

Investigation and Analysis on the Current Situation of Talents Cultivation in Traditional Chinese Medicine

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Keywords: Traditional Chinese medicine talents; training status; investigation and analysis

Abstract: In order to know the current situation of the talents cultivation in traditional Chinese medicine and to sort out the problems in the training process, this paper takes 1000 graduates who major in traditional Chinese medicine in a university of traditional Chinese medicine in Jiangxi Province as the respondents, and uses the questionnaire survey method to investigate the knowledge, ability and quality of Chinese medicine talents and the situation of graduates adapting to their posts. The results show that the overall situation of talents cultivation in traditional Chinese medicine is good, but it is urgent to strengthen training in the ability of handling critical illness, entrepreneurship and English application. It is suggested that the TCM colleges and universities should explore a new model of clinical competence training for TCM talents, establish and perfect the entrepreneurship education system for TCM talents, adjust the training strategies of English application competence for TCM talents, and continuously improve the quality of talents cultivation in TCM.

1. Introduction

As an important part of China's excellent traditional culture, traditional Chinese medicine is a medical system with a long history and unique theories and technical methods. It has made great contributions to the development and prosperity of the Chinese nation for a long time. Before the founding of the People's Republic of China, the training of traditional Chinese medicine talents mainly relied on the "handing-down teaching" method. Since the founding of the People's Republic of China, Chinese medical colleges and universities have made fruitful exploration and reform practices on their methods of training, and have experienced a number of different stages from emphasizing on college education but lighting handing-down teaching to paying equal attention to both college education and handing-down teaching, and have trained a large number of high-quality Chinese medical talents. The Law of the People's Republic of China on Traditional Chinese Medicine promulgated by the State in December 2016 emphasizes that "the education of traditional Chinese medicine should follow the law of the growth of traditional Chinese medicine talents, focus on the content of traditional Chinese medicine, embody the cultural characteristics of traditional Chinese medicine, and pay attention to the combination of classical theory of traditional Chinese medicine and clinical practice of traditional Chinese medicine, modern education and traditional education". It can be seen that the cultivation of traditional Chinese medicine talents has risen to the national strategic level. The quality of training Chinese medicine professionals is related to the health and well-being of thousands of ordinary people. It is of important application value to regularly investigate and analyze the current situation of the cultivation, sort out and summarize the problems in the cultivation process, and provide a realistic basis for the Chinese medicine colleges to further strengthen education and teaching reform and improve the quality of talents training.

2. Investigation and analysis

From July to September 2018, the research group made a questionnaire survey on the current situation of cultivating undergraduate talents of traditional Chinese medicine major(referred to as traditional Chinese medicine talents)in a university of traditional Chinese medicine in Jiangxi Province.

2.1. Respondents and investigation method

The respondents included graduates of traditional Chinese medicine major from 30 employing units such as Jiangxi Provincial Hospital of Traditional Chinese Medicine, Jiangzhong, Ganzhou Hospital of Traditional Chinese Medicine, Xinyu Hospital, Jiujiang Hospital of Traditional Chinese Medicine, Hongdu Hospital of Traditional Chinese Medicine, Yingtan Hospital of Traditional Chinese Medicine and Jiangxi Health Care Commission, etc.The survey is divided into two parts.The first part is about the evaluation on the knowledge, ability and quality of traditional Chinese medicine talents. The second part is about the evaluation on the graduates'self-adaptation knowledge and ability to the post.The questionnaire was first tested in a small scope and then revised according to the opinions of the experts.1000 questionnaires were distributed, 926 questionnaires were returned, and there were 844 valid questionnaires this time. The effective rate of the questionnaire was 84.4%.

2.2. The results and analysis

2.2.1. Investigation and analysis on knowledge, ability and quality of traditional Chinese medicine talents

The results of the statistical analysis on the effective questionnaires show that the satisfaction rate of knowledge, ability and quality of traditional Chinese medical talents (the sum of evaluation percentages of the “very good” and “good”, the same below) ranks first three in the training of professional ethics, innovation ability, depth and breadth of professional knowledge, with satisfaction rates of 95.50%, 93.01% and 87.80%, respectively. More than 80% of them are satisfied with the training of computer application ability, interpersonal relationship processing ability, teamwork spirit and psychological quality training. 70% to 80% of the respondents are satisfied with the cultivation of treatment according to syndrome differentiation, the cultivation of independent learning ability, the cultivation of competition consciousness, the cultivation of experimental hands-on ability, and the cultivation of systemic physical examination ability. Satisfaction rate is less than 60% for the cultivation of handling critical illness, entrepreneurship and English application. The satisfaction rate is 32.12%, 34.6% and 43.01% respectively. The dissatisfaction rate of these three items (the sum of evaluation percentages of the "poor" and "very poor") is also in the top three.

The above data show that:(1) The vast majority of traditional Chinese medicine professionals have good professional ethics, innovative ability and rich professional knowledge. They are good at handling interpersonal relationships, with good computer application ability, teamwork spirit and psychological quality, indicating that Chinese medicine talents have good performance in positions of clinical practice and management. (2) Most Chinese medicine talents have good ability in treatment according to syndrome differentiation, experimental hands-on ability, system physical examination ability and self-learning ability, and have strong sense of competition, indicating that Chinese medicine talents learn seriously during school time, and their professional knowledge and ability have been great improved and applied in work.(3) Most of the traditional Chinese medicine professionals are weak in the judgment and treatment of critical illness, entrepreneurship and English application, which indicates that traditional Chinese medicine students need to be strengthened in these three aspects.

2.2.2. Investigation and Analysis on the adaptability of graduates majoring in traditional Chinese medicine to post knowledge and ability

The results of statistical analysis on the effective questionnaires show that the graduates of TCM

believe that their knowledge structure, professional theoretical knowledge, professional operational skills and post professional ability are generally good, and the evaluations on the sum of "satisfaction" and "basic satisfaction" is above 90%.

The above data shows that although the graduates of traditional Chinese medicine majors think that their overall knowledge and ability adapting to positions are good, the scores of the four items "satisfaction" are not high, ranging from 60% to 70%. The "knowledge structure" occupies the highest score, with only 65.40%. At the same time, for the "professional theoretical knowledge" project, 61.02% of the candidates were "satisfied", and 36.02% of the candidates were "basically satisfied", indicating that a certain proportion of traditional Chinese medical graduates' professional theoretical knowledge was not sufficiently good enough and it is difficult to meet the requirements of their work in clinical practice.

3. Suggestions on training strategies

Through the investigation on the current situation of training traditional Chinese medicine talents in a university of traditional Chinese medicine in Jiangxi Province, it is found that there are problem sin the knowledge, ability, quality of Chinese medicine talents and the knowledge and ability of graduates to adapt to their posts.This provides a realistic basis for Chinese medicine colleges to strengthen the education and teaching reform and further improve the training of Chinese medicine talents.

3.1. Exploring a new mode of training clinical talents in traditional Chinese medicine

Clinical ability is the core competitiveness of Chinese medicine professionals.In addition to further strengthening the practical teaching such as inter-school probation and teaching practice it is necessary for Chinese medicine colleges to focus on strengthening the classic application ability training, clinical skills training, rotation practice and handing-down teaching practice before graduation field work, constructing a new model oriented to enhance the clinical ability of traditional Chinese medicine professionals.

Domestic colleges and universities have actively explored the innovative training mode of clinical competence of TCM talents.For example, a college of traditional Chinese medicine in Jiangxi has set up a cradle class of traditional Chinese medicine. The training mode of "reading classics, following famous teachers and more-clinic" has strengthened the students'thinking ability and clinical proficiency on traditional Chinese medicine, and strengthened students' clinical practice experience.[1]This model has achieved remarkable results in the classic application ability and treatment according to syndrome differentiation ability of traditional Chinese medical talents, but the number of students participating in the study is small. The powerful Chinese medical doctors' resources and teaching resources should be used to achieve full coverage of students majoring in traditional Chinese medicine. The clinical skills training before graduation internship is carried out in accordance with the Objective Structured Clinical Examination (OSCE) model.Each student's assessment includes simulation clinics, case analysis, professional operation skills, etc.Those who fail to pass the examination need to take part in the examination again after retraining until they pass it.In the rotation practice for graduation practice, the corresponding assessment methods should be formulated to focus on the students' learning effects on critical illness and intractable diseases. Students are required to have certain treatment ability and personal opinion on common critical illnesses and intractable diseases in various sections of traditional Chinese medicine.Conducting handing-down teaching during the graduation internship stage. Under the guidance of a clinical teaching instructor, the students will carry out a classic study for 5 months to inherit the academic thoughts and clinical experience of the instructors.At the end of the handing-down teaching, students should take part in the corresponding assessment to comprehensively improve the thinking ability and clinical ability of traditional Chinese medicine.

3.2. Establish and perfect the training system for Chinese medicine talents entrepreneurship education

Deeply implement and make the entrepreneurship education be effective. Colleges and universities of traditional Chinese medicine should build a set of education system with ability training as the core, so that traditional Chinese medicine talents can transform knowledge into ability through a whole set of learning, training and practice of entrepreneurial knowledge, and finally realize employment and entrepreneurship smoothly.

The contents of the entrepreneurship education system mainly include entrepreneurship education goals, entrepreneurial basic knowledge education, entrepreneurship training, entrepreneurship education faculty building and entrepreneurship project financing guidance.[2] And the goal of entrepreneurship education of traditional Chinese medicine talents is to improve the overall quality and entrepreneurial ability of traditional Chinese medicine talents through the implementation of a complete entrepreneurial education training system, to stimulate students' entrepreneurial dreams and pioneering spirit, and to comprehensively enhance their ability in discovering, analyzing and solving problems, and to allow them to make great progress in interpersonal communication, management skills, professional development, etc. The content of basic knowledge education for entrepreneurship of traditional Chinese medicine talents is as follows: first, the curriculum of entrepreneurship, including the guidance of entrepreneurship awareness, the cultivation of core competence of enterprises, the formation of core entrepreneurship team, etc. The second is the practical guidance of entrepreneurship, which mainly includes the design of business model, the production of business plan, the test of sample market and the financing of entrepreneurship projects. The training content of entrepreneurship ability of traditional Chinese medicine talents mainly includes the training of personal core competence and corporate job ability. Personal core competency training mainly includes training in language expression, execution ability and leadership. Corporate job ability training includes setting up research teams, developing and implementing research plans, statistical analysis of research information, writing research reports, and participating in entrepreneurial competitions. In the construction of teaching staff for entrepreneurship education, universities of Chinese medicine should actively support their entrepreneurship mentors to participate in various entrepreneurship academic conferences, and arrange them to practice in relevant enterprises to make up for the shortcomings of their practical experience. The second is to invite successful entrepreneurs to hold a series of entrepreneurial lectures for traditional Chinese medicine professionals.[3] Through the implementation of the above-mentioned training system, the entrepreneurial ability of Chinese medicine professionals will be gradually improved.

3.3. Adjust the training strategies of English application ability of traditional Chinese medical talents

Since the beginning of the 21st century, with the increasing frequency of foreign exchanges of traditional Chinese medicine, the translation and dissemination of traditional Chinese medicine culture has become an important part of China's traditional culture going to the world, and remarkable results in the development of Chinese medicine international industry and education have been achieved. The National Outline of Traditional Chinese Medicine Innovation and Development Plan (2006-2020) has clearly stated the grand vision of "applying global scientific and technological resources to promote the internationalization of traditional Chinese medicine, to promote the excellent culture of the Chinese nation and make new contributions to human health care". It can be seen that in order to vigorously implement the internationalization strategy of traditional Chinese medicine, the demand for compound talents that be proficiency both in traditional Chinese medicine and foreign language is very large.

Traditional Chinese medicine talents have certain professional advantages, but colleges and universities of traditional Chinese medicine have a lot of problems in neglecting oral English training, the backward traditional teaching mode and the lack of international cultural awareness in the cultivation of English application ability[4]. Therefore, in order to improve the English

application ability of traditional Chinese medicine professionals,colleges and universities of traditional Chinese medicine should pay attention to oral ability training, incorporate oral English training into the curriculum system, and promote students' all-round development, then fundamentally improve the English listening, speaking, reading and writing ability of traditional Chinese medicine talents.Secondly, they should innovate the teaching mode, actively use the campus network, multimedia audio-visual classroom, MOOC class, etc. to broadcast classical English movies and classical works for students, provide the most authentic language situation to further enhance students' confidence in oral English expression and enhance their oral expression ability. The third is to arrange courses scientifically, adopting the "online + offline" mode to arrange English courses, focusing on strengthening the knowledge of literature, linguistics and English national social and cultural knowledge as well as knowledge of certain ancient Chinese literature, health science, culture and religion, laying a knowledge base for improving students' English application ability and cultivating students' cultural communication awareness at the same time.

In order to further strengthen the training of traditional Chinese medicine talents, in addition to making up for the deficiencies of Chinese medicine talents in clinical ability, entrepreneurial ability and English application ability, colleges and universities of traditional Chinese medicine should further deepen the reform of education and teaching of traditional Chinese medicine talents training, improve the professional ability and quality of traditional Chinese medicine talents and strengthen the non-professional quality of traditional Chinese medicine talents[5] to meet the needs of the society for high-quality traditional Chinese medicine talents.

Acknowledgment

Fund Project: This work is supported by "Quantitative evaluation research on the achievement of the train objective in traditional Chinese medicine major" of Humanities and Social Sciences Research Project of the Ministry of Education(Grant No.17YJA880015), Moderator: DENG Chun-sheng.

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