

# *Discussion on the Status Quo and Inheritance of Chinese Medicine Culture Cognition of Medical Students*

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**Abstract:** Traditional Chinese medicine (TCM) is an excellent cultural heritage in China. As an important inheritor, the promotion of cultural literacy of contemporary medical college students is particularly important. In this study, the medical students from five colleges in Guangzhou were selected as the research subjects. Moreover, their knowledge of traditional medicine culture was investigated by questionnaire to evaluate the level of their traditional medicine cultural attainments, their cognitive attitude toward TCM, the situation of the inheritance of the campus, and the cognitive situation of the development prospect of traditional medicine culture. According to the current situation, this paper puts forward ways and methods to effectively improve the college students' cognition of traditional medicine culture to promote the inheritance and healthy development of traditional medicine culture in contemporary college students.

## 1. Introduction

The core concepts of Chinese traditional culture have been fully absorbed, especially using the holistic view and system theory as guidance, in the long-term development practice of traditional Chinese medicine (TCM). The basic concepts and thinking modes of syndrome differentiation and treatment, prevention and health care, and *treatment before disease* fully demonstrate the advance and effectiveness of TCM [1-2]. Moreover, TCM culture reflects the essence and characteristics of Chinese medicine. It is the essence of the condensed experience of doctors in the past and reflects the excellent traditional culture of the Chinese nation. Thus, integrating traditional medicine culture into the process of humanistic quality training of medical students and enhancing their cognition and confidence in traditional medicine culture is a problem that medical colleges need to consider [3-4].

## 2. Research Background

The promulgation and implementation of the “Outline of Strategic Planning for Development of Traditional Chinese Medicine (2016–2030)” of the State Council and the “Law of the People's Republic of China on Traditional Chinese Medicine” marked that TCM development has become a national strategy, which means that TCM has entered a new era of all-round development [5-6]. The party and the state attach great importance to the inheritance and development of Chinese excellent

traditional medicine culture. As the main position and new force of inheriting and promoting traditional medicine culture, medical colleges and students' traditional medicine culture literacy level are very important for the inheritance and development of traditional medicine culture [7-9]. Thus, this study investigates the medical students' cognition of traditional medical culture, analyzes the existing problems and put forward countermeasures to provide a reference for the publicity of traditional medicine culture and the reform of education and teaching of TCM in medical colleges, and provide enlightenment for promoting the inheritance and development of traditional medicine culture and expanding the audience scope.

### 3. Survey on the Cognition of Traditional Medical Culture among Medical College Students

#### 3.1. Respondents

Students majoring in medicine (including basic medicine, clinical medicine, stomatology, public health and preventive medicine, TCM, integrated Chinese and Western medicine, and pharmacy and traditional Chinese pharmacology) from five universities in Guangzhou (e.g., Sun Yat-sen University, Southern Medical University, Guangzhou University of TCM, Guangdong Pharmaceutical University, and Guangzhou Medical University) were selected in this survey as the research objects. Consequently, 1 050 questionnaires were distributed, 1 036 were recovered, and 1 019 were valid. Of the respondents, males, females, students under the second grade, and students over the fourth grade accounted for 43.96%, 56.04%, 70%, and <10% (Table 1).

Table 1: Gender and grade distribution of respondents

Index		Amount	Proportion/%
Gender	Male	448	43.96
	Female	571	56.04
Grade	Freshman	316	31.01
	Sophomore	397	38.96
	Junior	146	14.33
	Senior	86	8.44
	Fifth grade	13	1.28
	Postgraduate students	61	5.99

#### 3.2. Survey Methods

An open questionnaire was designed based on the vocabulary of the preliminary items of the traditional cultural questionnaire constructed by previous literature search. Using the expert interview method, three experts involved in traditional medicine, health statistics, humanities, and social sciences were consulted for two rounds. In addition, expert opinions on the rationality and accuracy of vocabulary entries were solicited again to determine the final questionnaire response form, the number of entries preset, the scoring rules of the questionnaire, and the time limit for answering the questionnaire. Consequently, 1 050 college students distributed in different colleges were randomly selected to fill in the questionnaire from October 8, 2018 to January 10, 2019. The results of the questionnaire were statistically analyzed by using Excel 2010 and SPSS 22.0 software.

## 4. Survey Results

### 4.1. Medical College Students' Literacy Level of Traditional Medicine Culture

Ten questions (all single-choice questions) were designed from four aspects: medical history, TCM, inquiry, and acupuncture. The results showed that the highest accuracy rate was *four diagnosis of TCM* (89.01%). Questions involving the essence of traditional culture, such as *Which of the following statement about “Qihuang” is incorrect?* Showed that the correct rate was the lowest (43.77%; Table 2).

The results suggested that most students had a certain understanding of the TCM culture and were quite familiar with some relatively well-known TCM stories and characters. However, they did not have enough knowledge about the historical significance and the origin of the TCM culture.

Table 2: Knowledge of traditional Chinese medicine

Serial number	Question	Correct answer	Correct rate/%
1	Which of the following statement about “Qihuang” is incorrect?	Qihuang refers to a Chinese herbal medicine	43.77
2	Which of the following works is the foundation of TCM?	Huangdi Neijing	66.44
3	What does four diagnosis of TCM include?	Look, listen, question and feel the pulse	89.01
4	Which one is the authentic medicine in Yunnan?	Panax notoginseng	64.87
5	Which one is the earliest existing pharmaceutical monograph in China and also is the first pharmacopoeia in the world?	Shennong Bencao Jing	55.25
6	Which of the following is known as the “Holy doctor” of TCM?	Zhang Zhongjing	60.16
7	The famous doctor in the story of “Scrape the poison off the bone” is	Hua Tuo	76.94
8	Who is known as the “King of Remedies” in China?	Sun Simiao	61.14
9	Which doctor invented mafeisan?	Hua Tuo	74.78
10	Which acupoint can be massaged for stomach health?	Zusanli	73.41

In addition, the reading situation of TCM classics was also investigated. The results showed that more than half (63.71%) of the students had not read classic TCM works.

### 4.2. Medical College Students' Cognitive Attitude toward TCM

Most medical students held a positive attitude toward TCM culture. They were interested in TCM culture and generally agreed with TCM scientificity. Moreover, 74.39% of students expressed their willingness to choose TCM when ill. Furthermore, 69.48% of students think it is necessary to popularize TCM culture knowledge among college students (Table 3).

Table 3: Students' cognitive attitude toward TCM

Title	Options	Percentage/%
What's your attitude toward traditional medicine culture?	Love and pay more attention to it	40.14
	Interested and possess some understanding	29.64
	Want to know only when I feel sick	21.10
	No attention, no interest to understand	9.13
Do you think TCM is scientific?	Agree with its scientificity, but some theories cannot be explained with scientific viewpoint	40.33
	Don't know much	43.47
	Pseudoscience	11.19
Have you gone to see TCM when you are sick?	Often	5.00
	Occasionally	25.52
	Rarely	48.87
	Never	19.33
Do you think it is necessary to popularize the knowledge of traditional medicine culture among college students?	Especially necessary	6.28
	Necessary	26.01
	Unnecessary	43.47
	Doesn't matter	11.09
		19.43

#### 4.3. The Inheritance of Traditional Medical Culture in Medical Schools

Table 4: Inheritance of traditional medicine culture in medical colleges

Title	Options	Percentage/%
Which channels do you usually use to learn about traditional medicine culture (multiple choices)?	Classroom learning	67.32
	Books, newspapers and magazines	53.58
	Lectures	54.27
	Network	78.61
Does your school carry out cultural heritage activities of TCM on campus?	Often	23.85
	Occasionally	41.41
	Rarely	23.55
In what form does the school carry out the campus inheritance of traditional medicine culture (multiple choices)?	No attention	11.19
	Elective courses	73.01
	Book exhibition	58.29
	Lectures and free clinics	62.71
What traditional medicine knowledge do you want the school to develop (multiple choices)?	Community culture festival	64.97
	Health preservation of TCM	66.93
	Chinese medicinal herbs	42.30
	TCM	22.47
	Acupuncture and cupping Qigong, and so on	83.61

Students participating in the survey have rich channels to understand traditional medicine culture and no longer only obtained relevant knowledge from classroom learning. Online learning has become the mainstream trend among them. Only 23.85% of the students said that the school often

carried out inheritance activities although the ways of inheriting TCM culture are diversified. The most desirable classes for students are health-preserving knowledge of Chinese medicine, acupuncture, cupping, and Qigong (Table 4).

#### 4.4. Students' Evaluation on the Development Prospect of Traditional Medicine

Of the students who participated in the survey, 57.80% have confidence in TCM development prospects. They felt that TCM development should first form a perfect theoretical system to promote TCM development and inheritance through various channels and improve its influence in the public (Table 5).

#### 4.5. Result Analysis

The traditional medical culture of medical students is insufficient and their ability to understand the classic TCM theory has declined based on the aforementioned survey results. Some students even denied the scientific TCM nature. The analysis shows that these situations are related to the insufficient TCM transmission in medical colleges. Moreover, traditional medical education has been influenced by Western medical education ideas and models in recent years. Problems (e.g., westernization of Chinese medicine education content and the weakness of the basic TCM education) exist [10-11]. Furthermore, the proportion of traditional culture courses in medical colleges is small. Similarly, the learning of classical TCM content (ancient Chinese, traditional TCM theory, and so on) is weak. Thus, this is against the law of TCM education, and cultivating TCM talents who love the cause of TCM, have a profound heritage of traditional Chinese culture, and have rich clinical practice experience is impossible. In addition, TCM is profound and obscure, which becomes the resistance for students to learn traditional medicine culture. Moreover, the research and publicity of TCM culture by the state and society are not enough, which leads to the lack of general understanding and TCM recognition by the society. Social masses doubt TCM scientificity, which marginalizes the work of TCM and further causes the traditional medicine culture inheritance work to carry on with difficulty.

Table 5: Students' evaluation of the development prospect of traditional medicine

Title	Options	Percentage/%
How do you think about the TCM development prospect?	Very good	57.80
	Commonly	28.95
	Gradually replaced by Western Medicine	9.52
	Poor prospects	3.73
What should the future development direction of TCM be (multiple choices)?	Form a perfect theoretical system of TCM	88.32
	Obtain better publicity and attention	60.65
	Promote to the world for the benefit of more people	61.04
	Take the direction of integration of traditional Chinese and Western medicine	72.91
	The government should allocate sufficient funds every year to increase publicity	58.88
How can the TCM influence be improved in the public (multiple choices)?	Actively carry out free clinic activities of TCM	83.42
	Hold lectures on TCM	67.32
	Demonstrate TCM technology	51.72
	Open museum on TCM	61.43
	Publishing easy-to-understand books on TCM	26.20

## **5. The Promotion of College Students' Traditional Medical Culture Literacy**

### **5.1. Focusing Attention to the Cultivation of TCM Professionals**

The inheritance of traditional medical culture should first focus on personnel training in medical colleges. Medical colleges must put the indoctrination of TCM culture knowledge in an important position in the goal of personnel training. Moreover, TCM teaching must be carried out under the background of TCM culture. In addition, the reform of personnel training and teaching modes should be carried out with the dissemination of TCM culture as the spiritual pillar of theory and skill teaching. Furthermore, knowledge training, skill improvement, and cultural penetration should be integrated into the teaching system. Thus, strengthening the construction of TCM culture curriculum; focusing on the developmental law of TCM culture in the overall design and planning; taking the historical background, ancient language, and traditional literature of TCM culture as the core; expanding the depth and breadth of knowledge coverage; forming a standardized and systematic TCM culture curriculum system; and consolidating the students' TCM culture foundation through continuous learning is needed. However, talent cultivation is inseparable from the key subject of teachers. Building a teacher development platform to continuously strengthen the construction of teachers' morality and improve the overall quality of the teaching team can bring positive guidance to college students from the aspects of value orientation, moral cultivation, ideological and moral character, and play a key role in the realization of moral education in colleges.

### **5.2. Promote Campus Activities of Traditional Medicine Culture**

Promoting students to deepen their experience and understanding of TCM culture, integrating TCM cultural elements in the opening and graduation ceremonies, and integrating campus cultural characteristics throughout education is necessary. Continuously carrying out campus cultural activities with traditional TCM characteristics to create a strong atmosphere of TCM culture, such as holding the “TCM Culture Festival” and “TCM Diet Festival”; carrying out “TCM Photography Exhibition,” “TCM knowledge competition,” and other activities; and holding regular exhibitions of TCM culture theme books and pictures in the library improve college students' participation and recognition of traditional medicine culture. In addition, relying on various forms of activities to enhance the soft power of TCM culture on campus promotes the balanced development of cultural quality and theoretical knowledge.

### **5.3. Strengthening the Construction and Publicity of Traditional Medical Campus Culture**

The campus culture reflects the school's training mode and management methods. Thus, creating a high-quality, good cultural atmosphere can imperceptibly influence the value pursuit of students. In terms of “hardware” facilities, optimizing campus layout, displaying TCM culture through the campus infrastructure, and strengthening the construction of the campus cultural atmosphere (e.g., the construction of Yaowang mountain, medicine garden, TCM culture corridor, famous doctor wall, medical history museum, famous doctor statue, and so on) guides teachers and students to experience TCM culture through diverse forms and carriers. In terms of software, a “melting media”<sup>[12]</sup> platform can be actively built for integrating media (e.g., school newspapers, campus networks, WeChat, and microblog) and regularly formulating publicity programs to enhance interaction and experience in a rich form. In addition, integrating traditional medicine culture into network video and broadcast media, establishing a traditional medicine culture heritage website column, opening the traditional medicine culture WeChat official account, and microblogging

interactive platform makes full use of internal and external publicity platforms to spread positive energy.

#### 5.4. Offering Characteristic Traditional Medicine Culture Courses

Starting from the psychological characteristics of college students, courses with TCM characteristics, such as Taijiquan, Baduanjin, Mawangdui, and Wuqinxi, which are of interest to students, will be offered to enhance students' understanding of TCM knowledge and strengthen their physical fitness. These highlights the concept of *treatment before disease* advocated by TCM; select courses that are close to life (e.g., spring health care, acupuncture health care, sachet DIY, and other practical activities), so that the concept of TCM health care can be silently permeated in clothing, food, housing, and transportation. Moreover, students can obtain the recognition of TCM culture through experiencing the health care TCM value to enhance their confidence and pride in excellent traditional Chinese culture.

#### 5.5. Organizing Social Practice Activities

Students should be guided to seek truth and socially practice cultivating the sense of social responsibility and awareness of serving the society, organize medical student volunteers to carry out publicity TCM activities into primary and secondary schools, and improve students' ability to spread TCM culture. In addition, regular organization of free consultation activities in the community and old-age care institutions are needed to spread TCM treatment knowledge and healthcare outside the school so that effective TCM services can be enjoyed and TCM confidence can be gained.

Moreover, college students should be actively encouraged to start an undertaking, hold innovation and entrepreneurship TCM competition, and provide entrepreneurial resources and environment for college students; arrange students to visit Chinese herbal medicine plantations, visit TCM pharmaceutical enterprises, identify Chinese herbal medicines in the wild, and so on; and open courses (e.g., study tours of TCM museum and residence of famous TCM experts, and so on) to stimulate students' interest in learning and deepen their understanding of TCM.

### 6. Conclusion

Traditional Chinese culture is condensed with profound philosophical wisdom and dialectical ideas of the TCM holistic view and practical experience. It is the treasure of the science world and the key to open the treasure house of Chinese civilization. Different from modern medical culture, the spirit and literacy advocated by TCM culture have profound significance for the cultivation of medical ethics and moral qualities of medical students. The introduction of traditional medical culture into the education of medical colleges and the construction of campus culture lays a foundation for the cultivation and strengthening of students' comprehensive professional consciousness and multidimensional and integrated thinking ideas. Moreover, it enables students to have a sense of responsibility and destiny to carry forward traditional culture and national medical cause, which can cultivate compound medical talents for China's socialist medical cause and contribute to human health.

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