

Cultivation of Innovative Talents for Logistics Management in Chinese Medicine Colleges

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Abstract: Aiming at the problem of lack of innovation ability of logistics management professionals^[1], this article explores the methods of cultivating the innovation ability of logistics management professionals in TCM colleges. Mainly based on the theory of innovative talent training, we analyze the logistics management professionals of TCM colleges through questionnaires of existing problems in the current status of innovation ability training, and put forward corresponding strategies.

Introduction

In 2018, China's pharmaceutical logistics maintained rapid growth, and the total cost of it reached 61.392 billion yuan, an increase of 12.90% year-on-year, which maintained double-digit growth for two consecutive years^[2]. The booming rate of the traditional Chinese medicine logistics, however, still lags far behind the development level of logistics in other industries. The fundamental reason is the lack of stamina in the industry due to the shortage of high-end talents. According to the "2018 Pharmaceutical Logistics Industry Talent Analysis Report" survey, in the pharmaceutical logistics industry, employees with bachelor degree or above account for only 20.54%.

There are currently only 4 undergraduate medical schools offering logistics management majors in China: Hubei University of Traditional Chinese Medicine, Liaoning University of Traditional Chinese Medicine, Yunnan College of Traditional Chinese Medicine and Mudanjiang Medical College^[3]. Deficiencies in teaching mode and training methods in the cultivation of college students' innovation ability lead to the mismatch between graduates' ability and market demand, and the lack of professional talents' innovation and practice ability further restricts the sustainable development of the field of Chinese herbal medicine circulation.^[4] Wu Jinzhuo believes that colleges and universities should focus on cultivating application-oriented talents to meet the needs of contemporary social development. He proposes to increase the proportion of practical teaching and strengthen the construction of a practice base, so as to guide logistics management students to carry out in-depth practical activities to promote innovation through practice. The research on the cultivation of innovation ability of logistics management professionals in TCM colleges and universities is of irreplaceable significance for improving the quality of college talents and promoting the development of TCM logistics industry.^[5]

The Status of Investigation and Research on the Cultivation of Innovative Ability of Logistics Management Professionals in TCM Colleges

Survey Overview. To vigorously promote the development of the logistics industry is an urgent need to build an innovative country. However, according to the survey, the shortage of innovative talents in China's logistics industry has hindered its development. Hence, this article carries out surveys based on questionnaires and supplemented by interviews which aimed at students in six grades of logistics management in Hubei University of Chinese Medicine. Through the students'

survey of the current logistics management curriculum, teacher arrangements, practical internships, and innovative education, we can understand the cultivation mode of innovative capabilities of logistics management professionals in Hubei University of Chinese Medicine, so as to propose a strategy corresponding to it. In this survey, 180 students were randomly selected from the 2016-2019 students and 2018-2019 graduates, and they were offered a questionnaire. A total of 142 questionnaires were recovered, including 129 valid questionnaires, and the effective rate of the questionnaire was 90.85%.

Survey Results and Analysis

Student satisfaction with the teaching situation

Table 1. Student satisfaction with the teaching situation

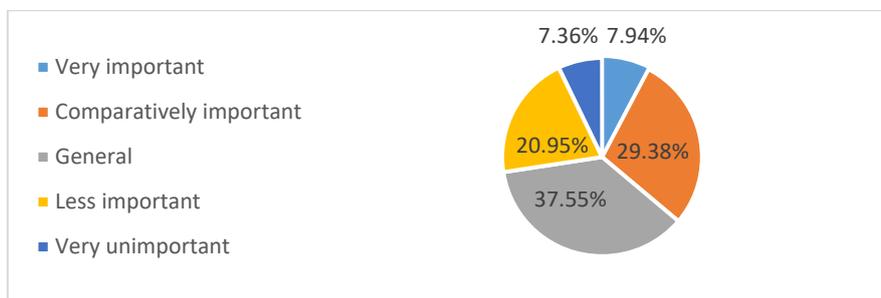
Items	Very satisfied		Quite satisfied		General		Less satisfied		Very dissatisfied	
	Nu mb ers	Propor tion %	Nu mb ers	propor tion %	Nu mb ers	propor tion %	Nu mb ers	propor tion %	Nu mb ers	propor tion %
Hardware equipment	17	13.19%	19	14.73%	59	45.74%	23	17.83%	11	8.53%
Software conditions	6	4.56%	48	37.21%	42	32.56%	18	13.95%	15	11.63%
Book resources	37	28.68%	35	27.13%	30	23.26%	20	15.50%	7	5.43%
Faculty	33	25.58%	23	17.83%	43	33.33%	15	11.63%	5	3.88%
Theoretical content	28	21.71%	36	27.91%	37	28.68%	17	13.18%	11	8.53%
Practice content	9	6.98%	11	8.53%	46	35.66%	53	41.09%	10	7.75%
Teaching methods	20	15.50%	25	19.38%	39	30.23%	41	31.78%	4	3.10%
Extracurricular activities	10	7.75%	29	22.48%	40	31.01%	47	36.43%	3	2.33%

According to the statistical results, the students who are least satisfied with "practical content", "extracurricular activities", "hardware equipment" and "software conditions". After interviewing students who are less or very dissatisfied with the selection of the above projects, the following general reasons can be obtained.

Regarding the "practical content" part, some students think that the proportion of practical courses offered by the school is too low, which leads to students having troubles to obtain the opportunity to connect theory with practice. Besides, some students think that the school hardly carry out professional skills competition and other related practical competitions; about "extracurricular activities", some students said that few teachers would combine the in-class and out-of-class teaching, or some teachers did not integrate deeply enough, resulting in students not being able to use the knowledge in the classroom and books flexibly in extracurricular practice; For the "hardware equipment" part, some students consider that the school always gives a cold-shoulder to the construction of a practical base for logistics majors. They complain about the school having few laboratories, old machinery and equipment, and there is also no close cooperation with enterprises outside the school; about the "software conditions" part, some students think that part of the software related to the major is not a complete legal software, resulting in the lack of function in the learning process.

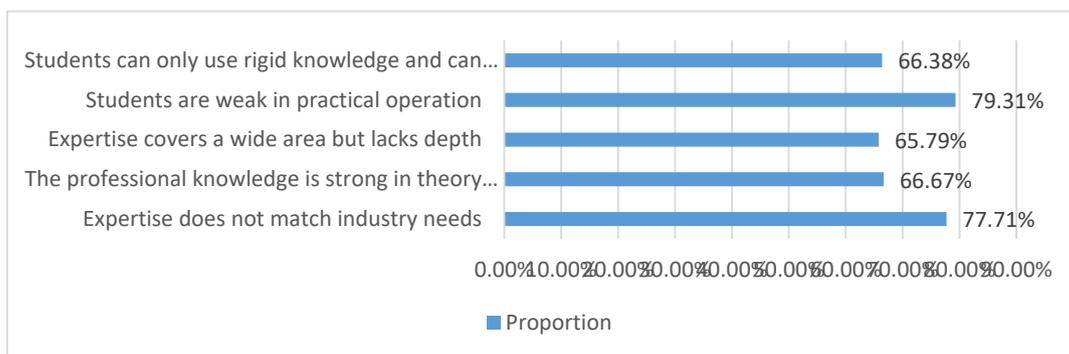
Insufficient attention to innovation ability training. Regarding the importance of innovation ability, only 37.32% of students think it is very or comparatively important, 34.55% of students think it is "average", and the remaining 28.31% of students think it is less important or very unimportant.

Table 2. Students' views on innovation



Insufficient training of practical ability. As for the shortcomings of the current teaching methods of logistics management majors in Chinese medicine colleges and universities, 77.78% of students think that "the students are weak in practical operation", and 69.44% of students think that "students can only use rigid knowledge and can not innovate". 66.67% of the students think that "the professional knowledge is strong in theory and poor in application".

Table 3. Students' view on the practicality of knowledge



Problems in the Cultivation of Innovative Ability of Logistics Management Professionals in TCM Universities

The Students' Innovation Willingness and Ability are Obviously Insufficient. The survey shows that students' willingness to innovate is generally not strong enough, and the importance, necessity, and urgency of innovation have not fully caught the attention of students. Some students think that only students with good performance will carry out innovative training^[6]. They fail to fundamentally understand the strong motivation and enterprising spirit brought by the cultivation of innovation ability of college students. At the same time, the traditional education method results in students only using rigid theoretical knowledge to test, but lacking innovation ability to connect theory with reality so as to find and solve problems.

Lack of Professional Faculty. The logistics management major in TCM colleges and universities has not started for a long time, resulting in existing teachers either switching from other majors or directly graduating from the school to teach Chinese medicine logistics, lacking professional and practical experience. In the daily teaching process, on the one hand, it is difficult for the instructor to have dual solid professional knowledge of traditional Chinese medicine and logistics management, which leads to serious division of professional teaching and insufficient stamina for professional innovation. On the other hand, students mainly focus on theoretical learning and lack the ability to solve practical problems^[7]. Therefore, it is difficult to mobilize the enthusiasm of students to learn. In addition, because most of the teachers in the class lack practical

experience, it will therefore lead to the teachers' untimely demand for the industry's cutting-edge technology and their grasp of it. Meanwhile, such teachers will also be unable to well carry out and guide students' practical courses.

Lack of Hardware and Software Facilities. In fact, Chinese medicine colleges and universities are actually very rich in practice teaching bases, including affiliated hospitals, teaching hospitals and internship hospitals, and some schools even have medicinal planting bases. However, these teaching practice resources can only provide mainstream professional services for students who major in clinical, nursing, pharmacy and other traditional Chinese medicine, while logistics management major is not a mainstream major in the whole school's professional setting. Therefore, although the school has abundant practical teaching resources, it is of little use to the teaching of logistics management. In addition, the above survey data also shows that some students are dissatisfied with the lack of function of teaching-related software^[8], which makes them unable to understand and master relevant operations well in the learning process.

Fewer Practical Courses and A Single Teaching Method. At present, college students majoring in logistics management in Chinese medicine colleges mainly obtain basic theory and professional knowledge through traditional teaching methods. Practical activities on and off campus are rarely carried out, which leads to the separation of students from theory and practice, resulting in insufficient understanding and mastery of in-depth theoretical knowledge, and they are particularly weak in application and practical operation. The lack of knowledge application and practical operation capabilities greatly hinders the acquisition and cultivation of students' innovative ability^[9]. In the traditional teaching method, the teacher-based teaching method is the fundamental cause for students lacking of initiative and creativity.

Strategies for Training Innovative Talents of Logistics Management Majors in TCM Universities

Promote the Reform of the Curriculum System and Strengthen the Construction of Practical Teaching. To promote the reform of the curriculum system of Chinese medicine logistics management majors, Chinese medicine colleges and universities should first increase the proportion of practical courses in the entire curriculum system, and establish a teaching model of "practice to promote innovation"; second, we must change the traditional education and teaching methods to form "case studies to promote independent thinking" method, using a variety of teaching methods to replace a single theoretical explanation, make the classroom vivid and diverse, thereby improving students' learning interest effect; Finally, we must fully focus on the curriculum arrangement and the allocation of class hours, so as to cultivate high-quality graduates with a combination of wide caliber and thick foundation in knowledge.

Carry out practical teaching activities related to theoretical courses. Such courses should mainly include information technology courses, such as Flexsim modeling and simulation and Spss statistical software. At the same time as the courses are opened, attention should be paid to the change of teaching methods. For example, the data obtained from students' own social practice are used as samples for analysis, so that students can truly understand and master the use of software and avoid copying the text. In addition, under the guidance of teachers, students can participate in logistics professional competitions and innovation and entrepreneurship activities in related fields. This kind of activity enables students to apply the theoretical knowledge they have learned in practice and exercise their ability of practice and innovation in practice.

Social investigation and professional internship. Social investigation is to train students to understand the actual situation of enterprises, residents and modern Chinese medicine logistics, so as to be able to truly understand the theoretical knowledge of logistics and the current status of Chinese medicine circulation, and ultimately stimulate their acumen to discover problems and solve problems. Such a state is precisely to help students to establish a basic understanding of the logistics management discipline system. The purpose of professional internship is to provide students with the opportunity to truly get in touch with the basic and practical related positions and problems in the field of Chinese herbal medicine circulation, so as to practice the ability to analyze and solve

problems when engaging in specific functional work. Through professional internships, students own the opportunity to have more direct contact with the industry, and can also promote students' theoretical knowledge and innovative thinking through practice.

Carry out School-enterprise Cooperation and Update Software and Hardware Facilities. Chinese medicine colleges and universities can use the school's resources to establish school-enterprise cooperation with pharmaceutical logistics enterprises in the name of schools. Through school-enterprise cooperation, a number of closely-trained, technologically advanced, and stable cooperation training bases can be built. In this way, practical courses can be put into enterprises and grass-roots units, so that students can exercise their practical ability and stimulate their creative thinking in perceptual practical experience. Secondly, we must pay attention to the mutual penetration of enterprises and campus culture. In the process of cooperation between schools and enterprises to train innovative logistics talents, we should appropriately carry out more enterprise-wide lectures on campus, and try to create and use conditions to lead students to visit the enterprise, learn the latest management methods and technical capabilities from the field, so as to achieve the purpose of "ascending the horizon" ^[10]

At the same time, Chinese medicine colleges and universities should fully realize that good teaching conditions play an irreplaceable role in the cultivation of students' feelings and the teaching and research of teachers. Therefore, first of all, the allocation and utilization of college funds should be effectively done, and the old laboratory equipment and software should be updated as much as possible, so as to provide students with an experimental environment that closely follows the requirements of cutting-edge technology; secondly, arrange special personnel to control and establish an open laboratory. The prerequisite for innovation is a large number of experiments, discovering problems, and then repeatedly verifying and seeking solutions. The plan should be based on the principle of safety, and strive to build a 7 × 24 open laboratory to encourage students to use their brains; finally, a complete and up-to-date subject literature room should be established.

Strengthening the Construction of Teachers. According to the requirements of high-quality development and high-quality teachers, Chinese medicine colleges and universities should strive to create a rational "dual teacher" team, and increase the introduction of master teachers, so that logistics management teachers have more comprehensive logistics and Chinese medicine theory knowledge, and more diverse practical experience. We should reasonably introduce high-end leading talents in the industry and strengthen synergies with enterprises and industry associations. On the one hand, actively attract senior executives in the field of Chinese medicine logistics to participate in classes, lectures, etc. Last but not least, professional teachers can be sent to relevant companies and industries for further training to improve their grasp of the most cutting-edge information and technology of the development direction of Chinese medicine logistics ^[11].

Conclusion

Today is the critical period for building an innovative country. Whether the contradiction between the rapid development of the Chinese medicine logistics industry and the scarcity of logistics talents in the field of Chinese herbal medicines circulation can be effectively resolved is the biggest test for Chinese medicine schools. As the base of talents, Chinese medicine colleges and universities can only truly cultivate high-quality comprehensive talents who are able to adapt to the needs of the industry and continuously promote the reform and development of the industry technology and system on the basis of completely changing the traditional teaching mode, vigorously carrying out practical activities, and striving to improve students' innovative thinking and innovative ability.

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