Construction of a Supervisory System of Resident Standardized Training: A Study on the Issues, Measures and Achievements

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Abstract

The resident standardized training is a basic national policy of cultivating the qualified residents in China and also a top managerial project. To guarantee the training quality, a supervision expert panel of resident standardized training was established in the First Affiliated Hospital of Chongqing Medical University in 2004. Through nearly twenty years of exploration and reform, a supervisory system suitable for the development of resident standardized training in our hospital has been established, and a batch of excellent supervision experts for resident standardized training have been thereby selected to take charge of the supervision of teaching, learning and management during training to enhance the training quality connotation construction.

Keywords

Resident Standardized Training, Supervision, Quality

1. Introduction

The resident standardized training is a necessary road to cultivate the qualified clinicians and a fundamental strategy to enhance the construction of the medical talent team and improve the medical care quality and level. Specifically, it refers to that after finishing the education in the medical colleges and universities, the medical graduates receive the systematic and standardized training focusing on the improvement of clinical skills at the identified training bases as residents.
The resident standardized training is implemented mainly using the “5 + 3” mode of 5-year medical bachelor education and 3-year resistant standardized training at the training bases (Huang, Wang, Li et al., 2019). It is a kind of continuing education for medical graduates and plays a role of linking the past and the future in the lifelong learning of medical students, and its long-term standardized and systematic clinical training not only improves the medical theories and clinical skills of medical students, and what’s more, cultivates the medical practitioner professional morality of these students. Therefore, the resident standardized training occupies an important position in the past-future (basic education in the medical colleges and universities—continuing medical education) link of lifelong medical education, and it is a major measure to deepen the reform of medicine and healthcare system and the medical education reform in China (Du, Gu, Chu et al., 2020).

Seven ministries including the former National Health and Family Planning Commission jointly released the Suggestions on Guidance for the Establishment of Resident Standardized Training System in 2013, and published the Identification Standard of Resident Standardized Training Bases (trial), Resident Standardized Training Contents and Standards (trial), and Administration Measures for Resident Standardized Training (trial) in 2014. And 7 departments including the former Chongqing Health and Family Planning Commission jointly issued a notification of Suggestions on Implementing the Establishment of Resident Standardized Training System in 2014.

The resident standardized training becomes a basic national policy to cultivate the qualified residents in China, and it is a top managerial project for various training bases (Li, Xiao, Liu, Liu, & Li, 2016). Since seven national ministries formally initiated Chinese resident standardized training work at the end of 2013, a series of regulations & rules and systems have been developed and gradually perfected, and the complete resident standardized training workflow, contents and quality control standards of training bases, professional bases and collaborating hospitals have been formulated (National Health and Family Planning Commission et al., 2013). The first batch of residents, who were recruited by the state in 2014, graduated in July 2017, and the results of graduation examination and performance assessment showed that these residents realized the training goals well and various training bases accumulated rich experience. However, there are some problems, e.g., the setting of individual specialties at the training bases is not standardized (Yin & Meng, 2016); the teaching arrangement of partial professional bases is improper, the teaching is implemented in a way of large randomness, and the teachers fail to fulfill their responsibilities well and present low teaching enthusiasm; the residents emphasize the theoretical learning but look down upon the learning of clinical skills, and some individual residents have serious absence; there is a big gap in the homogeneity of teaching quality between the training bases and the collaborating hospitals. These problems all can be resolved, and the fact proves that by the deep participation, the head managers can promote the good implementation of various difficult and
arduous tasks.

2. Importance and Necessity of Constructing a Supervisory System of Resident Standardized Training

2.1. Aging of Supervision Members and Supervisory System of Resident Standardized Training

As the core work to strengthen the training quality connotation construction, the supervisory system of resident standardized training plays an important role in the postgraduate medical education, and it enables the finding of issues about the process management, teaching activities and daily assessment of resident standardized training by supervisory inspection to achieve the purpose of promoting the correction and construction by supervision.

In 2004, the earliest supervision expert panel of resident standardized training was established and composed by the members of bachelor teaching supervision expert panel in our hospital. In the recent years, the enlarged scale of students recruited by our university has imposed an increasing heavy task of theoretical teaching and practice teaching on our hospital; the enlargement of clinical scale (an increase of several folds in the number of hospital beds, inpatients, outpatients, and surgical operations) and the arduous scientific research tasks make these experts usually being busy in the medical service, teaching & research and the teaching supervision of hospital and university education, without spare time to take a look at the supervision of resident standardized training, which results in many issues and low quality of resident standardized training. In the recent years, our hospital has to undertake the training of residents in a rapidly increasing number with the adjustment of relevant national policies.

2.2. A Too Large Number of Students Recruited

With the implementation of the dual-track integration cultivation for professional degree postgraduates in clinical medicine (hereafter referred to track-integration students) and the expansion of student enrollment scale, our hospital, as an affiliated hospital of Chongqing Medical University, takes charge of cultivating the track-integration students and the residents recruited from the society. As the biggest clinical hospital affiliated to Chongqing Medical University, our hospital is assigned with a student enrollment index and a social resident enrollment index separately by the Ministry of Education and Chongqing Health Commission of which the sum is far more than the approved overall student enrollment scale.

2.3. Insufficient Importance from the Relevant Personnel at Various Professional Bases

During 3 years from the entrance to the graduation, the track-integration students and the social residents are rooted at various professional bases, live with the directors and guiding teachers at these bases from morning to night every
day, learn and work under their guidance. Thus, their cultivation quality is closely associated with the management of various professional bases and the teaching quality of teachers. The directors and guiding teachers at the bases are the main body of training work and influence the training quality, and they take charge of heavy medical service, teaching and scientific research tasks. Many directors and guiding teachers focus on the clinical practice but look down on the teaching, and they pay no enough emphasis to the resident standardized training work and fail to learn, understand and become familiar with the national resident standardized training policies and the training workflow, contents, goals and requirements.

3. Measures for Constructing a Supervisory System of Resident Standardized Training

3.1. Strengthening the Learning under the Leadership of Hospital Leaders

The hospital leaders pay high importance to the resident standardized training work. The hospital president regularly organizes the directors, teaching assistants and secretaries of the resident standardized training management departments and professional bases to learn the relevant national policies as well as various resident standardized training documents and regulations formulated by seven ministries, has organized all the hospital staffs to learn and interpret the relevant documents at the meetings for several times, emphasizes the importance of strictly executing the national resident standardized training standards and the importance of qualified resident cultivation work, and requires various professional bases and departments in the whole hospital as well as collaborating hospitals to repeatedly learn the national resident standardized training policies and the workflow and teaching contents of resident standardized training and to strictly execute them. To guarantee the training quality, the hospital leaders regularly adjust and enrich the directors and teaching secretaries of hospital-level resident standardized training management agencies and professional bases, as well as the hospital-level supervision expert committee of resident standardized training, and make full use of the supervision and guidance role of supervision experts in the whole process of resident standardized training and especially in the training quality of various bases and collaborating hospitals.

3.2. Constructing an All-Around Organization System

3.2.1. Administrative Management System Cored by the President and Dominated by the President in Charge

In 2005, the “resident standardized training section” was founded in our hospital, and its office was set at the continuing education division of Academic Affairs Department. In 2006, the “medical education committee for postgraduates” was established and governed a subsidiary of “specialist training section” which consisted of the principals from the Personnel Department, Academic Affairs Department, Medical Department and main clinical departments and of which the
office was set at the continuing education division of Academic Affairs Department. In 2016, the resident standardized training work was transferred to the Postgraduate Management Department. At present, there are 8 full-time staffs responsible for the training work.

3.2.2. Training Guidance Team Dominated by Supervision Experts

In 2004, the first-term teaching supervision team was established. The expert committee of resident standardized training was set up in 2014, and it was adjusted as the supervision expert committee of resident standardized training consisting of 26 directors and professors from the professional bases and 9 directors and professors from the clinical departments in 2016, and further adjusted as a small supervision expert team consisting of 1 director, 3 vice directors and 15 members by reducing the expert members in 2020.

3.2.3. Implementation Management Team Dominated by Professional Bases and Clinical Departments and Principal-Dominated Resident Standardized Training Guidance Team Set up in Each Clinical Department

A guidance team of resident standardized training is set up at various professional bases, and it is responsible for the resident standardized training teaching work in its own base, including the teaching plan, teaching implementation, teaching quality, daily assessment, departmental rotation examination, teacher access and training, etc. Besides, they take charge of regularly inspecting the resident guidance of resident standardized training teachers and assistant teachers.

3.3. Adjusting the Members of Supervision Expert Committee

The term “supervision” in this paper contains “supervision” (including supervision, monitoring and inspection) and “guidance” (including policy guidance and service guidance) (Sun, Gu et al., 2016). A task can be certainly well done through supervision by a way of promoting the management and improvement with supervision and promoting the learning and construction with guidance. The resident standardized training supervision work includes the supervision of teaching, learning and management, i.e., supervising the resident standardized training management of hospital-level management institutions and leaders at a senior level, supervising the teaching implementation and teaching quality of various professional bases and collaborating hospitals as well as resident standardized training teachers and assistant teachers at a medium level, and supervising the learning of residents at a junior level. Thus, the hospital leaders have selectively recruited the directors at the professional bases of surgery who have the working experience in the resident standardized training teaching and have participated in the national and Chongqing resident standardized training supervisory inspections as the directors of the supervision expert committee, and the directors at the professional bases of internal medicine, anesthesiology and radiology who have done a good job in the implementation of resident standardized training as the vice directors of the above committee; and the remaining 15
members of the committee are the elites and backbones recommended by various professional bases and the experts who are professional and pleasantly engaged in the postgraduate medical education work. The supervision expert committee of resident standardized training is responsible for supervising the teaching, learning and management of various resident standardized training activities in the hospital and collaborating hospitals and at various professional bases.

3.4. Specifying the Work Responsibilities of the Supervision Expert Committee

Being familiar with the service: The supervision expert committee shall firstly organize the supervision experts to systematically re-learn all documents issued by seven national ministries and learn the national standards for the construction and assessment of various professional bases to understand the spirits. It is specified that the supervision expert committee shall organize the supervision experts to complete the systematic leaning at least twice per year and follow up their learning according to the national documents, information notifications and supervisory inspections.

Participating in the regular inspections: The supervision expert committee shall participate in the cross inspection of various professional bases in the hospital and the collaborating hospitals twice.

Carrying out the random inspection at any time: The supervision expert committee shall carry out a random inspection according to the obtained information (e.g., tip-offs, student reflection, expert feedback, etc.).

Cooperating the inspection: The supervision expert committee shall actively participate in the national and provincial supervisory inspections of resident standardized training.

4. Achievements from the Construction of a Supervisory System of Resident Standardized Training

4.1. Benefiting the Objectiveness of Supervision Work

The supervision experts hear and collect the suggestions of professional bases, resident standardized training teachers and residents, and report them to the hospital leaders timely. Besides, the supervisory inspection will be implemented for various professional bases twice per year. In the supervisory inspections of bases, each supervision expert worked strictly referring to the national standards, carried their duties conscientiously, hit the nail right on the head and made no bones about the found defects and problems, gave the patient guidance and helped analyzing the causes, and finally discussed about the correct practices. The inspection results were published on the hospital OA web and the existing problems were required to be corrected in the specified term. The supervision experts followed up the rectification results. The personnel composition of the new-term supervision expert committee overcomes the previous defect of “unilateral willingness” and “activeness at the senior level but delinquency at the
junior level”, i.e., the state and the hospital both pay importance, but the operators at the bases execute insufficiently and fail to practice the work in place (Xu, Ouyang et al., 2017). The resident standardized training work can be implemented in place, if they can understand the resident standardized training policies, become familiar with the resident standardized training workflow and quality standard, have an academic reputation and authority, and undertake the responsibilities and rights of managing the bases, and the resident standardized training secretaries assist the specific work.

4.2. Benefiting the Timeliness of Supervision Work

The supervision expert committee organizes the supervision experts to carry out the resident standardized training inspection on various professional bases and collaborating hospitals, and to supervise the teaching implementation of various professional bases and collaborating hospitals, the plan, contents, implementation and achievement of resident standardized training teaching practiced by resident standardized training teachers and assistant teachers, and the medical morality and behaviors, humanistic quality, learning methods and professional guidance of residents. The supervision experts are mixed in different groups and implement the cross inspection, and they must inspect each item and check the execution one by one strictly following the documents issued by seven national ministries and the inspection standards of the bases. The inspection mode is regular inspection combined with unannounced inspection. The inspection results are immediately fed back at site, published on the hospital OA web and fed back in a written form; the existing problems are required to be rectified in a specified term, and the resident standardized training office is required to follow up the rectification progression and timely communicate the information.

4.3. Benefiting the Humanization of Supervision Work

The supervision experts at various professional bases arrange an interview to the residents at these bases, inspect their training manuals and teacher comments, and understand their learning schedule and learning effects. For the residents who fail to complete the learning contents according to the schedule, the teachers are required to help supplementing such learning in the specified term. The residents without careful learning are advised and assisted, and those violating the regulations are educated and noted with the adverse record. The residents who still violate the regulations after several times of education are reported to the hospital leaders and then expelled after the investigation and approval of these leaders and according to the relevant national regulations. In addition to having an interview with the residents and understanding their learning situation, the supervision expert committee and the resident standardized training office irregularly hold the resident representative discussion meeting to hear their comments and suggestions about the management, teaching plan, content implementation, guiding teachers, learning environment, living arrangement of
resident standardized training in our hospital. The excellent residents found are timely reported, praised and rewarded. The following activities are irregularly held to activate the learning atmosphere and promote the mutual learning: resident speech contest, learning experience communication and exchange meeting, medical record writing contest, clinical skills contest, advanced & excellent individual appraisal, and so on (Qu, 2017).

4.4. Benefiting the All-Around Implementation of Supervision Work

Firstly, the current supervision expert committee supervises the standardization of overall management, the complete configuration of teaching equipment, the assurance of training quality, and the compliance of fund application in the hospital, finds out the problems and instructs or guides against the existing problems, and proposes the rectification suggestions. Secondly, it supervises the completion and compliance of the institutional construction at the hospital-level and various professional resident standardized training bases, and puts forward to the comments and suggestions for the non-standardized base settings. Thirdly, it routinely implements the teaching, supervises and monitors the administrative management department and the resident standardized training office of the hospital to inspect the completion and completion quality of the resident standardized training work in the whole year and various phases and at various bases of our hospital, proposes the corresponding suggestions, timely feeds back the found problems to the professional bases which are further reported to the hospital leaders by the resident standardized training office, puts forward to the rectification suggestions, and supervises the rectification and its implementation. Furthermore, it arranges the supervision experts to patrol and supervise the phased performance assessment and examination as well as graduation examination of residents. Fourthly, it recommends the excellent bases and teachers found during the supervision, and suggests the resident standardized training agencies to summarize the advanced experience and give praising and rewards for encouraging the learning and surpassing of various bases.

4.5. Benefiting the Improvement of Student Activeness

Holding the speech contest of “teachers in the heart of residents” and advanced & excellent individual appraisal activities helps knowing the learning situation of residents, concerning the teachers, deepening the teacher-student emotion, and arousing a sense of honor; besides, it assists us understanding the resident standardized training work situations of various bases and especially the teaching situation of resident standardized training teachers, and finding the excellent professional bases and the excellent resident standardized training teachers.

Therefore, it is obviously seen that a reasonable supervisory system of resident standardized training is critical in the postgraduate medical education work, and an excellent supervision expert team plays an important role in the connotation
construction process of resident standardized training quality. The reasonable supervisory system of resident standardized training can make full use of the subjective initiative of supervision experts so that these experts can find the issues during supervision to promote the continuous modification of professional bases and thus improve the resident standardized training quality, eventually cultivating the qualified clinicians for the state, making contributions and offering advices to the “Healthy China 2030” strategy.

**Support Projects**

**Project of Chongqing postgraduate teaching reform**: Exploration and practice of the dual-teacher system for the resident standardized training of professional degree postgraduates in clinical medicine, yjg 173088.

**Project of Chinese Society of Academic Degrees and Graduate Education**: Exploration and practice of the clinical skills improvement-oriented cultivation mode for professional degree postgraduates in general medicine, B2-YX20180309-03.

**Project of Chinese Society of Academic Degrees and Graduate Education**: Exploratory study on the dual-teacher system for the resident standardized training of professional degree postgraduates in clinical medicine, B2-20170502-01

**Project of Chongqing postgraduate teaching reform**: Construction and implementation of the morality education-oriented postgraduate teacher assessment system, yjg 182017.

**Conflicts of Interest**

The authors declare no conflicts of interest regarding the publication of this paper.

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