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ORIGINAL ARTICLE

Reforming the Basic Medical Experimental Teaching System in the New Era to Cultivate College Students' Innovative Practice Ability

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***Abstract*:** With the continuous reform of the education system, the educational concept and training direction of my country's colleges and universities are gradually moving towards an innovative model. More and more medical colleges pay more attention to basic medical experimental teaching, aiming to strengthen the innovative practice ability of college students. Cultivate social applied talents. Combined with the current teaching status of medical colleges, comprehensive quality education also faces some difficulties in the implementation process. This paper takes the basic medical experimental teaching in the new era as an example to analyze the ideas and strategies for cultivating innovative practical ability.

***Keywords*:** Educational Reform; Basic Medical Experimental Teaching; Innovative Practice; Strategy

Under the background of the new era, with the development of science and technology and social progress, the demand for talents in various industries has increased sharply, and the competition among talents has become more and more fierce. Cultivating innovative and practical talents and adapting to the development law of the current high-tech era is the current. The common mission of education and various industries. In recent years, as the COVID-19 epidemic has swept the world, the research on new diseases is also a manifestation of development and national strength. In the stage of basic medical education, it is even more necessary to take social responsibility. In teaching, focus on the cultivation of students' innovative thinking and practical ability. While adhering to its own traditional teaching style and philosophy, the experimental teaching system of basic medicine needs to innovate, remove common ground while reserving differences, and learn from each other's strengths in order to adapt to the current social education theme.

1. The current situation and deficiencies of basic medical experimental teaching in my country

The development of basic medical education in my country has been gradually refined from the initial comprehensive medicine to branch medicine. Today, the main disciplines include basic medicine and biology, and basic medicine has opened human anatomy, histoemology, epidemiology, immunology, pathology, physiology and many other courses, the refinement of the discipline also determines its professionalism. In the process of teaching direction and goal realization, basic medical courses are inseparable from medical experiments. Basic medical experiments mainly cover physiological experiments, human anatomy experiments, embryonic experiments, and prevention experiments. Functional experiments take living animals as experimental objects. To study the sensitivity of a certain tissue or nerve to drugs, the focus of anatomical experiments is to clarify the structure and composition of tissues and organs and various systems, and to understand the positions and surrounding structures of organs, tissues, nerves, blood vessels, etc. Medical experiments deepen students' understanding and mastery of theoretical knowledge, and form a systematic learning system through the connection of various basic knowledge, so that students can establish an overall awareness of medical learning and cultivate medical students' practical ability. This process accompanies the life of medical students, and medical

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experiments in schools are only a small part of practice, but it is also the most basic learning. Therefore, improving the content of the experimental teaching system, innovating experimental thinking, and laying a solid foundation for the future clinical practice of medical students are key teaching goals that should be included in colleges and universities.

With the continuous advancement of educational reform in the new era, there are still many deficiencies in the experimental teaching of medical schools. In the fixed teaching mode of experimental teaching, students are not very interested in experimental courses. Coupled with the credit-based education evaluation system, while students' test-taking ability continues to increase, their practical ability and innovative exploration ability for experiments are obviously insufficient, their thinking is solidified, and it is difficult to combine theory to deal with practical medical problems. The disadvantages and disadvantages of the above teaching are contrary to the core concept of quality education in the new era, and are far from the goal of efficiently cultivating social practical and innovative application talents. Therefore, they are also problems that need to be solved urgently.

2. Strategies for reforming the teaching system of basic medical experiments

2.1 Change the traditional experimental teaching concept and construct innovative experimental teaching courses

The background of education reform requires that colleges and universities must change the traditional teaching concept and respond to the national education policy of all-round development of quality education. In the teaching of basic medical experiments, the role of experiments should be emphasized first, the medical experimental teaching system should be improved, and innovative and exploratory experimental elements should be integrated. In the course teaching, the closed experimental thinking is broken, and the experimental thinking of multiple knowledge structures is constructed to stimulate students' thinking about knowledge series learning. In terms of experimental content, the single experiment is transformed into a comprehensive experiment, the awareness of students' independent design is strengthened, and the passive teaching in the experimental classroom is transformed into an experimental mode in which students actively explore and flexibly innovate. In terms of skills and methods, it emphasizes the verification experiment of diversified ideas, and combines theoretical learning to achieve the purpose of proficient experimental process, dialectical thinking and summary methods. The innovative experimental teaching course abandons the concept of rigid basic theoretical learning to a certain extent, so that students can proceed from the reality in the process of multiple experimental verifications, based on experiments, exert their subjective initiative, exercise innovative experimental thinking, and form a basic medical experiment. Strong interest in further deepening theoretical knowledge, summarizing experience and methods, and accumulating academic achievements.

2.2 Establish a new experimental teaching management system

A good management system can achieve twice the result with half the effort. The basic medical experimental teaching management system also plays an important role in the cultivation of students' practical ability. Experimental educators must establish a systematic teaching idea and structural system in order to improve teaching. The experimental teaching faculty. Combined with the educational background of the new era, relevant experimental teaching management systems should be established in the teaching staff of colleges and universities, clarify the responsibilities of teachers, do a good job in teaching guidance, and strengthen the implementation of teaching reward and punishment mechanisms, including professional title evaluation, semester assessment, etc. The investment in the construction of innovative experiments in the school stimulates the ability of teachers to innovate teaching practice to a certain extent, and uses flexible and diverse teaching methods to enrich experimental courses and improve the efficiency of students' experimental learning. The establishment of the experimental teaching system, on the one hand, promotes the overall academic level of the teaching team, and on the other hand consolidates the important position of the basic medical experimental part in medical schools.

2.3 Reforming the basic medical experimental teaching system

2.3.1 Establish an innovative basic medical experimental course group

The construction of the basic medical experimental teaching system should not only integrate the advantages of theoretical subject teaching, but also systematically integrate the comprehensiveness of the teaching mode of sub-disciplines, focus on organs and systems, lighten the boundaries between subjects, and promote students' knowledge of different subjects. Content, solve practical medical problems with innovative thinking, and cultivate the inquiry ability of experimental learning. Taking the experimental teaching of undergraduate clinical medicine as an example, histoembryology and pathology are morphological foundations based on the cellular level, which can be organized into two disciplines of "medical morphology" and "medical morphological experimentation". Physiology and pathophysiology study the mechanism of health and disease based on the level of

body function, metabolism, and mechanism. These two disciplines can be integrated into two disciplines: "medical technical science" and "medical function experimental science". The thinking of subject integration further strengthens the deep connection between basic knowledge, builds an innovative basic medical experimental course group, conforms to the systematic and scientific nature of medical knowledge, improves students' ability to integrate and further master basic knowledge points.

2.3.2 Constructing innovative experimental teaching content

In the content teaching of basic medical experimental courses, the principle of students' innovative learning should be followed, some innovative elements should be integrated into the experimental content, and the integration and optimization of basic experiments and innovative experiments should be carried out. In the open experiment, let the students inquire and explore the experimental problems in the form of interactive communication, use the literature materials to deepen the students' familiarity with the experimental process and purpose, and then make assumptions about the conclusions obtained. Experimental theory and principles, understand and master theoretical knowledge. In the confirmatory experiment, firstly strengthen the training of students' basic experimental operation, and then explore the experimental design ideas of different conclusions, analyze the possibility of experimental results with divergent thinking, compare the differences of conclusions under different ideas, and integrate statistical analysis knowledge. Summarize the advantages and disadvantages of different design ideas in confirmatory experiments, and cultivate interest in experimental learning. In the comprehensive design experiment, students can exercise their practical ability and ability to synthesize knowledge, summarize experience from experimental conclusions, explore methods of combining theoretical knowledge and practice, and obtain experimental results. Colleges and universities can organize relevant experimental competitions to create achievements for students. A platform to inspire among students.

3. Conclusion

In summary, the reform of the basic medical experimental teaching system in the new era needs to fully integrate the links between disciplines, strengthen the training of students' basic training and innovative thinking ability in practice, and implement scientific and reasonable assessment methods to promote medical science. All-round development of students and supply reliable all-round talents for the society.

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