories."

As a conclusion, academic concept brought up in modern times such as cultural hybridity cannot be taken for granted and thought that it is suitable to describe the communication of entire history of humankind. Nor does it necessarily have explanation of the future. In this paper, using the "Da Yi Jing Cheng" as an example, the author has critically considered premodern cross-cultural communication and endeavored to expound and enlighten on this subject.

Notes

Note 1: The year of Sun Simiao's birth and death is controversial in academic circles. This paper quotes the year in Prof. Li Jingwei's *Zhong Yi Shi* (《中医史》*History of Traditional Chinese Medicine*) (Hainan Publishing House, 2015 Edition).

Note 2: During the three Kingdoms period, Zhu Luyan and Zhiyue, two Hu monks (胡僧) of the Eastern Wu Dynasty, first introduced the four major elements and 101 theory in the translation of the *Fo Shuo Fo Yi Jiing* (《佛说佛医经》 *Buddhist Medical Sutra*). If you look at the names, you can see that they are people from ancient India and Dayuezhi (大月支) country, respectively.

Note 3: Zhang Zhan, scholar of the East Jin Dynasty, Author of Zhuang Zi Zhu (《庄子注》 Annotation on Zhuang Zi), Lie Zi Zhu (《列子注》 The Lie Zi Note), and Yang Sheng Yao Ji

(《养生要集》*The Major Collection of Health Preserving*). He is the representative figure of Taoism.

Note 4: Most scholars hold that the theory of *Karma* is influenced by Buddhism and that Sun is the representative of the hybrid integration of Confucianism, Taoism, and Buddhism. However, according to "Retribution Concept" and Chinese Traditional Medical Ethics, written by Zhang Sunbiao and Lin Nan, it is stated that there was a similar type of "retribution concept" in traditional Chinese culture. For example, The Book of Changes stated that "if one's good deeds do not accumulate, he/she will not make his lifelong fame; rather, if one's wrongdoing does not accumulate, he/she will not be led to death." The retribution concept in traditional Chinese culture does not have the meaning of afterlife and frequently refers to only this life. It is more like a concept persuading people to do good deeds, which is different from Karma. Therefore, the author also admits that there is no discussion that good deeds and wrongdoings will eventually be repaid either publicly or privately after examining Lao Zi's Tao Te Ching. Here, Sun gives his viewpoint on the pretext of Lao Zi's viewpoints.

Funding

This study was financed by a grant from The National Social Science Fund of China (No. 18ZDA322).

Conflicts of interest

None.

References

- Chen L. The origin of the theory of hybridity characteristics in native American literature studies – The conceptual evolution from biological hybridity to cultural hybridity. J Xi'an Foreign Stud Univ 2009;3:58-62.
- Xue L. From cultural collision, cultural identity to cultural hybridity – The reconstruction of cultural identity in Chinese-American literature. J Qiqihar Univ (Philos Soc Sci Ed)2010;6:112-3.
- Hirschmann D. Beyond hybridity, culture and ethnicity in the Mauritius revenue authority. J Afr Aff 2011;110:417-37.
- Suárez J. Exoticism, cultural hybridity, and subaltern identity in three Macanese novels. J Am Portuguese Stud Assoc 2015;13:199-212.
- Zhang H, Shao LW. Kongfu Panda 3 the cultural hybridization in Sino-US co-produced film. J Jiangsu Normal Univ (Philos Soc Sci Ed) 2016;4:54-9.
- Wang HT. Cultural hybridity and aesthetic creation The consumerist ideology of Chinese TV dramas. J Contemp Film 2010;7:113-6.
- Kraidy MM. Hybridity in cultural globalization. J Commun Theory 2002;12:316-39.
- Lee H. A "Real" fantasy: Hybridity, Korean Drama, and pop cosmopolitan. J Media Cult Soc 2017;40:365-80.
- Ribke N. Media imperialism beyond the anglo-saxonaxis, or negotiated hybridity? Neo-orientalist telenovelas and transnational business in Brazilian television. J Consum Cult 2015;17:562-78.
- Kolar Pano D. Video and the diasporic imagination of selfhood: A case study of Croatians in Australia. J Cult Studi 1996;10:288-314.
- Tufte T. How do telenovelas serve to articulate hybrid cultures in contemporary Brazil. J Nordicom Rev 1995;2:29.
- Sun SM, Wei QL, Guo RH. Essential Prescriptions Worth A Thousand Gold Pieces for Emergencies. Beijing: Traditional Chinese Medicine Ancient Books Publishing House; 2009. p. 1-5.
- Li JW. History of Traditional Chinese Medicine. Haikou: Hainan Publishing House; 2015. p. 148.

- Ma BY. History of Chinese Medical Culture. Shanghai: Shanghai People's Publishing House; 1994. p. 360, 371, 373.
- Cao HX, Xia JN. Healthy China Needs to Carry Forward the Spirit of 'Da Yi Jing Cheng'. Guangming Daily, 2017-09-23, p10.
- Information Office of the State Council: White Paper on Traditional Chinese Medicine. Available from: http://www.xinhuanet.com/ politics/2016-12/06/c_1120064848.htm. [Last accessed on 2016 Dec 06].
- Chen M. Medieval Medicine and Foreign Culture. Beijing: Peking University Press; 2013. p. 346.
- Zhang M, Yu JY. History of Cultural Exchange between China and Foreign Countries. Changehun: Jilin Literature and History Publishing House; 2006. p. 25.
- Chen M. "Medical prescription from Jivaka" in thousand golden prescriptions. J Beijing Inst Technol (Soc Sci Ed) 2003;2:91-6.
- Hillier S, Jewell T. Traditional medicine in China: Pragmatism and Holism. J Holist Med 2009;2:15-26.
- Sun SM. Supplement to the Essential Prescriptions Worth a Thousand Gold. Available from: https://gj.zdic.net/archive.php?aid=15876. [Last accessed on 2021 Feb 08].
- Duo Jie Zha Xi. On indiadiaearly philosophic thinking of Vedic culture: Upanishad as an example. J Qinghai Soc Sci 2017;2:100-4.
- Brantlinger P, Young RJ. Colonial Desire: Hybridity in Theory, Culture and Race. London: Routledge; 1995. p. 212.
- Mignolo WD. Local Histories/Global Designs: Coloniality, Subaltern Knowledges, and Border Thinking. America: Princeton University Press; 2000. p. 1-22.
- Bhabba H. The Location of Culture. New York: Routledge; 1994. p. 1-100.
- Appadurai A. Modernity at Large: Cultural Dimensions of Globalization. Minneapolis: University of Minnesota Press; 1996. p. 2-10.
- 27. García Canclini N. Hybrid Cultures: Strategies for Getting in and out of

- the Modernity Mexico: Grijalbo; 1989. p. 1-20.
- 28. Hannerz U. The world in creolisation. Africa: Journal of the International African Institute 1987;57:546-59.
- 29. Werbner P. Debating Cultural Hybridity: Multi-Cultural Identities and the Politics of Anti-Racism. UK: Zed Books; 1997. p. 15.
- Huntington S. The Clash of Civilization. Zhou Q, translator. Beijing: Xinhua Publishing House: 2013. p. 8.
- Derrida J. Of Grammatology. G. C. Spivak, Translator. Baltimore: Johns Hopkins University Press; 1976. p. 162.
- Anderson B. Imagined Communities: Reflections on the Origin and Spread of Nationalism. Trans. Wu Ruiren. Shanghai: Shanghai People Peoplenghai Peoples; 2016.
- Ren JH, Li Y, Jinping X. The Cultural Exchange and Mutual Learning is the Important Driving-Force that Pushes Civilization of Mankind and Global Peace. Available from: http://cpc.people.com.cn/n1/2019/0501/ c64094-31061112.html. [Lastaccessed on 2020 Sep 14].
- 34. Yang J, En ZJ, Xu CQ. A study on Confucius' birth in reference to the biographical paintings on the mirror from Haihun marquis mausoleum. J Jiangxi Prov Inst Cult Relics Archaeol Coll Arts Sci 2018;4:104-15.
- Yao FL. Reminting history: The formation of the idea of "History as Mirror" in the Pre-Qin Period. J Historiography 2010;2:1-7.
- 36. Fei XT. Absent dialogue Human research in China Personal experience. J Dushu 1990;10:5-13.
- Zhao TY. The Tianxia System: An Introduction to the Philosophy of World Institutions. Beijing: Renmin University Press; 2017.

How to cite this article: Su J. Premodern intercultural communication by reanalyzing the phrase "Da yi jing cheng (大医精诚)". Chin Med Cult 2021:4:1-11

A Survey of the History and Applications of American Ginseng (西洋参)

Nisma Lena Bahaji Azami, Qun Yu, Yun-Hui Shen

Department of Pharmacology, School of Pharmacy, Shanghai University of Traditional Chinese Medicine, Shanghai 201203, China

Abstract

American ginseng (Panax Quinquefolium L), also known as Xi Yang Shen (西洋参 Radix Panacis Quinquefolii), is indigenous to the United States and Canada. Its discovery in the 1700s paved the way for international trade, which boosted the economy of the New World and helped build commercial ties between the US and China. Due to its therapeutic effects, the demand for American ginseng grew steadily, eventually causing the volume of wild ginseng to dwindle. As a result, laws and regulations were introduced requiring farmers and exporters to engage in harvesting practices that would preserve wild American ginseng. Nowadays, wild American ginseng is considered an endangered and protected species. This article discusses the history, properties, and applications of American ginseng to optimize its use and protection.

Keywords: Ginseng; Jean-François Lafitau; Pierre Jartoux; Ren Shen (人参 Radix Ginseng); the Qing dynasty; Xi Yang Shen (西洋参 Radix Panacis Quinquefolii)

Introduction

In 1708, Kangxi, the Qing Emperor of China, commissioned Pierre Jartoux and other French missionaries to draw maps of the Chinese Empire. This led Jartoux and his companions to travel extensively to survey the land. As they neared China's border with the Kingdom of Korea, a local greeted them with a basket brimming with wild ginseng. Jartoux ate the raw ginseng root and instantly felt changes in his body. As he continued his travels, he was given the opportunity to learn different ways of consuming the herb, such as chewing ginseng leaves and drinking ginseng root decoction. He recorded this along with the benefits of consuming ginseng in a letter, which was later published in London in the scientific journal of Philosophical Transactions of the Royal Society. Jartoux's paper led to the discovery of American ginseng in North America and promoted trade with China. In fact, as China's own wild ginseng was becoming rare due to overharvesting, the demand for American ginseng soared, creating more international trade opportunities. For the first time, American ginseng was added to traditional

Chinese medicine (TCM) Materia Medica books, where it was named Xi Yang Shen (西洋参 Radix Panacis Ouinquefolii). Doctors began to use American ginseng to supplement qi and nourish yin in patients with qi deficiency and deficiency heat, and sometimes as substitute for Asian ginseng when the patient's syndrome differentiation and constitution allowed it. Currently, American ginseng is still used in Chinese medicine as well as in skin care products for its anti-inflammatory and antiaging properties. It is also sold as a dietary supplement to promote overall well-being, boost energy, and improve cognitive abilities.

History of American Ginseng

Discovery

In 1711, a French Jesuit missionary Pierre Jartoux, who was residing in Beijing, China, wrote a letter to the Procurator

Submitted: 14-Sep-2020 Accepted: 27-Oct-2020 Published: 31-Mar-2021

Quick Response Code:

Access this article online

Website: www.cmaconweb.org

10.4103/CMAC.CMAC 41 20

General of the Missions of India and China to inform him about Asian ginseng. In his letter, he described the extraordinary

Corresponding author: Associate Prof. Yun-Hui Shen, School of Pharmacy, Shanghai University of Traditional Chinese Medicine, Shanghai 201203, China.

E-mail: bravesyh@163.com ORCID: 0000-0002-7464-6344

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

effects, local uses, and ways of preparing this medicinal plant. Jartoux also documented his own experience ingesting Asian ginseng and the effect it had on him, stating that it helped him overcome fatigue, made him feel more vigorous, and increased his appetite. He observed that chewing the fibrous parts of ginseng leaves had almost the same therapeutic effect as ingesting decoctions of ginseng roots. Impressively enough, he even speculated that based on geographic similarities, ginseng could be found in other parts of the world such as Canada. His letter was published in London 2 years later, in the journal of Philosophical Transactions of the Royal Society.^[1]

After reading the published letter, another French Jesuit missionary, Joseph-François Lafitau, who happened to be staving in Canada with the Iroquois tribes showed Jartoux's drawing of Asian ginseng to the Mohawks and asked them if they had seen the plant [Figure 1]. Lafitau spent 3 months searching in the forests for ginseng until he found it and showed it to a Mohawk woman who helped him identify it. He learned from her that the herb was ordinary and was commonly used by the natives. Lafitau stated that he then told the Mohawk woman about the value and use of ginseng in China and that at the time of their conversation, the woman had been suffering from intermittent fever for months. After listening to him, she took a few ginseng roots and crushed them with two stones, soaked the crushed roots in cold water, and drank the water. The next day she was cured. After this incident, the Mohawk woman suffered from fever on two different occasions, at which time she repeated the treatment and was cured right away.[2] Her method of preparation to treat intermittent fever could possibly yield better therapeutic effects than slicing ginger roots and boiling them to make a decoction. Further scientific research is, however, warranted to verify this assumption.

In terms of American ginseng's local uses, the Iroquois explained to Lafitau that it was used as a purgative in infants



Figure 1: Asian ginseng drawn by Pierre Jartoux

and was not strong enough to be used as a purgative in adults; hence, they called American ginseng "medicine for children". American ginseng was also used to stimulate the appetite and in combination with other herbs, to treat dysentery.^[2]

As Lafitau learned that American ginseng could treat intermittent fever and could be used as a mild purgative, he sent the herb to a patient in France. The patient had been suffering from stomachache, intermittent fever, and insomnia for almost two years. Their condition was indeed alleviated after taking the roots for seven days. Furthermore, Lafitau tested American ginseng on himself and said that it cured his rheumatism. He also found that some people suffering from rheumatism, asthma, or chronic fever saw their condition improved after taking American ginseng whereas others did not see any improvements.^[2]

In his opinion, American ginseng was more suitable for chronic fever than for acute fever and was more suitable for weak and old people than for people with what he called "vigorous temperament" or strong constitution. Interestingly, this could correspond to patients with qi deficiency and deficiency heat rather than excessive yang or hyperactivity of yang. It is worth mentioning that at the time of Lafitau, many European doctors doubted the efficacy of Asian and American ginseng. Lafitau himself wrote that he remained skeptical about the panacea effect of ginseng, and that he was not convinced by Jartoux's account regarding the extraordinary effects of ginseng, even though both he and Jartoux had tried it on themselves. [2]

Another point worth mentioning is that Lafitau explained that while ginseng was known in China as Ren Shen (人参 Radix Ginseng), which meant a man's thigh or leg, the Iroquois called it Garent-oguen. Garent meant the lower limbs of a man whereas ogen meant two separate things. It should be noted here that Lafitau's translation of Ren Shen (人参 Radix Ginseng) was not completely correct, as Ren means man or person, whereas the character "参" can be pronounced can or shen and had different meanings. Can could mean to join, participate in something, or refer to. Shen can be used in a surname and is also the name of the three stars mansion in the Chinese constellation system. When added in Ren Shen, shen roughly refers to "having good properties." This character can also be seen in other TCM herbs such Dan Shen (丹参Radix Salviae Miltiorrhizae), Dang Shen (党参 Radix Codonopsis), and Nan Sha Shen (南沙参Radix Adenophorae).

After his return to France in 1718, Lafitau published a pamphlet narrating his discovery and describing the root and fruit of American ginseng to the Duke of Orleans. He also wrote that Asian ginseng was located in what was known at that time of the Qing dynasty as Chinese Tartary, between the 39th and 47th parallel north and a longitude between 10° and 20° counting

from the Beijing meridian, on mountain slopes, and in thick forests, away from the sun. Based on this, he speculated that Flemish immigrants in New York could make a fortune if the ginseng roots were to be found there. Finally, Lafitau attempted to name American ginseng L'Aureliane du Canada, *Aureliena Canadensis* [Figure 2].^[2] This name, however, was not adopted by botanists. Instead American ginseng was named *Panax quinquefolius*.

Because Europeans lacked the information and experience the Chinese and native Americans had regarding the uses and benefits of ginseng, they praised the herb differently. This engendered a massive race to uproot as much wild American ginseng as possible and trade it with China. Had Europe and North America valued American ginseng the same way China did, one could only speculate that such trade would not have taken place, as the domestic demand for American ginseng would have exceeded the supply, leaving no room for export.

US-China trade

In 1776, the Continental Congress sent Benjamin Franklin to France to seek alliance and support from the French government as colonies in the New World were seeking independence from the British Empire. A treaty was signed 2 years later, and the French joined their American counterparts in the fight against the British army. After the victory of the US and the signing of the peace treaty with Britain in 1783 (to mark the end of the War of American Revolution), the US had to pay its debt to France and other countries, as well as become financially independent. One way to achieve these goals was to engage in trade. These conditions combined with the discovery of American ginseng on US soil precluded the US-China trade.

The first US ship to trade with China was *The Empress of China*, which left the harbor of New York for Canton (Guangzhou) in 1784. She was loaded with Spanish silver dollars, as well as 30 tons of wild Ginseng from Western Pennsylvania and Virginia. Robert Johnston, the ship's surgeon, had been assigned the task of procuring the 30 tons of wild ginseng,

which he did over a period of 3 months, traveling to different mountains in the two aforementioned states.

The ship's captain was John Green, who, with his crew, sailed for 180 days before reaching Canton. Upon arrival, they discovered that many merchants from Canada were at the port to also trade ginseng roots. As the supply exceeded the demand, the price of ginseng went from \$2,000/133 pounds (or 60.33 kg) to \$200–300. Traders, therefore, earned less than expected. On her way back to America, *The Empress of China* transported black tea, silk, porcelain, and nankeen and still made a net profit from the voyage. [3]

The trade in wild ginseng with China continued for years, creating the first richest generation of Americans, which included Thomas H. Perkins and John Jacob Astor,^[4] but at the same time, it brought wild American ginseng to the brink of extinction. As the output of wild ginseng declined, people begin to cultivate it.

General Properties of American Ginseng

Traditional Chinese medicine properties and indications

American ginseng's value stems from its therapeutic benefits and properties. In TCM, the root is characterized as sweet, slightly bitter, and cool. It enters the lung, heart, and kidney channels. In addition, it can tonify Qi, nourish yin, and generate fluids, and is therefore more suitable for deficiency heat pattern. American ginseng is often prescribed for patients suffering from yin deficiency with chronic fatigue, thirst, and weakness, and it is given in the aftermath of chronic or febrile diseases to boost qi and replenish body fluids. Patients with lung yin deficiency causing lung fire and symptoms such as chronic wheezing, dry cough, and in some cases expectoration of blood-tinged sputum can use American ginseng.^[5]

Pharmacological properties and indications

Several studies have shown the effects of American ginseng on the central nervous system, cardiovascular system, and immune system, among others. Similar to Asian ginseng, namely Ren

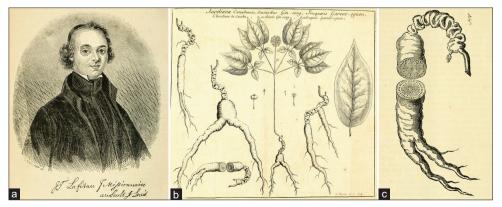


Figure 2: (a) Joseph-François Lafitau's portrait (b and c) drawings of American ginseng roots, as shown in his pamphlet

Shen (人参 *Radix Ginseng*), American ginseng is a cardiotonic, [6] neuroprotective, [7] antioxidant, [8] and anti-inflammatory [9] herb. In addition, due to its ability to boost energy and increase stamina, studies have focused on investigating its effect on cancer-related fatigue in patients undergoing chemotherapy. Results have shown that it can relieve chronic fatigue and help patients tolerate cancer treatment better. [10] The main active compounds in American ginseng belong to the ginsenoside class. The exhaustive list of molecules in American ginseng can be retrieved from the TCM systems pharmacology database at https://tcmspw.com/tcmsp.php.

Side effects

American ginseng is generally safe; however, overuse of this herb may cause side effects such as insomnia, mania, high blood pressure, vomiting, diarrhea, vaginal bleeding, and breast pain. Patients using other drugs such as blood thinners or immunosuppressants should consult their physicians before taking ginseng to avoid side effects from drug interactions.^[11] In TCM, American ginseng is contraindicated for patients with cold-dampness obstructing the middle jiao and patients with fire depression syndrome (火郁证).^[5]

American Ginseng In Classic Traditional Chinese Medicine Literature

The properties of American ginseng were first recorded by Wang Ang (汪昂) in his book *Ben Cao Bei Yao* (《本草备要》 *Essentials of Materia Medica*), which was published in 1694, during the Qing dynasty (1644–1912) [Figure 3]. Wang described American ginseng root as a cool bitter and sweet herb, with antipyretic properties. The herb can also tonify the lung and reduce internal heat. [12] The *Essentials of Materia Medica*, comprised of eight volumes, is mostly based on knowledge obtained from the *Shen Nong Ben Cao Jing* (《神农本草经》 *Shennong's Classic of Materia Medica*) and



Figure 3: Table of contents and preface

Li Shizhen's Ben Cao Gang Mu (《本草纲目》 Compendium of Materia Medica).

In the Ben Cao Cong Xing (《本草从新》 New Revised Materia Medica) written by Wu Yiluo (吴仪洛) in 1757, American ginseng and Zhu Zi Shen (珠子参 Panax Japonicus) have the same contraindications. Zhu Zi Shen (珠子参 Panax Japonicus), also called Zhu Shen (珠参), is a sweet, bitter, and slightly cold herb used to nourish lung yin, resolve stasis, and stop bleeding. In addition, the book confirms that American ginseng can supplement the lungs, reduce fire, and nourish body fluids. [13] The New Revised Materia Medica is comprised of 18 volumes and contains 720 medicines.

In the Ben Cao Gang Mu Shi Yi (《本草纲目拾遗》 Supplement to Compendium of Materia Medica) [Figure 4], Zhao Xuemin (赵学敏) described American ginseng root as yin tonifying and suitable for lethargic patients with deficiency heat. In addition, it can be used to treat blood in stool due to constipation, blood stasis, or toxic heat. For this, American ginseng root can be steamed and eaten with glutinous rice. Zhao even advised steaming the root a dozen times with rice or mixing it with Long Yan Rou (龙眼肉 Arillus Longan) before taking it. He cautioned readers not to use metal utensils in preparing and/or cooking American ginseng and not to stir-fry the herb with fire, as it can lose its medicinal properties. In addition, American ginseng root and Li Lu (藜芦 Veratrum Nigrum L) should not be taken together.[14] Li Lu (藜芦 Veratrum Nigrum L) is a cold, bitter, and extremely toxic herb with emetic and phlegm transforming properties. It is traditionally incompatible with Ren Shen (人参 Radix Ginseng) and Dang Shen (党参 Radix Codonopsis), among other herbs. The Supplement to Compendium of Materia Medica is considered a major classic in TCM as it added 726 new herbs and corrected a few errors that were present in the Compendium of Materia Medica.



Figure 4: The first page of Ben Cao Gan Mu Shi Yi (《本草纲目拾遗》 Supplement to Compendium of Materia Medica)

In Zhang Xichun's (张锡纯) Yi Xue Zhong Zhong Can Xi Lu (《医学衷中参西录》Integrating Chinese and Western Medicine), American ginseng root was described as a blood and Qi-tonifying herb. Zhang also noted to avoid adding Ren Shen (人参 Radix Ginseng) to Bai Hu Decoction (白虎汤) if the patient had a weak constitution. Instead Dang Shen (党参 Radix Codonopsis) should be added because Dang Shen (党参 Radix Codonopsis) has a stronger action and the ability to help Shi Gao (石膏 Gypsum Fibrosum) drive evil away. [15] Zhang divided his book into eight volumes and was known for advocating the reconciliation and combination of Chinese medicine and Western medicine to achieve the highest level of medical knowledge.

In the Zheng Ding Wei Yao Tiao Bian (《增订伪药条辨》 Revised and Expanded Catalogued Differentiation of Fake Medicine), compiled by Cao Bingzhang (曹炳章) in 1928 (Republic of China), it is indicated that if American ginseng root is given by mistake to deficiency cold patients, they will experience diarrhea as a side effect. [16] Revised and Expanded Catalogued Differentiation of Fake Medicine contains 110 medicines and adds content to the Wei Yao Tiao Bian (《伪药条辨》 Catalogued Differentiation of Fake Medicines), previously published by Zheng Fanyang in 1901 (Qing dynasty).

Finally, in the Ben Cao Yao Zheng (《本草药征》Materia Medica) by Zhou Zhenxiang (周祯祥) (2018), American ginseng root is reported to penetrate the heart, lung, and kidney meridians. It is indicated for cough, asthma, dry mouth, dry throat, thirst caused by internal heat, and blood-tinged phlegm. It is also used in febrile diseases, in which the patient suffers from excessive sweating, lethargy, dyspnea, cough, asthma, thirst, internal heat, and blood-tinged phlegm. In stomach and spleen deficiency cold, it should be used with caution. [17]

American Ginseng versus Asian Ginseng

The *Herbal Medicine* states that, in general American Ginseng root should be used in summer months while Asian Ginseng root should be used in the winter due to the difference of the properties between these two herbs. Asian ginseng root is warm and tonifying. It supplements the blood, calms the mind, and enhances intelligence. It is also suitable for treating heart restlessness due to qi and blood deficiency. American ginseng on the other hand has a cool nature and can nourish yin and clear internal heat. It is therefore more suitable for qi and yin deficiency pattern with internal heat.^[17]

Asian ginseng was first recorded in the *Shennong's Classic* of *Materia Medica*. In this book, Asian ginseng is mentioned as growing on mountains and in valleys. Its actions include sharpening intelligence, brightening the eyes, treating fright

and palpitation, calming the mind, and opening the heart orifices. [18] Asian ginseng is known to be sweet, slightly bitter, and warm. It enters the lung and spleen meridians and can tonify qi and revive patients from collapse. For patients with spleen and stomach deficiency, Li Shizhen (李时珍) prescribed Si Jun Zi Tang, which contains Asian ginseng, in the *Compendium of Materia Medica*. [19] In this formula, Asian ginseng acts as the monarch herb.

Current Commercial Uses of American Ginseng

North America

Currently, in the US, a few different methods are used to grow ginseng for export, which are wild-stimulated, wood-grown, and field-grown methods. According to the Internal Affairs Department of the US Fish and Wildlife Service, both wild ginseng and wild-stimulated ginseng are exported as wild ginseng, whereas wood-grown and field-grown ginseng are exported as artificially propagated ginseng. Both wood-grown and field-grown methods use pesticides and fertilizers.^[20]

Wild American ginseng is considered an endangered and protected species. Harvesting it is prohibited in many federal-owned lands such as national parks and forests. However, wild American ginseng and wild-simulated ginseng can be harvested at designated times of the year in 19 states including New York, Pennsylvania, West Virginia, and Wisconsin. In addition, to legally export wild ginseng or wild-stimulated ginseng, the plant must be at least 5 years old or have at least 3 leaves. [21] On the other hand, artificially grown American ginseng has no export restrictions and can be harvested anytime. Finally, to export any type of American ginseng, interested individuals and entities must apply for a permit from the US Fish and Wildlife Service bureau, in the US Department of the Interior, and pay a processing fee.^[21] Despite all these regulations being put in place, wild American ginseng poachers are quite common and are often caught in national parks and on other federal lands. Illegally harvesting wild ginseng is punishable by law. The punishment entails a fine and/or a prison sentence for up to 6 months.

The laws in Canada regarding wild American ginseng are stricter than those in the US. For example, no wild American ginseng can be exported or traded or even harvested anywhere including federal lands. [22] Any individual in possession of wild American ginseng will be fined up to C\$250,000 and sentenced up to 1 year in prison. [23] However, cultivated American ginseng can be traded and exported, but exporters must first apply for a Canadian Convention on International Trade in Endangered Species of Wild Fauna and Flora export

permit.^[22] Nevertheless, harvesting or selling cultivated American ginseng is prohibited and illegal in the province of Ontario. Farmers who want to harvest cultivated American ginseng in the region need to obtain a license from the Ontario Ginseng Growers Association and can only cultivate ginseng in designated areas. These farmers must not use any part of wild American ginseng to grow cultivated ginseng and they must use artificial shading to grow cultivated American ginseng.^[22]

In general, American ginseng can be found in temperate forests from Quebec to Oklahoma and Georgia. Currently, the state of Wisconsin is the largest producer of American ginseng in the United States, whereas the Ontario Ginseng Growers Association, Canada is considered the world's largest producer.^[24] Most American ginseng destined for export is shipped to Hong Kong.^[25] As previously mentioned, many laws have been put in place to preserve the wild population of ginseng and to use sustainable harvesting methods. In the US, American ginseng and ginseng in general is not as popular as in Asian countries such as China and Korea. In fact, many people do not know about the history of this herb and the role it played in shaping the US economy over the past two centuries.

Our general impression is that the target population consuming ginseng remains limited to people seeking to boost their energy levels or improve their cognitive functions. In fact, athletes desiring to enhance their physical performance; patients seeking to alleviate disease-induced fatigue; students striving to improve their memory abilities; and consumers determined to use natural products that promote longevity and wellbeing will very likely consume ginseng supplements at some point of their life. Furthermore, the public understanding of different types of ginsengs (e.g. American, Chinese, Korean, and Siberian ginseng) as well as the difference in their pharmacological properties, uses, and benefits is also limited.

The majority of consumers will get American ginseng in the form of capsules and energy drinks, which include ginseng root extract, in addition to drops (tincture), tea bags, and sliced dried roots. One of the major companies selling American ginseng in the US is Prince of Peace, which was founded by Kenneth Yeung between 1983 and 1985 in San Francisco and which currently has two branch offices overseas, in Tianjin and Hong Kong. According to the company's website, Yeung was the first one to introduce American ginseng in teabag form to the market.^[25]

When it comes to external use, American ginseng is included in some shampoos, soaps, as well as cosmetic products such as face moisturizers and lipsticks. The latter, however, are not widely distributed throughout the country and remain a niche product. However, products made with Asian ginseng such as face masks and cleansers can be found easily. Cosmetic products containing American ginseng or Asian ginseng are typically advertised as antiaging and rejuvenating.

China

Most imported American ginseng is used in TCM formulas and supplements. Another portion is used in cosmetic products. It is advertised as an antiaging herb that can also promote longevity. American ginseng is also grown in China, notably in Dongbei, Beijing, Xi'an, and Jiangxi. [26]

Conclusion

Overall, the discovery of American ginseng shaped early international trade between North America and China. In addition, it promoted the consumption of American ginseng due to the herb's properties and health benefits. With the development of sustainable growing methods, American ginseng has great potential to be part of a more globalized market, with more countries benefiting from its medicinal and commercial uses.

Funding

This study was financed by grants from the project of Shanghai University of Traditional Chinese Medicine (No. 2019GJ170), International Cooperation Department, National Administration of Traditional Chinese Medicine (No. GZYYGJ2020003).

Conflicts of interest

None.

References

- Jartoux P. The description of a tartarian plant, calld gin-seng; with an account of its virtues. In: A letter from Father Jartoux, to the Procurator General of the Missions of India and China. Taken from the tenth volume of letters of the Missionary Jesuits, printed in Paris in octavo. Vol. 28. London: Philosophical Transactions of the Royal Society of London; 1713. p. 237-47. Available from: https://royalsocietypublishing.org/doi/pdf/10.1098/rstl. 1713.0025. [Last accessed on 2020 Jul 23].
- Lafitau JA. Memoir presented to his royal highness Mgr. The Duke of Orleans,Regent of France: Concerning the precious plant of tartary ginseng discovered in America by Father Joseph-François Lafitau, of the company of Jesus. missionary of the Iroquois of Sault St. Louis; 1858.
 Available from: https://archive.org/details/mmoireprsent00lafi/page/ n11/mode/2up. [Last accessed on 2020 Jul 23].
- Smith PC. Empress of China. Museum; 1984. Available from: https://archive.org/details/empressofchina00smit/page/3/mode/2up?q=ginseng. [Last accessed on 2020 Jul 23].
- Youngman A. The fortune of john Jacob Astor. J Political Economy 1908;16:345-68.
- Bensky D, Clavey S, Stöger E. Chinese Herbal Medicine Materia Medica. Seatle, WA: Eastland Press; 2004. p. 823.
- Moey M, Gan XT, Huang CX, Rajapurohitam V, Martínez-Abundis E, Lui EM, et al. Ginseng reverses established cardiomyocyte hypertrophy and postmyocardial infarction-induced hypertrophy and heart failure. Circ Heart Fail 2012;5:504-14.
- Szczuka D, Nowak A, Zakłos-Szyda M, Kochan E, Szymańska G, Motyl I, et al. American ginseng (Panax quinquefolium L.) as a source of bioactive phytochemicals with pro-health properties. Nutrients 2019;11:1041.
- Kitts DD, Wijewickreme AN, Hu C. Antioxidant properties of a North American ginseng extract. Mol Cell Biochem. 2000;203:1-10. doi:10.1023/a:1007078414639.
- 9. Jin Y, Kotakadi VS, Ying L, Hofseth AB, Cui X, Wood PA, et al.

 American ginseng suppresses inflammation and DNA damage

- associated with mouse colitis. Carcinogenesis 2008;29:2351-9.
- Barton DL, Liu H, Dakhil SR, Linquist B, Sloan JA, Nichols CR, et al. Wisconsin ginseng (Panax quinquefolius) to improve cancer-related fatigue: a randomized, double-blind trial, N07C2. JNCI J Natl Cancer Institute 2010;105:1230-8.
- 11. Liu L. Side effects of ginseng supplements; 2020. Available from: http://www.poison.org/articles/side-effects-of-ginseng-supplements-191. [Last accessed on 2020 Jul 26].
- Wang A. Ben Cao Bei Yao. Taiyuan: Shanxi Science and Technology Press; 2013. p. 165.
- Wu Y. Ben Cao Cong Xin. Beijing: China Medical Science Press; 2016.
 p. 11.
- Zhao X. Ben Cao Gang Mu Shi Yi. Beijing: Xueyuan Press; 1994.
 p. 49-50.
- Zhang X. Yi Xue Zhong Zhong Can Xi. Taiyuan: Shanxi Science and Technology Press; 2010. p. 205.
- Cao BZ. Zeng Ding Wei Yao Tiao Bian. Fuzhou: Fujian Science and Technology Press; 2004. p. 24.
- 17. Zhou ZX. Ben Cao Yao Zheng. Beijing: People's Medical Publishing House; 2018. p. 312.
- Nong S, Yang S. The Divine Farmers Materia Medica: A Translation of the Shen Nong Ben Cao Jing. Boulder, CO: Blue Poppy Press; 1998. p. 24.
- Li S; 1596. Available from: https://so.gushiwen.org/guwen/bookv_1553. aspx. [Last accessed on 2020 Aug 08].
- 20. US Fish and Wild Life, American Ginseng: Export of American

- Ginseng. (n.d.). Available from: https://www.fws.gov/international/Permits/by-species/american-ginseng.html. [Last accessed on 2020 Aug 08].
- US Fish and Wild Life, American Ginseng: Laws & Regulations. (n.d.)
 Available from: https://www.fws.gov/international/plants/american-ginseng.html. [Last accessed on 2020 Aug 08].
- Canada EA. Government of Canada American Ginseng. 28 July, 2017.
 Available from: https://www.canada.ca/en/environment-climate-change/services/convention-international-trade-endangered-species/publications/american-ginseng.html# 1. [Last accessed on 2020 Sep 26].
- Crawford A. Poachers biggest threat to Canada's dwindling population of endangered wild ginseng CBC News; 27 July, 2017. Available from: https://www.cbc.ca/news/politics/wild-ginseng-poaching-endangered-p lants-1.4212920. [Last accessed on 2020 Sep 26].
- OGGA. Ginseng Ontario. OGGA; 2016. Available from: https://ginsengontario.com/.[Last accessed on 2020 Aug 05].
- About. (n.d.). Available from: https://www.popus.com/pages/ about. [Last accessed on 2020 Aug 08].
- The Chinese herbal Materia Medica editorial board. Zhong Hua Ben Cao. Shanghai: Shanghai Science and Technology Press; 1999. p. 852-6.

How to cite this article: Bahaji Azami NL, Yu Q, Shen YH. A survey of the history and applications of American ginseng (西洋参). Chin Med Cult 2021;4:12-8.

"Focusing on Treating the Spirit (神)" in Acupuncture and Moxibustion: The Dialectical Unity of Regulating the Body and the Spirit

Bing-Li Chen, Qian Fan, Li-Xin Guan, Wen-Guang Hou, Yue-Lai Chen

Acupuncture Department, Yueyang Hospital of Integrated Traditional Chinese and Western Medicine, Shanghai University of Traditional Chinese Medicine, Shanghai 200437. China

Abstract

"Focusing on treating the spirit (神)" is an important principle in acupuncture and moxibustion. It is a unique psychosomatic therapy involving the doctor and the patient, which includes regulating the spirit and the body. Traditional Chinese medicine attaches great importance to it. Focusing on treating the spirit is also a component of the standards of medical ethics. Only when doctors have noble medical ethics can they achieve clinical treatment of the mind and give full play to their skills to cure diseases. Focusing on treating the spirit runs through the entire clinical process of acupuncture and moxibustion. Before the treatment, it is necessary to focus on the spirit to distinguish the spirit and qi. During the treatment, attention should be paid to the mind to regulate the spirit and qi. It is the premise of clinical diagnosis and treatment of acupuncture and moxibustion and the key to the curative effect. Focusing on treating the spirit is also in the realm of doctor-patient double treatment, which requires doctor-patient communication before treatment and the preservation of the body and spirit after treatment. Therefore, concentration of the mind is the key to acupuncture and moxibustion treatment.

Keywords: Acupuncture and moxibustion, regulating the body, regulating the spirit (神), treating the spirit (神)

"Spirit (神)" is a unique concept in traditional Chinese medicine and a concentrated embodiment of human life activities. It summarizes people's spiritual consciousness and thinking as well as the manifestations of the external Zang-Fu organs, qi, blood and fluids. "Focusing on treating the spirit (治神)" is from *Su Wen* "Bao Ming Quan Xing Lun" (《素问·宝命全形论》*Basic Questions* "Discourse on Treasuring Life and Preserving Physical Appearance"). It is stated that "The key point for acupuncture is to pay full attention^[1] (凡刺之真,必先治神)." It is an important principle in the clinical diagnosis and treatment of acupuncture and moxibustion. Focusing on treating the spirit mainly refers to managing the conscious and unconscious mind, and regulating mental abnormality. It requires the cooperations of both doctor and patient, as well as the involvement of the mind and body.

Traditional Chinese medicine attaches great importance to it. The concentration of the mind in acupuncture and moxibustion is a unique form of psychosomatic therapy, which runs through the whole clinical process. Through teaching of the theory and practice of focusing on treating the spirit, the author deeply understands that focusing on treating the spirit will help better understand the principles of acupuncture and its manipulation. It will improve the clinical efficacy of diagnosis and treatment.

Focusing on Treating the Spirit is One of the Clinical Principles of Acupuncture and Moxibustion

Focusing on treating the spirit is the rule. *Ling Shu* "Ben Shen" (《灵枢·本神》 *Miraculous Pivot* "To Consider the

Corresponding author: Prof. Yue-Lai Chen,

Acupuncture Department, Yueyang Hospital of Integrated Traditional Chinese and Western Medicine, Shanghai University of Traditional Chinese Medicine, Shanghai 200437. China.

E-mail: chenyuelai@163.com ORCID: 0000-0001-7246-9420

Submitted: 30-Oct-2020 Accepted: 23-Jan-2021 Published: 31-Mar-2021

Quick Response Code:

Website: www.cmaconweb.org

Access this article online

DOI:

10.4103/CMAC.CMAC 44 20

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

 $\textbf{For reprints contact:} \ WKHLRPMedknow_reprints@wolterskluwer.com$

spirit as the Foundation") states that "the use of needling methods must be based on the spirit."[2] Basic Ouestions "Discourse on Treasuring Life and Preserving Physical Appearance" puts forward that "All the things [in nature] follow these rules and the examples are numerous. [As to] acupuncture, there are five points to be publicized [because] ordinary people only care their living and do not know [the secrets of acupuncture]. [These five points are:] Zhishen (paying full attention); knowing how to cultivate health; being familiar with the action of drugs; understanding how to select the size of stone needles; being sophisticated in examining blood and qi in the Zangfu-Organs."[1] In the above principles of treatment, focusing on treating the spirit is in the first place, because the "spirit" is not only a reflection of the mind, emotion and brain activities, but also a concentrated expression of the qi and blood function of the ZangFu organs, the meridian and collaterals. Dan Xi Xin Fa (《丹溪心法》Danxi's Experiential *Therapy*) states that "The change of the inner part of the body can be reflected in the outer part of the body." In other words, the change of mind is the fundamental change of life activities. Therefore, "mind" is fundamental, and focusing on treating the spirit is also essential. As the Yuan Dynasty's Du Su Wen Chao (《读素问钞》 Annotation of Basic Questions) states that "It's called the way of the needle. If the spirit is adjusted, the disease can be cured; if the spirit and the will are scattered, even if the needle is used, the disease will not be cured."[3]

The evaluation of the spirit is the first element in the formulation of the treatment principles of acupuncture. First of all, the rise and fall of the spirit reflects the gain and loss of the essence qi of the Zang-Fu organs. Through examining the changes of spirit, one can judge the constant change of the five Zang organs. Secondly, by identifying the improvement or decline of the spirit, one can judge the prognosis of the disease after acupuncture treatment. Therefore, knowing the status of mind is a prerequisite for the formulation of acupuncture principles. Zhang Jiebin (张介宾) said, "Spirit is righteousness. Those who have spirit will be prosperous. Otherwise, will die." Therefore, the diagnosis of disease not only relies on observing the various symptoms, but also on judging the gain and loss of spirit on the whole. According to Ling Shu "Guan Neng" (灵枢·官能 Miraculous Pivot "Function and Competence") said, "[In applying acupuncture, one] must not forget the cultivation and regulation of the spirit."[2] Ling Shu "Xiao Zhen Jie" (灵枢·小针解 Miraculous Pivot "Explanatory Remarks on the Small Needles") states that "'Ordinary [doctors] just stick to the Xing (form)' [means that ordinary doctors] only stick to the needling techniques. 'Excellent [doctors] closely observe the Shen (spirit)' [means that excellent doctors] use reinforcing and reducing [needling techniques] according to the Shi (Excess) or Xu (Deficiency) condition of blood and qi."[2] This is also the basis for the formulation of the principles of acupuncture treatment, which are "If the [evil] qi is abundant, they are to be drained. If the [proper qi] are depleted, they are to be supplemented. In the case of heat, [the needle is to be inserted and withdrawn] quickly. In the case of cold it may remain [inserted] for a while. If an indentation forms, [when the vessel is squeezed, that fails to level again when the finger is withdrawn,] then it is to be cauterized. When [the qi] is neither abundant nor depleted, then [the disease] is to be removed from the [respective] conduit." Here the spirit means the condition of blood and qi.

Focusing on treating the spirit is the first step. It indicates the importance of adjusting the emotion or mentality of patient during treatment. Basic Questions "Discourse on Treasuring Life and Preserving Physical Appearance" states that "The key point for acupuncture is to pay full attention."[1] It emphasizes on improving the overall therapeutic effect of the acupuncture treatment by first concentrating the mind. This is mainly reflected in two aspects: first of all, focusing on treating the spirit by differentiating syndromes is the first way of treatment. Acupuncture points with soothing effect can be used first to tranquilize the mind and smooth the gi. Then, treatment can be done by selecting points dialectically, so as to treating the spirit and improving the curative effect. According to the Lei Jing (《类经》 Classified Classic), "treatment must be based on the spirit, but invisible. Treatment must be based on the spirit, and the blood and gi can be improved. Therefore, in acupuncture, focusing on treating the spirit takes top priority." Secondly, the abnormal emotion is both the cause and the result of the disease. Many diseases are manifested or accompanied by abnormal mental symptoms, such as insomnia, anxiety or irritability. So, in acupuncture treatment, we should give priority to treating the spirit, through concentrating the mind to improve or treat abnormal mental states. To achieve the effect of tranquilizing the mentality at the same time, it is more beneficial to regulate the functions of the Zang-Fu organs, the gi and the blood.[4]

It is the Requirement of Standard Medical Ethics to Focus on Treating the Spirit and Concentrating the Mind

To some extent, the state of spirit reflects a doctor's ethics. The connotation of focusing on treating the spirit includes the norms of medical ethics. [5,6] The article Da Yi Jing Cheng (《大医精诚》 Mastership of Medicine Lies in Proficient Medical Skills and Lofty Medical Ethics) in the book Bei Ji Qian Jin Yao Fang (《备急千金要方》 Essential Prescriptions Worth a Thousand Gold Pieces for Emergencies) is essentially a requirement of medical ethics. The first important point is that doctors should have excellent medical skills, and they should think that medical treatment is "the most delicate

thing." Doctors should learn about abundant medical resources with diligence and work tirelessly to improve their skills. The second important point is to be sincere. Doctors should cultivate noble morals. In the process of diagnosis, they should have empathy for the pain of the patient. In addition, "when treating diseases, doctor must be calm and determined, have no desire and demand, and be kind and sympathetic. Doctors cannot show off their ability to be outstanding, seek fame in a matter of vital importance and rely on their own expertise to seek wealth". For clinical practice of acupuncture and moxibustion, "Mastership of Medicine Lies in Proficient Medical Skills and Lofty Medical Ethics" means that doctors should remain honest and upright, wholeheartedly provide effective and appropriate medical services for the patients. At the same time, doctors should care about the patients' mental state and focus on treating the spirit. No matter how rich or poor the patients are, whether they are close family and friends or not, doctors should always "concentrate on the minutest detail and focus their senses on the disease"[2] (Ling Shu "Jiu Zhen Shi Er Yuan" 《灵枢·九针十二原》 Miraculous Pivot "The Nine Needles and the Twelve Origin Openings"). Biao Yu Fu (《标幽赋》Song to Elucidate Mysteries) puts forward that "Doctors should not focus on irrelevant things and should hold the needle carefully, just like facing a man of dignity." It indicates that the curative effect of acupuncture and moxibustion depends not only on a doctor's skilled acupuncture techniques, but also directly related to attitude, attentive diagnosis and treatment, and trust between doctors and patients. Only by adhering to noble medical ethics can doctors focus on treating the spirit in clinical practice. Similarly, only with a focus on treating the spirit can doctors achieve the purpose of curing diseases, saving people with excellent skills, as well as reflecting sincerity and benevolence. This is completely consistent with the requirement of medical ethics in modern medicine.

Focusing on Treating the Spirit is the Premise of the Clinical Diagnosis and Treatment of Acupuncture and Moxibustion and is the Key to Achieving the Curative Effect

- 1. Before the treatment, it is necessary to concentrate on circulating qi to distinguish the spirit and qi.
- (1) Concentration: Focusing on the spirit is based on the premise of concentrating the mind. In *Ling Shu* "Zhong Shi" (《灵枢·终始》 *Miraculous Pivot* "End and Beginning"), it is stated that "tranquilizing the mind, concentrating the attention, balancing physical build and spirit, avoiding any disturbance from the outside in order to concentrate the attention and focusing

the whole mind on needling."^[2] Doctors should concentrate themselves before treatment. By concentrating doctors can evaluate the condition of the patient's essence and spirit, and understand the reaction of the qi of the acupoints under the fingers. This will provide the basis for the formulation of the principle of acupuncture and the implementation of appropriate manipulation.^[7,8]

Concentration is also a necessary preparation for patients. Song to Elucidate Mysteries states that it is necessary for the patients to focus their mind on the treatment before needling. When patients are focused, their spirit will be pacified and the qi will proceed without hindrance. Doctors guidance for patients to concentrate, act modestly, also meet the requirements for treating the spirit psychologically. In Ling Shu "Shi Chuan" (《 录 枢 · 师 传 》 *Miraculous Pivot* "The Transmissions from the Teachers"), it is stated that "[The doctor should] tell the patients [what are] harmful [to their health], let them know [what are] good [for their health], guide them [to do what they] like [for restoring their health] and try to straighten them out of their anxiety."[2] Obtain informed consent from patients before treating them with acupuncture methods. If the patient comes in a hurry, let the patient rest for a while. Wait for the qi and the blood to become calm, then give the acupuncture treatment.

- (2) Observation: Observing the condition of blood and qi of patients is the key to treatment. It is stated in Miraculous Pivot "To Consider the spirit as the Foundation" that "thus acupuncturists must carefully observe the physique of the patient [when treating the patient] in order to know the state of Essence, Spirit, Ethereal Soul and Corporeal Soul."[2] Doctors can identify the state of qi and blood by observing the spirit. In Miraculous Pivot "Function and Competence", it is stated that "To use acupuncture [to treat disease, one] must be clear about the physical [characteristics] and the location of qi; the upper, the lower, the left and the right; yin, yang, the external and the internal; the quantity of blood and qi; the normal and abnormal [flow of Channel-qi]; as well as [the acupoints where blood and qi] converge [when they] go out of and come [into the body]."[2] This shows that before acupuncture treatment, doctors should observe and distinguish the mind, collect the physiological and pathological information of patients in detail, evaluate the decline and prosperity of qi, observe the changes of qi, and determine the treatment principle before applying acupuncture.
- 2. Focusing on concentrating the mind and regulating the spirit and qi.
- (1) Concentrate: During acupuncture treatment, doctors should focus on the patients, treat them carefully and concentrate on the mind and the acupuncture needles. They cannot be careless.

Pay attention and hold the needle prudently before puncturing. Miraculous Pivot "The Nine Needles and the Twelve Origin Openings" states that "The rule for holding the needle is like this: [The needle] must be held firmly and straightly, inserted directly [into the acupoint] without any deviation. [When inserting the needle, the doctor should] concentrate his mind on the patient."[2] The needle should be held firmly when puncturing, so as not to slide between the fingers. Be conducive in rapid needling to reduce pain. At the same time, in order to acupuncture safely and correctly, the doctor should carefully observe the patient's appearance so as to, to achieve the synchronicity of the doctor's and patient's spirit. Zhen Jiu Da Cheng (《针灸大成》 Complete Compendium of Acupuncture and Moxibustion) states that "Calmness means that doctors and patients should both have a steady mind. Acupuncture treatment should not be given until both the patients and doctors are settled.""The patient must be emotionally stable and breathe smoothly when they are treated with acupuncture."

After inserting the needles, the doctor should be spirit-specific, to control the needle. Feel the needle carefully, identify whether the qi is being obtained. If the feeling under his fingers is like "fish swallowed bait ups and downs", that means the qi has arrived. Only in this way can we obtain the qi, keep the spirit and qi together, and then apply the techniques of supplementing and reducing effectively. As stated in the Basic Questions "Discourse on Treasuring Life and Preserving Physical Appearance" "When the Channel-Qi has arrived, [the acupuncturist] should carefully keep it, either deep or shallow [according to] the therapeutic requirement and [the acupoints selected may be either distal or proximal, [the rule is] the same, [In doing acupuncture, the acupuncturist must be very careful,] just like approaching a deep abyss or holding the tail of a tiger, with rapt attention."[1] Otherwise, according to Su Wen "Zheng Si Shi Lun" (《素问·徵四失 论》 Basic Questions "Discourse on Evidence of the Four Failures", "cannot concentrate [their] mind, make logical analysis and take both the external [manifestations] and the internal [disorders] into consideration. That is why [they are] frequently confused and failed [in treating dieseases]."[1] At the same time, doctors should pay attention to the changes in patient's appearance. After acupuncture, the patient should have a soothing complexion and a calm spirit. If there is any pain or discomfort, the patient should be consult in time and adjustments should be made to make him or her comfortable. Otherwise, it will be difficult to obtain the qi and difficult for doctors to sense the qi, thus leading to qi and blood disorders. Even if they obtain it successfully, it is more likely to lead to accumulation and dispersion of qi.

Professor Zheng Kuishan, a famous acupuncturist, emphasized that when needling, the left hand should feel the qi under the

acupoint, the right hand should hold the needle firmly and concentrate on the entry of the needle and guard the qi. Both hands need to "experience the impulse under the needle, and observe the patient's mental condition and tolerance of the needle." Therefore, it is summarized as acupuncture treating disease via the arrival of qi under the needle. The qi will then pass to the diseased area. [9]

(2) Guarding the mind: Guarding the mind in acupuncture is also guarding the qi. This refers to the obtaining of qi after needling and concentrating the force to make the gi of the needle tip not loose and smooth. According to Miraculous Pivot "Explanatory Remarks on the Small Needles", "To obtain qi in needling requires careful observation [of the changes] of gi lest [the best time for needling] be lost."[2] It indicates that the patient should keep the qi and concentrate his or her mind after obtaining qi from the needle. Based on the condition of the blood and gi of the patient, doctor adopts the technique of reinforcing deficiency or reducing excess. The meridians, qi and blood proceed in full flow, and the mind goes with. As the ancients said: "when needling, the important matter is to get fullness of vitality and obtain qi." The qi and mind accompany and promote each other. Only by fully grasping the status of the meridian and qi, by timely supplementing and relieving the mind, and by regulating the sense of effective acupuncture, can qi reach the diseased area and achieve a good curative effect. If the needle cannot obtain the qi successfully, then hold the needle and wait for it. At the same time, concentrate on the qi and keep the mind at the tip of the needle. Once the qi arrives, keep and circulate it. If the doctor cannot concentrate and is absent-minded when needling, he can neither keep the qi nor circulate the qi, let alone use the method of reinforcing deficiency and reducing excess as he is unable to distinguish the status of qi.

During acupuncture, doctors also need to guide the patient to concentrate. Experienced physicians often subtly induce or inspire patients to focus their attentions on the acupuncture site, which can guide and facilitate the conduction of acupuncture sensation, thus achieving the goal of concentrating the mind and promoting the effect of conducting acupuncture sensation and qi to the location of disease. Keeping the mind and qi between doctors and patients makes acupuncture treatment effect twice the result with half the effort. Therefore, the patient is also required to concentrate while needling, in order to experience the dynamics of qi and blood under the needle, attentively. Zhang Jingyue (张景岳) said, "After inserting the needles, be sure to focus on the patient's eyes to control their mental activity, so that the flow of qi circulates freely and the vessels are unobstructed." Only in the state of gathering and concentrating the mind can the doctor perform the needling accurately, and only when the patient receives treatment in a stable and calm state can the effect of the needle be induced. "The key point in needling is that the arrival of qi ensures curative effect." [2] (*Miraculous Pivot* "The Nine Needles and the Twelve Origin Openings").

(3) Regulating the spirit: "Regulating the spirit" means that doctor selects acupoints according to syndrome differentiation and coordinates these points with corresponding acupuncture techniques to unblock the patient's channels and collaterals, regulate the qi and blood, and direct the qi to the location of disease, so that the yin and yang of the patient can be balanced. When the functions of the Zang-fu organs are harmonious, the settled mind and spirit can improve the curative effect.

The effect of "regulating the spirit" is reflected in two aspects: ① yin and yang are harmonized, and the spirit is governed. *Ling* Shu "Gen Jie" (《 灵枢·根结》 Miraculous Pivot "Root and Connection") states that "thus it is said that the rule in applying acupuncture lies in knowing how to regulate yin and yang. [Only when] yin and yang are regulated [can] Jingqi (Essence-Qi) be replenished, the body and qi be integrated and the spirit maintain inside."[2] The occurrence and development of disease is the result of imbalance between the yin and yang. Clinically, acupuncture method of supplementing the yin and expelling the yang, or reinforcing the yang and expelling the yin should be adopted in accordance to whether the body's yin and yang are over excessive. This to ensure the yin and yang are balanced to contain the spirit inside. 2 Mind and spirit are settled so that the functions of the Zang-fu organs are harmonious. Being in a good mental state represents harmony in the functions of the Zang-fu organs and vice versa. Traditional Chinese medicine believes that each of the Zang-fu organs has its own spirit, Su Wen "Tian Yuan Ji Da Lun" (《素问·天元纪大论》 Basic Questions "Comprehensive Discourse on Arrangements of the Pricinpal [qi] of Heaven") states that "in the human body there are Five Zang-Organs that produce five kinds of qi respectively which are responsible for [the five emotional activities of] Xi (joy or happiness), Nu (anger or rage), Bei (grief or sadness), You (anxiety) and Kong (fear or fright)."[1] Ling Shu "Ping Ren Jue Gu" (《灵枢·平人绝谷》 Miraculous Pivot "A Healthy Person Ends the Ingestion of Grain") states that "the blood vessels are smooth and the spirit is vigorous."[2] People's emotional activities and responses are based on whether the physiological functions of the Zang-fu organs are normal. Pathological changes in the functions of the Zang-fu organs, obstruction of qi and disharmony of blood vessels will lead to abnormal changes in emotions. If the mind is lax, patients may lose their minds and even become frantic, the liver does not store blood so that patients will be agitated. In clinical treatment, regulate the Zang-fu organs, tranquilize the mind and reinforce the function are needed. In the same way, a change in one's mood can react on one's internal organs. Gui Gu Zi (《鬼谷子》 Kuei Ku-tzu) states that if it could not be treated reasonably then one would lose spirit and rule. Ling Shu "Kou Wen" (《灵枢·口问》 Miraculous Pivot "Oral Inquiry") states that "sorrow, grief, worry and anxiety will disturb the heart. [When] the heart is disturbed, the Five Zang-Organs and the Six Fu-Organs will be shaken." [2] Different emotional abnormalities can lead to different syndromes, ranging from light viscera qi injury, long-term viscera injury, injury to the mind, psychosomatic diseases, and losing the mind even death. Clinically, different acupoints and acupuncture techniques can be used to regulate the emotions and harmonize the functions of the Zang-fu organs.

Focusing on Treating the Spirit is also in the Realm of Doctor-Patient Double Treatment, Which Requires both Doctor and Patient to Communicate Before and After the Treatment to Preserve the Spirit, Mind and Body of both Parties

Focusing on treating the spirit includes enhancing the doctor-patient communication and building mutual trust and confidence. In the process of diagnosis and treatment, especially before carrying out treatment, patients can take the initiative to concentrate their mind under the guidance of doctors to achieve the desired effect. For example, through communication, patients can understand the ability of doctor, believe in acupuncture and moxibustion and have confidence in the treatment. Su Wen "Wu Zang Bie Lun"(《素问·五藏别论》 Basic Questions "Further Discourse on the Five Depots") puts forward that "Do not discuss medical theory with those who are superstitious; do not talk about the therapeutic skills with those who dislike acupuncture. [Those who] do not want to receive medical treatment when ill are incurable. In this case, forced treatment is ineffective."[1] It is the same meaning of "If they firmly believe in acupuncture and the doctor, patients will get twice the curative effect with half the effort" (Jin Zhen Mei Hua Shi Chao 《金 针梅花诗钞》On the Techniques of Plum-blossom Needle).[10]

The importance of focusing on treating the spirit comes after treatment. After receiving acupuncture treatment, patients should have a restful, calm demeanor, not be too angry, happy, sad, or worried, so as not to dissipate their qi, which is conducive to recovery. At the same time, doctors should also concentrate their minds to nourish their spirits and strengthen their bodies by regulating the functions of channels and collaterals. This will help facilitate concentration and recuperate the spirit. Especially after confirming the diagnosis and treatment, doctors should carry out purpose-oriented adjustment to promote "mind keeping" and the recovery of qi and the blood.^[8] Therefore, *Basic Questions* "Discourse on Treasuring Life and Preserving Physical Appearance" mentioned that people should "Zhishen (pay full attention) and know how to cultivate health."^[1] Only when doctors

are mentally and physically healthy, can they be supported to effectively carry out the treatment based on syndrome differentiation during acupuncture and moxibustion. It fully illustrates the importance of doctors maintaining their own health and ensuring recovery of their own energy after diagnosing and treating patients.

The spirit is the manifestation of the state of human life activities, and treating spirit is to regulate the integral life activity, which is an important content in traditional Chinese medicine practice, and has a special meaning in acupuncture and moxibustion. Acupuncture and moxibustion is the best method to treat the spirit, which is closely related to the moral cultivation and medical skills of doctors. The process of acupuncture and moxibustion treatment is an important interaction between doctor and patient. During the process, psychological guidance is carried out, thinking, trust, and confidence are also established. This ensures the improvement and expansion of therapeutic effect of acupuncture and moxibustion treatment. It also promotes patient's compliance and confidence. By superimposing psychological adjustment on the intervention of acupuncture, treating the spirit embodies a kind of comprehensive psychosomatic therapeutic principle and effect, which is worth thinking and studying in modern medicine.

Funding

This study was financed by a grant from the National Science Foundation of China (No. 81674090).

Conflicts of interest

None.

References

- 1. Li ZG, Liu XS. Yellow emperor's canon of medicine. Plain conversation. Xi'an: World Publishing Corporation. 2005.
- Li ZG, Liu XS. Yellow emperor's canon of medicine. Spiritual Pivot. Xi'an: World Publishing Corporation. 2008.
- Qu LF, Zhang WH. TCM Psychology, First Edition, Shanghai: Shanghai Scientific & Technical Publishers; 2015.p. 13-15.
- Xia SW, Liu HL, Zhou DA. Zhou De An. "Curing the spirit before treatment of the disease" academic thought in clinical acupuncture. Beijing Journal of Traditional Chinese Medicine. 2010;29:832-3.
- Sun FS. A brief understanding of acupuncture during the treatment of spirit. Journal of Shaanxi University of Chinese Medicine. 1994;1:33-4.
- Lee XY, Mi SM, Lei JJ. Significance of curing the spirit in clinical acupuncture. Information on Traditional Chinese Medicine. 1998;6:40-1.
- Ling H. Acupuncture focuses on treatment of the spirit. Journal of Fujian College of Traditional Chinese Medicine. 2001;3:37-8.
- Zhang HL, Hong JM, Tao HF. A key factor in the efficacy of acupuncture

 treatment of spirit. Journal of New Chinese Medicine. 2013;45:
 169-70.
- Zheng KS. Zheng's Complete Collection Of Acupuncture, Second Edition. Beijing: People's Medical Publishing House. 2017.p. 250-1.
- Chen H. Application of curing the spirit concept of "Internal Classic" in clinical acupuncture. Hubei Journal of Traditional Chinese Medicine. 2011;33:54-5.

How to cite this article: Chen BL, Fan Q, Guan LX, Hou WG, Chen YL. "Focusing on treating the spirit (神)" in acupuncture and moxibustion: The dialectical unity of regulating the body and the spirit. Chin Med Cult 2021;4:19-24.

Taking Proactive Action: Introduction to the Prevention and Treatment of COVID-19 with Traditional Chinese Medicine

Jian-Nan Qiu, Hong-Yong Deng

Shanghai Innovation Center of TCM Health Service, Shanghai University of Traditional Chinese Medicine, Shanghai 201203, China

Abstracts

Since the outbreak of coronavirus disease-2019 (COVID-19), traditional Chinese medicine (TCM) has fully displayed its strength and specialty and has played an important role in the prevention and treatment of the pandemic. Faced with the unexpected development of the pandemic, the Chinese government has responded quickly and attached great importance to the effect of TCM. Comprehensive therapy integrating Chinese and Western medicine has achieved remarkable success. To summarize and introduce the prevention and treatment of COVID-19 with TCM, this article covers the perspectives of policy guideline issue, clinical diagnosis participation, and scientific research progress.

Keywords: COVID-19, integrated Chinese and Western medicine, traditional Chinese medicine

The outbreak and rapid spread of coronavirus disease-2019 (hereinafter referred to as COVID-19) has become a global public health emergency which threatens the human life and health seriously. A cumulative of 38,789,204 confirmed cases including 1,095,097 deaths had been reported globally by October 17 Beijing time.^[1] Meanwhile, the epidemic situation in China was soon brought under control with reported sporadic cases. With its outstanding advantages, traditional Chinese medicine (TCM) has played a crucial role in this battle against the COVID-19 and has mutually reinforced its effect together with Western medicine. According to the white paper Fighting COVID-19 China in Action released by the State Council Information Office of the People's Republic of China, up to 92% confirmed cases were co-treated with TCM. For confirmed patients in Hubei province, both usage rate and total response rate exceeded 90%.[2] Due to insufficient evidence of antiviral and antibiotic therapies at the early stage of COVID-19 pandemic, there are not yet effective drugs against this novel coronavirus.[3] As the treasure of Chinese civilization, TCM guided by the concept of holism

and syndrome differentiation has combined with Western medicine and mutually complemented each other's advantages in the clinical diagnosis and treatment of COVID-19 patients, and its multiple targeting therapy has achieved good results. Looking back at the current progress in China, the epidemic would have never been subdued without the supplement and promotion of TCM from the government, medical staff, and science researchers. To provide further reference, this article summarize the relevant integrative clinical experience from the perspectives of policy guideline issue, clinical diagnosis participation, and scientific research progress.

The Government has Incorporated Traditional Chinese Medicine to Prevent and Treat COVID-19

Implement the participation of traditional Chinese medicine in anti-epidemic work

After the outbreak of COVID-19, the Chinese government has paid sufficient attention to the deployment of disease control and prevention repeatedly. On January 20, 2020, teleconference

Submitted: 18-Oct-2020 Accepted: 27-Jan-2021 Published: 31-Mar-2021

Quick Response Code:

Access this article online

Website: www.cmaconweb.org

DOI:

10.4103/CMAC.CMAC 4 21

Corresponding author: Prof. Hong-Yong Deng, Shanghai Innovation Center of TCM Health Service, Shanghai University of Traditional Chinese Medicine, Shanghai 201203, China.

E-mail: denghy@shutcm.edu.cn ORCID: 0000-0001-6438-198X

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

 $\textbf{For reprints contact:} \ WKHLRPMedknow_reprints@wolterskluwer.com$

on the prevention and control of COVID-19 was held in Beijing. Sun Chunlan (孙春兰), the Vice Premier of the State Council, attended the conference. She emphasized the importance of lawful, scientific, and orderly prevention, as well as the resolution of curtailing the spread of virus. [4] On January 25, the Spring Festival, President Xi Jinping chaired the meeting on epidemic prevention and control. A working group for epidemic response was formed to promote and strengthen the first line local prevention and control defense.^[5] In accordance with the unified deployment, the National Administration of Traditional Chinese Medicine (NATCM) has introduced a series of anti-epidemic policies with TCM. To deepen the implementation of integrative Chinese medicine and Western medicine treatment, on January 27, NATCM issued a Notice on this topic from the following five aspects: building joint treatment mechanism; improving medical care capacity of medical staff; carrying out standard medical care; focusing on the combination of clinical and scientific research, and sharing case information.^[6] In order to further implement the overall plan of anti-epidemic effort, give full play to the supporting role of informatization and propel the deep engagement of TCM, on February 8, NATCM issued the Notice on Strengthening Information Support for the Prevention and Treatment of COVID-19 with TCM. The Notice summarized typical practice for the purpose of strengthening information support by carrying out the following five tasks; Internet-based diagnosis and treatment service provided by TCM medical organization, Internet-based TCM prevention and control at grass root level; online TCM advisory services; "Internet+" government affairs service; and basic guarantee.[7] As the epidemic has become constant, China will be in a situation of ongoing prevention and control. To fully implement the overall control strategy of "preventing both foreign input and domestic rebound," on May 15, the office of NATCM released the Notice on Implementing TCM Works under Normalized Prevention and Control. In the notice, it is demanded that policies should be implemented accurately at different areas. Both TCM medical staff and materials should be in full supply. Rehabilitation therapy with TCM characteristics should be in widespread use, and TCM health education and scientific protection should be advocated.[8]

Release traditional Chinese medicine coordination scheme

The Chinese National Health Commission has released the eight versions of COVID-19 diagnosis and treatment schemes successively from January to August 2020. Each version, especially the third version, included TCM prevention and control. On the basis of syndrome differentiation of the second edition, the third edition further confirmed the pathogenesis characteristics of COVID-19 as "dampness, heat, toxin and stasis," and added specific treatment scheme.^[9] The fourth edition of the schemes divided the TCM treatment of

COVID-19 into the medical observation phase and clinical treatment phase. The latter can be further divided into four stages, namely the initial stage, the intermediate stage, the severe stage, and the recovery stage, which correspond respectively to four syndrome types of TCM: Stagnation of cold-dampness in the lung, epidemic toxin blocking the lung, internal blockage and external collapse, and qi deficiency of the lung and spleen. Chinese patented medicine for the medical observation phase, intermediate stage, and severe stage was also recommended.[10] Through differentiating syndrome, the cause of this pandemic is identified as dampness toxin, and its principal pathogenesis are "dampness, heat, toxin, and stasis". Considering the clinical manifestations of mild type, common type, severe type, and critical type, it was initially considered that COVID-19 had distinct stage-related progression and favorable or unfavorable prognosis. Therefore, the treatment based on syndrome differentiation by stage was suggested: The initial stage (mild type and common type), the progressive stage (severe type), the critical stage (critical type), and the recovery stage. In the initial stage, the location of disease was neither exterior nor interior. Instead, it was dampness toxin was stagnated at the membrane source of upper energizer. In the progressive stage, dampness toxin transformed into heat, and then the dampness immersed the lung, obstructed the lung and even blocked the lung, thus causing internal blockage and external collapse. For the severe type, patients should be treated from gi level and ying level, while for the critical type, there were deteriorated cases, so individual differentiation was required. As the epidemic aggravated, the herbal prescriptions also kept adjusting. Compared with the fifth edition, the differentiation of syndrome types for the herbal medicine treatment in the sixth and seventh editions was more precise, and the composition of prescriptions and dosages were more complicated. In the sixth edition, the clinical treatment phase was segmented into mile type, common type, severe type, critical type, and the recovery stage. A general prescription called "Qing Fei Pai Du Decoction" was recommended for the clinical treatment phase based on the summarization and analysis of empirical formulas and effective prescriptions across China.[11] Moreover, the application of TCM injection was valued in the treatment of severe and critical patients in the seventh edition. As the Head of Beijing Hospital of Traditional Chinese Medicine, Liu Qingquan was also the deputy chief of National Expert Group on TCM Treatment.[12] He pointed out that, "COVID-19 is an emerging disease for us, so the seventh edition provides us with more scientific guidance on the application of Chinese patented medicine and TCM injection." For the severe and critical patients with mechanical ventilation, if they suffered from abdominal distension, inhibited defecation or constipation, 5-10 g of raw Da Huang (大黄 Radix et Rhizoma Rhei) could be used for

treatment. For patient-ventilator asynchrony, 5–10 g of raw Da Huang (大黄 Radix et Rhizoma Rhei) and 5–10 g Mang Xiao (芒荫 Natrii Sulfas) could be used after giving depressant and muscle relaxant. On August 18, the General Office of National Health Commission and the Office of NATCM issued COVID-19 Diagnosis and Treatment Schemes (Trial Eighth Version). [13] By summarizing clinical experiences, Chinese medical staff have continually kept optimizing therapeutic measures by amending and perfecting the schemes, thus, providing comprehensive guidelines and specifications for improving COVID-19 diagnosis and treatment.

Traditional Chinese Medicine has Been Widely Applied in the Clinical Diagnosis and Treatment of COVID-19

Traditional Chinese medicine participates in the clinical diagnosis and treatment

Looking back at its history, TCM has played an important role in fighting against infectious diseases, including small pox, plague, SARS, influenza A, and avian influenza. [14] In the early outbreak of COVID-19, various provinces and cities actively responded to the call of the central government. Integrated Chinese medicine and Western medicine therapy and syndrome differentiation were applied in an individualized way to help patients detach from ventilator and Extracorporeal Membrane Oxygenation. These measures reduced bacterial cross-infection and improved rescue rate. According to the information

published by NATCM, summarization of data about TCM diagnosis and treatment from some provinces and cities at the early outbreak of COVID-19 are presented in Table 1. The rates of applying integrated Chinese medicine and Western medicine were close among provinces and cities, whereas effective rate and cure rate of TCM-involved treatment varied greatly. Different provinces and cities had different evaluation criteria on therapeutic efficacy and they conducted different independent treatments but what causes such variations remains to be further explored.

Frequently-used traditional Chinese medicine prescriptions, Chinese patent medicine, and other therapies

On January 6, 2020, the General Office of National Health Commission and the Office of NATCM issued *Notice* on *Recommending "Qing Fei Pai Du Decoction" in the Treatment of COVID-19 with Integrated Chinese Medicine* and *Western Medicine Approach*, thus providing guidance for the clinical application of this prescription. [15] "Qing Fei Pai Du Decoction" was first applied in the emergency clinical observation of 214 confirmed cases in the provinces of Shanxi, Hebei, Shaanxi, and Heilongjiang, with an effective rate over 90%. [16] Furthermore, as the most-used prescription in Wuhan city, Hubei province, a total of 390,000 bags of decoction and half a million doses of compound "Qing Fei Pai Du Decoction" granule were distributed to designated hospitals and isolation centers. The extensive use of this prescription acquired good curative effect and received no

Table 1: Effective rate and cure rate of Traditional Chinese Medicine involved treatment from some domestic provinces and cities at the early outbreak of COVID-19

Region	Rates of integrated Chinese medicine and western medicine therapy (%)	Cure rate of TCM-involved treatment	Cutoff date
Shanxi	96.90	-	February 17
Guangdong	93.54	89.00	February 19
Anhui	98.50	97.60	February 20
Fujian	98.00	70.70 (effective rate)	February 20
Guizhou	94.50	92.20	February 21
Shaanxi	93.50	-	February 23
Ningxia	98.60	98.20	February 23
Beijing	90.00	92.00	February 24
Hainan	93.00	-	February 24
Hebei	97.10	96.80	February 25
Zhejiang	97.76	95.00 (effective rate)	February 26
Hunan	100.00	80.63	February 27
Jilin	100.00	-	February 27
Henan	98.74	99.27	February 27
Shandong	-	98.00	February 29
Gansu	97.80	100.00	March 2
Guangxi	97.60	97.60	March 3
Liaoning	-	80.00 (effective rate)	March 4
Chongqing	92.36	-	March 4
Guangzhou	95.38	-	March 4

TCM: Traditional Chinese Medicine

obvious specific adverse drug reaction reporting.^[17] Various clinical observations and fundamental researches have proven that "Qing Fei Pai Du Decoction" is quick-acting, efficient, safe, and cost-effective.[18-21]

According to the 8th edition of the Scheme, the following Chinese patented herbal products are recommended: Jin Hua Qing Gan Granule (金花清感颗粒), Lian Hua Qing Wen Granule / Capsule (连花清瘟颗粒/胶囊), Shuang Huang Lian Granule / Oral Liquid (双黄连颗粒/口服液), Qing Kai Ling Capsule (清开灵胶囊), She Ma Oral Liquid (射 麻口服液), Xin Xue Granule (新雪颗粒), and Zi Xue Elixir (紫雪丹); Angong Niuhuang Pills (安宫牛黄丸) and Su He Xiang Pills (苏合香丸) are applicable to those in coma with high fever. For intravenous drip, the following products are recommended: Tan Re Qing Injection (痰热清注射液), Xue Bi Jing Injection (無必净注射液), Re Du Ning Injection (热 毒宁注射液), Shen Mai Injection (参麦注射液), and Shen Fu Injection (参附注射液). In addition, under the supervision of physicians, COVID-19 patients are encouraged to choose various TCM therapies, including acupoint application, acupuncture and moxibustion, Baduanjin exercise, Tai Chi, breathing exercises, Qigong rehabilitation, exercise training, psychological counseling, and music-related therapy. After clinical observation and fundamental research screening, "Three drugs and three prescriptions" have been proven to be effective, and they are Jin Hua Qing Gan Granule, Lian Hua Qing Wen Granule / Capsule, Xue Bi Jing Injection, Qing Fei Pai Du Decoction, Hua Shi Bai Du Decoction and Xuan Fei Bai Du Decoction. [22] Obviously, TCM plays a crucial role in fighting against COVID-19.

Traditional Chinese Medicine Researches on Anti-epidemic

Traditional Chinese medicine clinical researches

Since the outbreak of pandemic, researchers have carried out a large number of clinical studies on TCM treating COVID-19, and thus providing valuable experimental evidence for summarizing clinical experience, discovering effective intervening measure, and optimizing clinical protocols. A clinical trial registry follow-up study^[23] tracked Chinese Clinical Trial Registry and Clinical Trials.gov as data source and its result showed that by April 20, 2020, there had been a total of 137 registered clinical researches related to using the TCM treatment against COVID-19 (including integrated Chinese medicine and Western medicine). The sample size was 58.266 and most of the researches were randomized controlled trial. Potential effective intervening measures included classical TCM prescriptions, Chinese patent medicine, TCM exercises, acupuncture, moxibustion, and Tuina, as shown in Table 2.

With the deepening of TCM clinical research, a larger number of achievements have been reported. Statistics showed that by October 17, 2020, newly included literature on TCM treating COVID-19 by SinoMed and PubMed were 1,780, among which 160 were evidence-based ones. These theses covered clinical observation, controlled trial, and randomized controlled trial, as well as systematic review based on clinical trial.[24-26]

Researches on traditional Chinese medicine characteristic theories

From the perspective of TCM, the gi of cold-dampness and pestilence obstructs the spleen and stagnates the lung,

Classification	Medicine/measures	п
Chinese patent medicine	Xi Yan Ping Injection (喜炎平注射液), Tan Re Qing Injection/Capsule (痰热清注射液/胶囊), Lian Hua Qing Wen Granule/Capsule(连花清瘟颗粒/胶囊), Xue Bi Jing Injection (血必净注射液), Compound Chai Yin Granule (复方银柴颗粒), Qing Qiao Antiviral Granule (青翘抗病毒颗粒), Re Du Ning Injection (热毒宁注射液), Shuang Huang Lian Oral Liquid (双黄连口服液), Jin Ye Bai Du Granule (金叶败毒颗粒), Ba Bao Pills (八宝丹), Shu Feng Jie Du Capsule (疏风解毒胶囊), Shen Qi Fu Zheng Injection (参芪扶正注射液), Antiviral Granule (抗病毒颗粒), Compound Yuxingcao Mixture (复方鱼腥草合剂), Jin Yin Hua Oral Liquid (金银花口服液), Ke Su Ting Syrup (咳速停糖浆), Ke Qing Capsule (咳清胶囊), Liu Shen Capsule (六神胶囊), Antiviral Oral Liquid (Xiangxue Pharmaceuticals)(抗病毒口服液(香雪制药)), Shen Fu Injection (参附注射液), Granule for Qing Wen Bai Du Decoction (清瘟败毒饮配方颗粒剂), Jing Yin Granule (荆银颗粒), Liu Shen Pills (六神丸), E Zhu Oil Injection (莪术油注射液), Hua Ju Hong Tan Ke Liquid (化橘红痰咳液), Han Ma Capsule (汉麻胶囊), Gu Shen Ding Chuan Pills (固肾定喘丸), Hua Shi Bai Du Granule (化湿败毒颗粒), Yin Hu Qing Wen Granule (银胡清瘟颗粒), Granule for Xiao Tan San Jie decoction (消痰散结方颗粒剂)	
TCM exercises	TCM conduction exercise, "six-character formula" breathing exercises, expiration and inspiration exercises, Tai Chi, fitness Qigong for nourishing the lung, Baduancao exercises for rehabilitating and strengthening the lung, Baduanjin exercise	10
Classical prescriptions	Ma Xing Shi Gan Decoction (麻杏石甘汤), Sheng Jiang Powder (升降散), Shen Ling Bai Zhu Powder (参苓白术散), Dang Gui Shao Yao Powder (当归芍药散)	4
Acupuncture/Acupoint	Zang-fu organ Acupoint pressure, acupuncture, auricular point pressing with bean	3
Tuina	Chest relieving and regulating technique, tuina	2

TCM: Traditional Chinese medicine

enters from superficies to interior and transforms itself into heat. These are the clinical features of COVID-19. Hence, resolving dampness and removing toxicity can be applied with strengthening body resistance and eliminating evil simultaneously. TCM therapies are mainly applied to patients with mild and common types. Decoction or Chinese patented medicine is used together with auricular point pressing with bean to quickly alleviate symptoms and hold the progression of disease at bay, so patients can be cured clinically. For severe and critical patients, integrated Chinese medicine and Western medicine therapies were applied to rescue them. TCM puts emphasis not only on strengthening the body resistance for relieving depletion, purging the lung to relax bowel, but also on removing toxicity, nourishing yin, and inducing resuscitation. Academician Zhong Nanshan pointed out^[27] that "the present clinical practice has proven the objectivity and effectiveness of TCM. The modern medical study methods should be adopted to better interpret and explain TCM, so that recognition can be gained from both domestic and international medical colleagues." Chinese researchers Wang W et al.[28] analyzed the therapeutic schemes for COVID-19 and prescriptions of TCM in relevant clinical cases across the country, discussed prescription patterns on preventing and treating COVID-19, thus providing reference for the clinical prescriptions and medication. Data mining was adopted by Bai M et al. [29] to sort the prevention and treatment of epidemics in ancient books. They set up a database of prescription formulating, explored potentially valid herbal pairs and their compatibility, thus offering new ideas for the clinical application of Chinese medicine. Modern medical researches focus more on commonalities of diseases when developing drugs, but when individual factors dominate, there will be poor treatment response. On the country, TCM takes holistic concept and syndrome differentiation as the principles, attaching full importance to individual factors, so its targeted treatment can achieve good results. However, due to individual differences and environmental factors, it is difficult to repeatedly test on the same prescription; hence, the curative effect of specific prescriptions cannot be guaranteed or promoted. In addition, TCM experiment and fundamental research are rather backward and have impeded its development. We should strengthen the basic research, lay emphasis on the type of syndrome, pathogenic characteristics and evolvement of disease, and find specific medicine and prescription for specific disease based on the above emphasis. To achieve better therapeutic effect, clinicians should modify and adjust these specific medicine and prescription according to the individual conditions of patients.

Facing the outbreak of COVID-19, Chinese medicine and western medicine can join hands and build a solid lifeline of defense, and this is a highlight of epidemic prevention and

control in China. At present, the situation is generally under control, but the novel coronavirus is to be wiped out yet. The nationwide virus control is now being conducted in an ongoing normalized basis, for a long time. "In this fighting against COVID-19, TCM has played a crucial and all-round role in the overall process of prevention and treatment," said Zhang Boli, the academician of Chinese Academy of Engineering who continued thus: "TCM will always prevail as long as an opportunity is given. The virus is new in each epidemic, and there is no specific medicine available, so I think TCM should take responsibility upon itself."[30] Although the epidemic is now generally under control, the virus is borderless. Now COVID-19 still wreaks havoc on a global scale and multiple outbreaks have been reported. Wu Zunyou, the chief expert of the Chinese Center for Disease Control and Prevention, predicted that COVID-19 will maintain high prevalence for the indefinite future, and even aggravate in winter.[31] Recently, a piece of news about Timoshenko, the former Prime Minister of Ukraine, has circulated online. She said she would actively promote the internationalization of TCM.[32] In August 2020, she was infected with COVID-19, and then fully recovered with the help of integrated Chinese medicine and western medicine therapy. This is an epitome of many stories about TCM fighting against COVID-19 outside China. As a part of the outstanding traditional Chinese culture, TCM culture is rooted in the ancient civilization of our country. To better spread the classical theory of TCM, we should combine it with time-honored history and civilization of our nation. We can also promote TCM culture to people outside of China from the dimension of history, humanities, folk customs and geography, and elaborate the mechanism of TCM treatment via fundamental researches. The internationalization of TCM needs both humanities and science. As the leader of NATCM expert group for medical rescue, Huang Luqi, the academician of Chinese Academy of Engineering, president of the China Academy of Chinese Medical Science, said,[33] "We would like to fight side by side and jointly response to the pandemic with people from all the countries. We are willing to share TCM experiences and achievements against COVID-19!"

Translator: Guoqi Shi (石国旗)

Funding

This study was financed by the grants from National Key R&D Program of China (No. 2019YFC1709803) and National Natural Science Foundation of China (No. 81873183).

Conflicts of interest

None.

References

- WHO. WHO Coronavirus Disease (COVID-19) Dashboard [EB/OL]. Available from: https://covid19.who.int/. [Last accessed on 2020 Oct 17].
- 2. The State Council Information Office of the People's Republic of China

- Fighting COVID-19: China in Action [EB/OL]. Available from: http://www.scio.gov.cn/ztk/dtzt/42313/43142/index.htm. [Last accessed 2020 Jun 07].
- Siemieniuk RA, Bartoszko JJ, Ge L, Zeraatkar D, Izcovich A, Kum E, et al. Drug treatments for covid-19: Living systematic review and network meta-analysis. BMJ 2020;370:m2980.
- Central People's Government of the People's Republic of China. Sun Chunlan Attended and Spoke at the Teleconference on the Prevention and Control of COVID-19 [EB/OL]. Available from: http://www.gov. cn/guowuyuan/2020-01/20/content_5471108.htm. [Last accessed on 2020 Jan 201.
- Xinhuanet. President Xi Chaired the Standing Committee Meeting of Political Bureau of the Central Committee of the CPC. [EB/OL]. Available from: http://www.xinhuanet.com/mrdx/2020-01/26/c_138734686. htm. [Last accessed on 2020 Jan 26].
- National Administration of Traditional Chinese Medicine. Notice on Further Deepening the Implementation of Integrative Chinese and Western Medicine in Fighting against COVID-19 [EB/OL]. Available from: http://yzs.satcm.gov.cn/zhengcewenjian/2020-02-13/13053. html. [Last accessed on 2020 Jan 27].
- National Administration of Traditional Chinese Medicine. Notice on Strengthening Information Support for Prevention and Treatment of COVID-19 with TCM [EB/OL]. Available from: http://gcs.satcm.gov. cn/zhengcewenjian/2020-02-08/12901.html. [Last accessed on 2020 Feb 081.
- National Administration of Traditional Chinese Medicine. Notice on Implementing TCM Works Under Normalized Prevention and Control [EB/OL]. Available from: http://yzs.satcm.gov.cn/ zhengcewenjian/2020-05-15/15104.html. [Last accessed on 2020 May 15].
- National Health Commission of the People's Republic of China. COVID-19 Diagnosis and Treatment Schemes (Trial Third Version) [EB/OL]. Available from: http://www.nhc.gov.cn/xcs/zhengcwj/202001/f492c9153ea9437bb587ce2ffcbee1fa/files/39e7578d85964dbe81117736dd789d8f.pdf. [Last accessed on 2020 Jan 23].
- Civil Affairs and Medical Administration Bureau. COVID-19 Diagnosis and TreatmentSchemes(TrialFourthVersion)[EB/OL]. Available from: http://www.nhc.gov.cn/yzygj/s7653p/202001/4294563ed35b43209b31739bd0785e67/files/7a9309111267475a99d4306962c8bf78.pdf. [Last accessed on 2020 Jan 27].
- Civil Affairs and Medical Administration Bureau. Interpretation on COVID-19 Diagnosis and Treatment Schemes (Trial Sixth Version) [EB/OL]. Available from: http://www.nhc.gov.cn/yzygj/ s7652m/202002/54e1ad5c2aac45c19eb541799bf637e9.shtml. [Last accessed on 2020 Feb 19].
- National Administration of Traditional Chinese Medicine. Expert Interpretation on COVID-19 Diagnosis and Treatment Schemes the Seventh Version: Bring TCM Superiority into Full Play [EB/OL]. Available from: http://www.satcm.gov.cn/xinxifabu/meitibaodao/2020-03-09/13783.html. [Last accessed on 2020 Mar 09].
- National Health Commission of the People's Republic of China. COVID-19 Diagnosis and Treatment Schemes (Trial Eighth Version) [EB/OL]. Available from: http://www.nhc.gov.cn/yzygj/ s7653p/202008/0a7bdf12bd4b46e5bd28ca7f9a7f5e5a/files/ a449a3e2e2c94d9a856d5faea2ff0f94.pdf. [Last accessed on 2020 Aug 18].
- China Central Television. Fighting against COVID-19 with Traditional Chinese Medicine [EB/OL]. Available from: http://tv.cctv.com/yskd/ special/zhyy/index.shtml. [Last accessed on 2020 Mar 11].
- National Administration of Traditional Chinese Medicine. Notice on Recommending "Qing Fei Pai Du Decoction" in the Treatment of COVID-19 with Integrated Chinese and Western Medicine Approach [EB/OL]. Available from: http://yzs.satcm.gov.cn/ zhengcewenjian/2020-02-07/12876.html. [Last accessed 2020 Feb 06].
- National Administration of Traditional Chinese Medicine. Advances have been made in research of screening effective TCM prescriptions [EB/OL]. Available from: http://bgs.satcm.gov.cn/gongzuodongtai/2020-02-06/12866.html. [Last accessed on 2020 Feb 06].
- 17. China News of Traditional Chinese Medicine. CPPCC member Wang Jie: "Qing Fei Pai Du Decoction" Should be Considered as Strategic

- Reserve Medicine [EB/OL]. Available from: http://www.wfas.org.cn/news/detail.html?nid=5632&cid=43. [Last accessed on 2020 May 27].
- Meng JH, He Y, Chen Q, Gao Q, Chen YG, An J. A retrospective study on the treatment of COVID-19 type common/type severe with Qingfei Paidu Decoction. Chin Hosp Pharm J 2020;40:2152-7.
- Li KY, An W, Xia F, Chen M, Yang P, Liao YL, et al. Observation on clinical effect of modified Qingfei Paidu Decoction in treatment of COVID-19. Chin Tradit Herbal Drugs 2020;51:2046-9.
- Chen J, Wang YK, Gao Y, Hu LS, Yang JW, Wang JR, et al. Protection against COVID-19 injury by qingfei paidu decoction via anti-viral, anti-inflammatory activity and metabolic programming. Biomed Pharmacother 2020;129:110281.
- National Administration of Traditional Chinese Medicine. Wang Wei: Qing Fei Pai Du Decoction is Specific Medicine for COVID-19, with a Course of Treatment Only 100 RMB [EB/OL]. Available from: http:// www.satcm.gov.cn/hudongjiaoliu/guanfangweixin/2020-04-18/14727. html. [Last accessed on 2020 Apr 18].
- 22. China Daily. These "Three Drugs and Three Prescriptions" of TCM are Therapeutically Effective for COVID-19 [EB/OL]. Available from: https://china.chinadaily.com.cn/a/202003/18/ WS5e7178c5a3107bb6b57a7281.html. [Last accessed on 2020 Mar 18].
- Deng HY, Zhao YF, Xu J, Yuan M, Zhang Y. Dynamic analysis report on registration of clinical evidence-based research of COVID-19 prevention and treatment with traditional Chinese medicine. Shanghai J Tradit Chin Med 2020;54:14.
- 24. Hu K, Guan WJ, Bi Y, Zhang W, Li LJ, Zhang BL et al., Efficacy and safety of Lianhuaqingwen capsules, a repurposed Chinese herb, in patients with coronavirus disease 2019: A multicenter, prospective, randomized controlled trial. Phytomedicine. Available from: https://doi.org/10.1016/j.phymed.2020.153242. [Last accessed on 2020 Oct 18].
- 25. Ye YA, G-CHAMPS Collaborative Group. Guideline-based Chinese herbal medicine treatment plus standard care for severe coronavirus disease 2019 (G-CHAMPS): Evidence from China. Front Med (Lausanne) 2020;7:256.
- Luo XF, Ni XJ, Lin JH, Zhang YD, Wu L, Huang DH, et al., The addon effect of Chinese herbal medicine on COVID-19: A systematic review and meta-analysis. Phytomedicine. Available from: https://doi. org/10.1016/j.phymed.2020.153282. [Last accessed on 2020 Oct 18].
- 27. Global Network. Beijing Forum for Global Health-Academicians Zhong Nanshan and Zhang Boli Discussed Together TCM Preventing COVID-19 and Safeguarding Global Health [EB/OL]. Available from: https://baijiahao.baidu.com/s?id=1675647923441758984&wfr=spider &for=pc. [Last accessed on 2020 Aug 21].
- Wang W, Wang L, Jiang SS, Ding X, Wei HJ, Liang TX, et al. Study on the TCM prescriptions regularity in fighting against COVID-19 based on the cloud platform of Ancient and Modern Medical Records. Beijing J Tradit Chin Med 2020;39:800-5,901.
- 29 Bai M, Li YB, Miao MS. Analysis on the prescription rule of traditional Chinese medicine for epidemic disease prevention and treatment based on data mining of ancient books. Pharmacol Clin Chin Mater Med 2020:36:32-6
- The Beijing News. Zhang Boli: TCM "Goes Global" Depends on Technology and Standards, Not Only on Herbal Medicine [EB/OL]. Available from: http://news.sina.com.cn/c/2020-09-08/doc-iivhuipp3240770.shtml. [Last accessed on 2020 Sep 08].
- 31. People's Daily. Wu Zunyou: Global Outbreak of COVID-19 Will Maintain High Prevalence in Some Time [EB/OL]. Available from: https://www.sohu.com/a/416544389_359980?_f=index_select_10. [Last accessed on 2020 Sep 05].
- 32. China Network. Timoshenko: Will Actively Promote the Internationalization of TCM [EB/OL]. Available http://health.china.com. cn/2020-10/15/content 41325148.htm. [Last accessed on 2020 Oct 15].
- Xinmin Evening News. Integrated Chinese and Western Medicine, "Chinese Approach" for Fighting against COVID-19 [EB/OL]. Available from: https://baijiahao.baidu.com/s?id=16774138604341619 94&wfr=spider&for=pc. [Last accessed on 2020 Sep 10].

How to cite this article: Qiu JN, Deng HY. Taking proactive action: Introduction to the prevention and treatment of COVID-19 with traditional Chinese medicine. Chin Med Cult 2021;4:25-30.

Theory of Fighting the Epidemic with Traditional Chinese Medicine Qigong (气功) Therapy

Dan Zhao

Shanghai Qigong Institute, Shanghai 200030, China

Abstract

Qigong (气功) therapy is an active self-paced exercise therapy and it has a long history in traditional Chinese medicine (TCM). As early as the mention of it in the *Huang Di Nei Jing* (《黄帝内经》*Huangdi's Internal Classic*), there is a record of using qigong therapy to prevent and treat pestilence. This thesis discusses the idea and methods of qigong therapy in TCM, such as daoyin (导引), expiration and inspiration, and meditation. These methods purpose to have the functions of strengthening and consolidating the primordial qi, improving health conditions, and resisting pestilent qi. Therefore, the core idea of fighting the epidemic with qigong therapy is to enhance the healthy qi, and to prevent the intrusion of pestilent qi into the human body. It embodies the TCM thought of "when there is sufficient healthy qi inside the body, the evil cannot invade the body."

Keywords: Active self-medication, daoyin (导引), expiration and inspiration, healthy qi, pestilence, qigong (气功) therapy

Introduction

The new coronavirus disease (COVID-19) refers to pneumonia caused by a new type of coronavirus (SARS-CoV-2) infection. It is the most widespread pestilence in human history. Traditional Chinese medicine (TCM) has played an important role in this pandemic situation. As part of the TCM method, qigong (气功) therapy is also applied in the frontline of tackling the disease. In the Wuhan field hospital, doctors taught patients to practice Ba Duan Jin (八段锦) and Liu Zi Jue (六字诀), etc. On February 22, 2020, to make full use of the unique advantages of TCM and to accelerate the recovery of COVID-19 patients, the experts committee for the COVID-19 Joint Control Mechanism Response Team of China's State Council formulated a guideline named the Chinese Medicine Rehabilitation Suggestions for Patients during the Recovery Period of New Coronavirus Pneumonia (Trial Implementation). In this guideline, it is stated that "After checking out from the hospital, patients with mild and common types of new

coronary pneumonia can take a variety of exercises; while for severe or critical patients; they should choose the appropriate traditional exercises according to their recovery conditions." Recommended qigong methods include Ba Duan Jin, Tai Ji Quan (太极拳), and Liu Zi Jue. Qigong therapy has once again entered the notice of the public.

Philosophy of Fighting the Epidemic with Traditional Chinese Medicine Qigong Therapy

The well-known TCM saying "when there is sufficient healthy qi inside the body, the evil cannot invade the body (正气存内,邪不可干)" is actually the principle found in the *Huangdi's Internal Classic* for use in the treatment of epidemic diseases, and the treatment method adopted mainly is the qigong therapy. *Su Wen* "Ci Fa Lun" (《素问·刺法论》*Plain Questions* "Discussion on Acupuncture Methods") states that, "The Yellow Emperor (黄帝) said: "I have heard

Submitted: 26-Jun-2020 Accepted: 28-Jan-2021 Published: 31-Mar-2021

Quick Response Code:

Access this article online

www.cmaconweb.org

DOI:

Website:

10.4103/CMAC.CMAC 3 21

Corresponding author: Dr. Dan Zhao,

Shanghai Qigong Institute, Shanghai 200030, China.

E-mail: 15921545368@126.com ORCID: 0000-0002-3243-401X

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

 $\textbf{For reprints contact:} \ WKHLRPMedknow_reprints@wolterskluwer.com$

that the five kinds of pestilence can all spread from people to people. Among children or adults alike, the symptoms are the same. How come there are people who are not been affected by the pestilence even though no treatment is used? (余闻五 疫之至,皆相染易,无问大小,病状相似,不施救疗,如何可 得不相移易者)." Qi Bo (岐伯) is said to answer: "Those who are not affected by the pestilence is due to sufficient healthy qi inside their bodies. That is why evil cannot invade their bodies. When pestilence has occurred, care should be taken to avoid toxic qi. Evil qi usually gets into and out of the body through the nose. Healthy qi originates from the brain, so evil can't attack it (不相染者,正气存内,邪不可干,避其毒气,天牝 从来,复得其往,气出于脑,即不邪干)."[1] The "pestilence" described by the Yellow Emperor has the characteristics of the plague, which is able to "spread from people to people, and despite their ages, they all exhibit the same symptoms (皆相染易,无问大小,病状相似)." Qi Bo points out that by improving the healthy qi of the human body, the intrusion of the epidemic qi can be avoided. He proposes three methods to treat epidemic diseases, all of which are related to gigong therapy. The first method is to keep thinking: "Qi comes from the brain, that is, the heart is just like the sun. If you want to enter the epidemic room, first think of the blue-green qi coming out of the liver, moving from the left to the east and transforming into a forest; then think of the white qi coming out of the lungs, moving right to the west and transforming itself into dagger and armor; the red qi coming out of the heart, going south to the top and turning into flame; the black qi coming out of the kidneys, going north to the bottom and transforming itself into the water; finally think of the yellow gi coming out of the spleen, to be stored in the center, and then turning into soil. After thinking of these five qi of the viscera which could protect the body, then you can enter the epidemic room."[1] The second method is expiration and inspiration: "On the vernal equinox, you breathe out before the sunrise (于春分之日,日未出而吐之)."[1] The third method is to use medicine combined with qigong therapy: "Formulae of Minor Golden Elixir... Take a sip of qi from the brilliance of the sun from the east every day, take a pill with ice water, and swallow it. If you take ten pills, you won't suffer from epidemic diseases (小金丹方……每日望东吸日华气一口,冰水下一 为.和气咽之.服十粒.无疫干也)." When taking the minor golden elixir, you breathe in the sun's yang qi from the east and ingest the pill with the cold qi of cold water, so that epidemic disease will not attack you. In addition, the same chapter of the book also uses daoyin (导引) method after treating the "earth pestilence (土疫)" with acupuncture." "When the acupuncture is completed, the patient should not travel at night or long distance. They need to keep clean within 7 days, and refrain from meat, wine, and other stimulants. All people with chronic kidney diseases should face south from 3 a.m. to 5 a.m., keep

calm without thinking of anything, hold their breath for 7 times, and then breathe in smoothly as if swallowing something very hard. After doing it 7 times, there will be vast quantity of saliva underneath the tongue."[1] After the treatment of acupuncture, one needs to calm the mind, swallow the saliva and accept the qi. Therefore, it can be inferred that qigong therapy was at that time a common method to treat pestilence in the Qin and Han dynasties. In the process of fighting against pestilence, gigong therapy can be applied standalone or in combination with other therapies. Su Wen "Shang Gu Tian Zhen Lun" (《素 问·上古天直论》 Plain Ouestions "Ancient Ideas on How to Preserve Natural Healthy Energy") states that: "When vital qi in the body is in harmony, essence and spirit will remain inside and diseases will have no way to penetrate (恬淡虚无,真气 从之,精神内守,病安从来。)."[1] Although qigong therapy seems to be mysterious, when it is used by the ancients' minds which were pure, calm, and harmonious, the strength of the vital qi protecting the body is unperceivable by the impetuous homo sapiens.

The ideological principle of cultivating healthy qi to fight against evils via gigong therapy has continued to this day. In the early days after the founding of the People's Republic of China, there was a shortage of medicines and medical treatment, hence the promotion and use of gigong therapy. Liu Guizhen (刘贵珍), the initiator of the widespread application of Qigong therapy in the New China published a book entitled the Qi Gong Liao Fa Shi Jian (《气功疗法实践》 Qigong Therapy Practice) in 1953. He says that during the process of practice and collation, they realize that although the names of the exercises are different, they are all about body, breathing, and mind exercise to cultivate the body's healthy gi in order to prevent illness and prolong lives. According to the classical theory, this kind of self-exercise method which focuses on cultivating healthy qi is named qigong. Liu explains that the "qi" of qigong does not only include respiratory qi, but also the healthy gi in the human body. In gigong practice, disease can be cured of by strengthening the healthy qi. When the healthy gi is consolidated, the body constitutions will be strong, and the function of the zang-fu organs will also be enhanced, thus maintaining health and prolong life. The "gong" of qigong refers to the kung fu of practicing gigong. If you practice gigong without kung fu, you cannot achieve good results. The word "qigong" summarizes the practice of meditation, expiration and inspiration, daoyin, and internal kung fu. Because qigong is used for curing and preventing disease, it is named gigong therapy. [2] It can be deduced that through various methods such as mediation, expiration and inspiration, daoyin, and internal kung fu, that qigong can achieve the goal of enhancing healthy qi, preventing diseases, or expelling evil. This very same idea is the philosophical thinking of using qigong to fight the epidemic.

Methods of Fighting the Epidemic with Traditional Chinese Medicine Qigong Therapy

Qigong has been used in the fight of epidemic since the ancient times. In the unearthed Mawangdui tombs of the early Western Han dynasty, the "Daoyin for Warm Diseases (引温 病)" figure is a typical representative of using daoyin to treat warm diseases. The Han Bamboo Slips, Yin Shu (《号[书》 Book of Daoyin) unearthed from the same period of time also mentions fever during the onset of consumption diseases, and daoyin was used as its treatment. The Yin Shu states that when the seasons change, human beings will inevitably be affected by the excessive counterflow of gi and suffer from illness. The "counterflow qi (乱气)" includes qi of the epidemic diseases. Methods of daoyin and expiration and inspiration are applied to prevent and treat illness. There are also many records of the fighting epidemic with gigong in other classics of Chinese medicine, i. e. the chapter of "Symptoms of Epidemic Diseases" from Zhu Bing Yuan Hou Lun (《诸病源候论》 Treatise on the Pathogenesis and Manifestations of Various Diseases) and the chapter of "Epidemic Diseases" from Gu Jin Tu Shu Ji Cheng (《古今图书集成》 Collection of Ancient and Modern Books). All of them have adopted daoyin therapy.

Qigong therapy refers to a comprehensive treatment method with various measures. Its prevention and treatment against epidemic diseases are as follow:

Daovin

Dao Shu "Zhen Gao Pian" (《道枢·真诰篇》 Dao Principle "Advise Chapter") states that: "The Jingjing Massage Classic says that when waking up, you should calm your breath and sit up straight. First you cross the left and right hands to cover the back of the neck, raise the neck to look forward for three to four times. This will make the essence and blood flow smoothly and the wind qi won't penetrate the human body. Once this movement is completed, stretch out the four extremities backward, then the static qi will be dispelled and vessels will be smooth. Doing these two kinds of movements for three times separately. When waking up, you wipe the neck and ears with the thick cloth until the adjacent areas are warm. Then rub the back from hairline to the neck multiple times, and rub the face with left and right hands for a long time. Once these activities are completed, swallow the saliva for twenty times to circulate the inner fluid. Practicing these movements consistently will improve vision, cleanse the body, and prevent evils from attacking your body."[3] The book concludes that through the flexion and extension, rubbing hands, and swallowing saliva, daoyin can enhance the healthy qi, maintain wellbeing, and prevent the invasion of evils.

Dao Shu "Yi Sheng Pian" (《道枢·颐生篇》 Dao Principle "Prolonging Lives Chapter") states that "Zuo Zhenren (左

真人) (named Ci) said, 'The elderly is often attacked by the wind. They should cross the left and right hands day and night, moving their heads towards the ground. Let the Qi in their body go upwards to the Tianzhu acupoint and produce sweat in the limbs. These movements can be used to eliminate pestilence, guide the qi and improve vision.""[3] Zuo Ci (左 慈) is a cultivator. He believes that the elderly is vulnerable to wind evil attack, and the method of daoyin to produce sweat can be used to eliminate pestilence. Dao Shu "Tai Qing Yang Sheng Xia Pian" (《道枢·太清养牛下篇》Dao Principle "Part 2 of Health Cultivation Chapter") points out the causes of the pestilent outbreak and the methods of applying daoyin to eliminate pestilence. "Pestilence is a kind of evil yang qi. It gathers in various viscera and enters different kinds of vessels (温疫者,阳气也,聚于诸藏,入于诸脉)."[3] Qi mechanism of the five viscera, such as the liver, spleen and kidney, tends to rise upward; qi mechanism of the six fu organs, such as the stomach, small intestine, and large intestine, tends to flow downward. The zang and fu organs are connected to each other. If the qi of the viscera does not rise, the qi of the fu organ will not descend. If the qi of the fu organ does not descend, the evil heat will not be eliminated. Through prostrating and lifting, bending and stretching the body, it is possible to adjust the ascending and descending of the five zang and six fu organs, harmonize the vin and yang of the qi, blood and meridians, and finally expel the evils. Malaria is also a kind of pestilence, which is caused by yang exposure and yin blockage. It can also be treated with daoyin when it attacks. The "Chen Xiyi (陈希夷) sleeping in Huashan Figure" from the Chi Feng Sui (《赤凤髓》 Red Phoenix Marrow) states that "To treat color consumption (色痨), rest your head on your right hand, use the left fist to rub up and down on the abdomen. Lay your right leg slightly curled, and rest the left leg on top of the right leg. Keep thinking and adjust your breathing. When sleeping, breathe in the qi for 32 times and retain it in the abdomen. Practice this measure for 12 times, and the disease will be healed over time."[4] "Consumption" is a chronic infectious disease. The above-mentioned approach adopts comprehensive gigong methods such as horizontal daoyin, thinking, and inspiration and expiration to treat deficiency caused by "color consumption."

Self-massage is also a daoyin method. For example, in the Yi Qie Jing Yin Yi (《一切经音义》 Meanings of All Classics), Huilin (慧琳) of the Tang dynasty said that "Daoyin means scrape, pinch, stretch and contract your hands and feet to relieve fatigue and vexation (凡人自摩自捏,伸缩手足,除劳 去烦,名为导引)." This method can also be used to remove pestilence. Dao Principle "Advising Chapter" states that "For producing qi, swallow your saliva for 14 times and then press the painful parts of the body......Swallow saliva for 14 times, and press the painful parts of the body for 21 times. By taking

these measures often, there will be no diseases attacking you."[3] This is the method of self-massage combined with Zhu You's method to eliminate pestilence. Between 10 pm and 12 pm, when the body is producing qi, swallow the saliva, massage the painful parts of the body, and pray with Zhu You to get rid of the "evil wind qi and pestilence (风气恶疫)."

Respiratory Method

Since the early Han dynasty, there have been records of breathing, inspiration and expiration to prolong lives in Chinese classics. The Zhuang Zi (《庄子》 Chuang Tzu) states that "Breathe, exhaling old (air) and inhaling new (air) just as a bear hangs itself while climbing a tree or as a bird stretches its legs while flying and doing so can prolong lives (吹呴呼 吸,叶故纳新,能经鸟申,为寿而已矣)."The Book of Daovin from the Zhangjiashan Han bamboo slips has clearly pointed out that the "breathing out" method could be used to remove heat, and that the "blowing" method could be used to remove cold. Ling Jian Zi (《灵剑子》 Master of the Magical Sword) explains that, "About all kinds of heart diseases, they could be cleared with the breathing out method. There is no need to treat them according to the six qi methods. If there are cold diseases, the blowing method could be used to supplement it. And it will regulate the disease of the upper energizer (凡诸 热疾,大开口呵之为泻,不必六气也。有疾冷,即吹以补 之,则调理上焦之疾,往来微,自求安之道也)." Both cold and heat are common phenomena in epidemic diseases. The methods for inspiration and expiration with pronunciation could be applied to remove the evils of cold and heat. Yang Xing Yan Ming Lu (《养性延命录》 Records for Cultivation and Prolonging Lives) states thus: "There is one method for receiving qi, six methods for expelling qi. The one method for receiving qi refers to inhalation. The six kinds of expelling qi methods refer to blowing, exhaling, sighing, breathing out with open mouth, breathing out slowly, and panting..... Blowing is used for cold diseases, while exhaling is used for warm diseases. About the functions of the six methods, blowing could eliminate wind, exhaling could eliminate heat, sighing could eliminate vexation, breathing out with open mouth could descend qi, breathing out slowly could dispel stagnation and panting could relieve extremities."[5] Through different phonetic sounds, the corresponding exogenous evils can be removed, which can be used flexibly in clinical settings.

Qi of absorbing and regulating the elements is a common method of qigong. The *Master of the Magical Sword* states that "if your heart dies(气灰心绝), and you do not want to be affected by diseases, then all kinds of diseases including those contagious ones could not attack you. If the brain is depleted, epidemic pathogen will attack human body from the top of the head. If the brain is sufficient with essence, nothing can harm it. Anyone who has illnesses should get up early, adjust their breathing to drive the illnesses out of the five zang and six fu

organs via the movement of qi. This is deemed to be effective if a large amount of warm sticky sweat is produced. Before the sweat degrades, adjust the movement of qi as before and close the pharynx. Otherwise, you need to wrap the body with clothes and quilts. Both of these actions belong to gi adjustment. For patients with wind, qi, pestilence, consumption or toxin diseases, the former method could be taken to dispel evils from tendons, bones, and marrows. The effect is unparallel that even large quantity of various medicines may not achieve it." "Heart dies" refers to the state of "forgetting body and cognition (离形去知)" from Chuang Tzu. If a person could separate themselves from the human body, no pestilence or toxin can invade them. In addition, adopting the method of Qi adjustment can also ward off evils and eliminate diseases such as wind, qi, miasma, consumption, and toxin. Bao Pu Zi "Shi Zhi" (\lambda 抱朴子·释滞》 Works of Master Bao Pu "Interpretation of Stagnation") states that "Qi movement can cure all diseases, or can help people remain safe and sound during a plague (行气 或可以治百病,或可以入瘟疫)."[6] This book points out that practicing Oi movement can cure all diseases and defend the body against epidemic. Bao Sheng Xin Jian "Dao Yin Fa" (《保生心鉴·导引法》Heart Mirror for Health Preservation "Daoyin Method") states that "Starting from midnight, no breathing out from the mouth should happen. Only a slight clear breath is taken from the nose. Take this measure once after midday and again before noon, or three times every day. Over time illness will be gotten rid of and the body will gradually be lightened."[7] Therefore, practicing two to three times inspiration and expiration a day in a calm state can help get rid of pestilence and improve body health.

Meditation

The methods of keep thinking for preventing plagues are mentioned in "Symptoms of Warm Diseases (温病候)," "Symptoms of Pestilence (疫疠病候)," and "Disease Cause of Warm Disease (温病论病源)" which are the chapters in the Treatise on the Pathogenesis and Manifestations of Various Diseases. Chapter of "Symptoms of Warm Diseases" stated that "When the rooster crows, recite the names of the gods of the four seas several times to ward off hundreds of evils, so that people will not get sick. The god of the East Sea is A Ming(阿 明), the god of the South Sea is Zhu Rong (祝融), the god of the West Sea is Ju Cheng (巨乘), and the god of the North Sea is Yu Qiang (禹强). It is also said that the heart qi is red, the liver qi is blue-green, the lung qi is white, the spleen qi is yellow, and the kidney qi is black. These kinds of Qi surround the human body and ward off evils. You need to keep thinking that the heart is flaming and bright against protect the body from evils and and it could stay safe during an epidemic."[8] In "Cultivation Chapter (道林养性)" of the Bei Ji Qian Jin Yao Fang (《备急千金要方》 Essential Prescriptions Worth a Thousand Gold Pieces for Emergencies), it is stated that "At the beginning of learning the Tao, practitioners need to get rid of external interference. If they can do it, they will not get sick even in an epidemic (是知勿外缘者,真人初学道法。若能如此者,可居温疫之中无忧疑矣)."[9] If a practitioner can withdraw from external disturbances, his mind will be calm, his qi and blood circulation will be smooth and his healthy qi will be strong. He will not contract the contagious diseases even during an epidemic outbreak.

Sit still as a form of therapy

In the *Dong Jing Gong An Mo Mi Jue* (《动静功按摩秘诀》 *Secrets for the Dynamic and Static Massage*), daoyin is also applied to treat "color consumption (色痨)" and "wine consumption (酒痨)." The same book also points out the treatment methods for "consumption" disease. "When you are sick due to overexertion, sit upright, clear your mind, keep your eyes closed, deactivate the Manipura chakra, and close your nose and mouth. This would descend the heart fire and ascend the kidney water, resulting in the heart and kidney qi mixed together.(凡劳疾,正坐,清心瞑目,不视脐轮,缄鼻闭口。使心火下降,肾水上升,二气交结为妙)." Keeping calm and meditating will intersect the heart and kidney, and promote the growth of healthy qi.

All in all, qigong therapy mainly adopts methods such as calming the mind, daoyin with flexion and extension, keeping the thought of the circulation of qi, and etc., in order to promote the abundance of healthy qi, dispel evils, or to prevent the invasion of external evils. Qigong therapy focuses on the prevention of epidemic diseases. As is mentioned above, there are many such similar expressions in TCM classics, including "pestilential pathogen and toxin will not be able to cause the disease (瘟瘴疫毒莫能为患)," "not suffering from the epidemic disease even in the prevalence of pestilence (坐于温疫之中无忧疑)," "not being attacked by the pestilence (不入瘟疫)," "no invasion of the evil qi (邪气 不侵)" and so on. Chapter of "Symptoms for Warm Diseases not Infecting People (温病令人不相染候)" in the Treatise on the Pathogenesis and Manifestations of Various Diseases states that, "Epidemic diseases are caused by abnormal climate and disharmony between warmth and coolness. People who contract such pathogenic qi will become sick, and will easily affect other people. It may even cause the extermination of an entire family and infecting others, therefore medicines and 'magic arts' must be taken to prevent it."[8] This suggests that epidemic diseases possess the characteristics of "been contagious (转相染易)," and "magic arts" are proposed as an early prevention method. "Magic arts" refers to the methods of praying by witched doctors and keep thinking in qigong therapy. If people have contracted evil qi, the evils must be expelled as soon as possible. As is mentioned in the Jin Gui Yao Lue (《金匮要略》 Synopsis of the Golden Chamber), "daoyin and expiration and inspiration should be practiced when the

four extremities are heavy (四肢才觉重滞,即导引吐纳)."[10] Daoyin and expiration and inspiration should be used when the evils are in the superficial layer of the body to dispel evils as soon as possible.

The Key to Fight Epidemic Diseases with Qigong Therapy

Various treatment measures in qigong therapy emphasize the importance of "inner peace." It is believed that inner peace can bring about qi tranquility, which can cultivate healthy qi and resist evils. For example, Xin Ke Bao Sheng Xin Jian "Huo Ren Xin Fa" (《新刻保生心鉴·活人心法》 New Engraved Heart Mirror for Health Preservation "Mental Cultivation Methods for Human Beings") points out that "Ancient sacred doctors could treat people's minds to prevent illnesses from happening; while doctors today only know how to treat diseases but do not know how to heal the mind. It is definitely unwise to think that such doctors can cure people of diseases, they are just trying to catch the shadows and ignoring the substance. They hardly realize that disease is caused by the mind.....this is the key factor in infecting all plagues (古之神圣之医而能疗人之心, 预使不致于有 疾;今之医者,惟知疗人之疾而不知疗人之心,是由舍本 逐末,不穷根源而攻其流,欲求疾愈,不亦愚乎.....殊不 知病由心生.....凡传染一切瘵疫之证是也)."[7] "If you want to treat the disease, you must first treat the mind (to remove doubts, anxiety, dissatisfaction) for the edification of Tao (欲治其疾,先治其心。必正其心,然后资于道)."[7] Mental adjustment is the core principle of qigong therapy. It ensures the smooth movement of qi by regulating qi disorder caused by emotions. Emotional changes have great influence on the human body. Su Wen "Ju Tong Lun" (《素问·举痛 论》 Plain Questions "Discussion on Pains") states that "Excessive anger drives qi to flow upwards; excessive joy slackens qi; excessive sorrow exhausts qi; excessive fear makes qi sink..... excessive fright causes Qi chaotic..... excessive contemplation binds qi(怒则气上,喜则气缓,悲则 气消,恐则气下.....惊则气乱.....思则气结)."[[All kinds of emotional changes may cause qi disorder of the human body, leading to abnormal qi movement and blood circulation and ending up with diseases. The Huangdi's Internal Classic states that "all diseases are caused by the disorder of qi (百 病生于气)." Abnormal qi movement is an important cause of diseases. Qigong therapy keeps emotions in a stable state by adjusting the mind and thus reducing the harm stemming from abnormal emotions.

Qigong therapy is of active self-medication, which requires the patient to practice persistently to achieve significant results. For example, Bao Sheng *Xin Jian* "Xiu Zhen Yao Jue" (《保生心鉴·修真要决》 *Heart Mirror for Health Preservation*

"Essentials for Cultivation") states that "Anyone who wants to cultivate themselves must choose a clean room, adapting themselves to the warmth and coolness, dryness and dampness of the weather. At the early dawn when the qi grows, or while lying in bed at 3 am to 5 am, you may sit and stand up according to the qigong principles. You must first massage your eyes, make a fist, adjust your breath, and then focus on your breath. Being diligent, your body will be relaxed and healthy, the disease will be conquered, and life will be prolonged." This emphasizes that practicing qigong must be diligent and persistent, and its effect will be achieved after quite some time. Qigong can not only prevent diseases but also prolong lives.

Translator: Xin Huang (黄鑫).

Funding

This study was financed by grants from the Youth Fund for Humanities and Social Sciences of Ministry of Education (No. 20YJCZH240); "Taiji Health" platform development of 3-year action plan for Shanghai to further accelerate the development of TCM Career (No. ZY(2018-2020)-CCCX-2007).

Conflicts of interest

None.

References

- Guo AC. Proofreading Notes of the Huangdi's Internal Classic Plain Questions. Beijing: People's Medical Publishing House; 2013. p. 829.
- Liu GZ. Practice of Qigong Therapy. Shijiazhuang: Hebei People's Publishing House; 1957. p. 1-2.
- Zeng S. Taoism Classic. Shanghai: Shanghai Classic Publishing House; 1990. p. 58, 88-9, 278.
- Zhou LJ. Marrow of the Crimson Phoenix. Shanghai: Shanghai Classic Publishing House; 1989. p. 128.
- Ding GD. Record for Mental and Physical Cultivation of Taiqing Daoyin Health-Preservation Classic. Beijing: China Traditional Chinese Medicine Press; 1993. p. 96-7.
- Li A. Analects of Master Zhu Scripture of the Great Peace the Works of Master Baopu. Tianjin: Tianjin Classic Publishing House; 2016. p. 544.
- Jushi T. Heart Mirror for Health Preservation. Beijing: Publishing House of Ancient Chinese Medical Books: 1994. p. 1, 28-9, 31.
- Chao YF. Proofreading Notes of General Treatise on the Causes and Symptoms of Diseases. Beijing: People's Medical Publishing House; 1992. p. 211, 213.
- Sun SM, Lu ZL. Essential Prescriptions Worth a Thousand Gold Pieces for Emergencies. Shenyang: Liaoning Science and Technology Press; 1997. p. 410.
- 10. Zhang YP. Synopsis of Prescriptions of the Golden Chamber. Fuzhou: Fujian Science and Technology Press; 2011. p. 1.

How to cite this article: Zhao D. Theory of fighting the epidemic with traditional Chinese medicine qigong (气功) therapy. Chin Med Cult 2021;4:31-6.

The Introduction and Localisation of Traditional Chinese Medicine in Malaysia

Shin-Wei Lee1, Hai-Ying Li2

International Education College, Shanghai University of Traditional Chinese Medicine, Shanghai 201203, China, Institute of Science, Technology and Humanities, Shanghai University of Traditional Chinese Medicine, Shanghai 201203, China

Abstract

This thesis discusses how traditional Chinese medicine was introduced to Malaysia. History records show that traditional Chinese medicine was first introduced to Malaysia in the year 1405 while 1796 saw the establishment of Malaysia's first Chinese medicine shop. With the popularization of Chinese medicine, Chinese medicine education and organizations were established. Traditional Chinese Medicine has gradually been recognized by the Malaysian government due to the efforts of the practitioners of traditional Chinese medicine. In 2004, the Traditional and Complementary Medicine Department was established at the prestigious National Cancer Institute to improve quality of life as well as provide opportunities for cure to cancer patients.

Keywords: Chinese medicine, localization, Malaysia, South East Asia

Introduction

Malaysia (formerly Malaya) is a Southeast Asian country whose geographical location is close to the equator. Malaysia's population comprises three main ethnic groups (Malays, Chinese, Indians) as well as other smaller ethnic groups and indigenous groups. The Malaysian Chinese are the second largest ethnic group in Malaysia, accounting for 24.6%^[1] of the total population. Most of the ancestors of the Malaysian Chinese came to Southeast Asia to make a living and to escape from the hard life conditions in the then South China.^[2] The Chinese traditional culture of health preservation is both deep-rooted in their culture and effective, and the Chinese who have left their native land have inherited these customs and habits of health preservation. This is why, wherever there are Chinese people, there must be Chinese culture and the Chinese medicine tradition of maintaining good health. These phenomena are due to the Chinese people's tradition of keeping to their roots and origin wherever they go.

Submitted: 02-Jun-2020 Accepted: 21-Jan-2021 Published: 31-Mar-2021

Access this article online Quick Response Code: Website: www.cmaconweb.org DOI: 10.4103/CMAC.CMAC_2_21

History of the introduction of Chinese medicine to Malaysia

According to Han Shu "Di Li Zhi" (《汉书·地理志》 Treatise on Geography, the Book of Han"), some Chinese monks and businessmen arrived at the Malay Peninsula by sea when they traveled to India in 206 BC. In 618 A.D. they found a small number of monks and businessmen already living in the Malay Peninsula. They claimed to be the first Chinese settlers in the Malay Peninsula. (3) Chinese medicine followed in their footsteps. In 1405, Zheng He (郑和) of the Ming dynasty made seven voyages to the Indian Ocean, six voyages of which were to Malacca (a state of Malaya). His fleet carried many sailors, food, ceramics, and Chinese herbal medicines. [4]

Chinese businessmen and Zheng He's voyages to the Indian Ocean stimulated cultural exchanges among different countries at that time and encouraged many Chinese who had gone to Southeast Asia to seek a better life in Malaya. Due to Malaya's proximity to the sea, the climate is often quite humid. Despite this, the weather is never too hot and the temperatures range from a mild 20°C to 30°C on average throughout the year. This means that there is only monsoon season and dry season

Corresponding author: Dr. Hai-Ying Li,

Institute of Science, Technology and Humanities, Shanghai University of Traditional Chinese Medicine, Shanghai 201203, China.

E-mail: editor_lhy@126.com ORCID: 0000-0001-8872-6137

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

 $\textbf{For reprints contact:} \ WKHLRPMedknow_reprints@wolterskluwer.com$

in Malaya. Zheng He brought back some herbs to China from Malaya which included yellow ripe Chen Xiang (沉香 Lignum Aquilariae Resinatum), Chen Xiang (沉香 Lignum Aquilariae Resinatum), Mu Xiang (木香 Radix Aucklandiae), Bing Lang (槟榔 Semen Arecae), Yan Wo (燕窝 Nidus Collocaliae) and etc. Some of the medicines that he brought from China were well received because they were in line with the living conditions and daily needs. Due to the increase in demand for Chinese herbal medicines, Koo Suk Chuan (古石泉), a Malayan Chinese, purchased Chinese medicines from China in 1796 and shipped them to Penang, where he established a Chinese medicine hall— Yin Ai Tong (仁爱堂)[5] [Figure 1]. Even today this historical herbal medicine hall is still run by Koo's descendants.

In 1873, with the help of his knowledge of Chinese medicine, Eu Kong (余广) went to Southeast Asia to make a living. He set up a medicinal hall named 'Yan Sang' in Gopeng, Perak. This hall was named "Yan Sang," which literally means 'caring for mankind' in Chinese. [6] In order to commemorate his father, Mr Eu's son renamed the medical business as "Eu Yan Sang" (余仁生) and the name has remained to this day^[7] [Figure 2]. In the late 1880s, the economy was depressed. At that time the owner decided to use the name "Eu Yan Sang." A small medical hall thus changed itself into a Chinese medicine health care chain store known to every household in Malaysia, Singapore and Hong Kong. Today, "Eu Yan Sang" is located in every state and in a lot of shopping malls in Malaysia. They have become one of the top choices whenever Malaysian Chinese want to send a health care gift to their relatives and friends. Apart from selling Chinese patent medicines, "Eu Yan Sang" has set up private clinics and traditional Chinese medicine clinics in Singapore, Malaysia, and Australia.

As time went on, the number of migrant workers increased. Due to nonacclimatisation or injury at work, there was a surge in medical demand. In 1878, a citizen of Kuala Lumpur set up Malaya's first Chinese medicine clinic-Chha Yong Fay Choon Kuan to provide medical services for fellow townsmen. Pooi Shin Thong, was founded in 1881 by Kapitan Yap Kwan Seng, and In 1894 it was converted into a non-profit organization and its name was changed to Tung Shin Hospital (同善医院)^[8] [Figure 3]. Tung Shin Hospital is one of the earliest Chinese medicine hospitals established in Malaysia.

Traditional Chinese Medicine followed the footsteps of our ancestors to Malaysia and gradually took root. In 1924, the earliest Malayan TCM organization, namely Muar Chinese Medicine Institute was established in Muar by practitioners of TCM. Soon afterward, other states also witnessed the founding of their own Chinese medicine organization. In 1948, the Chinese Physicians' Association of Central Malaya was established. In 1989, it was renamed to be the



Figure 1: Yin Ai Tong (仁爱堂)



Figure 2: Eu Yan Sang (余仁生)



Figure 3: Tung Shin Hospital (同善医院)

Malaysian Chinese Medical Association (MCMA). In 1955, all individual states' TCM associations jointly formed a national federation of Chinese medicine---the Federation of Malayan Chinese Medicine.^[9]

Before 1955, most TCM courses were run by private TCM associations. With time passing by, there appeared more education institutes of Chinese medicine. In an effort to reform traditional medicine, the Government of Malaysia

issued the Bachelor degree of Chinese Medicine program standards in 2007. Those universities that still provide a TCM program are listed below: International Medical University (IMU), Management and Science University, INTI International University and Colleges (INTI), Southern University College (Southern UC), University Tunku Abdul Rahman (UTAR Sungai Long Campus) and Xiamen University Malaysia (XMU).[10] Malaysia's Ministry of Higher Education and Traditional and Complementary Medicine Division (T&CMD) also recognizes the certificate or diploma in Traditional Chinese Medicine Education obtained in China. Shanghai University of Traditional Chinese Medicine, Beijing University of Traditional Chinese Medicine, Tianjin University of Traditional Chinese Medicine, Nanjing University of Traditional Chinese Medicine, and Guangzhou University of Traditional Chinese Medicine are the five Chinese medicine universities recognized by the Malaysia government.[11] At present, most of the teaching materials used by Chinese medicine programs in Malaysia are from China, just the same materials used in most Chinese universities. English is the main teaching language at IMU while some people use Mandarin in teaching. The use of English has increased the opportunities to learn about TCM, and has further enhanced the understanding and acceptance of TCM by other ethnic groups in Malaysia.

Leading lights of Malaysia Chinese medicine

Malaysian TCM education can be divided into two stages, with 1955 as the watershed. Before 1955, those Chinese who came to Malaysia were more likely to do physical work. Acupuncture and Chinese medicine were the most widely used ways to supplement their physical strength and to cope with the injuries and tiredness they endured in their work as physical jobs consumed a lot of muscles and this made the workers become exhausted so they used acupuncture that could help them to recover. Because of the social environment at that time, most of the medical skills were passed down from generation to generation or carried out in the form of succession from teachers. Due to the lack of relevant historical records, it is difficult or even impossible at present to trace the first imported books of traditional Chinese medicine in Malaysia. Communication between China and Malaysia was disrupted by the British colonial government's Immigration Restrictions Act of 1952. To solve the problem of shortage of doctors and to train more Chinese medicine practitioners in Malaysia, the Chinese Physicians Association of Central Malaya established the first college of Chinese medicine in Malaysia---The Chinese Medical Institute of Malaya, which was later renamed to be Chinese Medical Institute of Malaysia.[12]

In the early days, teachers of various subjects wrote their own lecture sheets or asked senior TCM practitioners to write lecture sheets before printing and distributing them to students.^[13] In 1954, the Chinese Physicians Association of Central Malaya

established the Chinese Medical Aid Department to give medicine to those in need. Due to an increase in the number of patients and gaining support of people from all walks of life, the Chinese Medical Aid Department was granted 6700 square feet of land for building a new building on Hang Jebat Road. Later on, this house became the clinical teaching base for for Chinese Medical Institute of Malaysia's students in Malaysia. In March 2012, the Chinese Medical Aid Department established its first branch in Brunei West Road in Pudu. The Chinese Medical Aid Department and the Chinese Medical Institute of Malaysia [Figures 4 and 5] are the brainchildren of Professor Ngeow Sze Chan (饶师泉) [Figure 6], father of the development of traditional Chinese medicine in Malaysia. Professor Ngeow was committed to the promotion and cultivation of the next generation of TCM practitioners in Malaysia. In 2015, in memory of Professor Ngeow, and to praise his contributions and efforts in developing Malaysia TCM, the MCMA set up the first Ngeow Sze Chan Spirit Award, the highest award in the field of Chinese medicine in Malaysia. The MCMA also demonstrated the dedications and hard work of Professor Ngeow in developing Chinese medicine in Malaysia in the form of a stage drama to help the younger generation understand how difficult it used to be in setting up proper TCM practice and education and in cultivating the young generation to become traditional Chinese medicine practioners.[14] In 2016, after 6 months of preparation and data collection, the first Museum of Traditional Chinese Medicine History and Culture in Malaysia officially opened with the mandate of preserving a historical record of traditional Chinese medicine in Malaysia.

Localization of traditional Chinese medicine in Malaysia

Traditional medicine served the Malaysian people well since the beginning of the 20th century. Based on this, the government decided to control the quality of traditional medicines and Chinese herbal medicines in 1922. In 1997, the government of Malaysia began to monitor the quality of herbal medicines and proprietary medicines to ensure that the ingredients of these products lived up to the standard. In 2000, the Herbal Medical Research Centre was established in Malaysia. A dedicated division called the Traditional and Complementary Medicine Division under the Ministry of Health (MOH) was subsequently set up in 2004. It officially began operation in December of the same year.^[15] Chinese medicine in Malaysia took a big step forward in January 11, 2006, where the Malaysian Cabinet had agreed with the proposal of the MOH to establish T&CM units to include Chinese medicine as part of the medical services offered in public hospitals. To better regulate traditional and complementary medicine and to ensure both the safety of patients and the standard and quality of practitioner, Malaysia passed and enacted the Traditional and Complementary Medicine Act in Parliament on 1 August,



Figure 4: Speech by the late Dr. KO Che-kwong (高哲光), the former Head of Malaysian Chinese Medicine Association during the first full-time Chinese medicine course opening ceremony of Traditional Chinese Medical Institute Malaysia in 1990



Figure 5: Group photo during the opening ceremony of Chinese Medicinal Aid Hall in 17/3/1954



Figure 6: Professor Rao Shiquan (饶师泉)

2006. All traditional and complementary medicine practitioners were urged to register with the relevant authorities. Before

this, the Government had approved of three Chinese medicine organizations, namely the Federation of Chinese Physicians and Acupuncturists Association of Malaysia (FCPAAM), the MCMA, and the Federation of Chinese Physician and Medicine Dealers Association of Malaysia (FCPMDAM) to voluntarily register their member practitioners. Until March 20, 2020, a total of 3740 TCM practitioners had registered with the FCPAAM, 2096 TCM practitioners had registered with the MCMA and 6100 TCM practitioners had registered with the FCPMDAM, the data being obtained from the three major TCM organizations' websites. [16]

Hai-O Enterprise is another famous chain medicine shop in Malaysia whose establishment was to provide Malaysians the access to TCM. In 2002, Hai-O joined venture with Beijing Tong Ren Tang (北京同仁堂), the largest and long-serving pharmaceutical manufacturer in China to set up Peking Tong Ren Tang Malaysia Pte Ltd.[17] Beijing Tong Ren Tang is widely trusted around the world, and its medicines are sold all over the world. In Malaysia, Peking Tong Ren Tang pays close attention to the traditional management concept of "integrated clinical services" where medical consultations are carried out by the qualified traditional practitioner and the dispensing of prescribed herbs and drugs is available in one location. In 2013, Peking Tong Ren Tang and UTAR Sungai Long Campus signed a Memorandum of Understanding. The two sides agreed to conduct clinical and academic exchanges in the field of TCM and to jointly promote the development and future of TCM in Malaysia. The cooperation projects in the memorandum mainly involve three areas, namely, Peking Tong Ren Tang will assist Chinese medicine students from UTAR to conduct clinical internships at designated places of the company; Peking Tong Ren Tang will facilitate academic exchanges between the two sides, including mutual visits of academic staff, teaching research and participation at seminars or workshops, etc. Moreover, UTAR will arrange for their academic staff including lecturers and professors to attend medical services in Peking Tong Ren Tang. The opportunity to cooperate has laid a more solid foundation for the localization of Chinese medicine in Malaysia.

On December 13, 2017, UTAR and Guangxi University of Traditional Chinese Medicine (GXUCM) strengthened their cooperation in scientific research, training, culture, and medical treatment by signing a 3-memorandum of understanding. The China-Malaysia Centre for TCM was subsequently built at the UTAR Sungai Long campus. This center is responsible to promote the excellent traditions of oriental medicine including TCM, and the development of the local traditional medicine industry to enhance the level of health of the Malaysian people. On September 11, 2018, the China ASEAN Traditional Medicine book announced its book launch in Nanning, China. This book is the first systematic introduction and

documentation of traditional medicines in China and in the ASEAN countries. The book contains 746 high-resolution color pictures as well as a total of 104 families and 350 species of traditional medicine that are commonly used in China, Thailand, Myanmar, Vietnam, Laos, Malaysia, Cambodia, and the Philippines.

On August 8 of the same year, the 17th Consortium for Globalization of Chinese Medicine (CGCM) was held in Kuching, Sarawak.^[20] The conference was organized by the CGCM Committee and hosted by the Malaysian Institute of Pharmaceuticals and Nutraceuticals (IPharm) and the National Institutes of Biotechnology Malaysia. In contrast to the past conferences of its kind, the 2018 conference featured two different themes including a poster presentation and a forum on herbal research and industrial development in Malaysia. These valuable activities have infused endless energy into the Malaysian TCM community and encouraged the localization of TCM in Malaysia.

Clinical application of traditional Chinese medicine in Malaysia

At present, the graduates of TCM can start their own business or work in public hospitals, private hospitals, or private TCM clinics. The government has also set up a traditional Chinese medicine unit in the most authoritative National Cancer Institute to improve the quality of life and to provide opportunities for the cure to cancer patients. According to the data from the Traditional and Complementary Medicine Division in Malaysia, acupuncture was used more often to treat chronic pain and stroke sequelae in public hospitals in 2008.[21] The data also shows that more women are getting acupuncture treatment for chronic conditions, while men are more likely to get acupuncture treatment for stroke sequelae, and women are more likely to choose Chinese herbal medicine for cancer treatment.[22] Most of the patients that sought treatment in private clinics were diagnosed with pain syndrome (such as headache, stomach-ache or a sore neck, shoulder, lumbago or leg), limb and joint diseases (such as disc protrusion, rheumatoid arthritis), neurological diseases (such as stroke sequelae, insomnia, facial paralysis) and gynecological diseases (such as irregular menstruation, dysmenorrhea). In addition to the usual traditional Chinese medicine raw herbs, patients in Malaysia now have the option of scientific Chinese medicine such as powder and capsule so that it is more convenient for patients to take the medicine.

Bak Kut Teh (肉骨茶)

Malaysia's climate and the working environment of ancestral Chinese have enabled Malaysians to integrate Chinese medicinal materials into their daily meals. Among these, the most famous dish is Bak Kut Teh. At that time, most of the Chinese who came to Malaysia worked in rather poor

conditions because of their low-level knowledge and skills. They worked hard as three-wheeled cart coachmen, as laborers at wharf, as miners at the tin field, and as laborers of other difficult and dirty jobs. A kind-hearted tin mine boss who slightly understood the knowledge of Chinese medicine felt compassionate for these employees who worked under wet and humid environment. So he ordered the kitchen to boil a pot of medicinal bone soup for the workers according to a Chinese medicine prescription.^[23] This recipe is said to consist of such ingredients as Hu Jiao (胡椒 Fructus Piperis Nigri) from Malaysia, Dang Gui (当日 Radix Angelicae Sinensis), Chuan Xiong (川芎 Rhizoma Ligustici Chuanxiong), Gan Cao (甘草 Radix Glycyrrhizae) and Rou Gui (肉桂 Cortex Cinnamomi). These medicines could make the workers gain more strength, dispel damp-cold and which could also improve work efficiency. Gradually, the news about this nutritious bowl of soup spread among the laborers. In the end, Bak Kut Teh has become a favorite dish among Malaysian Chinese. The ingredients and herbs used in Bak Kut Teh are more inclined to nourish the body. Therefore, people who have damp-heat constitution should pay attention to the amount of Bak Kut Teh consumed so as to avoid the accumulation of damp-heat in the body.

Herbal tea and Gui Ling Gao (龟苓膏)

Malaysians have also developed the habit of drinking herbal tea due to the sultry climate and the habits of their Chinese background. Today, there are different types of herbal teas in Malaysia, such as centella asiatica tea, bitter-taste tea, sugar cane and imperatae rhizome tea, and monk fruit tea. Generally, herbal tea has a dark appearance, bitter taste with a little sweet note at the end and the elders say that drinking these herbal teas can clear heat and remove dampness. These herbal teas are recommended to be taken when they are still warm instead of leaving it cold. In ancient times, herbal tea was packed by herbalists and sold in herbal tea shops. Although such herbal tea packaging is still available, bottled herbal drinks are getting popular to keep up with the fast pace of modern life. In order to be adapted to the market, merchants have produced bottled tea drinks to make it easier for consumers to take. In addition to bottled drinks, herbal tea bags are another popular herbal tea product in Malaysia. Among the many herbal tea bags, the brand known by almost every household in Malaysia is Ho Yan Hor Herbal Tea [Figure 7]. Ho Yan Hor had come out with individual packing of herbal teas where consumers can get a cup of fresh herbal tea simply by brewing the teabag in hot water. In addition to herbal tea, Malaysian herbal tea shops also sell Gui Ling Gao, while supermarkets sell both homemade Gui Ling Gao powder and canned Gui Ling Gao. This is because the Gui Ling Gao and herbal tea have the same effect of clearing heat and dampness from the body. Due to the fact that one of the raw material of Gui Ling Gao---the

Cyclemys trifasciata---is an enlisted protected animal, and that there are more people adopting plant-based diet, most of the Gui Ling Gao brands that are now sold in the market does not contain it.^[24] Although there is a lack of one ingredient in the making of Gui Ling Gao nowadays, it does not affect much the effect the Gui Ling Gao produces.

Malaysia native herbs

Dengue fever is very common in Malaysia because of the hot weather and too much rainfall. This climate provides the best breeding ground for mosquitoes. Currently, there is no effective treatment for dengue fever in clinical practice around the world. As a result, Malaysian people choose folk medicine which can treat dengue fever such as Mu Gua Ye (木瓜叶 Carica papaya) and porcupine dates to treat dengue fever [Figure 8]. Scientists around the world have proven that Mu Gua Ye (木 瓜叶 Carica papaya) have anti-inflammatory effect, strong anti-thrombocytopenia, and immunomodulatory activity, which could help to increase the number of white blood cells.^[25] Although the use of porcupine dates has a long history there is no written or formal documentation until recently when experiments on it have shown that porcupine dates do possess anti-cancer efficacy. However, more experiments with higher vertebrae models are still warranted to validate its traditional claims as an anticancer agent.[26] Porcupine dates and Niu Huang (牛黄 Calculus Bovis) are both animal gallstones. Shen Nong Ben Cao Jing (《神农 本草经》Shennong's Classic of Materia Medica) stated that Niu Huang (牛黄 Calculus Bovis) can eliminate heat, dissipate phlegm, clear the wind-fire and recover one's sanity. These functions coincide with the use of porcupine dates in the treatment of dengue fever which belongs to febrile disease

The combination of Malaysian people's understanding of the living environment and the knowledge of traditional Chinese medicine is reflected in the use of indigenous herbal medicines in daily life. Some of the Malaysians have the habit of growing the local herbs in their gardens to relieve their ailments. These herbs include Black Face General(黑 面将军 Strobilanthes Cripus), [Figure 9]. Snake grass (忧遁 草 Clinacanthus nutans) [Figure 10], and Cat whisker (猫须 草 Clerodendranthus spicatus) [Figure 11], etc. These herbs were used by the ancestors through wisdom and experience in life and were able to treat common ailments and injuries in daily life. People believe that the so-called Black Face General Leaves could relieve dizziness and urinary infections, and the Snake Grass could treat cuts and injuries.^[27] The official Malaysian Herbal Monograph had documented Black Face General as laxatives and could treat malaria, coldness and coughing in children. Our country has also conducted some preliminary pharmacological experiments on the bioactive components of Black Face General, such as anti-oxidation, anti-ulcer, anti-diabetes, cytotoxicity, lipid-lowering, wound



Figure 7: Ho Yan Hor



Figure 8: Porcupine dates (豪猪枣)



Figure 9: Black Face General (黑面将军)

healing and inhibition of angiogenesis. These experimental data have not really been established on more human trials, because its pharmacological active ingredient analysis results also show it may be a potential future pharmaceutical market, and it is included in the national research and development direction.^[28]

In 2003, Li Jinrong and Huang Yunxuan used the collection of their 28 years of experience in identifying Chinese herbal medicines in Malaysia and published the illustrated plants of Malaysia for the benefit of the public. They hope when all those who encounter minor ailments in their life they will have the ability to treat them on their own. This book contains 100 kinds of herbs which belong to 47 families which can be found in Malaysia. It has listed the Latin names, Chinese names and also English names of the plants. The book contains also a detailed record of the collection and processing method, the properties of each herb, such as smells, indications, dosage, application methods, and some fun and tips about those medicinal plants. This book can be a comprehensive reference manual for understanding medicinal plants in Malaysia. Malaysia's native herbs are mostly able to clear heat and detoxify, which coincides with the hot climate, high rainfall and more damp-heat diseases in Malaysia.

With the improvement of living standards and consumption ability, people's awareness of health has also been raised. Malaysian people are more inclined to consume medicinal soups for improving health and nourishing the spleen that



Figure 10: Snake grass (忧遁草)



Figure 12: Ning-Shen calming soup

are suitable for the whole family. People can buy prepacked medicinal soup such as Ning Shen Decoction (宁神汤), Qing Fei Decoction (清肺汤) and Ren Shen Shi Quan Da Bu Decoction (人参十全大补汤) at the medicine hall, the medicine chain store and even at the shopping mall [Figure 12]. Most of these packed medicinal soups consist of Gou Qi (枸杞 Fructus Lycii), Yu Zhu (玉竹 Rhizoma Polygonati Odorati), Fu Ling (茯苓 Poria) and Dang Shen (党参 Radix Codonopsis). Women's menstrual regulating products, which include Bai Feng Pill (白凤丸) and Ba Zhen Decoction (八珍汤) that are also popular among Malaysian women [Figure 13].

Chicken essence is another health supplement product that Malaysians often come into contact with and they will bring this product as a gift when they go to visit someone in the hospital, old folks homes or in confinement [Figure 14]. The Malaysian people believe that chicken essence can reduce fatigue, boost immunity and vital energy, enhance brain function, nourish blood and promote lactation The traditional method of preparing chicken essence requires double boiling



Figure 11: Cat whisker(猫须草)



Figure 13: Bak Foong Pill



Figure 14: Product of Chicken Essence

fresh chicken with Chinese herbal medicines using such ingredients as Gou Qi (枸杞 Fructus Lycii), Hong Zao (红枣 Fructus Jujubae), Huang Qi (黄芪 Radix Astragali seu Hedysari) and etc. The end product is nutritive gold liquid. In the early 19th century, H.W. Brand, the royal chef of Buckingham Palace invented a fat-free, easily digestible chicken broth for King George IV of England. The sick King George IV regained strength after taking it a few times. In 1835, after his retiring, H.W. Brand set up a company making chicken essence with the name "Brand." In 1920, the first batch of chicken essence arrived in Asia. Because the traditional way of preparing Chinese chicken soup requires stewing long hours, the new hassle-free concept of this product from a British chef was quickly accepted by the Malaya market. In addition to the original flavour there is also canned chicken essence with added Ren Shen (人参 Radix Ginseng), Chong Cao (虫草Ophiocordvceps sinensis), Dang Gui (当归 Radix Angelicae Sinensis), Ling Zhi (灵芝 Ganoderma Lucidum seu Japonicum), Gou Qi (枸杞Fructus Lycii) sold to cater for different needs [Figure 14]. Some of Malaysia's Chinese medicine chain enterprises such as Eu Yan Sang, and Hai-O are selling these products. Pao Shen (泡参 Adenophora capillaris Hemsl) is another Chinese herbal medicine that Malaysians use in their daily lives. Some Malaysians have the habit of chewing Hua Qi Shen (花旗参 Panax Quinquefolius) in the morning or soaking it in warm water and then drinking the water, believing that they can improve their energy and immunity in doing so.

It is impressive and fascinating how TCM and Chinese herbal medicine have been preserved and integrated into Malaysian life and play an important role in it. Chinese Malaysians are among the few the who have maintained long history of knowledge transfer and cultural interactions with China, while at the same time they have developed a localized TCM culture with its unique characteristics. With the inclusion of Chinese medicine into the International Classification of Diseases by

the World Health Organization, it is hoped that Malaysia can learn from the rapid development and integrative experience with western medicine in China so that the development of Chinese medicine in Malaysia can keep pace with time and benefit more people.

Funding

This study was financed by a grant from The National Social Science Fund of China (No. 18ZDA322).

Conflicts of interest

None.

References

- Population Distribution and Basic Demographic Characteristic Report 2010 (Updated: 05/08/2011). Available from: https://www.dosm.gov.my/v1/index.php?r=column/ctheme&menu_id=L0pheU43NWJwRWVSZklWdzQ4TlhUUT09&bul_id=MDMxdHZjWTklSjFzTzNkRXYzcVZjdz09#:~:text=Malaysian%20citizens%20consist%20of%20the, which%20constituted%2063.1%20per%20cent. [Last accessed on 2020 Dec 26].
- Lai BJ. A Survey of Chinese Drama in Southeast Asia. Beijing: China Drama Press; 1993. p. 7.
- Lai BJ. A Survey of Chinese Drama in Southeast Asia. Beijing: China Drama Press; 1993. p. 5.
- Song L. Development of Traditional Chinese Medicine in Malaysia.
 Malaysia First Chinese Medicine Hall- Penang Ren Ai Tang Founded For 190 Years: Singapore Xinhua Cultural Enterprise; 1986. p. 10-2.
- Tang RA. Story. Available from: https://www.renitang.com/story. html. [Last accessed on 2020 Feb 10].
- Sang EY. Our History. Available from: https://www.euyansang.com.my/ en_MY/our-history/eyscorporate2.html. [Last accessed on 2020 Feb 10].
- Jiafeng Z. Inheritance and cross-border development of overseas Chinese time-honored enterprises Taking Eu Yan Sang Malaysia as an example. Ethnogr Stud Qinghai 2016;27:38-43.
- 8. Tung Shin Hospital. Overview. Available from: https://www.tungshin.com.my/about-us/overview. [Last accessed on 2020 Feb 10].
- Federation of Chinese Physicians and Medicine Dealers Associations of Malaysia. History of FCPMDAM. Kuala Lumpur. Available from: https://www.fcpmdam.com/?page_id=685. [Last accessed on 2020 Feb 13].
- World Traditional Chinese Medicine Education. Training and Prospect of Malaysian TCM Doctors. Available from: http://www.eic.tjutcm.edu. cn/info/1003/1535.htm. [Last accessed on 2020 Feb 13].
- Official Portal Traditional and Complementary Division Ministry of Health Malaysia. Overseas Institutions China. Available from: http:// www.tcm.moh.gov.my/en/index.php/education/institutions/china. [Last accessed on 2020 Feb 15].
- 12. Wong H, Ng S, Tan W, Liu J, Lin X, Goh S, *et al.* Traditional Chinese medicine in Malaysia: A brief historical overview of education and research. Chin Med Cult 2019;2:162-5.
- Malaysian Chinese Medical Association. Traditional Chinese Medical Institute Malaysia. Available from: http://www.mcma.com. my/%e9%a9%ac% e6%9d%a5%e8%a5%bf%e4%ba%9a%e4%b8%ad %e5%8c%bb%e5%ad%a6%e9%99%a2. [Last accessed on 2020 Feb 15].
- 14. Malaysian Chinese Medical Association. Rao Shiquan Spirit Award. Available from: http://www.mcma.com.my/%E9%A5%B6%E5%B8 %88%E6%B3%89%E7%B2%BE%E%A5%9E%E5%A5%96. [Last accessed on 2020 Feb 10].
- Official Portal Traditional and Complementary Division Ministry of Health Malaysia. Background. Available from: http://www.tcm.moh. gov.my/en/index.php/profil/background. [Last accessed on 2020 Feb

- 10].
- Malaysian Chinese Medical Association. Member List. Available from: http://www.mcma.com.my/%e4%bc%9a%e5% 91%98%e4%b8% 93%e5%8c%ba. [Last accessed on 2020 Mar 20].
- Beijing Tong Ren Tang In Malaysia Available from: http://www.news.sina.com.cn/o/2006-11-18/154710536347s.shtml. [Last accessed on 2020 May 17].
- China-Malaysia TCM Center Established. Available from: http://www. xinhuanet.com/overseas/2017-12/13/c_129765103.htm. [Last accessed on 2020 May 18].
- Chinese-ASEAN Traditional Medicine, First Issue in Nanning. Available from: http://www.m.xinhuanet.com/gx/2018-09/12/c_1123416758.htm. [Last accessed on 2020 May 18].
- People's Daily. Plant Wisdom Let Chinese Medicine Benefit the World.
 Available from: http://www.m.pipsci.org/m/NewsStd_408_0028.
 html. [Last accessed on 2020 May 21].
- Laporan Tahunan Annual Report 2008. Available from: http://www.tcm.moh.gov.my/en/upload/penerbitan/laporantahunan/2008.pdf pg18. [Last accessed on 2020 May 21].
- Laporan Tahunan Annual Report 2008. Available from: http://www.tcm. moh.gov.my/en/upload/penerbitan/laporantahunan/2008.pdfpg19. [Last accessed on 2020 Mar 25].
- Story of Bak Kut Teh. Available from: https://www.orientaldaily.com. my/news/wenhui/2017/07/15/204728. [Last accessed on 21 May 2020]

- 24. TRAFFIC the Wildlife Trade Monitoring Network. National Second-class Protected Animals. Available from: http://www.trafficchina.org/node/39. [Last accessed on 2020 Jun 16].
- Ahmad N, Fazal H, Ayaz M, Abbasi BH, Mohammad I, Fazal L. Dengue fever treatment with *Carica papaya* leaves extracts. Asian Pac J Trop Biomed 2011;1:330-3.
- 26. Khan AY, Ahmed QU, Narayanamurthy V, Razali S, Asuhaimi FA, Saleh MS, et al. Anticancer activity of grassy Hystrix brachyura bezoar and its mechanisms of action: An in vitro and in vivo based study. Biomed Pharmacother 2019;114:108841.
- Malaysian Herbs Available Everywhere. Available from: https://www. jiankangcaoyao.com/2019/12/18/herbal-medicine-in-malaysia. [Last access on 2020 Jul 05].
- 28. Black-Faced Generals are Cold and not Suitable for Long-term Pregnant Women. Available from: https://www.easily.sinchew.com.my/node/2981/%E9%BB%91%E9%9D%A2%E5 %B0%86%E5%86%9B %E6%80%A7%E5%AF%92-%E4%B8%8D%E5%AE%9C%E4%B9 %85%E6%9C%8D%E5%AD%95%E5%A6%87%E7%A6%81%E6% 9C%8D. [Last accessed on 2020 Jul 22].

How to cite this article: Lee SW, Li H. The introduction and localisation of traditional Chinese medicine in Malaysia. Chin Med Cult 2021;4:37-45.

Application of Traditional Chinese Medicine in Treating COVID-19

Meng-Cheng Liu, Hong-Yun Gao

Department of Foreign Language, School of Foreign Languages, Anhui University of Technology, Maanshan 243002, Anhui, China

Abstract

Traditional Chinese medicine (TCM) has been applied to the treatment of the novel coronavirus (COVID-19). In the epidemic, COVID-19 patients were treated through integrated TCM and Western medicine. The effect was remarkable, especially in the treatment of mild COVID-19 cases. This paper introduces several TCM treatments to COVID-19, put forward by both domestic and foreign scholars.

Keywords: COVID-19, effect, principle, traditional Chinese medicine, treatment

Introduction

A novel coronavirus (COVID-19) pandemic outbroke in Wuhan in December 2019 and earlier there had already been such cases in the other parts of the world. After several months of home quarantining, temperature monitoring, and other precautionary measures [Figure 1], the epidemic situation soon became effectively controlled. Meanwhile, COVID-19 cases were on the rise in the rest of the world. COVID-19 belongs to the beta genus of coronavirus, with a capsule and round or oval in shape, often polymorphic. The genetic characteristics are significantly similar to SARS coronavirus and MERS coronavirus. At present, the homology of SARS coronavirus found in human beings and that found in bats is more than 85%.[1] Novel coronavirus pneumonia is the main source of infection. However, asymptomatic infection may also become a source of infection. The pathological changes of patients with new-type coronavirus pneumonia are mainly in the lung, presenting consolidation in varying degrees, involving the spleen, lung, joint, bone marrow, cardiovascular system, liver and gallbladder, kidney, brain tissue, and the other body organs. According to the Centre for Disease Control and Prevention guidelines and public perception, the incubation period is thought to be 14 days with a median

time of 4–5 days from exposure to symptoms onset.^[1] There are also many asymptomatic patients. Fever, fatigue, and dry cough are the main manifestations. A large number of patients exhibited nasal obstruction, running nose, diarrhea, and other symptoms such as chest distress, conjunctivitis, and muscular soreness. Many patients have lost their sense of smell and appetite. Severe cases are often accompanied by dyspnea after 1 week. Severe cases developed rapidly into acute respiratory distress syndrome, septic shock, metabolic acidosis, and coagulation dysfunction. Nonsevere patients do not need to be hospitalized. Most patients can improve or even heal by themselves within 1–2 weeks through a combination treatment of traditional Chinese medicine (TCM) and Western medicine. Severe patients need to be hospitalized for further treatment. The following sections will analyze the principle of TCM in the treatment of COVID-19 and preventive prescriptions [Figure 1].

Traditional Chinese Medicine Treatment Principle for COVID-19

TCM can effectively alleviate or prevent epidemic and reduce the relevant death rate. The reason of such effect is that TCM treats diseases and epidemics from the

Corresponding author: Prof. Hong-Yun Gao,

School of Foreign Languages, Anhui University of Technology,

Maanshan 243002, Anhui, China. E-mail: 123262049@qq.com ORCID: 0000-0002-0254-7689

Submitted: 22-Aug-2020 Accepted: 05-Feb-2021 Published: 31-Mar-2021

Access this article online **Quick Response Code:**

Website: www.cmaconweb.org

10.4103/CMAC.CMAC 5 21

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com



Figure 1: Campus entrance for checking in during the time of COVID-19

perspective of life. TCM is people-oriented and emphasizes the relationship between nature and humans, and from this perspective, human diseases are dealt with.^[2] COVID-19, in particular, is not only explored and treated in this way, but also thought about from the perspective of life as a whole. TCM pays great attention to the harmony between Yin and Yang, qi and blood, as well as the improvement and enhancement of the body's own immunity and disease resistance (during disease or epidemic outbreak). The primary principle of prevention and treatment of COVID-19 is the "holistic view," which holds that the pestilence from nature will infect the human body through corresponding channels, and the human body will resist the pathogen through corresponding abilities. TCM prevention is the main way to prevent change of the contracted disease by altering the environment, regulating the body, and resisting severe pressure. This idea of overall prevention and control guides the application of various measures of TCM in preventing diseases. Wang Oi, an academician of the Chinese Academy of Engineering and President of the Institute of TCM Body Constitution and Disease Prevention under the National Institute of TCM Constitution and Preventive Treatment of Beijing University of Chinese Medicine, said on April 17 that TCM has shown unique advantages in reducing mortality and improving the cure rate during the COVID-19 epidemic.

Specifically speaking, there are two steps in TCM for treating diseases. The first is to "prevent the transmission of change (遏阻传变)" to make patients stay for treatment. More than 2000 years ago, the *Huang Di Nei Jing* (《黄帝内经》*Huangdi's Internal Classic*) proposed that "preventing disease from occurring, preventing change of the contracted disease (未病先防, 既病防变)." The novel coronavirus pneumonia is a major infectious disease, especially in the modern era. It has a rapid transmission property, which

requires the application of "perspiration, vomiting, diarrhea, warming, clearing, eliminating, and supplementing" from the perspective of TCM to effectively block the rapid deterioration of the disease and avoid sudden organ failure, so as to save the life of the patient. Prevention and treatment of the pandemic are of priority.

Second, "strengthening the healthy and eliminating pathogenic factors (扶正袪邪)" is to achieve a healthy state of balance between Yin and Yang. The Huangdi's Internal Classic stated that "no matter what your disease is, as long as the Yin and Yang are in harmony, no symptoms are considered bad."[2] TCM attaches great importance to the harm of "Evil Qi (邪气)" to the human body, but more emphasis is placed on the ability of "Healthy Qi (正气)" to resist evil, poison, and disease. In the case of novel coronavirus pneumonia, during the early prevention, treatment or recovery, TCM helps the body to maintain the "Healthy Qi" throughout the disease, so as to remove the "Evil Qi". TCM provides patients with vital energy throughout the course to dispels Evil Qi. To a large extent, TCM is preferred to people who get sick rather than patients who suffer from diseases. TCM pays more attention to the physiological state of the human body and adopts the treatment methods by adjusting to the circumstances, restoring physiology, and improving resistance against diseases, rather than simply eliminating the symptoms and toxicity of disease. This means that when TCM does not know what the virus is, it can still carry out syndrome differentiation under the guidance of the holistic concept, choose the appropriate treatment, and achieve the purpose of "healthy qi expelling pathogen (正胜 邪退)" and recovery.

Zhang Boli, in his article TCM Can Completely Cure General Patients with Mild COVID-19, said that a total of 564 patients have been admitted to Dahuashan Field Hospital, Jiangxia District, Wuhan, and none of them have become seriously ill or returned to the hospital second time during the operation of the hospital. This has demonstrated that TCM can completely cure patients with mild COVID-19. In the absence of specific drugs or vaccines, the unique advantages of TCM in the diagnosis and treatment of the disease is capable of bringing itself into full play to explore and form a systematic multi-target intervention scheme featuring combination of TCM and Western medicine in the treatment of COVID-19 patients.[3] This has become a convincing demonstration of the inheritance and innovation of TCM. Severe epidemic outbreaks in the past have produced new medicinal prescriptions and in-depth explorations of ancient classical prescriptions for use in clinical practice. A selected number of effective prescriptions represented by "three herbs and three prescriptions (三药三方)" has also become an important feature and advantage of Chinese COVID-19 treatment program.[3]

TCM Preventive Plan for COVID-19

The prescription is suggested which uses Huang Qi (黄芪 Radix Astragali seu Hedysari) 30 g, Jin Yin Hua (金银花 Flos Lonicerae) 15 g, Chen Pi (陈皮 Pericarpium Citri Reticulatae) 9 g, Da Zao (大枣 Fructus Jujubae) 5 g, Gan Cao (甘草 Radix Glycyrrhizae) 7 g.^[4]

Recommended Traditional Chinese Medicine Treatment for COVID-19

The followings are several novel coronavirus therapeutic prescriptions which can be applied to the treatment of patients depending upon the different stages of infection [Figure 2].

Initial Stage

If novel coronavirus pneumonia is confirmed, the initial clinical manifestations are observed in the form of fever or lack of fever, dry cough, chills, fatigue, or pale tongue with a white coating. These clinical manifestations belong to the lung syndrome caused by cold damp. The recommended prescriptions use the following herbal plants: Cang Zhu (苍术 Rhizoma Atractylodis) 15 g, Chen Pi (陈皮 Pericarpium Citri Reticulatae) 10 g, Hou Po (厚朴 Cortex Magnoliae Officinalis) 10 g, Huo Xiang (藿香 Herba PogoStemonis) 10 g, Sheng Jiang (生姜 Rhizoma Zingiberis Recens) 10 g, Bing Lang (槟榔 Semen Arecae) 10 g, Qiang Huo (羌活 Rhizoma et Radix Notopterygii) 10 g, Cao Guo (草果 Fructus Tsaoko) 6 g, raw Ma Huang (麻黄 Herba Ephedrae) 6 g. [4]

Intermediate Stage

If the patient's condition progresses to the intermediate stage, it may manifest with the following symptoms: continued fever, chills, sweats, cough and panting, scanty yellow phlegm, panting abdominal distention, constipation, red tongue, yellow greasy coating, or dry yellow coating. This is caised nu



Figure 2: Chinese medicinal herbs store

epidemic toxicity leading to lung closure. The recommended prescription is to use such herbal things as: Ku Xing Ren (苦杏仁 Semen Armeniacae Amarum) 10 g, Shi Gao (石膏 Gypsum Fibrosum) 30 g, Gua Lou (瓜蒌 Fructus Trichosanthis) 30 g, Da Huang (大黄 Radix et Rhizoma Rhei) 6 g (decoct later), stir-fried Ma Huang (麻黄 Herba Ephedrae) 6 g, Ting Li Zi (葶苈子 Semen Descurainiae) 10 g, Tao Ren (桃仁 Semen Persicae) 10 g, Cao Guo (草果 Fructus Tsaoko) 6 g, Bing Lang (槟榔 Semen Arecae) 10 g, Bai Zhu (白术 Rhizoma Atractylodis Macrocephalae) 10 g.^[4]

Severe Stage

The clinical manifestations of the severe stage are dyspnea and the patient may require auxiliary ventilation, accompanied by restlessness, dizziness, and other symptoms. The patient's tongue is dark purple in color, with thick and greasy coating, or dry coating. The patient is likely to have the syndrome of internal closure and external detachment (內闭外脱证). The main symptoms include difficulty in breathing, frequent panting or need mechanical ventilation, accompanied by dizziness, irritability, sweating, cold limbs, dark purple tongue, and thick greasy tongue coating. The recommended prescription is to use the following herbal things: Ren Shen (人参 Radix Ginseng) 15 g, Fu Zi (附子 Radix Aconiti Lateralis Preparata) 10 g (decoct first), Shan Zhu Yu (山茱萸 Fructus Corni) 15 g, Su He Xiang Pill (苏合香丸) or An Gong Niu Huang Pill (安宫牛黄丸).[4]

Recovery Stage

The main clinical symptoms for patients in the recovery period are found in shortness of breath, poor appetite, fatigue, enlarged tongue with white and greasy coating. This is the syndrome of deficiency of lung and spleen qi. The recommended prescription is: Ban Xia (半夏 Rhizoma Pinelliae) 9 g, Chen Pi (陈皮 Pericarpium Citri Reticulatae) 10 g, Dang Shen (党参 Radix Codonopsis) 15 g, stir-fried Huang Qi (黄芪 Radix Astragali seu Hedysari) 30 g, Fu Ling (茯苓 Poria) 15 g, Huo Xiang (藿香 Herba PogoStemonis) 10 g, Sha Ren (砂仁 Fructus Amomi Villosi) 6 g (decoct later)[4] [Figure 2].

Treatment Effect

TCM plays an important role in the treatment of COVID-19, which belongs to the category of "pestilence" disease in TCM. Pestilence disease is a fierce and infective disease which is caused by the pestilential pathogen. However, aside from the disease condition, local climate characteristics and physical condition of the patients could also affect the progression of the disease. The novel coronavirus pneumonia is treated by different treatment methods in different stages. It has been shown that the treatment of the

novel coronavirus pneumonia by TCM resulted in fewer side effects, which can relieve symptoms and accelerate patients' recovery.

Taking TCM internally improves pulmonary function and pulmonary fibrosis in COVID-19 patients. Deficiency of qi, yin, yang, blood stasis, and phlegm are the main pathogenesis of COVID-19. Treatment regimens focus on promoting qi, nourishing yin, invigorating yang, reducing phlegm, and activating blood circulation which are of great clinical significance for improving the pulmonary function and pulmonary fibrosis condition of COVID-19 patients during rehabilitation.^[5]

In response to the new pandemic, TCM has shown its ability in treating acute and severe COVID-19 disease, and its treatment is not inferior to Western medicine. However, TCM still faces many challenges in the treatment of COVID-19. Due to the implementation of different TCM diagnosis and treatment programs in various regions, standardization of clinical prescription is difficult to achieve, which is not conducive to large statistical data analysis of TCM efficacy. As the pandemic changes from time to time, TCM prescription needs to be changed according to the diagnosed syndromes, making it difficult to develop a fixed strategy. This makes the evaluation of long-term clinical efficacy and safety of TCM problematic.

Conclusion

TCM has played an important role in the fight against the COVID-19 pandemic. The treatment of TCM is not the so-called "specific medicine" for killing the virus, but it is a "recipe" designed after syndrome differentiation. What these TCM prescriptions do is to help the "Healthy Qi" eliminate the cause of the symptoms, and eventually cure the disease. In fact, both TCM and Western medicine are similar in this way. [6] A TCM practitioner once said, "I add another layer of definition to the "Zhong" of Chinese medicine - TCM itself cannot cure any disease. Its mind, language, manipulation, acupuncture and stone needling are nothing more than establishing a

"Zhong" channel between the patient and his inherent "Tao" and physical capacity." To put it simply, TCM is a matchmaker, or an intermediary. The TCM gives consideration to both physical form and spirit, which is the bridge between nature and human, and the boundary between spirit and material substance. It is so that the integrated Chinese medicine and Western medicine treatment will fight shoulder to shoulder and give full advantages to win the battle against COVID-19. Nowadays, there are many published studies showing the effectiveness of TCM. This article is an additional summary of the treatment of COVID-19 with TCM.

Funding

The study was financed by a grant from the Humanities and Social Sciences Research Project of Anhui Province (SK2018ZD004).

Conflicts of interest

None.

References

- National Health Commission. National Health Commission notice on temporary naming of COVID-19. Natl Med J 2020;42:1. Available from: http://www.nhc.gov.cn/mohwsbwstjxxzx/s2908/202002/ f15dda000f6a46b2a1ea1377cd80434d.shtml. [Last accessed on 2020 Feb 07].
- She ZQ, Lu J, Xu YQ. Discussion on TCM syndrome management of common COVID-19. Hubei J Tradit Chin Med 2020; 1:47-8.
- Zhang BL. Traditional Chinese medicine can completely cure common patients with mild COVID-19. Health World 2020;6:15.
- Office of the National Health Commission, Office of the National Administration of Traditional Chinese Medicine. Notification of the diagnosis and treatment plan for infected pneumonia of COVID-19 (trial version 5). 2020. p. 10-1. Available from: http://www.nhc.gov.cn/xcs/ zhengcwj/202002/d4b895337e19445f8d728fcafle3el3a.shtml. [Last accessed on 2020 Feb 05].
- Chen Y, Chen ZL, Xie XM, Wang J, Luo L, Ren Y. Thinking and exploration of the application of traditional Chinese medicine in the rehabilitation treatment of COVID-19. Chin Tradit Chin Med Emerg 2020;29:1693-5, 1701.
- Feng XG. Cooperative anti-epidemic, how does TCM work. Health News 2020; 5:1-2.

How to cite this article: Liu MC, Gao HY. Application of traditional Chinese medicine in treating COVID-19. Chin Med Cult 2021;4:46-9.

Talking about Hot Flashes (潮热)

Anna Bogachko Holmblad

Master of Traditional Chinese Medicine, Course Organizer at the Shanghai Qigong Research Institute, Shanghai 200030, China

Abstract

Women worldwide are dealing with hot flashes (潮热), a perimenopausal feature that is often tiring, embarrassing, and energetically draining. Conventionally, Chinese medicine defines hot flashes as Kidney-yin deficiency and its clinical manifestations include red face, sweating, hot sensations in the palms and soles, mouth and nose dryness, constipation, insomnia, lumbar soreness, knee weakness, red tongue, etc. To obtain a broader perspective and understand the dynamics of hot flashes, we examined the mechanisms behind hot flashes based on both the knowledge from ancient Chinese medicinal texts, as well as novel research findings of Chinese and Western medicine. This perspective was the foundation for the acupuncture study of our traditional Chinese medicine conducted in 2018–2019 in Shanghai. This study, designed as a pragmatic randomized control trial with two parallel groups, focused on regulating and unblocking conception and governor vessels. The results confirmed that our acupuncture method could effectively reduce both the frequency and severity of hot flashes and improve life quality of middle-aged women.

Keywords: Hot flashes (潮热), kidney, menopause, perimenopause, syndrome differentiation (辩证), traditional Chinese medicine (TCM), trial

Abbreviations: TCM- Traditional Chinese Medicine, HRT- Hormone Replacement Therapy, HPO- Hypothalamic Pituitary Ovarian (axis), HPA- Hypothalamic Pituitary Adrenal (axis), CV- conception vessel, GV- governor vessel, SP- Spleen meridian, KI- Kidney meridian, HT- Heart meridian.

Introduction

A group of smartly dressed, jolly women takes their seats with a cup of herbal tea handy in front of them [Figure 1]. Curious about the traditional Chinese medicines (TCMs) perspective on their menopausal concerns and especially the troublesome hot flashes, they are all attentive. The first PPT slide for our course is a picture showing the typical symptoms during the menopausal transition: fatigue, irritation, mood swings, hot flashes, hyposexuality, anxiety, and irregular sleeping patterns. Instantly, they all burst out in unison: "Oh, I have all of them!!.".

When sneaking through the door of perimenopause at the age of 45–55, women embark on a journey taking them into unknown

Submitted: 04-Dec-2020 Accepted: 05-Feb-2021 Published: 31-Mar-2021

Access this article online

Quick Response Code:

Website:
www.cmaconweb.org

DOI:
10.4103/CMAC.CMAC_6_21

territory of bodily experiences accompanied by new thoughts and emotions. The shift from being in phase with a monthly cyclic flow to the stage when periods eventually stop is the transformation period when women tend to feel more tired, worried, and anxious. Many women face the nuisance of hot flashes, sleepless nights, soaked bed linens, discomfort, and extreme fatigue, thus amplifying their symptoms. Even if we are all told this will happen, women are a bit taken aback by perimenopause, leading up to menopause and the end of their fertile years. This transition is a time for reflection and change.

A troublesome feature at menopause, hot flashes have around a 70% prevalence in women living in the Western world, lingering for up to 10 years [Figure 2].^[1,2] When experiencing a hot flash, the woman has a feeling of intense warmth rising upwards from the chest area to the head, along with sweating, flushing, and chills. Occurring during the day and even more common; at night (generally referred to as night sweats), hot flashes are normally accompanied by sweating but do not have to be. Except the nuisance and discomfort of hot flashes other problems lurk in the hot flashes' backwaters

Corresponding author: Dr. Anna Bogachko Holmblad,

Master of Traditional Chinese Medicine, Course Organizer at the Shanghai

Qigong Research Institute, Shanghai 200030, China.

E-mail: annalenabh@yahoo.com ORCID: 0000-0002-7666-7448

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

 $\textbf{For reprints contact:} \ WKHLRPMedknow_reprints@wolterskluwer.com$

such as mood disorders, psychological distress, and sleep disorders, negatively influencing social interaction and work, generally lowering the woman's quality of life.^[3,4] In the Chinese population only 15% of menopausal women seem to have troubles with hot flashes, a much lower proportion in the society.^[5]

How can we approach the issues of hot flashes from the perspective of TCM? Broadly speaking, hot flashes and its clinical manifestations belong to perimenopausal and postmenopausal syndromes with a rather sudden decline in Kidney energy (capitalized to distinguish the Chinese view of these organs as focusing on their function). Classically, it has been defined as a Kidney-yin deficiency: hot flashes, red face, sweating, hot sensations in palms and soles, constipation, dryness of the mouth, ringing ears, insomnia, lumbar soreness, knee weakness, and red tongue. If yin is deficient, it cannot defend and hold back yang, and as a consequence, endogenous heat will disturb the body and the body's fluids cannot be kept well, thus the emergence of hot flashes.^[6,7]

In addition, Kidney essence is the origin of the female reproductive system and of both yin and yang. Thus, Kidney essence encompasses the whole foundation and congenital basis of a person, therefore, the body's entire functional and material roots. The woman's Kidney essence is affected and weakened when reaching perimenopause [Figure 3]. As the root of both yin and yang, consequently we would find many women with hot flashes presenting not only with yin deficiencies but also with Kidney yang deficiency symptoms; cold limbs aversion to cold, painful knees, apathy, easily sweating, incontinence, pale face, and pale tongue. [8,9] One of the known dynamics of the body, is that if kidney yang cannot sufficiently support the spleen during the transformation and absorption function, there will be a lack of nutrients available to the body. Thus, when the spleen fails to support the body with adequate moisture and nutrients, the blood becomes deficient. The body then develops patterns of dry hair, brittle nails, vaginal dryness, dry cough, dry eyes, constipation, and anxiety resembling that of kidney yin deficiency symptoms. Moreover, showing a kidney yang deficiency, a woman's defensive qi gets weakened; this includes the body's opening and closing function, resulting in the leakage of body fluids, including sweating.

During the menopausal transition, these kidney deficiencies will involve and affect other viscera and systems of the body, including the Liver, Spleen, Heart, and Lungs.^[6,8]

Researching ancient Chinese medicinal literature concerning the understanding of perimenopausal hot flashes we find the pathogenesis is mainly "deficiency of Kidney qi," "debility of thoroughfare and conception channels," and "yin-yang disharmony." The ancient classic on Chinese medicine, *Huang*



Figure 1: Drinking Chinese herbal tea at our workshop on hot flashes



Figure 2: Hot flashes is a troublesome feature at menopause

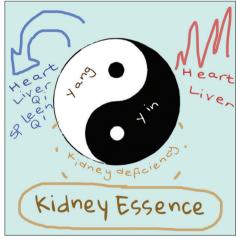


Figure 3: Traditional Chinese medicine kidney dynamics at perimenopause

Di Nei Jing (《黄帝内经》Huangdi's Internal Classic), states that a woman in this time of her life is influenced by a decline in Kidney energy with other meridians and viscera involved. Huang Di Nei Jing Su Wen (《黄帝内经·素问》Huangdi's

Internal Classic Basic Questions) states that "When the woman reaches the age of 49-year-old, the Kidney qi gradually declines, the tiangui (menstruation) gradually dries up, and the thoroughfare and conception vessels (CVs) no longer dominate a woman's energetic physiology. During this period, due to the influence of both the internal and external environment, such as the deficiency of yin and yang, or the changes of family and social groups, it easily leads to an imbalance of kidney yin and yang". Huangdi's Internal Classic also mentions that "The Kidney is the foundation of nature"; and "When diseases of all the other viscera are too severe, they are certain to involve the Kidney." Specifically, the imbalance of kidney vin and yang can easily affect other viscera (and meridians), while the disease or imbalance of other viscera will affect the Kidney. Thus disease at menopause will be rooted in the Kidney, often involving the Heart, Liver, Spleen, and other organs and channels. Consequently, a series of clinical manifestations including hot flashes will appear.[10]

The conception and governor vessels are energetically interesting representations of yin and yang. They are the two coupled yin-yang meridians that run along the central line of the body's front and back. They are two branches of the same source, both reaching the uterus. The GV connects the uterus with its branch; the CV internally originates in the uterus and therefore, connects the uterus to the kidney, heart, and brain.^[11] They both externally originate at the perineum, the Huiyin point (CV 1), and both vessels reach the brain in their circuits; thus, together complete an orbit of yin and yang of the upper body.[12] In Qigong, the practice and positions should always be regulated to unblock the two meridians' free flow. Their circular rotation supports the whole body's qi and all the 12 yin and yang meridians. The fact that both are connected to the uterus area can liken this circuit to the Hypothalamic Pituitary Ovarian (HPO) axis, and possibly the Hypothalamic Pituitary Adrenal (HPA) axis (see below the yin-yang representation of the reproductive and adrenal endocrine systems). Ling Shu "Wu Yin Wu Wei" (《灵枢·五音五味》Miraculous Pivot "Five Tones, Five Substances") states that Tiangui, as a woman's menstrual blood (or menstrual water) is the essence of gi, so the Kidney essence is directly related to the CV, which "regulates the womb" and is the "foundation of health."

Hot flashes pathogenesis from an allopathic medicinal perspective is rather complex. The dynamics mainly include estrogen withdrawal, luteinizing hormone decrease, serotonin (5-HT) receptor system disorder, reduction of endogenous opioid peptides, disruption of catecholamine release, and the changing function of the calcitonin gene-related peptide receptor.

Generally speaking, we find that there is a flawed mechanism when hot flashes emerge; the neuro-endocrine-immune system of the body is changed during the estrogen withdrawal stage during perimenopause. This affects the body's synthesis and secretion of a series of neurotransmitters and hormones; for instance, serotonin and norepinephrine and disrupting the HPO axis feedback loop [Figure 4] as well as interfering with the HPA axis.

When estrogen levels fall in perimenopause, the hormonal feedback loop in the pituitary and hypothalamus malfunctions, creating several hormonal changes and imbalances in the body. The hypothalamus is the center in the brain that controls the body's core temperature. Novel studies have found a narrowing of the thermoregulatory center in the hypothalamus as one of the causes of hot flashes. This supposedly creates a narrowing of the temperature allowance, causing the body to react to any small temperature changes, internal or external. This sensitivity will cause a sudden impulse of heat release triggering a hot flashes. [13-15]

For decades, the understanding of the hot flashes' basic dynamics and mechanics has been somewhat simplified. Doctors and health practitioners readily attribute the nuisances of hot flashes to a decline in estrogen production, correlating it to vaginal dryness, dry skin, irritation, and sleep issues. Therefore, hormone replacement therapy (HRT) has been the first solution to tackle these problems, accounting for approximately 80% of doctors' prescriptions and treatment solutions in the Western world [Figure 5]. Even if HRT is effective with up to a 90% efficacy in reduction of the hot flashes, the medications come with serious health risks and discomfort, ranging from breast cancer to thromboembolic events to irregular bleeding and breast tenderness.[1,16] An important point to remember here is that estrogen depletion is present in all menopausal women, but not all these women have hot flashes. While the drop in estrogen levels is a natural

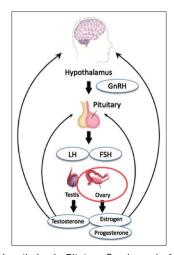


Figure 4: The Hypothalamic-Pitutary-Ovarian axis feedback loop; in Western medical understanding a disruption of its dynamics is the main factor to cause hot flashes

transitional occurrence at menopause, hot flashes are a symptom of imbalance, encompassing a wide range of different biological mechanisms.

Bearing this in mind, it is both intriguing and of great utility to try and combine these two separate medical understandings of hot flash mechanisms into one streamlined approach. One way to look at it, is to focus on how the decline of estrogen and progesterone production by the ovaries influences a decline in essence within the reproductive system's yin and yang. As progesterone levels peak in the menstrual cycle, this corresponds to the yang phase in Kidney energy. Subsequently, estrogen levels peak during menstruation and correspond to the yin phase [Table 1]. Cessation of estrogen at menopause has the same clinical manifestations as a Kidney yin deficiency, but we should be careful and observe the whole picture of deficiencies and imbalances. First, yang deficiencies may be discovered, and recent studies on progesterone levels as influencing the Kidney yang, have suggested that they are a predictor of hot flashes.[17] Second, the neurotransmitter serotonin is influenced by estrogen, and is largely involved in deciding the magnitude of the thermoneutral zone within the hypothalamus. Serotonin can be seen as a yin factor, cooling the system. Third, norepinephrine, another neurotransmitter in the brain, excites the nervous system and narrow the thermoneutral zone. Norepinephrine can be viewed as a yang factor, heating the body. Lastly, the TCM Kidney represents a broader dynamic of the endocrine system (except the kidney-urinary system), where the dynamics of the adrenal glands are involved. The Yin function of the adrenal glands includes the body's buffer function, involving the secretion of glucocorticoids, acting like a stabilizing factor that the body uses to tolerate and fight stressors. These yin functions can be considered critical "hypo" functions of the body, which include the parasympathetic nervous system. Conversely, yang functions are the body's



Figure 5: Sweating at menopausal transition is to 80% treated by Hormone Replacement Therapy in the western world

"hyper" functions used to excite and stimulate different systems and encompasses the secretion of adrenaline and noradrenaline from the adrenal glands. Adrenal functions also involve the pituitary and hypothalamus; therefore, the HPA axis is an intriguing mechanism to represent the TCM Kidney and its imbalances of yin and yang as the HPO axis.^[11]

Back to yesterday's small TCM workshop with the five perimenopausal women; four experienced troublesome hot flashes; two of them felt it seriously disturbed their sleep and quality of life. Approaching our workshops end, we agreed to check our tongues to find out who had red tongues suggesting heat in the body and a kidney yin deficiency. Graciously, one after the other showed their tongue and interestingly they were all pale, some very pale, and some just pale. Three women had teeth marks on the sides of their tongues and were slightly swollen, suggesting waek digestion and weak spleen function. This small assessment added valuable information to the observations made at menopause: perimenopausal women with hot flashes are often Spleen qi, yang, and blood deficient with symptoms of fatigue, sensitivity to stress, restlessness, and anxiety.

Treatment Alternatives

How can we then approach all this and create a successful treatment? Generally, we can find a range of alternatives to HRT. Complementary and alternative medicine treatments at menopause have had much publicity over the last few decades. Black cohosh, phytoestrogen (for instance, soy), yoga, Qigong, and acupuncture have received much attention as possible remedies for reducing hot flashes [Figure 6]. TCM, a >2000-year-old medicinal practice has had long-standing success in treating menopause in China. TCM applies

Table 1: Correspondence between the concept of	of yin yang
and hormonal changes in the menstrual cycle	

Yin Estrogen	Western medicine concepts	TCM concepts
	Estrogen	Yin
Yang Progesterone	Progesterone	Yang



Figure 6: (a) There are many effective and safe ways to balance and strengthen the body to relieve hot flashes at perimenopause (b) there are many effective and safe ways to balance and strengthen the body to relieve hot flashes at perimenopause

various concepts and treatment strategies that, in addition to acupuncture, also include herbal medicine, moxibustion, massage (Tuina), cupping, Qigong, and food therapy to enhance health preservation and quality of life. The reported positive effects, holistic approach and safe treatment procedures attract midlife women to try TCM to relieve their conditions.

Acupuncture Treatment

Acupuncture treatment is one of the most commonly used TCM methods for middle-aged women. Findings confirm that hot flashes are likely to be reduced by needling some classical points such as Guanyuan (CV4), Sanyinjiao (SP6), and Yinxi (HT6). Study designs and syndrome patterns have confounded results about optimal point selection.[20-22] Treatment designs in larger studies are often streamlined and point selection standardized to compare larger trial populations. One trial that applied a more individualized design was undertaken by a Norwegian research team.^[7] The researchers found 50% of their participants to be Kidney yin deficient. In total, they acknowledged seven types of primary syndrome patterns in hot flash conditions, which also seem to be the general consensus among other sources. [6,12,23] In an Australian acupuncture trial in 2017, they reached the same portion of Kidney yin deficiency; 50% of the hot flash population might be predominantly yin deficient.^[20]

To test the effect of TCM acupuncture as a treatment option for hot flashes, in 2018 we started a hot flash trial at the Shanghai municipal hospital of TCM. This trial and analyses were part of my master's thesis at Shanghai University of TCM. The trial "Regulating and Unblocking conception and governor vessels - Acupuncture Method in the Treatment of Hot flashes in Perimenopausal Women: A Randomized Controlled Trial" was completed in 2020.

Design and Syndrome Patterns in Our Study

A total of 72 Chinese and international perimenopausal women with hot flashes, whom all had hot flashes >four times in 24 h, enrolled in the trial. They were treated with acupuncture twice per week, 30 min each session for six weeks; at the end of the trial, sixty-six patients had completed all recordings, treatments, and follow-ups required by the trial [Figure 7].

We applied the strategy of two parallel groups; one acupuncture group and one control group (these women were on a waitlist and were given personal health support during the six weeks). Sham acupuncture had some less than satisfactory results in recent international hot flash studies; it was decided to skip the sham needling's uncertain factor. [18,20,23]

The requirements of our research study set by the university as well as time limitations had two implications. First, we had



Figure 7: Our acupuncture trial at Shanghai municipal hospital of traditional Chinese medicine had 66 patients completing the treatment program

to choose a clear and standardized treatment method. Second, from the 72 women enrolled in the study, we were only able to carefully diagnose and track the progress of the syndromes in the first 19 patients. As the diagnostic patterns are valuable in a TCM treatment setting, I would like to share some of our findings.

After an initial TCM assessment, the 19 women's diagnostic patterns could be redefined as the treatment proceeded, due to the acupuncture in many cases affecting their hot flash situation. Below are the syndrome patterns presented in these women and the frequency and severity of the hot flashes they experienced at the start of the trial.

The analysis of the patterns at enrollment showed some interesting findings. Among the 19 patients, nine presented with yang deficiencies, ten patients had clear signs of yin deficiency, including those with Liver yang rising. Where yin was the predominant deficiency pattern, the women often had complimentary issues with Liver yang rising or Heart yin deficiency with hyperactivity and heat flaring up to disturb the brain. When Kidney yang was deficient, the Spleen's function was often affected in its transformation and transportation function. Liver qi stagnation was often found as a secondary pattern. Three women presented with stomach heat and a very tense and rigid upper gastric area and diaphragm. Hot flashes were emerging strongly, almost like a pain, from this area.

A Treatment Strategy for Hot Flashes

At the start of our clinical trial, it was a challenge to determine how to target and balance such basic and profound yin and yang dynamics, accounting for the patients' hot flashes. There are systematic changes on both the physiological and biochemical levels, including the endocrine system, HPO, HPA axes, and the brain centers and neurotransmitters. As the treatment strategy should involve harmonizing basic yin and yang dynamics, the idea to treat the governor and CVs as part of the protocol developed.

Due to our time limits, our point selection was standardized. Our choice of points were:

Baihui (GV20), Yintang (GV29), Shenting (GV24), Guanyuan (CV4), Qihai (CV6), Zhongwan (CV12), Sanyinjiao (SP6), Taixi (KI3), Fuliu (KI7), Yinxi (HT6).

We did not want to choose points on the back such as BL23 (Kidney shu) or GV4 (Mingmen), as we would have to turn the patient over. Our chosen TCM acupuncture strategy was to link the lower abdomen, and reproductive areas applying the CV4 and CV6 points, to the governor meridian points Baihui and Yintang. Additionally, from TCM theories and current international knowledge of hot flash dynamics, our logic for the choice of points was a combination of three ideas:

1. A basic yin-yang balance is disrupted. The governor and conception vessels are the seas of yin and yang meridians of the body. They both enter the uterus area and are also connected at the perineum, and the head, needling key points along these two meridians are fundamental nourishing yin and yang [Figure 8]. Regulating the governor and CVs can also indirectly unblock the GV to help supplement Kidney qi, which would always be tonified in perimenopausal issues. On the CV, we chose: Zhongwan (CV12), Qihai (CV6), and Guanyuan (CV4). Guanyuan (CV4) needle placement is directly on the CV and is represented as the place that stores blood. It is closely related to a woman's reproductive cycles and benefits endocrine regulation. CV4 is the Spleen, Liver, and Kidney meridians' meeting point that help nourish and regulate the body's yin aspects. CV6 is the sea of qi, and together with CV4, they strengthen the foundational qi of the body. [6,12,22] CV12 helps to relax and smooth the upper gastric area where many tensions and worries are held within hot flash women

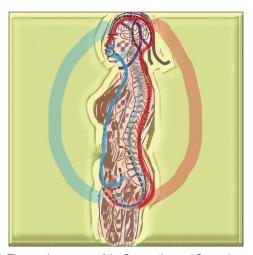


Figure 8: The running course of the Conception and Governing meridians is creating an orbit of the upper body, connecting to the uterus as well as to the brain centers responsible for a balanced hormonal secretion

- Link to the brain centers. The GV is a bridge that communicates with the brain directly. Nan Jing "Er shi Ba Nan" (《难经·二十八难》 Classic of Difficult Issues "The Twenty-eight Difficult Issue") states that "The governor originates from the transmission of the lower pole, runs in the spine, up to Fengfu and belongs to the brain." Reaching the reproductive area and connecting with CV, the brain part of the meridian runs in the area of the pituitary and hypothalamus, which are the brain centers involved in thermoregulation. Seen from a TCM perspective, stimulating and regulating this meridian helps the HPO and adrenal axis function. We chose the Baihui (GV20), Shenting (GV24), and Yintang (GV29) points on the GV. These three points jointly regulate the GV in order to regulate the mind and tonify the Kidney, including the endocrine system. The Yintang point is referenced in ancient Chinese and Indian texts. It is closely connected to the pituitary gland, the primary gland of the endocrine system and to a person's intuition and balance of the two yin and yang forces^[6,12]
- Traditionally applied points for hot flashes and night sweats. Treating hot flashes should include points directly supplementing the Kidney and the vin aspect of a woman in order to nourish and calm the system, therefore helping to subdue yang. CV4, KI3, KI7, SP6, and HT6 have all been frequently used both traditionally in clinics and in international trials to reduce hot flashes. [20,22,24,25] For CV4 see above. Fuliu (KI7) and Taixi(KI3) belong to the Shaoyin Kidney meridian of the foot, nourishing the Kidney and yin. Yinxi (HT6) belongs to the Shaoyin heart meridian of the hand, which helps treat steaming bone disorder and night sweating. It has the function of clearing heat deficiencies and gathering vin fluids, which are mainly used to treat yin deficiencies, night sweating, and hot flashes. Sanyinjiao (SP6) is the key point of fitness and good health and is located at the intersection of the foot's three yin meridians. Combining these points can balance qi, blood, yin, and yang functions as well as improve perimenopausal hot flashes.

In a standard clinical setting, an individual pattern differentiation should support this treatment protocol and points should be added flexibly to optimize the patient's treatment results, yielding a personalized medicinal approach to patient therapy. Moxa can be added as well to support the conditions related to the Spleen, Liver, and Heart when needed.

Results and Discussion

What outcomes did our methods and treatment strategy have?

The results of this study showed that acupuncture therapy focused on regulating and unblocking the conception and governor vessels could effectively reduce both the frequency and severity of hot flashes in perimenopausal women [Figure 9]. The quality of life experienced by the women was also improved. The treatment proceeded without any adverse events.

Table 2 shows that the frequency of the hot flashes for the women having acupuncture treatment was reduced after six treatments and showed a continued reduction one month after the 12 treatments were completed [Figure 10]. This was found both compared to the waitlisted women and to the daily number of flashes they had at the start of the trial.



Figure 9: After 6 weeks of acupuncture treatment both the frequency and severity of the women's hot flashes were reduced

In terms of the severity of the hot flashes, i.e., how strongly they experienced them, we found a similar positive effect of the acupuncture treatment. In the patients who experienced very intense and strong hot flashes that originated in their upper gastric area, the therapy was successful after four to five treatments. The women felt their upper gastric area beginning to soften, and the severity of their hot flashes decrease.

There was also an evident positive change in the participants' perceived quality of life during the six weeks of treatment.

The body houses a complex system of hormonal secretion and regulation mechanisms, and therefore the hot flashes can be addressed from numerous angles. We applied an acupuncture method focused on regulating and unblocking the conception and GVs, which corresponds well to TCM diagnostic patterns

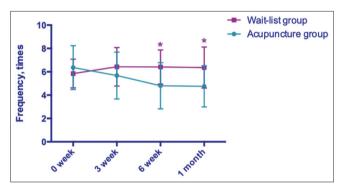


Figure 10: The frequency of the hot flashes for the women having acupuncture treatment

Table 2: Diagnostic patterns and baseline data in the 19 first enrolled hot flash Chinese and international women			
Patterns	Acupuncture group (n=10)	Wait-list group (n=9)	
Age at randomization (years old)	54.3	51.6	
Hot flashes per 24 h at baseline	5.5	5.6	
Severity of hot flashes at baseline (on a scale 1-10)	5.4	4.7	
Main (primary) syndrome pattern			
Yin yang deficiency	5	4	
Kidney yin deficiency	3	4	
Kidney yang deficiency (only)	0	0	
Liver kidney yin deficiency	2	1	
Secondary syndrome pattern at BL			
KI and SP qi deficiency	4	5	
KI and HT not harmonized	1	1	
HT and KI yin deficiency	-	1	
Stomach heat	2	1	
Liver qi stagnation	2	3	
Changed Secondary patterns			
KI and SP qi deficiency	4	1	
KI and HT not harmonized	1		
HT and KI yin deficiency	-	-	
Stomach heat	-	-	
Liver KI yin deficiency	1	1	
Liver qi stagnation	2	2	

SP: Spleen meridian, KI: Kidney meridian, HT: Heart meridian

of hot flashes and to Western medical findings of the disruption in the body's HPO and HPA systems.

From our findings and supported by novel research, TCM acupuncture can confidently be used as a safe and efficient treatment method to support women going through perimenopause and help reduce troublesome hot flashes.

The main finding in this article researching perimenopausal hot flashes in women is that it is possible to reach a diagnosis utilizing both yin and yang deficiencies as the root cause that affects many visceral systems. Yin deficiency seems obvious as estrogen production, representing one of the body's yin substances, comes to an end. An important reminder here is that depleted estrogen levels are a natural occurrence in menopause, but not all women suffer from hot flashes. Different bodies handle this transformational stage differently. Therefore, we should search for other dysfunctions and imbalances. For instance, many women in midlife have developed yang deficiencies. We hope to have the time to individualize our treatment design more in the future. It will be an essential piece of information to follow the progress of every woman's unique pattern and be able to apply points individually after that.

Pictures by Anna Bogachko Holmblad and Eva-Britt Andersson, Artist. Thanks to A M Hellberg Moberg, freelance writer in London UK, for helping with the text.

Funding

None.

Conflicts of interest

None.

References

- Avis NE, Crawford SL, Greendale G, Bromberger JT, Everson-Rose SA, Gold EB, et al. Duration of menopausal vasomotor symptoms over the menopause transition. JAMA Intern Med 2015;175:531-9.
- Kroenke CH, Caan BJ, Stefanick ML, Anderson G, Brzyski R, Johnson KC, et al. Effects of a dietary intervention and weight change on vasomotor symptoms in the Women's Health Initiative. Menopause 2012;19:980-8
- Freeman EW, Sammel MD, Gross SA, Pien GW. Poor sleep in relation to natural menopause: A population-based 14-year follow-up of midlife women. Menopause 2015;22:719-26.
- Kronenberg F. Menopausal hot flashes: A review of physiology and biosociocultural perspective on methods of assessment. J Nutr 2010:140:1380S-5S.
- Zheng J, Li J, Zhang L, Hu GH, Yu CQ, Zhang ZF, et al. Epidemiological investigation of perimenopausal women in Shanghai. J Chin Integr Med 2009;7:827-30.

- Giovanni M, editor. Obstetrics and Gynecology in Chinese Medicine. Edinburgh: Churchill Livingstone; 1998.
- Borud EK, Alræk T, White A, Grimsgaard S. The acupuncture treatment for postmenopausal hot flushes (Acuflash) study: Traditional Chinese medicine diagnoses and acupuncture points used, and their relation to the treatment response. Acupunct Med 2009;27:101-8.
- Beinfield H, Korngold E, editors. Meonopause, Hormones and Chinese Medicine. Women's Health. Pennsylvania: Inner Light, Wellness Acupuncture; 2010.
- Tierra M. Integrating the Traditional Chinese Understanding of the Kidneys Into Western Herbalism. East West School of Herbology. 2018
- Ma BZ, Qi C. Gynecology of TCM [M]. Beijing: China Press of Traditional Chinese Medicine; 2012. p. 35-360.
- 11. The Governing and Conception Vessels. Available from: http://www.lieske.com. [Last accessed on 2020 Dec 04].
- Edlund R, Mitchell D. Daoist Neigong for Women. The Art of the Lotus and the Moon. Singing Dragon. 2016.
- Spetz Holm AC, Frisk J, Hammar ML. Acupuncture as treatment of hot flashes and the possible role of calcitonin gene-related peptide. Evid Based Complement Alternat Med 2012;2012:579321.
- Hanisch LJ, Mao JJ, Kodransky M, Coyne JC. Endogenous opioids and hot flushes still hypothetical. Lancet 2006;367:92-3.
- 15. Berendsen HH. The role of serotonin in hot flushes. Matuitas 2000;36:155-64.
- Kim KH, Na SY, Lee MS, Kim HS, Jung YS, Choi MS, et al. Acupuncture for hot flashes in postmenopausal hemodialysis-dependent women: Two case reports. J Altern Complement Med 2010;16:915-8.
- Chiang C, Gallicchio L, Zacur H, Miller S, Flaws JA, Smith RL. Hormone variability and hot flash experience: Results from the midlife women's health study. Maturitas 2019;119:1-7.
- Kim DI, Jeong JC, Kim KH, Rho JJ, Choi MS, Yoon SH, et al. Acupuncture for hot flushes in perimenopausal and postmenopausal women: A randomised, sham-controlled trial. Acupunct Med 2011;29:249-56.
- McGarry K, Geary M, Gopinath V. Beyond estrogen: Treatment options for hot flashes. Clin Ther 2018;40:1778-86.
- Ee C, French SD, Xue CC, Pirotta M, Teede H. Acupuncture for menopausal Hot flashes: Clinical evidence update and its relevance to decision making. Menopause 2017;24:980-7.
- Avis NE, Coeytaux RR, Isom S, Prevette K, Morgan T. Acupuncture in menopause (AIM) study: A pragmatic, randomized controlled trial. Menopause 2016;23:626.
- Alraek T, Borud E, White A. Selecting acupuncture treatment for hot flashes: A Delphi consensus compared with a clinical trial. Altern Complement Med 2011;17:33-8.
- Pirotta M, Ee C, Teede H, Chondros P, French S, Myers S, et al. Acupuncture for menopausal vasomotor symptoms: Study protocol for a randomised controlled trial. Trials 2014;15:224.
- Yu Q. Traditional Chinese medicine: perspective on and treatment of menopausal symptoms (J). Climacteric 2018;21:93-5.
- Chiu HY, Pan CH, Shyu YK, Han BC, Tsai PS. Effects of acupuncture on menopause-related symptoms and quality of life in women in natural menopause: A meta-analysis of randomized controlled trials. Menopause 2015;22:234-44.

How to cite this article: Holmblad AB. Talking about hot flashes (潮热). Chin Med Cult 2021;4:50-7.

The Importance of Adopting Leadership Concepts in Communicating Medicinal Culture of Chinese Medicine in the Western World

Tina Wu

Master of Arts in Leadership, Trinity Western University, Richmond Campus, BC, Canada

Abstract

Cultures are beliefs, knowledge, and languages people use to communicate with others. In the same rationale, the communication between Chinese and Western medicinal cultures is the communication between two medicinal beliefs, knowledge, and languages. In this article, the key components of Chinese and Western cultures will be discussed to lay the foundations for better communication of Traditional Chinese Medicine (TCM) in the Western world. Besides the discussion of similarities and differences between the two cultures, the potential of being complementary to each other in practices will be explored. Moreover, in this article, using key leadership skills to enable better communication and practices of TCM in the Western world will be examined as well.

Keywords: Belief, Chinese medicine, communication skills, complementary, culture, leadership theories, Western medicine

Introduction

There are two major medicine systems used by professional health-care providers in China, one is Traditional Chinese Medicine (TCM), and the other is Western Medicine (WM). TCM treatment is based on the entire system of the body. Chinese medicine physicians, nurses, and other health-care providers focus on restore/maintain the balance (between yin and yang), harmony (between yin and yang), and vital energy (qi) flow in one's body. The results of a smooth flow bring healthy life to people. WM on the other hand focuses on science, logic, and hard evidence. "The Western physician starts with a symptom, then searches for the underlying mechanism— a precise cause for a specific disease." WM health-care providers use biomedical technologies, techniques, and drugs to prevent and treat illnesses and injuries, rehabilitate, and promote health in general.

There is a tension between TCM and WM practices.^[2] In the West, TCM has been considered to be part of complementary

alternative medicine. It involves a broad range of medicine practices sharing common concepts developed in China. TCM has been a tradition based on 3000 years of various forms of health practices including herbal medicine, acupuncture, massage (Tuina), exercise (Qigong), and dietary therapy.

There is tension between TCM and WM practices in the field. Based on a study done by Ren *et al.*,^[2] in China, there has been the development of clinical practice guidelines (CPGs) to promote evidence-based medicine both for TCM and WM. There are expected to be equally reflected in Chinese CPGs. However, in the study, a total of 604 CPGs were identified, only a small number of them (12%) recommended TCM therapy and only five guidelines (7%) had applied evidence grading. It leads to the conclusion of a few Chinese WM CPGs recommend TCM therapies and very few provide evidence grading for the TCM recommendations. The findings may have resulted from limited communication between the two systems. How to solve the issues? The author recommends using leadership perspectives or skills to bridge communication between TCM

Submitted: 01-Sep-2020 Accepted: 10-Feb-2021 Published: 31-Mar-2021

Access this article online

Quick Response Code:

Website:
www.cmaconweb.org

DOI:
10.4103/CMAC.CMAC_8_21

Corresponding author: Prof. Tina Wu,

Master of Arts in Leadership, Trinity Western University, 305-5900 Minoru Blvd, Richmond Campus, BC, V6X 2A9, Canada.

E-mail: tina.wu@twu.ca ORCID: 0000-0002-8873-3692

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

 $\textbf{For reprints contact:} \ WKHLRPMedknow_reprints@wolterskluwer.com$

and WM medicinal systems and cultures. Furthermore, the author recommends a communication training program for medical students and health-care professionals to apply the required leadership skills to bridge communication between TCM and WM cultures.

What is leadership? "Leadership is a process of social influence which maximizes efforts of others towards the achievement of a goal." For the communication between the two systems, the goal to be achieved would be through providing a facilitation training program to encourage dialogues between TCM and WM. Medical students (both from TCM and WM) are rarely motivated to take up leadership roles or activities during their medical schooling. The focus could be more on skills and knowledge training, rarely focus on formal training to prepare them for the leadership roles or activities after graduation. [4]

This paper aims to explore the possibility of using leadership training to develop students both from TCM and WM to facilitate better communication between them. The purpose of doing so is to encourage using leadership perspectives to the development of inclusion and integration of both systems in communication. In the end, it could be beneficial to patient-centered treatment and interventions. The outcomes could be a win-win approach for all – patients, practitioners, and the treatment systems involved.

The Relationship between Culture and Communication Styles

To facilitate better communication between TCM and WM, we need to define the fundamentals behind the two systems, in other terms, we have to know the culture and the key communication concepts of the two systems – their similarities and differences.

Cultures

According to Webster Dictionary, "culture" is defined as the customary beliefs, social forms, and material traits of a racial, religious, or social group. Also, the Dictionary defines "culture" as the set of values, conventions, or social practices associated with a particular field, activity, or social characteristic. The following illustrates some of the key differences in TCM and WM communication styles rooted in the fundamental of their cultural backgrounds.

Culture and communication style

- Direct communication or indirect communication style. As mentioned before, TCM culture emphasizes more on philosophical foundations of body and mind connection, while WM focuses more on scientific and direct approach communication style [Figures 1 and 2].
- Self-concept and shared attitudes. The self-concept between TCM and WM is different as demonstrated in Figure 3.

In the same rationale, the differences exist between the two on shared attitudes, values, goals, and practices that characterize intervention or treatment. In TCM, the shared attitudes of self are on the whole system of mind and body connection, while WM is more on individual organs or units. It is the set of shared attitudes determines the treatments or intervention patients will receive-TCM or WM [Figure 3].

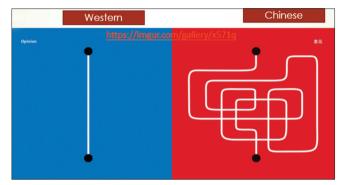


Figure 1: The cultural differences between East and West - How people express their opinion? Retrieved from https://imgur.com/gallery/x571q (February 8, 2021)

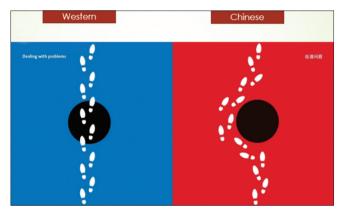


Figure 2: The cultural differences between East and West - How people deal with problems? Retrieved from https://imgur.com/gallery/x571q (February 8, 2021)

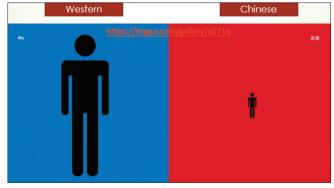


Figure 3: The cultural differences between East and West - How do people view themselves? Retrieved from https://imgur.com/gallery/x571q (February 8, 2021)

• Social practices. This type of communication style and culture is associated with one's concept of leaders and followers. It is the set of values, conventions, or social practices associated with a particular field, activity, or societal characteristic. In social practices, leaders usually are the leading role in the process and outcomes of the practices. In TCM, the leader usually plays the most important leading role in the decision-making process and team performance outcomes. Team members are followers of such practices in their medical practices; however, for WM, leaders usually function primarily in providing guidance and advice [Figure 4].

Goman indicates in her culture controls communication article:

In high-context cultures (Mediterranean, Slav, Central European, Latin American, African, Arab, Asian, and American-Indian) leave much of the message unspecified—to be understood through context, nonverbal cues, and between-the-lines interpretation of what is actually said. By contrast, low-context cultures (most of the Germanic and English-speaking countries) expect messages to be explicit and specific. The former is looking for meaning and understanding in what is *not* said — in body language, in silences and pauses, and in relationships and empathy. The latter place emphasis on sending and receiving accurate messages directly, and by being precise with spoken or written words. [5]

Goman also suggests that in low-context cultures, they disregard the importance of building and maintaining personal relationships when dealing with individuals from high-context cultures. The same communication rationale applies to TCM and WM practices. For TCM, the mind-body connection would take more time for communication and treatment/intervention, while, for WM, the aim is to cure the symptoms than to take time to build and maintain personal relationships.^[5]

In TCM and WM communication dealings, reason and emotions both play a role; however, which one is dominant depends on the factor of affective (readily showing emotions)

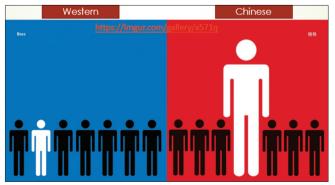


Figure 4: The cultural differences between East and West - How do people view leaders? Retrieved from https://imgur.com/gallery/x571q (February 8, 2021)

or emotionally neutral in one's approach. Members of neutral cultures do not tend to share their feelings but keep them carefully controlled and subdued. The approach is more task-oriented than in WM. In cultures with high-contexts, professionals show their feelings plainly as more likely in the TCM community.

For TCM and WM global medicinal community, there is no one single best approach to communicating with one another. The key to this cross-cultural success is to develop an understanding and deep respect for the differences and similarities as well.

Leadership Skills to Facilitate on Culture and Communication

The author will introduce several important fundamental leadership perspectives/skills related to the topic discussed in this article to enhance the communication between TCM and WM. The leadership perspectives included are Trait Leadership Theory; Authentic Leadership theory; Servant Leadership Theory; Transformational Leadership Theory; and Situational/contingency Leadership Theory.

In the end, based on the required communication skills, a facilitation training program for medical students and medical professionals will be recommended.

Trait leadership theory

"Leader traits can be defined as relatively coherent and integrated patterns of personal characteristics, reflecting a range of individual differences, that foster consistent leadership effectiveness across a variety of group and organizational situations."[6] This definition has three key components: (1) Leaders traits are not to be considered in isolation but rather as integrated as a cluster of attributes that influence leadership performance;^[7] (2) Leader's traits concern the inclusiveness of a variety of personal qualities that promote stability in leader effectiveness. Traits have traditionally referred to personality attributes. However, in line with most modern leader trait perspectives, the qualities that differentiate leaders from nonleaders are far-ranging and include not only personality attributes but also motives, values, cognitive abilities, social and problem-solving skills, and expertise; (3) Leader traits specify leader attributes are relatively enduring, producing cross-situational stability in leadership performance; however, most personality and leadership researchers agree that actual behavior varies considerably across situations. The variability has been the crux for pure situational or person-situation models in personality theory.^[7] More discussion on the leader's situational behavior will be included in the following situational leadership theory section.

In summary, according to *Trait Leadership Theory*, potential leaders to bridge communication between TCM and WM may need to have an integrated cluster of leadership attributes (e.g., accuracy in work, moral habits, decisiveness in judgment, speech fluency, interpersonal skills, and administrative abilities as stable leader qualities) for performance. Also, their motives, values, cognitive abilities, social and problemsolving skills, expertise are important traits. When considering the communication as a situation to connect the two systems, then, appropriate better handling quality of the situation will be an additional meaningful attribute to take into consideration.

Authentic leadership theory

According to Harter, [8] authenticity can be defined as "owning one's personal experiences, be their thoughts, emotions, needs, preferences, or beliefs, processes captured by the injunction to know oneself' [8] and behaving in accordance with the true self. Based on the initial definition of *Authentic Leadership* Luthans and Avolio, [9] and the underlying dimension of the construct posited by Gardner *et al.*, [10] and Illies *et al.* [11] Walumbwa *et al.* [12] defined *Authentic Leadership* as a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development.

In this definition, self-awareness refers to demonstrating an understanding of how one derives and makes meaning of the world and how that meaning-making process impacts the way one views himself or herself over time. It also refers to showing an understanding of one's strengths and weaknesses and the multifaceted nature of the self, which includes gaining insight into the self through exposure to others and being cognizant of one's impact on other people.^[13] Relational transparency refers to presenting one's authentic self (as opposed to a fake or distorted self) to others. Such behavior promotes trust through disclosures that involve openly sharing information and expressions of one's true thoughts and feelings while trying to minimize displays of inappropriate emotions.[13] Balanced processing refers to leaders who show that they objectively analyze all relevant data before coming to a decision.

In summary, authentic leadership perspectives encourage leaders' selection criteria to connect TCM and WM as follows:

• They are self-aware and genuine. Authentic leaders are self-actualized individuals who are aware of their strengths, their limitations, and their emotions. They also show their real selves to their followers. They do not act one way in private and another in public; they do not hide their mistakes or weaknesses out of fear of looking

- weak. They also realize that being self-actualized is an endless journey, never complete.
- They are mission driven and focused on results. They are able to put the mission and the goals of the organization ahead of their own self-interest. They do the job in pursuit of results, not for their own power, money, or ego.
- They lead with their heart, not just their minds. They
 are not afraid to show their emotions, their vulnerability,
 and to connect with their employees. This does not mean
 authentic leaders are "soft." In fact, communicating in a
 direct manner is critical to successful outcomes, but it's
 done with empathy.
- They focus on the long-term. Ideal leaders to connect TCM and WM would be leaders who realize that to nurture individuals and to nurture an organization requires hard work and patience, but the approach pays significant returns over time.

Servant leadership theory

Greenleaf first presented servant leadership theory in the *Servant as a Leader* essay. The servant-first model focuses on making sure that other people's highest priority needs are being served. In that essay, Greenleaf mentioned:

The servant-leader is servant first... It begins with the natural feeling that one wants to serve, to serve first. Then, conscious choice brings one to aspire to lead. That person is sharply different from one who is leader first, perhaps because of the need to assuage an unusual power drive or to acquire material possessions... The leader-first and the servant-first are two extreme types. Between them, there are shadings and blends that are part of the infinite variety of human nature.^[14]

Throughout its development, numerous other theorists have contributed to our understanding of servant leadership. Spears outlined ten characteristics of servant leaders by analyzing the writings of Greenleaf. These ten characteristics are listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of others, and building community.^[15]

A servant-leader focuses primarily on the growth and well-being of people and the communities to which they belong. While traditional leadership generally involves the accumulation and exercise of power by one at the "top of the pyramid," servant leadership is different. The servant-leader shares power, puts the needs of others first, and helps people develop and perform as highly as possible.

What is the effect of practicing servant leadership? Longbotham^[16] presented a multiple regression model that is able to explain a significant percentage of the variance in the effectiveness of teams. The essential servant leadership variables

identified were (a) providing accountability; (b) supporting and resourcing; (c) engaging in honest self-evaluation; (d) fostering collaboration; (e) communicating with clarity; and (f) valuing and appreciating.

In summary, to enhance the communication between TCM and WM, the servant leaders approach could enhance team effectiveness to a significant percentage level, in turn, produce encouragement, humility, and trust to team members on both sides. It could be a win-win outcome for all teams involved in the communication process.

Transformational leadership theory

Burns^[17] and Bass^[18] used the term "transformational leadership" to explain how transformational leadership could be measured, as well as how it impacts the follower's motivation and performance. A transformational leader is measured based on his/her influence on the followers. The followers demonstrate behaviors such as feeling trust, loyalty, and respect for the leader. The outcomes could be followers are willing to work harder than originally expected because they feel more than just self-gain, they have a sense of inspiring mission and vision in them, as well as a meaningful identity. The leader transforms and motivates followers through his/her idealized influence (attribute and behavior), intellectual stimulation, individual consideration, and inspirational motivation.

Besides, the transformational leader encourages followers to come up with new and unique ways to challenge the status quo and to alter the environment to support being successful.

To connect TCM and WM, transformational leadership can facilitate communication through the following fundamental elements:^[19]

- Idealized influence: Provides a role model for high ethical behavior, instills pride, gains respect, and trust.
 As a development tool, transformational leadership has spread already in all sectors of western societies, including governmental organizations.
- Intellectual stimulation: The degree to which the leader challenges assumptions, takes risks, and solicits followers' ideas. Leaders with this style stimulate and encourage creativity in their followers. They nurture and develop people who think independently. For such a leader, learning is a value and unexpected situations are seen as opportunities to learn. The followers ask questions, think deeply about things, and figure out better ways to execute their tasks.
- Inspirational Motivation— The degree to which the leader articulates a vision that is appealing and inspiring to followers/teammates. Leaders with inspirational motivation challenge followers/teammates with high standards, communicate optimism about future goals, and

provide meaning for the task at hand. Followers/teammates need to have a strong sense of purpose if they are to be motivated to act. Purpose and meaning provide the energy that drives a group forward. The visionary aspects of leadership are supported by communication skills that make the vision understandable, precise, powerful, and engaging. The followers are willing to invest more effort in their tasks, they are encouraged and optimistic about the future, and believe in their abilities.

• Individualized consideration: The degree to which the leader attends to each follower's/teammate's needs, acts as a mentor or coach to the follower, and listens to the follower's concerns and needs. The leader gives empathy and support, keeps communication open, and places challenges before the followers. This also encompasses the need for respect and celebrates the individual contribution that each follower can make to the team. The followers have a will and aspirations for self-development and have intrinsic motivation for their tasks.

Situational leadership theory

The situational theory of leadership suggests that no single leadership style is best. Instead, it all depends on the situation at hand and which type of leadership and strategies are best suited to the task. According to this theory, the most effective leaders are those able to adapt their style to the situation and look at cues such as the type of task, the nature of the group, and other factors that might contribute to getting the job done. [18,20]

Hersey and Blanchard suggested that there are four primary leadership styles:

- Telling (S1): In this leadership style, the leader tells people what to do and how to do it.
- Selling (S2): This style involves more back-and-forth between leaders and followers. Leaders "sell" their ideas and message to get group members to buy into the process.
- Participating (S3): In this approach, the leader offers less direction and allows members of the group to take a more active role in coming up with ideas and making decisions.
- Delegating (S4): This style is characterized by a less involved, hands-off approach to leadership. Group members tend to make most of the decisions and take most of the responsibility for what happens.

The right style of leadership depends greatly on the maturity level (i.e., the level of knowledge and competence) of the individuals or group.

Hersey and Blanchard's theory identifies four different levels of maturity, including:

 M1: Group members lack the knowledge, skills, and willingness to complete the task.

- M2: Group members are willing and enthusiastic, but lack the ability.
- M3: Group members have the skills and capability to complete the task, but are unwilling to take responsibility.
- M4: Group members are highly skilled and willing to complete the task.

The Hersey-Blanchard model suggests that the following leadership styles are the most appropriate for these maturity levsels:

- Low maturity (M1) Telling (S1)
- Medium maturity (M2) Selling (S2)
- Medium maturity (M3) Participating (S3)
- High maturity (M4) Delegating (S4)

Furthermore, the Situational Leadership II (or SLII model) was developed by Kenneth Blanchard^[21] and builds on Blanchard and Hersey's original theory. According to the revised version of the theory, effective leaders must base their behavior on the developmental level of group members for specific tasks. The developmental level is determined by each individual's level of competence and commitment. These levels include:

- Enthusiastic beginner (D1): High commitment, low competence.
- Disillusioned learner (D2): Some competence, but setbacks have led to low commitment.
- Capable but cautious performer (D3): Competence is growing, but the level of commitment varies.
- Self-reliant achiever (D4): High competence and commitment.

SLII also suggests that effective leadership is dependent on two key behaviors: supporting and directing. Directing behaviors include giving specific directions and instructions and attempting to control the behavior of group members. Supporting behaviors include actions such as encouraging subordinates, listening, and offering recognition and feedback.

- Directing (S1): High on directing behaviors, low on supporting behaviors.
- Coaching (S2): High on both directing and supporting behaviors
- Supporting (S3): Low on directing behavior and high on supporting behaviors.
- Delegating (S4): Low on both directing and supporting behaviors.

Important situational factors

For enhancing the communication between Chinese and Western Medicinal cultures, the following are factors leaders must be aware of when assessing the situation. The factors include:

 Leaders need to consider the relationship between the leaders and the members of the group. Social and interpersonal factors can play a role in determining which approach is best.

- 2. The leader needs to consider the task itself. Tasks can range from simple to complex, but the leader needs to have a clear idea of exactly what the task entails to determine if it has been successfully and competently accomplished.
- 3. The level of authority the leader has over group members should also be considered. Some leaders have power conferred by the position itself, such as the capacity to fire, hire, reward, or reprimand subordinates. Other leaders gain power through their relationships with employees, often by gaining respect from them, offering support to them, and helping them feel included in the decision-making process.
- 4. As the Hersey-Blanchard model suggests, leaders need to consider the level of maturity of each group member. The maturity level is a measure of an individual's ability to complete a task, as well as his or her willingness to complete the task. Assigning a job to a member who is willing but lacks the ability is a recipe for failure.

Putting Communication in Action: Use Leadership Skills to Facilitate Conversation on Medicinal Culture of Chinese Medicine in the Western World

The author proposes the following certification training program to train medical students from both TCM or WM background, or medical professionals to enhance the communication exchange between the two systems proposed. The goal for training is to develop their leadership skills to facilitate better in-depth communication skills for a better quality of care provided to patients, and prevention measures provided to people living in communities. The quality and integrated health-care approach would enhance collaborations between TCM and WM practitioners to achieve better care for all parties involved.

What areas are the focus of this leadership training program designed for connecting both TCM and WM? Briefly, the design is for trainees to be skillful in the leadership areas listed down below. Trainees who completed the training program would be able to upgrade not only their skills in their medical practices but also becoming better facilitators/leaders soliciting dialogues between the two medicinal cultures. Graduates would be equipped with a basic understanding of intervention options available to patients from both TCM and WM. The goal for good facilitation is to provide holistic/integrated mind-body connection treatments to enhance patient care by maximizing the available/tangible health-care resources.

- Area 1: Leadership skills to build relationships and trust with teammates or colleagues.
 - Skills to build relationships (e.g., people-oriented leadership skills) include those established between

individual nurses, on teams, and with internal and external partners.

- Area 2: Leadership skills to create an empowering work environment.
 - Leadership skills (e.g., authentic leadership skills) to nurture respectful, trusting relationships among people in a work setting.
 - Leadership skills to enable an empowered work environment (e.g., transformational leadership skills) that has access to information, support, resources, and opportunities to learn and grow, in a setting that supports professional autonomy and strong networks of collegial support.
- Area 3: Leadership skills to create a culture that supports knowledge development and integration.
 - Leadership skills (e.g., servant leadership skills) to foster both the development and dissemination of new knowledge and instilling a continuous-inquiry approach to practice, where knowledge is used to continuously improve clinical and organizational processes and outcomes.
- Area 4: Leadership skills to lead and sustain change.
 - Leadership skills (e.g., situational leadership skills) for active and participatory engagement in implementation (e.g., transformational leadership skills) of change projects, resulting in improved clinical and organizational processes and outcomes.
- Area 5: Leadership skills to balance the complexities of the system, managing competing values, and priorities.
 - After completion of the certification program, the ideal facilitators will advocate for patients from integrated TCM and WM perspectives to obtain resources necessary for high-quality patient care. In the meanwhile, will recognize the multiple demands and complex issues that shape organizational decisions aiming at efficiency and effectiveness of best available health-care outcomes. Also, able to use evidence-based findings to support the optimal intervention/treatment outcomes.

Conclusion

Although various forms of Chinese medicine are currently practiced in over 120 countries worldwide,^[15] the communication of medicinal culture of Chinese medicine in the Western world is still limited. Based on Wong *et al.*,^[22] they stated in their paper "Developing a modern language for traditional concepts would be a significant challenge; however, this also represents a great opportunity to make Chinese medicine more accessible to Western audiences".

In this paper, the author proposes using leadership concepts/skills to be the communication tool/channel to the development of a modern language to enhance dialogue for TCM in the Western world. There are many ways to make

it happen; however, it could mutually be beneficial for both TCM and WM if the leadership training program is offered to TCM first. "Leadership is a process of social influence which maximizes efforts of others towards the achievement of a goal." [3] For communicating TCM in the western world, the goal to be achieved would be through a facilitation training program provided to medical professionals from TCM first to encourage dialogues between the two medicinal cultures. In the end, collaborations between the two medicinal cultures would encourage optimally integrated interventions available to patients in need (patient-focused-care/patient satisfaction). In return, the cost-effectiveness and efficiency produced at the end of the integration are outcomes for optimal medical practices.

Funding

None.

Conflicts of interest

None.

References

- Kaptchuk TJ. The Web that Has Not Weaver: Understanding Chinese Medicine. New York: McGraw Hill Publishing; 2000. p. 133.
- Ren J, Li X, Sun J, Han M, Yang GY, Li WY, et al. Is traditional Chinese medicine recommended in Western medicine clinical practice guidelines in China? A systematic analysis. BMJ Open 2015;5:e006572.
- Kruse K. What is Leadership? 2013. Available from: http://www.forbes. com/sites/kevinkruse/2013/04/09/what-is-leadership/. [Last accessed on 2021 Feb 02].
- Burgess A, van Diggele C, Mellis C. Students as facilitators in a teacher training program: Motivation for leadership roles. Adv Med Educ Pract 2015;6:615-20
- Goman K. How Culture Controls Communication; 2011. Available from: https://www.forbes.com/sites/carolkinseygoman/2011/11/28/ how-culture-controls-communication/#26558b71263b. [Last accessed on 2021 Feb 02].
- Zaccaro SJ, Kemp C, Bader P. Leader traits and attributes. In: Antonakis J, Cianciolo AT, Sternberg RJ, editors. The Nature of Leadership (pp. 101–124). Thousand Oaks, CA: Sage; 2004. p. 104.
- Zaccaro SJ. Trait-based perspectives of leadership. Am Psychol 2007;62:6-16.
- Harter S. Authenticity. In: Cnyder CR, Lopez SJ, editors. Handbook of Positive Psychology. London: Oxford University Press; 2002. p. 121, 382-94.
- Luthans F, Avolio BJ. Authentic leadership development. In: Cameron KS, Dutton JE, Quinn RE, editors. Positive Organizational Scholarship. San Francisco: Barrett-Koehler; 2003. p. 241-58.
- Gardner WL, Avolio BJ, Luthans F, May DR, Walumbwa FO. Can you see the real me? A self-based model of authentic leader and follower development. Leadersh Q 2005;16:343-72.
- 11. Illies R, Morgenson FP, Nahrgang JD. Authentic leadership and eudemonic well-being: Understanding leader-follower outcomes. Leadersh Q 2005;16:373-94.
- Walumbwa FO, Avolio BJ, Gardner WL, Wernsing TS, Peterson SJ. Authentic leadership: Development and validation of a theory-based measure. J Manage 2008;34:89-126.
- 13. Kernis MH. Toward a conceptualization of optimal self-esteem. Psychol Inq 2003;14:1-26.
- 14. Greenleaf R. Servant leadership A journey into the nature of legitimate power and greatness. Mahwah, NJ: Paulist Press; 1977. p. 6.
- Scheid V. Remodeling the arsenal of Chinese medicine: Shared pasts, alternatives futures. Annu Am Acad Polit Soc Sci 2002;583:136-59.
- 16. Longbotham GJ. The relationship of leadership, environment, and team factors to process improvement project team success: An ex post facto

- study. Diss Abstr Int 2000;61:4457.
- 17. Burns JM. Leadership. New York: Harper & Row Publisher. 1978.
- 18. Bass BM. The Bass handbook of leadership: theory, research, and managerial applications. 4th ed., New York: Free Press; 2008.
- 19. Dartey-Baah K. Resilient leadership: A transformational-transactional leadership mix. J Glob Responsib 2015;6:99-112.
- Hersey P, Blanchard KH. So you want to know your leadership style? Train Dev J 1981;35:34.
- 21. Blanchard KH, Zigʻarmi D, Nelson RB. Situational leadership after
- 25 years: A retrospective. J Leadersh Stud 1993;1:21-36.
- 22. Wong EY, Gaster B, Lee SP. East meets west: Current issues relevant to integrating Chinese medicine. Chin Med 2012;7:20.

How to cite this article: Wu T. The importance of adopting leadership concepts in communicating medicinal culture of Chinese medicine in the Western world. Chin Med Cult 2021;4:58-65.

Content Features of Medical Journal Zhong Xi Yi Xue Bao (《中西医学报》The International Medical Journal) during the Republican Period and Its Impact on Medicine

Hai-Feng Cao, Li-Li Wang

Shanghai Museum of Traditional Chinese Medicine, Shanghai University of Traditional Chinese Medicine, Shanghai 201203, China

Abstract

As a medical journal during the republican period, *Zhong Xi Yi Xue Bao* (《中西医学报》*The International Medical Journal*) was characterized by rich and popular content, wide range of knowledge, and better popularization. It had played an important role in spreading modern Western medicine and popularizing medical knowledge in China, promoted the development of modern Chinese medicine and its integration with Western medicine, thus provided essential research value and far-reaching influence for medical science.

Keywords: Integrated Chinese and Western medicine, medicine, the republican period, Zhong Xi Yi Xue Bao (《中西医学报》The International Medical Journal)

As an important medical journal during the late Qing Dynasty and the early Republic of China when Western learning introduced into China, Zhong Xi Yi Xue Bao (《中西医学报》The International Medical Journal) was featured by rich and popular content, wide range of knowledge, and better popularization and guidance. It had played a prominent part in spreading modern Western medicine in China and contributed to its integration with Chinese medicine. Thus, it not only influenced and promoted the transformational development of modern traditional Chinese medicine but also provided enlightenment and reference for the development of medicine nowadays. This paper aims to explore the content features of this journal, elaborate its historical contribution, and influence to modern medicine, hoping to start a discussion on inheriting Chinese medicine culture and further study its academic value.

Submitted: 16-Sep-2020 Accepted: 16-Feb-2021 Published: 31-Mar-2021

Access this article online Quick Response Code: Website: www.cmaconweb.org DOI: 10.4103/CMAC.CMAC_9_21

Brief Introduction to *The International Medical Journal*

The International Medical Journal [Figure 1] was founded in April 1910 (April Emperor Shunzhi 2nd years) by a famous medical scientist Ding Fubao. Edited and published by Shanghai Chinese and Western Medicine Research Society, it was a monthly journal chief-edited by Ding Fubao. Its general distribution agency was located in No. 81 Changshouli Xinma Road Shanghai (it was changed to "No. 82 Changshouli Xinma Road in January 1911" and "No. 58 Changshouli Paike Road" in August 1912). This journal aimed to "study the Chinese and Western medical science, exchange knowledge and reinvigorate medicine." It stopped publication in July 1918 when Ding Fubao was busy compiling the book *Shuo Wen Jie Zi Gu Lin* (《说文解字话林》 Dictionary of Paraphrasing Texts and Words).^[1] In January 1927, it resumed publication with an aim of "introduce medical knowledge, elaborate hygienic truth and develop

Corresponding author: Dr. Li-Li Wang,

Shanghai Museum of Traditional Chinese Medicine, Shanghai University of Traditional Chinese Medicine, Shanghai 201203, China.

E-mail: Ilw1104@sina.com ORCID: 0000-0001-6400-018X

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

 $\textbf{For reprints contact:} \ WKHLRPMedknow_reprints@wolterskluwer.com$

healthy personality and good judgement". In April 1928, it was renamed as *De Hua Yi Xue Za Zhi*(《德华医学杂志》 *De Hua Medical Journal*), and Dr. Ding Huikang, the second son of Ding Fubao, was the chief-editor. The periodical office was located in No. 121 Meibaige Road (now Xinchang Road), Shanghai. Distributed by Medical Book Company, the objective of this journal was changed to "promote the realization of public health by popularizing new medicine with attitude of academic freedom". In 1929, this journal changed its name back to *The International Medical Journal*. By the time June 1930 when it finally stopped publication, there were total 11 published volumes, with 12 issues in each volume.

Brief Introduction to the Journal Founder

Ding Fubao (1847-1952), with courtesy name Zhonghu, pseudonym Meixuan, and alias Taoyin Buddhist and Jiyang Pona, was born in Wuxi, Jiangsu province. He was a famous medical scientist, scholar, as well as translator in recent history. He became the vice-chairman of China Medical Association in 1904 and was sent to Japan for government-sponsored study in 1909. He created the Chinese and Western Medicine Research Society in Shanghai after returning home. He joined together successively with 513 colleagues from Chinese and Western medicine fields to advocate medical research and published *The* International Medical Journal by self-financing. What's more, he founded hospitals, convalescent homes, and medical book company in Shanghai; compiled flood of Western medical works; and published them on this journal, thus making tremendous efforts to improving Chinese medicine. He was one of the representatives in the field of integrated Chinese and Western medicine, promoted the development of modern medicine in Shanghai, and made progress in health protection and education. In addition, he also contributed much to the Buddhism, philology, ancient coins collections and study, and mathematics.[2]



Figure 1: Contents page of the International Medical Journal, the 9^{th} Issue, April 1918

Content Features of *The International Medical Journal* and Its Impact

Rich and popular in contents, wide range in knowledge, and better popularization and guidance

The International Medical Journal introduced and spread many Western medical knowledges while learning from Western medicine to improve Chinese one and promoted medical knowledge exchanges and progress of medical and health services. The periodical columns of this journal covered comments, theories, contributions from society members, document assembly, roll of society members, medical news, medical history, special reports, Eastern and Western translations, biography, forum, medical cases, small forum, notes, appendix, etc. What's more, there were large amounts of information involving medical advertisements [Figure 2], newsletter, correspondence course, marked prices, conference service introduction, etc.Besides comments, theories, and document assembly, other periodical columns would be adjusted flexibly according to the content of each issue. As for the content of this journal, it covered different departments of Western medicine, including anatomy, physiology, pathology, diagnostics, lemology, immunology, internal medicine, surgery, hygiene, gynecology and obstetrics, pediatrics, dermatology, ophthalmology and otorhinolaryngology, and psychology. It also involved various aspects of Chinese medicine, medical history, translation, etc.^[1] Information such as correspondence course, training institute, and conferences in this journal reflected the rise of emerging educational pattern of Chinese medicine at that time. This journal recorded numerous medical commonsense, effective therapeutic intervention for common diseases, and medical cases. Published or translated contents were both professional and easily to be understood, which was beneficial to the spread of Western medicine knowledge and health knowledge.



Figure 2: Medical advertising insert published in April 1918 on The International Medical Journal, introducing red tonifying pill by Dr. Williams for assisting to quit smoking (opium)

Attaching importance to integrated Chinese and Western medicine and advocating improving Chinese medicine

Ding Fubao translated 68 kinds of Japanese medical books and compiled many other medical works from 1908 to 1933. 83 kinds of them were included in Ding Shi Yi Xue Cong Shu (《丁氏医学丛书》 Ding's Series Medical Books). To facilitate association members to exchange and study, he published most of them on this journal and correspondence course information. [3] These translation of Western medical books and new-style correspondence teaching reduced learning costs and became an important platform for Chinese doctors to study Western medicine. A galaxy of doctors was cultivated and influenced, and it brought a huge impact on knowing and learning Western medicine by Chinese medical circles. A large number of articles about theories and clinical experience of Chinese and Western medicine were published on this journal by society members from different provinces. They learned new knowledge and discussed how to improve Chinese medicine while pointing out problems and pushed forward medical system reform. They were opposed to the removal of traditional Chinese medicine. Most of them advocated for learning from strong points of Western medicine to offset its weakness and studying Chinese medicine with modern scientific approach. Ding Fubao was the first to propose "scientization of Chinese medicine" in this journal. Plenty of published medical cases and articles from experts (such as Ding Fubao, Chen Bangxian, Qian Bowen, Zhu Huyun, and Wu Tingfang) represented academic level at that time. This journal reflected the innovative ideas of modern doctors, and it became the theory position of Chinese medicine reformists then.

Laying emphasis on the prevention and treatment of the present diseases, especially infectious diseases, and stressing on popularizing hygienic knowledge

The International Medical Journal recorded numerous articles about the medical cases and discussions of daily diseases, especially provided theory and experience of Western medicine systemically for the diagnosis, treatment, and precautionary measures of infectious diseases. It also gave a full introduction to the spread of public health knowledge. During the late Qing Dynasty and the early Republic of China, there were outbreak of infectious diseases such as tuberculosis, plague, cholera, and bloody dysentery. This journal published over 40 papers about tuberculosis and discussed many aspects including pathogenesis, symptoms, process, bacteria feature, and suitable environment, as well as route of infection, therapy, and preventions.^[4] For example, there were Rescue Regulation for Tuberculosis and Preventative Measures for Tuberculosis. During the outbreak of plague, the press gave special report. Doctors started to reflect and explore the source of plague spread.

Thus, doctors discussed and focused more on how to enhance and spread public health knowledge and promote the health service. There were several relevant papers such as *Theory* of Plague and Discussion on China Implementing Diseases Prevention Sanitary Measure. This journal also gave systemic introduction to public epidemic prevention. It was, thus, clear that the prevention and treatment of infectious diseases had always been emphasized in the development of medical history. For example, in the prevention of tuberculosis, it talked about the importance of personal hygiene, diet, and keeping in a good mood. In the aspect of public health prevention, it suggested to set the spittoon and disinfect public places, emphasized that government prohibition was necessary to put an end to bad habits and infection source, and called for compliance from the public in the perspective of social morality. More suggestions included setting up quarantine office at trading ports, epidemic diseases should be treated at special department in hospital, and patients should be treated in isolation. Moreover, it suggested to have health education class in schools and inspected the food and beverage on the market. It called for the establishment of public health system featuring improving public environment and strengthening the prevention and control capacity of infectious diseases.

In addition, this journal also laid emphasis on psychotherapy and Chinese medicine ethics, and introduced the classification, features, and premise of psychotherapy.

Conclusion

The International Medical Journal was a prominent journal on introducing Western medicine in the late Qing Dynasty and the early Republic of China. It was founded relatively early, distributed in a wide range, and published longer with rich contents, thus providing us precious historical materials for further exploration. It had promoted the spread of Western knowledge in China and boosted the improvement and transformation of Chinese medicine in modern times. Moreover, it bridged the gap between Chinese and Western medicine in mutual exchanges and facilitated the concept transformation of modern Chinese medicine. The theory and experience of disease prevention and treatment recorded are still providing high referential value in current medical field.

Translator: Guo-Qi Shi (石国旗)

Funding

None.

Conflicts of interest

None.

References

- Xiao HY, Wang BF. Centennial journal of traditional Chinese and western medicine, medical memoir during the Republican period – In memory of the centenary founding of the International Medical Journal by Ding Fubao. Chin Med Cult 2010;5:51-3.
- Yi GQ. Outline of Ding Fubao's Life and his works. Knowl Anc Med Lit 2003;20:14-5.
- Zhang S. Ding Fubao and modern eastward transmission of western medicine. J Jiangsu Inst Educ 2013;29:89-94.

 Guo YJ. The International Medical Journal under perspective of modern knowledge transformation (1910-1930) [dissertation]. [Zhengzhou]: Zhengzhou Univ 2019. pp.17-18.

How to cite this article: Cao HF, Wang LL. Content features of medical journal *Zhong Xi Yi Xue Bao* (《中西医学报》*The International Medical Journal*) during the Republican period and its impact on medicine. Chin Med Cult 2021;4:66-9.

Chinese Medicine and Culture Contribution Notices to Authors

Chinese Medicine and Culture (ISSN: 2589-9627 CN:31-2178/R9) is a scholarly, peer-reviewed journal dedicated to the introduction of traditional Chinese medicine and culture. Chinese Medicine and Culture publishes original articles, review articles, case reports, research articles, commentaries and interpretations of the classics, archaeology and cultural relics, historical events, health preservation, treatment, herbal medicine, acupuncture, traditional sports health care, global information on Chinese Medicine at both home and abroad. Chinese Medicine and Culture aims to build a communication platform for researchers to share updated, high-quality studies in Chinese medicine.

Types of Papers

Contributions of the following types will be considered for publication:

Original Papers: These include studies of Chinese classics, cultural relics, medical history and treatment with herbal medicine.

Review Papers: It is expected that these articles would be written by individuals who have done substantial work on the subject or are considered experts in the field.

Case Reports: They should be of special values, describing a great diagnostic or therapeutic challenge and providing a learning point for the readers.

Commentary/Systematic Review/Mata-analyses/Global View/Book Reviews....

Abstract

The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, references should be avoided.

Keywords

Authors are invited to submit 5-8 keywords associated with their papers.

Conflict of interest

State if there is any competing interest of any sort. If there is no financial interest, use the following format: There are no conflicts of interest.

Reference Format

References should be numbered consecutively in the order in which they are first mentioned in the text (not in alphabetic order). Identify references in text, tables, and legends by Arabic numerals in superscript with square bracket after the punctuation marks.

Papers in Journals

1. Standard journal papers (for up to six authors):

Parija S C, Ravinder PT, Shariff M. Detection of hydatid antigen in the fluid samples from hydatid cysts by co-agglutination. Trans. R.Soc. Trop. Med. Hyg.1996; 90:255–256.

2. Standard journal papers (for more than six authors): List the first six contributors followed by et al.

Roddy P, Goiri J, Flevaud L, Palma PP, Morote S, Lima N. et al., Field Evaluation of a Rapid Immunochromatographic Assay for Detection of *Trypanosoma cruzi* Infection by Use of Whole Blood. J. Clin. Microbiol. 2008; 46: 2022-2027.

3. Volume with supplement:

Otranto D, Capelli G, Genchi C: Changing distribution patterns of canine vector borne diseases in Italy: leishmaniosis vs. dirofilariosis. *Parasites & Vectors* 2009; Suppl 1:S2.

Books and Other Monographs

1. Personal author(s):

Parija SC. Textbook of Medical Parasitology. 3rd ed. All India Publishers and Distributors. 2008.

2. Editor(s), compiler(s) as author:

Garcia LS, Filarial Nematodes In: Garcia LS (editor) Diagnostic Medical Parasitology ASM press Washington DC 2007: pp 319-356.

3. Chapter in a book:

Nesheim M C. Ascariasis and human nutrition. *In Ascariasis* and its prevention and control, D. W. T. Crompton, M. C. Nesbemi, and Z. S. Pawlowski (eds.). Taylor and Francis, London, U.K.1989, pp. 87-100.

Electronic Sources as reference

Journal papers on the Internet:

Parija SC, Khairnar K. Detection of excretory *Entamoeba histolytica* DNA in the urine, and detection of E. *histolytica* DNA and lectin antigen in the liver abscess pus for the diagnosis of amoebic liver abscess. *BMC Microbiology* 2007, 7:41.doi:10.1186/1471-2180-7-41. http://www.biomedcentral.com/1471-2180/7/41

Submission

Submission to this journal proceeds totally online. All manuscripts must be submitted on-line through the website https://mc03.manuscriptcentral.com/cmac. First time users will have to register at this site. Registration is free but mandatory. Registered authors can keep track of their papers after logging into the site using their user name and password.

中医文化 东方智慧
Healthcare Wisdom in
Traditional Chinese Medicine



ISSN 2589-9627



Price: 50.00 USD