# **Innovation and Practice of Personnel Training System for Overseas Chinese Undergraduates in Traditional Chinese Medicine Program**

Yupei Zhang, Chuiyang Zheng, Nan Li, Xiaofeng Zhu, Qinhe Yang\* College of Traditional Chinese Medicine, Jinan University, Guangzhou 510632, China.

\*tyangqh@jnu.edu.cn

# Abstract

As a practical and professional discipline, Traditonal Chinese Medicine (TCM) program is designed to train specialists with the abilities of clinical thinking, innovation and practice on TCM. With the deepening of the reform of medical education in recent years, the construction and improvement of talent training system of the overseas Chinese undergraduates under TCM program has gradually attracted the attention of relevant universities, and become an important direction for the reform of TCM program. This study discussed the experience of reform on overseas undergraduate talent training mechanism of School of TCM at Jinan University (JNU) from the perspectives of curriculum system, talent training mode and practice teaching reform, in order to provide reference for overseas countries or regions in training clinical specialists who are enable to fulfill their needs of rapidly development of TCM.

# Keywords

## TCM; Overseas Students; Talent Training; Innovation.

## **1.** Introduction

Under The Belt and Road, the current national strategy, the enrollment scale of overseas Chinese students in China is constantly expanding. How to inherit the essence, keep the integrity and innovation on TCM international education has become a severe challenge of foreign student educator in TCM colleges and universities<sup>[1]</sup>. JNU was the first university established by the Chinese Government to recruit overseas Chinese students with a history of 114 years, and the mission of running the school is "facing overseas, facing Hong Kong, Macao and Taiwan". It is one of national double first-class universities and one of institutions of higher learning in Guangdong Province. At present, there are a complete range of disciplines in JNU, including literature, science, technology and medicine, covering a total of 98 undergraduate programs. Established in 1999, the TCM program at JNU is one of the first batch of TCM undergraduate programs that have passed the professional certification, and it is also the first batch of national first-class undergraduate majors to be selected as majors. Up to date, more than 70% of the undergraduates of this program are from Hong Kong, Macao, Taiwan and overseas. It is one of the preferred programs for overseas Chinese students to apply for at JNU. It has been 21 years since the development of personnel training for undergraduate program of TCM at JNU, and it has accumulated deep experience in talent training. Therefore, it is necessary to build a mature and normative mechanism of TCM program on overseas Chinese undergraduate talent training, because it contributes to turn out highly-qualified professionals with basic knowledge expertise, skills in application and good ways of thinking of TCM, who are able to apply TCM theory to diagnosis and therapy and can be qualified for overseas clinical and educational work.

# 2. Strengthen the construction of curriculum system of TCM program

According to our practical experience of education on overseas Chinese students in the program of TCM at JNU, there are obvious differences in political, economic and cultural environment, educational background and medical needs between overseas students and Chinese students. Therefore, it shows unique characteristics on specialized course teaching system for overseas students.

In the past 21 years, on the basis of *combining inheritance with innovation*, we have built a set of mature training mechanism for overseas undergraduates, and made the following explorations and attempts in the course system construction on TCM: (1) Base upon the educational background of overseas Chinese students, optimize the setting of teaching curriculum, improve the construction of its system, clarify their training objectives in the training program, and organically combine the course construction and discipline construction to construct core curriculum group of TCM with distinctive characteristics. (2) Strengthen the quality construction of the main courses of TCM, vigorously build online open courses such as *MOOC*, *Gold course*, *quality resource sharing course* and *virtual Simulation experiment training course*, and actively improve the overall level of construction on the courses of TCM. (3) Strengthen the construction of teaching materials, encourage teachers to edit national and other kinds of teaching materials, especially those suitable for overseas Chinese students. (4) Carry out the reform of student-centered, problem-centered and self-learning education and teaching methods, promote heuristic, exploratory, discussion and participatory teaching, and advocate small class teaching and group discussion.

#### 3. Reform the cultivation of overseas talents

Combining the experience and reform practice of cultiving more than 400 overseas students under TCM program in the School of TCM at Jinan University, we have taken measures, such as reforming training targets, optimizing training methods and curriculum evaluation standards, to actively improve their theories and basic skills in TCM, strengthen their thinking, equip them with knowledge of TCM theories, enhance their clinical practice ability, and establish an all-round, three-dimensional and permeable system of comprehensive quality cultivation<sup>[2]</sup>. The specific measures are as follows: (1) Establish the training mode of *reading more classical books and making clinical practice earlier* and more often, improve the overseas Chinese students' cognition of Chinese traditional culture, stress the status and importance of TCM classic courses, allow students to learn from teachers in the hospital as soon as possible, cultivate their good thinking of TCM, and build a solid knowledge system. (2) Stimulate the enthusiasm and interest of overseas Chinese undergraduates in TCM program and improve their initiative and ability by means of establishing a tutorial system, holding knowledge contests, organizing academic lectures, and setting up scholarships. (3) Improve the evaluation system of overseas Chinese students' curriculum performance. The evaluation scheme is slightly different according to the categories of TCM courses. Generally, it is divided into closed-book examination, open-book examination, in-class examination, bedside examination, laboratory examination, etc., among which the closed-book examination is the main one while usual examination is a supplement.

# 4. Do a good job in clinical practice teaching for overseas Chinese students

It's the foundation of cultivating outstanding TCM specilists to strengthen the training in clinical ability of overseas Chinese students and improve their ability in clinical practice. *Concept of organic* wholeness, and syndrome differentiation and treatment are the basic characteristics of TCM theory. Thus, it is important to enable students to improve their cognition of disease in the clinical practice, cultivate them with ability and method in clinical of thinking, be equipped with skills in collection, discussion and analysis of clinical cases. To this end, in the field of clinical practice teaching, we have carried out the following exploration and reform: (1) Adjust the proportion of TCM theory course and practice course, reform the teaching materials of experimental and practical training course, increase the class hours of practical training course, and improve the content of clinical practice teaching. For example, add acupoints and acupuncture operation item on Acupuncture and Moxibustion; add clinical case discussion item on Internal Medicine of Traditional Chinese Medicine; add traditional bone-setting techniques item on Orthopedics and traumatology of traditional Chinese Medicine; add the animal experiment operation item on Warm Disease Study, ect. (2) Strengthen and perfect the construction of TCM clinical skill training center, improve the level of its modernization, intelligentization and networked, so as to meet the needs of TCM modernization education. TCM clinical skills training center at our university, founded in 2003, has

built 8 functional laboratories with a total area of about 800 square meters, consisting of Acupuncture, moxibustion and traditional Chinese Tuina training rooms, External medicine, orthopedics and traumatology of TCM training rooms, traditional Chinese pharmacy and formulae training rooms, traditional Chinese pharmacy specimen room, TCM clinical skills training room, TCM comprehensive laboratory, TCM clinical simulation consulting room, internal medicine of TCM laboratory. It features the combination of theory teaching and clinical practice teaching on TCM and focus on cultivation in students' comprehensive clinical operation ability. (3) Establish a fixed and perfect TCM clinical hospital practice base. Objectively, students in TCM program should not conduct clinical training only at school but also in the hospital, which fixed and perfect. Students get chances to personally participate in diagnosis and treatment, clinical skills operation and medical record discussion during their internship in the hospital, which increases their interest in learning TCM and cultivates their comprehensive abilities. At present, we have established fixed clinical probation and practice bases in Jiangmen Wuyi Hospital, Guangdong Hospital of Integrated Traditional Chinese medicine and Western Medicine, Guangzhou Huangpu Hospital of Traditional Chinese Medicine, ect. With perfect facilities, advanced equipment and distinctive characteristics of TCM, these hospitals provide a good platform for the cultivation of overseas undergraduates on TCM program.

## 5. Conclusion

Taken together, relying on the multidisciplinary cross advantages of JNU, a comprehensive university, we have been actively focusing on the aim of oversea undergraduate talents training, highlighting the characteristics of traditional Chinese medicine professional, changing teaching philosophy and teaching ideas, and have basically formed a set of relatively mature overseas talent cultivation system of TCM in the past 21 years. In the future, we hope to continue to innovate and improve the talent training system, so as to cultivate senior professionals with theoretical knowledge and practical skills, who could make contributions to medical treatment and teaching in the field of TCM at all levels of medical treatment institutions, scientific research institutions and medical colleges at home and abroad.

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