

# Reflection on Standardized Training for Resident Physicians in Cardiology

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**Abstract:** The standardized training of residents is an important part of Graduate medical education for medical students after graduation. The Affiliated Hospital of Weifang Medical University, as a Teaching hospital approved as a training base, has accumulated rich clinical teaching experience. In the practice of residential training in the Department of Cardiology, we have found that by creating a positive learning atmosphere, improving teacher management mechanisms, establishing efficient training models, drawing on reasonable evaluation systems, taking into account the cultivation of scientific research and teaching abilities, and emphasizing humanistic quality education, it is possible to cultivate higher quality medical talents.

**Keywords:** Resident Physician; Standardized Training; Cardiology Department.

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## 1. Introduction

Standardized training for resident physicians in cardiovascular medicine is of great significance in consolidating their basic knowledge of internal medicine, improving their clinical practice abilities, and helping medical students transition from medical students to qualified resident physicians as soon as possible [1-2]. The author summarized some experiences and thoughts of the Cardiovascular Department of the Affiliated Hospital of Weifang Medical University in the standardized training of residents.

## 2. Some Experience in Standardized Training for Resident Physicians

### 2.1. Creating a Positive Atmosphere and Stimulating Individual Potential

Because of the uncertainty of medicine and the tension of Doctor-patient relationship, students' learning motivation is reduced. At this point, if one accuses them of their shortcomings, it is easy to make them disheartened and even unable to recover. Therefore, teachers need to affirm their grades, point out problems, and provide suggestions at the same time. The professional and social experience of new residents and trainees is insufficient, which can inadvertently reduce the trust of patients. It is recommended that students should ask questions during the consultation, and the instructor should return to the classroom to comment on the specific treatment plan. This not only increases patient trust, but also allows students to experience a sense of professional pride [3].

### 2.2. Improving the Teacher Management Mechanism

Firstly, we need to strengthen teaching awareness. Secondly, domestic and foreign experts can be invited to give lectures and carry out excellent teaching demonstrations; Select business backbone to go out for further education; Encourage academic exchange and build a reasonable talent

pool. Finally, improve the reward and punishment mechanism. Strict admission standards, proud of being selected; Adhere to each according to his contribution, and distribute labor services according to the difficulty and quality of teaching; Linking teaching with promotion, assessment, etc., truly reflecting the value of teaching; Based on student satisfaction and expert evaluation, regularly evaluate professional literacy and teaching level, and punish those who fail until their teaching qualifications are cancelled.

### 2.3. Establish an Efficient Training Model

The cardiology department has many urgent and severe cases, and its professional knowledge is complex. How to efficiently teach under limited resources requires the adoption of appropriate training models. Residential training is different from internship teaching, which presents a single disease diagnosis and treatment approach through typical cases; Residential training often uses complex cases and achieves clinical thinking through differential diagnosis. In terms of teaching methods, a model has gradually formed that focuses on teaching rounds, combining theoretical teaching with case teaching, and PBL (Problem Based Learning) teaching with various teaching methods. The hospital teaching platform and advanced networked teaching have been actively utilized to comprehensively improve students' clinical skills [4-5]. All cardiology ward teachers have undergone standardized and systematic cardiovascular specialized training (including medical record writing, ward rounds, case discussions, and training on commonly used diagnostic and treatment techniques) and teaching ward rounds to ensure the quality of teaching. In addition to the hospital's management of clinical teaching rounds, the core expert group of cardiology teaching also regularly conducts routine teaching training and inspections forward supervisors and superiors. The department randomly checks and analyzes the quality of operating medical records every month. Weekly discussion of general practice rounds and rounds of cases under the supervision of the department director, evaluating and guiding the collection of medical history, consultation, physical examination, quality of case writing, clinical

diagnosis and treatment ideas and analysis of students and teachers.

In order to improve students' initiative and initiative in learning, teachers will combine more case teaching and PBL teaching methods widely adopted by departments in their annual continuing education courses to provide systematic theoretical knowledge training for students. Students can access the library at any time through the campus network, which has a large number of electronic literature and books for reference; You can also enter the independently developed online teaching platform of the Education Department to learn online courses and conduct online assessments; Students can also access the public website, WeChat platform, and doctor Weibo of the Department of Cardiovascular Medicine, where they can have extensive and in-depth communication and exchange with teachers. These online platforms provide students with more learning resources and opportunities, enriching and expanding their learning space.

#### **2.4. The Cultivation of Scientific Research and Teaching Abilities and the Connection of Degree Education**

Modern physicians should have the ability to conduct scientific research and teaching, and our hospital regularly holds scientific research lectures; Encourage students to participate in scientific research projects and guide them in writing reviews and papers. In terms of teaching, it is arranged in stages to guide lower-level students and be responsible for certain internships, internships, and teaching. Reading clubs, teaching rounds, and speech competitions are also beneficial for enhancing scientific and educational abilities. In 2014, the National Health and Family Planning Commission requested the initiation of residential training in graduate education, but the previous model of "emphasizing scientific research and neglecting clinical practice" resulted in the inability to perform clinical work after graduation. Therefore, strict standards should be established for residential training to ensure seamless connection between the two. Tutors can prioritize clinical, interventional, or scientific research based on students' characteristics, and reasonably arrange the proportion of each link. In clinical practice, it is required to master the diagnosis and treatment routine of common diseases, go out to the clinic with a mentor, encourage attention to the clinical work of other professional groups, and arrange speeches for case discussions within the department, which helps to quickly improve clinical thinking. Those who have the desire to intervene can arrange surgical observation, and those with outstanding qualifications can focus on training. For degree projects, one can first have a broad understanding of the latest developments in the field, focus on areas of interest, and then boldly explore the "unmanned area". It is encouraged to start selecting and setting questions from a clinical perspective. When rotating, the review and proposal report should be completed first, and then gradually expanded.

### **3. Problems and Countermeasures in Standardized Training for Resident Physicians**

#### **3.1. Lack of Professional Training in Doctor-Patient Communication Skills**

A good professional knowledge background is the foundation of doctor-patient communication. Only by deeply

understanding the relevant knowledge of the disease, can medical students communicate with patients and their families with sufficient confidence. However, without good interpersonal communication skills, the process of doctor-patient communication may result in unclear words and unexpected outcomes. Although clinical doctors with rich experience in doctor-patient communication serve as teaching staff in the department of cardiology, allowing students to learn communication skills from teachers, this hands-on approach lacks systematicity and professionalism. In previous teaching research surveys, it was found that nearly 50% of medical students have a desire to receive professional doctor-patient communication training. Therefore, it is important to supplement doctor-patient communication skills in clinical skill training. At present, hospitals have begun to attach importance to doctor-patient communication skills training and gradually carry out some communication skills training courses throughout the hospital. The Department of Cardiology emphasizes that teaching teachers should pay attention to student doctor-patient communication training, while also initiating targeted doctor-patient communication training in the form of case discussions. I hope to offer more humanistic quality training courses in the future, so that students can develop comprehensively and become truly excellent doctors with "benevolence and benevolence".

#### **3.2. Improve the Medical Environment and Strengthen the Sense of Belonging of Standardized Resident Physician Training Students**

In the current medical environment, due to low job benefits and a lack of sense of belonging, it will inevitably affect students' enthusiasm and initiative in learning. Although hospitals and departments have made great efforts in relevant aspects to increase students' sense of belonging, they still hope to fundamentally increase salary and benefits from policies and enhance students' sense of professional pride. In addition, as the future work units of regulated trainees have been determined, even if the quality of training results has little impact on the future, it greatly reduces students' awareness of improving clinical skills. If the future direction of students can be determined based on their training scores, such as whether outstanding students can stay in the school for work, it will inevitably improve their motivation for learning.

In summary, the standardized training content for resident physicians in cardiovascular medicine plays an important role in internal medicine training. We hope that the existing training practices can serve as a reference for the widespread development of standardized training for resident physicians nationwide, and gradually explore a suitable training plan for resident physicians in China's medical model.

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