Research on the Cultivation of Innovative Talents in Logistics Management in Traditional Chinese Medicine Colleges and Universities Oriented towards Improving Employment Quality

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Abstract: In the current booming pharmaceutical industry, the importance of pharmaceutical logistics, as a key link connecting pharmaceutical production and consumption, is increasingly prominent. The logistics management major in medical colleges and universities is responsible for providing professional talents for the medical logistics field. The quality of talent cultivation is directly related to the employment quality of students and also affects the overall development level of the medical logistics industry. Aiming at the problem of lack of innovation ability of logistics management professionals, with the target of improving the quality of employment, this article explores the methods of cultivating the innovation ability of logistics management professionals in TCM colleges.

Keywords: Logistics Management Specialty; TCM Colleges; Cultivation of Innovative Talents; Employment Quality

1. Introduction

In recent years, with the deepening of the reform of the pharmaceutical distribution system, the revenue of China's pharmaceutical logistics industry has shown an increasing trend year by year, the market size has steadily grown, and the distribution model of pharmaceutical logistics is also gradually changing [1]. In the context of digital empowerment, the extensive application of technologies such as 5G networks and big data has driven the circulation model of pharmaceutical logistics to achieve more standardized, scientific and precise iterative upgrades [2-4]. The rapid development of medical logistics has led to an increasing demand and requirement for logistics talents. Whether the training of logistics management professionals in medical colleges and universities can adapt to the development needs of the industry in a timely manner and achieve high-quality and full employment of graduates has become an urgent issue for the training of talents in colleges and universities.

At present, there are only four undergraduate medical colleges in China that offer logistics management: Hubei University of Chinese Medicine, Liaoning University of Traditional Chinese Medicine, Yunnan University of Traditional Chinese Medicine and Mudanjiang Medical University. There are still deficiencies in teaching models and training methods in the ability development of college students, resulting in a mismatch between the ability of graduates and market demand. The quality of talent cultivation is directly related to the quality of students' employment, and the lack of innovative practical ability of professional talents further restricts the further development of the medical distribution field [5-7]. Colleges and universities, as cradles of talent, should focus on cultivating applied talents that meet the needs of contemporary social development. By increasing the proportion of practical teaching, offering courses on artificial intelligence and logistics networks, and strengthening the construction of practical bases, we can guide students majoring in logistics management to carry out in-depth practical activities to meet the market's demand for students' employ ability. Therefore, in this situation, conducting research on the cultivation of innovation ability of logistics management talents in traditional Chinese medicine colleges and universities is of irreplaceable significance for improving the employment quality of talents in colleges and universities and promoting the development of the traditional Chinese

medicine logistics industry.

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

2.1 Survey Overview

Vigorously promoting the development of the logistics industry is necessary for building an innovative country. But according to the survey, the shortage of innovative talents in China's logistics industry has hindered the development of China's logistics industry. Therefore, this paper conducted a survey of six grades of students majoring in logistics management at Hubei University of Chinese Medicine, mainly through questionnaires and supplemented by interviews, to investigate the current situation of the curriculum setting, faculty arrangement, practical internship, and innovative education of the logistics management major, to understand the current situation of the cultivation of innovative ability of logistics management professionals and analyze the existing problems. In order to propose corresponding strategies for cultivating students' innovation ability in the major of traditional Chinese medicine logistics management. A total of 360 students were randomly selected from six grades, including current students of 2022-2025 and graduates of 2020-2021, to receive questionnaires. A total of 340 questionnaires were retrieved, of which 325 were valid, with an effective rate of 90.85%.

2.2 Survey Results and Analysis

2.2.1 Student satisfaction with the teaching situation

According to the statistical results in table 1, the students who are least satisfied with "practical content", "extracurricular activities", curriculum design", "infrastructure. 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; Regarding the "infrastructure" section, which includes both software and hardware facilities, some students think that the school has been relatively slow in building practical bases for the logistics major. The school has few laboratories, outdated machinery and equipment, the software part has not kept up with market trends, there is a lack of software application in AI, and there is no close cooperation with enterprises outside the school. Regarding the curriculum, some students think that the medical characteristics of the curriculum are not prominent and the integration is stiff. There are insufficient courses on big data application and artificial intelligence, and there is a lack of relevant technical support, resulting in the learning content failing to keep up with the changes in the demand for employment.

Table 1. Student Satisfaction with the Teaching Situation

Items	Very satisfied	Quite satisfied	General	Less satisfied	Very dissatisfied
Infrastructure	13.19%	14.73%	45.74%	17.83%	8.53%
Curriculum Design	4.56%	37.21%	32.56%	13.95%	11.63%
Book resources	28.68%	27.13%	23.26%	15.50%	5.43%
Faculty	25.58%	17.83%	33.33%	11.63%	3.88%
Theoretical content	21.71%	27.91%	28.68%	13.18%	8.53%
Practice content	6.98%	8.53%	35.66%	41.09%	7.75%
Teaching methods	15.50%	19.38%	30.23%	31.78%	3.10%
Extracurricular activities	7.75%	22.48%	31.01%	36.43%	2.33%

2.2.2 Insufficient attention to innovation ability training.

Regarding the importance of innovation ability in Figure1, 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.

2.2.3 Insufficient training of practical ability

As for the shortcomings of the current teaching

methods of logistics management majors in Chinese medicine colleges (data shown in Figure2), 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".

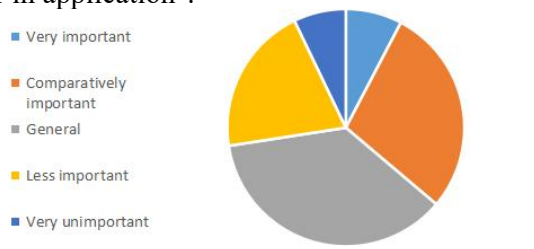

Figure 1. Students' Views on Innovation

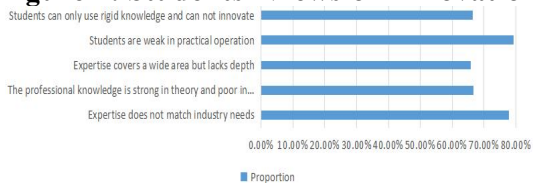

Figure 2. Students' Views on Practicality of Knowledge

3. Problems in the Cultivation of Innovation Ability among Students Majoring in Logistics Management in Traditional Chinese Medicine Colleges

3.1 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. 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.

3.2 The Medical and Pharmaceutical Advantages are Weakened and the Professional Characteristics are not Prominent

Chinese medicine colleges and universities' shaping of the "composite type" has remained at the simple level of "medicine + logistics" or "medicine + management", and have failed to distill the medical characteristics into professional characteristics. Although the teaching plan retains the medical-related courses, the curriculum structure is unscientific and formalism; the current teaching staff mainly focuses on logistics, information engineering and management, and lacks a multi-disciplinary teaching staff, resulting in the inability to organically integrate professional knowledge with the medical background in the teaching process. In terms of logistics management-related courses, the proportion of basic theory courses is too high, while courses such as big data and artificial intelligence that reflect the cutting-edge of professional development are relatively lacking.

3.3 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 useless 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, which makes them unable to understand and master relevant operations well in the learning process.

3.4 Fewer Practical Courses and a Single Teaching Method

At present, college students majoring in logistics management in Chinese medicine 1 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. In the traditional teaching method, the teacher-based teaching method is the fundamental cause for students lacking of initiative and creativity.

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

4.1 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' leaning 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.

4.1.1 Digital empowerment to enrich teaching methods and enhance practical teaching

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.

In the context of digital empowerment, while offering courses, attention should be paid to the transformation of teaching methods. Online teaching platforms, multimedia playback and distance education platforms can be used more, and the combination of online and offline methods can be adopted. The problems that arise in students' learning process can also be fed back and guided in a timely manner through live classroom and online interaction. Use more data from students' own social practice as samples for analysis, so that students can truly understand and master the use of the software, strengthen the cultivation of students' practical skills and avoid rote learning.

4.1.2 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.

4.1.3 Build a four-in-one competition platform to enhance students' comprehensive abilities

Based on the educational and teaching philosophy of "promoting learning through competition, promoting teaching through competition, promoting reform through competition, promoting practice through competition" and in combination with the disciplinary characteristics of traditional Chinese medicine colleges and universities, stimulate students' interest in the study of logistics major, thereby enhancing students' innovation ability. We should change the traditional teaching form with teachers as the main line of knowledge transmission, with

students as the main body and teachers as the auxiliary, and encourage students to participate in more competitions. In order to enable colleges and universities to directly cultivate compound talents needed by the medical logistics industry, schools can create a "four-in-one" competition practice and training platform integrating schools, enterprises, society and entrepreneurs based on the demands of employers, so as to better strengthen the innovative practical ability of logistics major students and improve their comprehensive quality.

4.2 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"

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 [8]. 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 open laboratory to encourage students to use their brains; finally, a complete and up-to-date subject literature room should be established.

4.3 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 [9]. 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 [10]. 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.

5. Conclusion

The booming medical logistics and the rise of smart logistics present new opportunities and challenges for logistics graduates. Colleges, as bases for delivering talents, optimize the curriculum, change traditional teaching models, vigorously carry out practical activities, and enhance students' employ ability and innovation ability. In order to truly cultivate high-quality, comprehensive talents for the traditional Chinese medicine logistics industry who can adapt to the industry's demands, technological changes and institutional reforms and developments.

Acknowledgments

This paper was supported by General Project of Hubei Provincial Education Science Planning for 2023, (2023GB026).

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