Practicability Evaluation and Improvement of Bloodletting Model Mold in Mongolian Medicine Teaching

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Abstract According to the problems such as low level and depth of experimental teaching research of Mongolian medicine in higher vocational colleges, lack of applicable teaching model mold, lack of students' practical operation in time, and single teaching, the development direction and ideas of bloodletting model mold in Mongolian medicine in vocational Mongolian medicine teaching were proposed to provide valuable reference for the experimental teaching reform of traditional therapy of Mongolian medicine and the teaching reform and development ideas of Mongolian medicine and other traditional medicine.

Key words Specialty of Mongolian medicine, Higher vocational education, Experimental teaching of bloodletting in Mongolian medicine, Bloodletting model mold of Mongolian medicine

1 Introduction

With the continuous development of vocational education, the value status of bloodletting therapy in Mongolian medicine has gradually increased, and bloodletting in Mongolian medicine has been introduced into teaching and assessment. In this paper, the application of bloodletting model mould in the teaching of Mongolian medicine was studied, and the characteristics and advantages of bloodletting model mould in Mongolian medicine and the needs of students majoring in Mongolian medicine in higher vocational colleges were explained to lay a certain theoretical foundation for the rapid promotion of experimental teaching of bloodletting therapy in Mongolian medicine.

2 Bloodletting therapy in Mongolian medicine

Mongolian medicine has a long historical heritage. "Food, action, medicine and external treatment" are the four methods used to treat diseases in Mongolian medicine, among which external treatment is characterized by simple operation, rapid curative effect, no toxic side effects and extensive clinical application[1]. Bloodletting therapy in Mongolian medicine is an acute therapy within the scope of external therapy in Mongolian medicine. It is a traditional external therapy that uses special instruments to bleed diseased blood (bad blood) at the designated part of the shallow vein of the human body to treat and prevent diseases[2]. Bloodletting is not just bleeding, but strict principles and methods are needed. Higher vocational colleges pay more and more attention to practical teaching, and the proportion is increasing day by day. In addition to learning solid theoretical knowledge, students of Mongolian medicine should master clinical skills and basic training of bloodletting, be able to master the pulse location, indications and contraindications of bloodletting therapy, and be able to correctly choose the injection method according to the conditions of acupuncture points and needles. The steps of bloodletting include the ligation before bloodletting (*i. e.* pulsing method), operation method, site selection, observation of blood color, amount of blood released and auxiliary treatment, *etc.* In addition, attention should be paid to the skin folds, and veins are exposed in any part during bloodletting[3].

Li Yunbing believed that with the popularization of higher vocational education, the scale of enrolled students majoring in Mongolian medicine in medical colleges continues to expand, and there is a contradiction between limited teaching hardware facilities and relatively large students[4].

In the traditional experiment teaching, an experiment is done by an experiment teacher. Before class, students will not preview the experimental content of bloodletting, without thinking about the details of bloodletting therapy, and innovation is insufficient. The traditional experimental teaching mode is simple, and students have no chance to participate in and master the whole process and precautions of the experiment. Besides, it cannot stimulate students' innovative consciousness, improve their ability to find and solve problems, and improve their comprehensive ability to rescue in case of emergency[5].

Medical teaching is different from other disciplines, and requires a lot of practical operation. According to the *Four Medical Classics · Exposition*, there are a total of 77 vascular vessels suitable for bloodletting therapy, including 21 bloodletting sites on the head and neck, 34 bloodletting sites on the upper limbs, 18 bloodletting sites on the lower limbs, and 4 bloodletting sites on the trunk[6]. The operation of these acupoints is traditionally teacher-centered. In this experimental teaching mode, students' interest in learning is not high, and they cannot repeatedly oper-

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ate, resulting in poor operating ability, which is directly related to the safety of patients.

In actual teaching, the current laboratory equipment is difficult to fully support the operation of students in the teaching process, and students are faced with the safety risks of patients and experimental equipment caused by insufficient proficiency and mastery. Bloodletting therapy is a kind of extravasation disease. During bloodletting, it is necessary to strictly control the blood color and blood pressure, whether the sick blood is separated from the positive blood, and quickly distinguish the dark red as the sick blood and the bright red as the positive blood, and immediately stop bleeding when the blood has bubbles[7].

Clinical bloodletting therapy in Mongolian medicine has achieved certain results, but in teaching, students cannot directly operate on patients. In this way, students can not improve their hands-on ability and execution ability, which seriously affects students' grasp of the essence of bloodletting in Mongolian medicine.

3 Application of bleeding model mold in experimental teaching of Mongolian medicine

Learning to train and operate various medical models is an effective means to promote medical science in China. The experimental teaching of bloodletting therapy in Mongolian medicine has always been based on the gesture of students with each other after the teacher's oral practice. In this way, the teaching is single, and students cannot practice and absorb new knowledge in time, correctly select relevant acupoints, and effectively control blood volume, school time and location, and blood color. In order to fill this gap, the bloodletting model mould can solve the bottleneck problem in practical operation and the technical problems of Mongolian medicine students' practice and repeated operation of acupoints, shallow vein incision or puncture, and greatly improve the success rate and the psychological quality of operators through repeated practice, make the teaching process more authentic, significantly reduce the risk, and ease the doctor-patient relationship. This study believes that the bloodletting model mould can strengthen students' hands-on ability, so as to achieve better teaching purposes.

This study proposes that teachers provide operation process exercises and assessments, and students can repeatedly operate effectively on the model mould, bleed blood on the bleeding site and observe the color of blood. Generally dark red is sick blood, and bright red is positive blood. The ligation is loosened when the color of blood turns bright red from dark in the process of bloodletting to stop bleeding.

Such experimental teaching of bloodletting therapy in Mongolian medicine meets the needs of training applied talents in vocational education of Mongolian medicine, and has controllability of operation, repeatability of practice. The pass rate of all students can reach 100% , and the excellent and good rate will also be significantly improved. The use of bloodletting model teaching in Mongolian medicine can increase students' hands-on ability, better grasp the basic operation methods of bloodletting therapy in Mongolian medicine, and achieve the goal of cultivating students' basic ability and skills to independently engage in bloodletting work in Mongolian medicine. Students have no psychological burden to practice on the model and dare to operate, and repeated practice will help students to master the above steps.

The bloodletting model mould of Mongolian medicine realizes the combination of traditional Mongolian medicine therapy with modern high technology, further promotes the development of traditional Mongolian medicine therapy in teaching, clinical practice and scientific research, and pushes the research of Mongolian medicine five therapeutics to a new platform[8].

4 Development of bloodletting model mold in Mongolian medicine in post practice

The ultimate goal of students to learn Mongolian medicine is to become a medical talent with clinical practice ability, and post practice is a subject that serves as the foundation and paving for this purpose, which is of great significance to Mongolian medical students. It is an effective transition for medical students from simply learning medical theoretical knowledge to clinical practice, but the limitation of the traditional teaching mode of two years in school makes the learning of this unique skill longer. In addition, bloodletting therapy has certain risks. In the context of sensitive doctor-patient relationship, students who initially enter the internship period cannot operate directly on patients, and may prefer to use relatively safe Mongolian medicine treatment, so the clinical hands-on rate of students will be lower and lower[9]. At school, students should grasp the teaching methods of clinical internship and practice, and enrich the teaching methods and teaching models, so as to ensure the quality of Mongolian medicine students during the post practice period, and lay a solid foundation for the continuous promotion of the reform of Mongolian medical education[10].

Mongolian medicine bloodletting model mold is convenient and fast to operate, and the success rate of bloodletting is high. If students cannot operate on patients during clinical practice, the model mold can simulate the reaction of adults when stinging, enhance students' practical operation ability and teaching effect, and have strong practicability. Multiple exercises can greatly improve the practical ability and execution ability of clinical interns.

5 Necessity of research and development of bloodletting model in the experimental teaching of Mongolian medicine

Bloodletting therapy of Mongolian medicine, which is one of the four conventional therapies of Mongolian medicine clinical system, is an ancient, basic and commonly used therapy with immediate effect in Mongolia. It is properly applied, the effect is significant,

so that the blood is diluted to promote the generation and circulation of fresh blood, reduce blood viscosity and blood lipids, and prevent and treat cardiovascular and cerebrovascular diseases. As a professional course of Mongolian medicine, bloodletting therapy has characteristics and significant curative effect, and is worthy of further study and promotion[11].

If bloodletting therapy course in Mongolian medicine attaches too much importance to the cultivation of theoretical knowledge and ignore hands-on training, it will hinder the potential of students to a certain extent, resulting in the mechanical behavior in clinical practice, and the initiative and creativity of students in experimental teaching will be reduced, so they cannot actively and effectively organize, connect and transfer what they have learned in practice. The bloodletting teaching model just fills this gap, and lays a foundation for the practice of clinical thinking and practical operation in Mongolian medicine[12].

In teaching practice, the use of model mold experiment teaching is an important way for teachers to carry out teaching practice, and setting the experimental course of Mongolian medicine blood-letting model mold is a major reform of the oral mode of Mongolian medicine bloodletting therapy course. It realizes the combination of Mongolian medicine bloodletting therapy and modern technology, promote the innovation of experimental teaching methods of Mongolian medicine bloodletting therapy and the development of the discipline.

Compared with traditional teaching methods of Mongolian medicine, model mold experiment teaching enables students to fully think and stimulate creativity, so as to cultivate their hands-on and innovative abilities[13]. According to the current situation of experimental teaching of Mongolian medicine specialty, the experimental teaching system of Mongolian medicine specialty combined with model and mold is established to make up for many deficiencies in the traditional experimental teaching of bloodletting in Mongolian medicine. Students can practice repeatedly through model molds and simulated practical training, and complement and promote each other with traditional teaching modes, which better solves the problems in the experimental teaching of Mongolian medicine and plays an important role in the training of high-quality practical talents[14]. In the past, medical staff needed to be on the job to gradually contact clinical cases and train their clinical skills. Because of limited human resources, some are trained by real people. Nowadays, medical model has become a valuable teaching equipment for medical professional schools. Students can apply practical skills to medical model while learning theoretical knowledge, so that future medical professionals will be medical talents with advanced knowledge and skilled clinical skills when they take up their jobs.

6 School-enterprise cooperation for the development of model mold teaching platform

Sun Qingfeng *et al.* proposed to use modern information technology to improve teaching methods and promote the construction and widespread application of virtual and other network learning spaces[15]. Seen from the above research, the model mold will also become an important carrier and practical operating object of experimental teaching, and can become the basis of experimental teaching. It is a complicated process to build a model mold experimental teaching platform with technology, intelligence and education. The model mold experimental teaching platform involves bloodletting simulation technology, bleeding technology and hemostasis technology, which are mainly in the hands of professionals, but these professionals stand in the perspective of technical realization to see the problem, and lack experience in education and teaching. Professional teachers in Mongolian medicine have the ability to impart professional technical knowledge according to the laws of pedagogy, but lack the research and development of model mold technology. The key to solving the problem of separating educational equipment from teaching is to form a team of enterprise technical personnel and front-line teachers. In the construction of model mold experiment teaching platform, it is necessary to take into account the existing professional equipment, and stand in the perspective of professional groups to conduct comprehensive and systematic consideration.

Gao Lele *et al.* pointed out that there is a serious disconnect between experimental teaching content and clinical practice. The reason is that teachers can only always require students to master these operations in the classroom, but students cannot operate on patients. As a result, the Mongolian medicine students are often unable to seamlessly connect with hospitals, nor can they successfully pass the practical operation of the assistant physician qualification examination and the licensed physician qualification examination, and they need a long clinical practice to adapt to and relearn[16].

Huang Damin *et al.* put forward that experimental teaching should be student-centered, take innovative thinking as the goal, and guide students to discover and explore more new knowledge[17]. Through the work of conception, planning and design, students' comprehensive ability can be cultivated, which can help students to see the important operation part of this therapy in the teaching, and they can repeatedly practice the amount of bleeding at the bleeding site, observe the color of blood and stop bleeding. In the process of experimental teaching, this study forms a new experimental teaching mode recognized by students by improving the traditional experimental teaching method and adopting the task-driven teaching mode based on the model mold.

Zou Xingyu proposed that through model mold experiments, boring theoretical courses become easy to understand and master, so that students are more interested in learning and practicing. At present, Chinese and Mongolian hospitals and outpatients demand that Mongolian medicine professionals should not only strengthen the study of clinical knowledge, but also pay attention to the training of practical skills, so as to realize the teaching system of multi-

clinical and repeated clinical. Paying attention to students' practical operation can not only improve students' clinical experience, but also better integrate theoretical knowledge into practical operation and promote the understanding of theoretical knowledge[18].

7 Prospects of bloodletting model mold in Mongolian medicine

The people ultimately cultivated by medical education are compound talents who can solve practical clinical problems and have practical ability. Although the bloodletting model mold has many advantages, it can only be in the position of supplementing and assisting teaching. In the future, in order to achieve rapid development of the bloodletting model mold in Mongolian medicine teaching, it is necessary to conduct a variety of cross-research, identify the intersection of bloodletting therapy and other new technologies, and conduct comprehensive research.

Modern medicine and methods should be applied to compare the guiding theories and teaching methods in the bloodletting model mold, so as to make them more scientific and constantly updated, so that the bloodletting model mold of Mongolian medicine can be applied for a long time and occupy a place in medical teaching[19].

8 Discussion

The bloodletting model makes the experimental teaching of bloodletting in Mongolian medicine more visualized and intuitive, and will become an indispensable carrier for the teaching of bloodletting therapy in Mongolian medicine, which has important guiding significance for the inheritance of bloodletting therapy in Mongolian medicine.

The experimental model mold of bloodletting is a development direction of the practice teaching of Mongolian medicine, which should be paid attention to by the teaching of Mongolian medicine, and should be more widely used in the process of experimental teaching. If the important significance of model mold in experimental teaching is recognized, more excellent Mongolian medical students will be educated more effectively. According to the professional characteristics and teaching practice, it is necessary to actively explore and reform the model mold experiment course, teach students according to their abilities, constantly meet challenges and innovate, summarize teaching experience and methods, and strive to cultivate high-quality Mongolian medical talents who meet the needs of the development of modern medical and health undertakings.

The model mold of bloodletting in Mongolian medicine brings a lot of convenience to students in vocational colleges of Mongolian medicine. In class, students can practice repeatedly to master the acupoints of bloodletting, and can intuitively see the amount and color of emitted blood in the mold before hemostasis.

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