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Paradigm Shift: Construction of the "One-on-One" Teaching Model in Nursing Education for Neurology Nursing Students

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Abstract: With the continuous improvement of the medical industry's requirements for the professional capabilities of nursing talents, traditional nursing teaching models can hardly meet the needs of complex nursing work in neurology. This paper focuses on nursing education for neurology nursing students and explores the construction of the "one-on-one" teaching model, aiming to achieve a paradigm shift in nursing education. By analyzing the current status of neurology nursing education, this paper identifies the problems in traditional teaching models. Combining the advantages of the "one-on-one" teaching model, it elaborates on the construction path of this model from aspects such as the selection and training of teaching instructors, the design of teaching content, the innovation of teaching methods, and the improvement of the teaching evaluation system. The research shows that the "one-on-one" teaching model can significantly enhance nursing students' mastery of professional knowledge, clinical operation skills, communication skills, and emergency response capabilities, as well as strengthen their professional identity and sense of responsibility. It provides an effective way to cultivate high-quality nursing talents who can meet the needs of neurology nursing work and promotes the innovative development of nursing education.

Keywords: Neurology; Nursing students; One-on-one teaching model; Nursing education; Paradigm shift

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1. Introduction

Neurological diseases are relatively complex and variable, requiring high professional skills and emergency handling capabilities from nurses. For nursing students, who are about to enter the workforce as nursing practitioners, their internship teaching at school will affect their future professional literacy and work ability. In the nursing of neurology patients, the "one-on-one" teaching model, with its unique advantages, has changed the drawbacks of the previous large-class teaching and centralized internship teaching, thus forming a new educational model that breaks through the traditional nursing teaching model and has become a guiding method for clinical teaching of neurology nursing students [1]. It can be said that the "one-on-one" teaching model, with its unique

advantages, has brought new ideas and methods to the nursing education of neurology nursing students, and is expected to realize a paradigm shift in nursing education.

2. Analysis of the current situation of nursing teaching for nursing students in the department of neurology

2.1. Limitations of traditional teaching models

In traditional nursing teaching for neurology, theoretical courses are mainly conducted in large-class lectures. Teachers need to explain a large amount of professional knowledge to numerous students within limited time, making it impossible to take into account each student's learning progress and comprehension. As a result, students have low learning enthusiasm, remain in a passive state, and lack thinking and innovative abilities.

In clinical internship supervision, one instructor often supervises multiple nursing students. Due to limited energy, instructors cannot provide detailed guidance and tutoring to every student. Nursing students have few opportunities to perform operations during internships, and when they encounter or identify problems, they cannot get timely solutions. This hinders the effective improvement of their practical abilities [2].

2.2. Difficulty in meeting students' individualized needs

Nursing students differ in their learning starting points, abilities, and styles. However, traditional teaching adopts a "unified education" model with a "one-person lecture" approach, ignoring individual differences. This leads to two extremes: some high-ability students find the content too simple and lose interest in learning, while others with weaker foundations struggle to keep up with the teaching pace, lacking confidence. Such a model is not conducive to cultivating talents capable of adapting to various work needs [3].

2.3. Disconnection between clinical practice and theory

Neurology nursing is a highly practical discipline. Traditional teaching often suffers from a disconnection between theoretical teaching and clinical practice. The theoretical knowledge students learn in class cannot be promptly applied to clinical practice to consolidate their skills, leaving their understanding of knowledge superficial and failing to grasp the essentials of nursing skills and key clinical application techniques. Additionally, practical problems encountered in clinical work cannot be fed back into theoretical teaching, affecting the optimization of theoretical course content [4].

3. The value of constructing the "one-on-one" teaching mode in nursing teaching for nursing students in the department of neurology

3.1. Personalized teaching

In the process of "one-on-one" teaching, the teaching teachers can formulate targeted and personalized teaching plans according to the individual differences, learning foundations, career plans, etc. of nursing students. Nursing students can make up for their learning deficiencies and weaknesses according to their own weak links, meet their personalized learning needs, and enable all nursing students to reach their own level. For example, nursing students with weak learning and operation abilities are arranged to have more time and frequency for practical operation guidance; for nursing students with unconsolidated theoretical knowledge, more learning materials and

counseling explanations are provided [5].

3.2. Enhancing teacher-student interaction

The application of the "one-on-one" teaching mode can promote closer interaction between students and teachers. Nursing students can ask teachers questions at any time, and teachers can also timely understand the learning progress and psychological status of nursing students, and give timely feedback and guidance. Such good teacher-student interaction not only improves students' learning efficiency, but also enhances the teacher-student relationship, making students feel relaxed and happy.

3.3. Improving practical ability

The "one-on-one" teaching mode can provide nursing students with more opportunities for clinical practice. In the specific operation process, the teaching teachers will personally guide the nursing students, timely correct their improper operations, and teach the key points and precautions of the operations. This enables nursing students to master the operation skills of nursing workers more proficiently under the strict supervision of teachers, improve their clinical practical ability, and lay a solid foundation for their future work.

3.4. Cultivating professionalism

"One-on-one" teaching teachers are not only disseminators of knowledge and skills, but also practitioners of professionalism. Teachers' professional ethics, work attitudes and professional behaviors will affect the development of nursing students' professionalism and sense of responsibility, so that nursing students can better understand and comprehend the values and codes of conduct of the nursing profession, and help them cultivate good professionalism [6].

4. Construction path of the "one-on-one" teaching mode in nursing education for neurology nursing students

4.1. Selection and training of teaching teachers

4.1.1. Selection criteria

The quality of teaching teachers directly affects the quality of teaching. For the selection of teaching teachers, emphasis is placed on their professional knowledge, clinical practice experience, teaching ability, and moral character. Specific requirements include: solid professional knowledge in neurology nursing, rich clinical practice experience in neurology nursing, proficiency in various nursing operations, and skillful execution of common nursing procedures; Good teaching ability, being able to clearly and fluently impart knowledge and skills, and guide nursing students in thinking and operational practice; Strong sense of responsibility, patience, concern for nursing students' study and life, and the ability to solve problems independently; Good professional ethics and literacy, serving as role models for nursing students.

4.1.2. Training content and methods

Strengthen training for teaching teachers to systematically improve their teaching and mentoring capabilities. Training content includes teaching theories and methods, new advancements in neurology nursing, communication skills, and teaching norms. Training is conducted through a combination of centralized lectures, case analysis,

group discussions, and on-site observation to update teachers' teaching concepts, help them master advanced teaching methods and mentoring skills, and improve teaching quality.

4.2. Design of teaching content

4.2.1. Theoretical knowledge teaching

Systematically integrate and optimize theoretical knowledge based on the characteristics of neurology nursing work and the learning needs of nursing students. Teaching content includes neuroanatomy and physiology, etiology and pathology of common diseases, clinical manifestations, diagnosis and treatment, nursing assessment, and nursing measures. Integrating theory with practice, abstract theoretical knowledge is made intuitive through case analysis and multimedia teaching, facilitating nursing students' mastery of theoretical knowledge [7].

4.2.2. Clinical Skills Teaching

Under the "one-on-one" teaching mode, clinical skills teaching mainly covers basic information of nursing students and clinical skill operations. Teachers need to formulate detailed clinical skills teaching plans based on individual students' situations. Content includes basic operational skills and specialized nursing skills, such as arterial blood sampling, sputum suction, ventilator use, and post-lumbar puncture care. In teaching, teachers first demonstrate operations, clearly explaining procedures, key points, and precautions, then arrange hands-on practice for students while providing guidance and corrections to ensure full proficiency [8].

4.2.3. Cultivation of professional literacy

Integrate professional literacy education throughout the teaching process. Through their words and deeds, teachers educate students to form nursing professional values and habits; guide students in clinical practice to care for, respect patients, protect patient privacy, and cultivate a sense of responsibility, patience, and carefulness. Organize students to attend professional ethics lectures and case discussions to deepen their understanding of nursing's connotation and requirements, enhancing professional identity and responsibility [9].

4.3. Innovation of teaching methods

4.3.1. Scenario simulation teaching

This method integrates theoretical knowledge with clinical practice. Teachers design scenarios based on common neurology cases, such as epileptic seizures, thrombolysis/thrombectomy for cerebral infarction, etc., allowing students to perform nursing operations and emergency responses in simulated situations. This helps students experience clinical work more realistically and enhances their ability to solve practical problems and respond to emergencies.

4.3.2. Case teaching method

Case teaching uses real examples to guide students in applying knowledge to analyze and solve problems. Teachers select typical neurology cases including the care for cerebral hemorrhage, cerebral infarction, myasthenia gravis, or Guillain-Barré syndrome patients, organize discussions and analysis, and guide students to think from multiple perspectives, propose solutions, and exercise clinical thinking and comprehensive problem-solving abilities [10].

4.3.3. Flipped classroom teaching method

This method combines traditional classroom teaching with online teaching. In "one-on-one" teaching, teachers

upload teaching videos and materials to online platforms for students to study independently before class. In class, teachers explain and discuss problems encountered during self-study, guiding in-depth learning, which fully stimulates students' initiative and improves learning efficiency.

4.4. Improvement of teaching evaluation system

4.4.1. Diversified evaluation subjects

Teaching evaluation should be multi-subjective, including evaluations by teaching teachers, self-evaluation by students, peer evaluation among students, and patient evaluation. Teacher evaluation is the main form, assessing students' academic performance, practical skills, and professional literacy. Self-evaluation and peer evaluation help students identify strengths and weaknesses, fostering a learning exchange model. Patient evaluation reflects students' actual work performance and service attitude, providing objective basis for evaluation [11].

4.4.2. Multi-dimensional evaluation content

Evaluation content includes theoretical knowledge, clinical skills, and professional literacy. Theoretical knowledge is assessed via written tests or online quizzes; clinical skills through on-site operation assessments and scenario simulations including the evaluation of the operational proficiency and emergency response; professional literacy through observing daily performance and patient feedback such as assessing ethics, communication skills, and teamwork [12].

4.4.3. Dynamic evaluation process

Evaluation should run through the entire teaching process dynamically. Teachers record students' progress, conduct regular phased evaluations to identify problems and adjust teaching strategies, and perform comprehensive summative evaluations after teaching to assess overall learning outcomes, providing feedback and guidance [13].

5. Implementation effect and prospect of the "one-on-one" mentoring model

5.1. Implementation effect

The application of the "one-on-one" mentoring model in the nursing teaching process for nursing students in the Department of Neurology has achieved remarkable teaching results. Significant improvements have been observed in several aspects, including the mastery of professional nursing theoretical knowledge, clinical operation skills, communication abilities, and emergency response capabilities. Nursing students' theoretical assessment scores are significantly higher than those under the traditional mentoring model. Their clinical practice operations have also been recognized by both mentors and patients. Notably, their communication skills have improved markedly, where they communicate more confidently and fluently with patients, their families, and medical staff, enabling them to effectively meet patients' needs. When facing emergencies, they can quickly make correct judgments and responses, demonstrating strong emergency handling abilities. Additionally, their professional identity and sense of responsibility have been significantly enhanced, which is beneficial to their career development [14].

5.2. Prospect

Although the "one-on-one" mentoring model has shown obvious effectiveness in nursing teaching for neurology students, it also exposes some shortcomings and challenges: insufficient mentoring teacher resources, making

it difficult to meet the "one-on-one" mentoring needs of all students; high teaching costs, involving substantial consumption of human, material, and financial resources; and difficulties in teaching management, with inadequate improvement in teaching management systems and teaching quality monitoring systems. In the future, it is necessary to further strengthen the construction of the mentoring teacher team, improving both the quantity and quality of mentors; explore diversified methods for integrating teaching resources to reduce teaching costs; and optimize teaching management to enhance management efficiency and quality control. Meanwhile, with the advancement of information technology, efforts should be made to integrate new technological means such as artificial intelligence and virtual reality into the "one-on-one" mentoring model. This will enrich teaching contents and methods, improve teaching efficiency, and promote the continuous innovation and development of nursing teaching for neurology students [15].

6. Conclusion

In summary, against the backdrop of the rapid development of the medical industry, neurology nursing teaching is facing new opportunities and challenges. Applying the "one-on-one" mentoring model to this course not only innovates the existing teaching model but also promotes a paradigm shift in nursing education. For teachers of neurology nursing courses, it is essential to actively explore more diversified teaching methods and give full play to the role of the "one-on-one" mentoring model to improve teaching quality. Ultimately, this will contribute to cultivating more outstanding talents for China's neurology nursing cause.

Disclosure statement

The authors declare no conflict of interest.

References

[1] Guo J, Zheng H, Chen H, 2025, Comparison of Effects Between One-to-One Teaching Mode and Division-of-Labor Cooperative Teaching Mode in Spinal Surgery Nursing Teaching. Chinese Journal of Metallurgical Medicine, 42(01): 119–120.

[2] Yu M, Shi W, 2022, Application of One-to-One Teaching and Interactive Teaching Mode in Clinical Nursing Teaching. China Continuing Medical Education, 14(13): 132–136.

[3] Yu Y, Pan Q, Lan Q, 2022, Application Research of One-to-One Teaching Method in Practical Teaching of Oncology Nursing Teaching. China Continuing Medical Education, 14(09): 141–144.

[4] Shi H, Li W, 2022, Effect Evaluation of One-to-One Clinical Pathway Teaching in Nursing Teaching. China Higher Medical Education, 2022(03): 104 + 106.

[5] Li S, 2022, Application of "One-to-One" Tutorial System Combined with Reflective Teaching in Nursing Teaching of Intensive Care Unit. China Higher Medical Education, 2022(02): 64 + 95.

[6] Qiu L, Zhang S, Liu C, 2021, Application Research of Cooperative Learning Combined with Case Nursing Teaching Mode in Urology Nursing Students. Today Nurse (Mid-term), 28(11): 185–188.

[7] Cai W, 2021, Observation on the Application Effect of Teacher-Student One-to-One Teaching Combined with Interactive Teaching Mode in Clinical Nursing Teaching. Journal of Practical Medical Techniques, 28(05): 676–678.

[8] Zeng Y, 2021, Analysis on the Application Effect of One-to-One Teaching Mode in Respiratory Medicine Nursing

Teaching. China Health Industry, 18(11): 11–14.

[9] Lei L, 2021, Practice of One-to-One Teaching Mode in Pediatric Surgery Nursing Teaching. China Health Industry, 18(11): 132–135.

[10] Du M, 2021, Analysis on the Application Effect of One-to-One Teaching and Scheduling Teaching in Nursing Interns. Chinese Medicine Modern Distance Education of China, 19(06): 18–20.

[11] Zeng G, 2020, Application Effect of One-to-One Teaching Mode in Internal Medicine Nursing Teaching. Journal of Clinical Rational Drug Use, 13(22): 178–179.

[12] Wang C, 2020, Practical Significance of One-to-One Targeted Teaching Path in Anesthesiology Nursing Teaching. China Health Industry, 17(20): 167–169.

[13] Li X, 2020, Discussion on the Application of One-to-One Full-Process Teaching in Nursing Teaching for Operating Room Interns. Medical Diet and Health, 18(09): 197 + 200.

[14] Tan Q, 2020, Analysis on the Application Effect of One-to-One Teaching Mode in Respiratory Department Nursing Teaching. China Health Industry, 17(13): 142–144.

[15] Zhao S, 2020, Application of One-to-One Teaching Guidance Mode in the Management of Nursing Interns. Journal of Modern Clinical Medicine, 46(02): 137–139.