

Cultivation of Postgraduates with Master's Degree in Clinical Medicine Against the Background of Medical Education Coordination Practical Research on the "Tutor Team" Model

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ABSTRACT

With the advancement of economic and social development and the deepening of medical reform, the shortage of medical talents has become a bottleneck restricting the development of medical and health care. Accelerating the construction of an education system that closely links the training of graduate students with standardized training of residents is an important focus to solve the problem. This research is based on the close connection between the cultivation of master's degree students in clinical medicine and the "residential training". Combining with the school's reality, this research explores the responsibility system of the tutor team, builds a postgraduate tutor team training model, and makes full use of relevant disciplines. Together with the efficient combination of related fields and related professionals, and the guidance of an interdisciplinary team for postgraduates with a master's degree in clinical medicine, it can ensure the quality of postgraduate training.

Keywords: *Tutor team, Postgraduates with master's degree in clinical medicine, Training model.*

1. INTRODUCTION

With the advancement of economic and social development and the deepening of the medical reform, the society's demand for high-level medical personnel is increasing, and the shortage of medical personnel has become a bottleneck restricting the development of medical and health services. Medical professional degree postgraduate education is an important way to cultivate high-level medical talents in China. How to establish a professional degree postgraduate training model oriented to improve professional ability under the new situation and ensure the quality of professional degree postgraduate training has become an important issue facing medical education.[1]

2. CURRENT TRAINING MODEL OF POSTGRADUATES WITH MASTER'S DEGREE IN CLINICAL MEDICINE

For a long time, postgraduate training in China has been implemented as a single tutorial system, that is, a postgraduate is under the guidance of only one tutor, and the tutor alone formulates a graduate training plan and independently guides his scientific research experiments and dissertations. With the substantial increase in the scale of postgraduate education in China and the rapid development of science and technology, the traditional single tutorial system for postgraduate training can no longer meet the current needs of postgraduate training, and it has become a key issue restricting the improvement of postgraduates' professional ability.[2]

The publication of the "Opinions on the Collaboration of Medical Education to Deepen the Reform of Cultivating Clinical Medical Talents"

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marks the start of a new round of medical education reform. The most important focus of this reform is to accelerate the establishment of an education system that closely links postgraduate training with standardized resident training. The "Opinions on the Collaboration of Medical Education to Deepen the Reform of Cultivation of Clinical Medical Talents" stated that since 2015, newly recruited postgraduates with a master's degree in clinical medicine are also residents who participate in standardized training of residents. They have "dual identities", and their clinical practice training is consistent with the requirements of residents participating in standardized training of residents.[3] [4]

In accordance with the requirements of the "Standardized Training Contents and Standards for Residents (Trial)", the standardized training period for residents is generally 3 years (the actual training time for graduate students with a medical professional degree in school should not be less than 33 months). It takes the form of rotation within the relevant disciplines of each three-level discipline (professional) department and other related departments. However, due to the shortage of medical resources, clinical tutors are undertaking heavy medical and scientific research tasks. They have no time to provide in-depth guidance on the clinical practice of postgraduates, let alone grasp the rotation of postgraduates in other clinical departments, and the quality of postgraduate training cannot be guaranteed. On the other hand, the education of medical professional degree graduate students is to cultivate students' comprehensive quality and ability. Although traditional single tutors have strong academic capabilities in their academic fields, they can no longer meet the broad knowledge needs of contemporary graduate students to adapt to the current multidisciplinary integration of scientific and technological development.

3. THE CONSTRUCTION OF THE GUIDANCE MODEL OF POSTGRADUATE TUTOR TEAM

In 2013, the "Opinions on Further Promoting the Reform of Professional Degree Graduate Training Model" jointly issued by the Ministry of Education and the Ministry of Human Resources and Social Security (Jiaoyan [2013] No.3) clearly requires that: according to the characteristics of different professional degree categories, it is a must to explore the tutor group system, and set up a tutor team composed of experts in related disciplines and

industry (enterprise) experts to jointly guide postgraduates.[5]

Based on the characteristics of the close connection between the training of postgraduates with a master's degree in clinical medicine and the "residential training", this study explores the responsibility system of the tutor team and builds a training model for the graduate tutor team based on the school reality. It also makes full use of the combination of related disciplines and related professionals to implement interdisciplinary guidance for postgraduates with a master's degree in clinical medicine to ensure the quality of postgraduate training.

The first is the formation of tutor team.

The basic model of the tutor team is composed of the main tutor, deputy tutor and assistant tutor, using a certain coordination mechanism. The main tutor is a master tutor with a high degree of education, a high-level title, rich teaching experience and certain achievements in his research field; the deputy tutor is a clinical teacher with a different professional expertise than the main tutor, and the assistant tutor shall be a young teacher with a master's degree or above and intermediate professional title in the same subject and research field as the main tutor.

The second is to establish and improve various management systems, including the selection mechanism of the tutor team, the division of labor and coordination mechanism, and the evaluation and incentive mechanism.

The tutor team implements the master tutor responsibility system, and organizes relevant professional teachers to participate in the formation of a relatively fixed tutor team with the master tutor as the core. According to the standards of teachers' specialties and teaching experience, it also divides labor and cooperates, complements each other, and jointly completes the guidance of graduate students in this major.[6] The main tutor is mainly responsible for all aspects of the postgraduate training process and the quality of training; the deputy tutor participates in the training of graduate students and assists the main tutor to complete the guidance of the clinical practice skills of graduate students; the assistant tutor mainly cooperates with the main and deputy tutors to guide graduate students in teaching, scientific research, and clinical practice, and to a certain extent guide graduate students' life and thinking. It is necessary to implement different evaluation standards according to the responsibilities and division of labor undertaken by the team leader

and team members. Through the establishment of a clear reward and punishment system, it is also necessary to establish the sense of collective honor, responsibility and crisis of the tutor team, and realize the dynamic management of the postgraduate tutor team. [2]

The third is to establish and improve the training system for the tutor team

With the deepening of medical reform and continuous advancement of education reform, the situation and training requirements faced by medical higher education have also changed accordingly. This requires tutors to understand and master new trends in a timely manner, and constantly adjust training measures, improve their teaching and research capabilities, update their knowledge, and cultivate the ability to keep pace with the times. At the same time, due to the close connection between the training of master's degree students in clinical medicine and the

"residential training", the tutor team must also actively participate in the "residential training" teacher training, understand and master the requirements and training standards of "residential training", thereby improving the ability to direct their own clinical practice.

4. EVALUATION OF THE EFFECTIVENESS OF THE GUIDANCE MODEL OF POSTGRADUATE TUTOR TEAM

Since 2015, the school has implemented a tutor team guidance model to train 58 postgraduate students with a master's degree in clinical medicine. The training of their professional skills can be guaranteed and improved. The passing rate of the first practicing physician exam is 100%, and the passing rate of the "residential training" final exam is up to more than 90% (see "Table I" for details).

TABLE I. THE PASSING SITUATION OF THE EXAMINATION FOR CLINICAL MEDICINE DEGREE POSTGRADUATE STUDENTS

Grade	Number of people	The passing rate of first-time medical practitioner examination	The passing rate of the final exam of "residential training"
2015	11	100%	91%
2016	21	100%	100%
2017	26	100%	100%

5. CONCLUSION

The implementation of the tutor team guidance model to train postgraduate students with a master's degree in clinical medicine fully demonstrates the following advantages of the tutor team guidance model:

5.1 It Is Conducive to the Overall Improvement of the Competency of Professional Degree Postgraduates and the Quality of Postgraduate Training

During the rotation study process of clinical medicine professional degree graduate students, the tutor team members in each department are responsible for the guidance. The high passing rate of the first practicing physician examination and the "residential training" final examination fully shows that the cultivation of graduate students' professional ability can be guaranteed and improved; at the same time, the postgraduate research work is equipped with special personnel responsible, which broadens the students' academic vision and knowledge, and strengthens their practical ability, innovation ability and team spirit.

5.2 Promoting Academic Exchanges and Effectively Achieving Interdisciplinary

In the process of communicating with related disciplines and professional team members, the tutors expand each other's subject knowledge and update their own knowledge, which will help the intersection and integration of various disciplines, form a synergy between disciplines, and improve their academic level.

5.3 It Is Conducive to the Cultivation of Talent Echelon of Tutors

Young tutors enter the tutor team and cooperate and communicate with tutors who have rich experience in graduate training, which can quickly improve their own graduate tutoring level, thereby improving the quality of the tutor team itself.

AUTHORS' CONTRIBUTIONS

Jian Dong is responsible for the design and writing of the thesis, Zhihua Zhang is responsible for the collation of the data related to the postgraduate

education of the thesis, participated in the writing, and Jie Yu is responsible for data analysis

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