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Exploring and Optimizing Teaching Supervision Teams in Sub-colleges of Medical Universities

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Abstract

This paper explores the construction and optimization of teaching supervision teams in sub-colleges of medical universities under the context of China's ongoing medical education reform. It first analyzes the significance of establishing a robust teaching supervision system for ensuring teaching quality and highlights current challenges faced by medical schools and their affiliated hospitals. Building upon this, the study proposes a two-level supervision mechanism involving both sub-colleges and affiliated hospitals, supported by scientific supervision standards, standardized procedures, feedback and rectification mechanisms, informatization tools, and professional team building. By integrating organizational innovation with technological support, this model aims to achieve comprehensive, continuous, and data-driven supervision. The findings contribute to enhancing clinical teaching quality, improving faculty development, and providing policy-oriented references for advancing medical education governance.

Keywords Teaching supervision; Medical education reform; Clinical teaching quality; Informatization; Sub-colleges of medical universities

As China's medical education reform deepens, national requirements for the quality of medical talent cultivation continue to rise. In recent years, the Ministry of Education, the National Health Commission, and the National Medical Examination Center have issued a series of policy documents emphasizing the standardization, normalization, and consistency of clinical teaching. The *Guiding Opinions of the General Office of the State Council on Accelerating Innovation and Development of Medical Education* ([2020] No. 34) explicitly calls for "strengthening the construction of clinical teaching bases, improving clinical teaching management mechanisms, and enhancing the quality of clinical practical teaching." At the same time, the *Chinese Standards for Undergraduate Medical Education—Clinical Medicine (2022 Edition)* also require medical schools to establish and improve teaching quality monitoring systems[1], to strengthen clinical teaching supervision, and to ensure balanced development of medical students' clinical competence.

However, certain limitations remain in the practice of teaching supervision in current clinical medical schools and their affiliated teaching hospitals. On the one hand, traditional supervision models are often organized by college or by a single hospital, lacking cross-institutional collaboration, which leads to

non-uniform supervision standards and incomplete feedback mechanisms, making it difficult to comprehensively cover all aspects of clinical teaching. On the other hand, differences among affiliated hospitals in faculty levels, educational resources, and management models, as well as gaps in evaluation systems, result in uneven teaching quality. With the advancement of informatization and intelligent management, conventional supervision methods can no longer meet the needs of modern medical education management, and there is an urgent need to build a more scientific and efficient supervision system[2]. Constructing an effective new teaching supervision system is a key component and an effective means for fully implementing national education policy and carrying out modern education and teaching management, while also pointing the way for the healthy development of teaching in higher medical colleges and universities[3].

1 Significance of Teaching Supervision

Establishing and improving a teaching quality monitoring and assurance system is an important guarantee for strengthening schools' self-management and enhancing their capacity for self-development[4]. As a key stage in cultivating future health professionals, medical education is directly related to population health and the quality of medical services. In current clinical teaching practice, due to differences among affiliated teaching hospitals in faculty allocation, teaching resources, and management models, there is an urgent need to build a more standardized and systematic teaching supervision mechanism to ensure teaching quality.

To this end, we propose a two-level supervision system jointly established by the secondary colleges of clinical medical schools and their affiliated teaching hospitals. The first aim is to unify teaching standards by developing consistent supervision indicators and operational norms so that different teaching units can achieve comparable levels of teaching quality; the second is to realize full-process supervision that, through cross-institutional collaboration, extends beyond classroom teaching to clinical practice and skills training.

In practice, the joint supervision system helps promote the sharing and diffusion of high-quality resources and teaching experience among hospitals. By building a data-driven supervision information platform, real-time collection and analysis of teaching data can be achieved to support continuous improvement. Over time, through regular feedback and targeted development, the system is expected to strengthen teachers' instructional competence and sense of professional responsibility[5], promote the transformation of supervision from temporary inspections to normalized, continuous quality assurance, and form a virtuous mechanism for quality improvement. This model aligns with the current policy orientation of medical education reform and also provides experience that can serve as a reference for teaching quality monitoring in other disciplines. By continually refining the content and methods of supervision, this system is anticipated to become an important driving force for improving the quality of clinical medical education and to lay a solid foundation for cultivating high-quality medical talents.

2 Requirements for Members of the Teaching Supervision Group

The core role of teaching supervision is oversight and guidance, aimed at regulating and optimizing teaching and improving teaching quality[6]. As the core executors of the two-level supervision system, the professional qualities and competencies of members of the teaching supervision group directly affect the quality and effectiveness of supervision. Members should possess rich clinical teaching experience. In principle, they should hold a senior professional title (associate chief physician/professor or above), have more than five years of frontline teaching experience, and be familiar with all aspects of teaching. The team composition should encompass major clinical disciplines (internal medicine, surgery, obstetrics and gynecology, pediatrics, etc.) and include personnel involved in educational administration to ensure interdisciplinary perspectives. Supervisors should be familiar with national medical education policies and institutional rules

and regulations, and be able to apply appropriate evaluation standards to conduct teaching supervision.

The core competencies include mastery of modern educational evaluation methods, keen observation, and objective judgment, with the ability to identify problems accurately and provide feasible suggestions for improvement. A high sense of responsibility and professional ethics is essential, and supervision procedures must be strictly implemented to avoid formalism and personal bias. Good communication skills are required to effectively interact with teachers and students and build trust. Regular training should be provided to update educational concepts and evaluation tools, and basic research literacy should be cultivated to analyze supervision data systematically and provide evidence for teaching reform. To ensure the continuity of supervision, members' terms should, in principle, be no less than two years, and a tiered structure incorporating senior, mid-career, and junior members should be implemented to ensure the stability and sustainable development of supervision work.

3 Constructing an Effective Teaching Supervision Mechanism

3.1 Establishing and Improving the Organizational Structure as the Foundation

Clinical medical schools should take the lead in forming a two-level supervision committee with the participation of all affiliated teaching hospitals. This committee should establish several specialized working bodies, including a Teaching Supervision Group, a Quality Evaluation Group, and a Data Analysis Group. The Teaching Supervision Group mainly undertakes routine teaching inspections and guidance, staffed with experienced senior professors. The Quality Evaluation Group develops unified evaluation standards and metrics, requiring personnel familiar with educational measurement. The Data Analysis Group conducts data processing and analysis, involving personnel with expertise in statistics and information technology. At the same time, a comprehensive regulatory framework should be established, including *Standards for Teaching Supervision*, *Detailed Rules for the Implementation of Supervision Evaluation Standards*, and *Measures for Supervision Feedback and Rectification Management*, ensuring that all work is rule-based and evidence-supported. In addition, a system of regular meetings should be institutionalized, consisting of monthly coordination meetings on supervision work and semester summary meetings, to guarantee coordinated supervision across affiliated hospitals.

3.2 Formulating Scientific and Sound Supervision Standards

Formulating scientific and sound supervision standards is essential for ensuring the quality of supervision. The supervision and evaluation system should comprehensively cover all aspects of teaching, including theoretical instruction, clinical practice, and skills training, and should establish differentiated evaluation indicators for different teaching formats.

In theoretical teaching, the focus should be on the accuracy, timeliness, and coherence of content; the integration of disciplinary frontiers; innovation in teaching methods (such as case-based teaching and PBL); and the quality of teacher student interaction and student participation. In clinical practice, attention should be given to whether instructors can effectively cultivate students' clinical reasoning, standardize operating procedures, and demonstrate effective doctor patient communication, as well as to the adequacy and representativeness of students' clinical exposure. In skills training, emphasis should be placed on the conditions of training venues and simulators and on whether training outcomes align with curricular objectives.

A multi-channel evaluation approach should be adopted, combining classroom observation, student evaluations, peer evaluations, and inspection of teaching archives. Student evaluation questionnaires should be scientifically designed, and peer-evaluation mechanisms should be fair and transparent to ensure objectivity and fairness in the results.

3.3 Standardizing the Implementation Process as a Guarantee for Effective Supervision

Supervision should extend throughout the entire teaching process and be implemented through a combination of scheduled reviews and random checks. At the beginning of each semester, a detailed supervision plan should be prepared, clarifying key content and timelines. A mid-term comprehensive review should then be conducted, followed by a summary evaluation at the end of the semester.

Supervisors should engage directly at the teaching frontline, conduct on-site class observations and clinical shadowing, and hold structured interviews with teachers and students. Classroom observations should include teachers of different ranks and course types. Clinical supervision should focus on key departments and representative cases. Interviews should employ appropriate questioning techniques to obtain candid feedback.

Detailed records should be maintained, and a complete supervision archive should be established, with systematic collation and analysis of identified problems. Feedback must be timely and specific, delivered through written reports and dedicated meetings. Written reports should be clear and precise, while meetings should emphasize practical outcomes and propose feasible, context-specific improvement measures.

3.4 Feedback and Rectification as the Core Link in a Closed-Loop Supervision Process

A complete closed-loop process of "supervision–feedback–rectification–re-inspection" should be established to ensure that every issue identified through supervision is effectively addressed. Supervision results should be communicated through official documents, clearly specifying corrective requirements and deadlines. For general issues, corrective actions should be completed within one month. For major issues, immediate action is required, with designated personnel responsible for tracking implementation.

Regular teaching quality analysis meetings should be organized with clear agendas and minutes, both to review problems and to disseminate good practices. A re-inspection system should be implemented to evaluate corrective actions against requirements, checking items one by one to ensure that improvement measures are in place and effectively enhance teaching quality. In addition, an evaluation mechanism should be established to track and assess the effectiveness of corrective actions, thereby fostering a virtuous cycle of continuous improvement.

3.5 Informatization as Technical Support for Improving Supervision Efficiency

Efforts should be made to build a teaching supervision information management platform with full-process functions, including supervision plan management, process recording, and results feedback. The platform should support mobile access to facilitate on-site recording by supervisors. A sound data-collection system should be introduced to enable real-time input of supervision data, and robust statistical-analysis functions should be implemented to automatically generate reports such as trend charts and problem heat maps. These results should be presented visually through interactive dashboards to help managers quickly grasp the overall situation.

By leveraging big data technologies, dynamic monitoring and trend prediction of teaching quality can be achieved, and an early-warning mechanism for teaching quality can be established to support evidence-based decision-making. Informatization not only improves efficiency and reduces errors in manual statistics, but also enhances the standardization and transparency of supervision, ensuring full traceability of the process. At the same time, attention must be given to data security, and a reliable permission-management system should be implemented.

3.6 Strengthening the Supervision Team as the Fundamental Guarantee for Sustainable Supervision

A system for the selection and training of supervision experts should be developed. Selection criteria must be clear, including requirements for teaching experience, professional qualifications, and sense of responsibility. Training should be systematic, consisting of pre-service, regular, and specialized programs. Incentive mechanisms should also be improved, with commendations and rewards for outstanding supervisors and teaching units. Rewards may take diverse forms, including material benefits, advantages in professional-title evaluation and appointment, and priority in project applications, thereby motivating supervisors to fulfill their duties effectively.

A tiered team structure should be implemented: senior personnel should play a leading and mentoring role, mid-career personnel should undertake the core responsibilities, and junior personnel should learn and develop, ensuring continuity and stability of supervision work. At the same time, a performance appraisal system should be introduced, using scientific indicators to regularly evaluate supervisors' performance. The appraisal results should be linked to rewards and penalties to promote continuous improvement in the team's overall quality. In addition, a pool of supervision experts should be created and managed dynamically to maintain the vitality of the team.

4 Conclusion

Constructing a scientific and sound teaching supervision system is a systematic endeavor that requires close cooperation and sustained effort from clinical medical schools and their affiliated teaching hospitals. By adopting multiple measures—improving organizational structures, refining institutional standards, standardizing implementation processes, strengthening feedback and rectification, advancing informatization, and reinforcing team building—a comprehensive, multi-level, and multidimensional teaching quality assurance system can be established.

Such a system will not only enhance the quality of clinical teaching and the effectiveness of talent cultivation, but also promote the intrinsic development of medical education, providing a strong guarantee for cultivating high-quality medical professionals with both competence and integrity. With a strong sense of responsibility and mission, we will jointly advance teaching supervision toward standardization, scientific rigor, and informatization, thereby contributing to the high-quality development of medical education.

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