



Reform and Innovation of Practical Teaching Methods in Pediatric Nursing

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Abstract

Pediatric nursing is a compulsory course in nursing major, which mainly studies how to care for newborns and infants so that they can get the best care in terms of physiology, psychology, society, spirit, etc., and finally promote the health and development of children. According to the characteristics of the course, in the process of clinical practice teaching, we selected a new teaching method combining multiple forms such as situational teaching method, PBL project-based teaching method, and simulation teaching method for nursing trainees, regular training trainees, and interns. We conducted hierarchical assessment and evaluation on students, guided students to apply theoretical knowledge to clinical practice, and improved students' comprehensive quality and ability while also increasing their interest in learning. Through reform and innovation of practical teaching methods, students can better master the knowledge and skills of pediatric nursing, combine theory with clinical practice, and improve students' clinical thinking ability and innovation awareness.

Keywords

Pediatric nursing; practical teaching; teaching methods; teaching reform and innovation

1. Innovative teaching model

Pediatric nursing is a discipline that closely combines theory and practice. Nursing staff need to constantly update their knowledge and improve their professional skills in clinical practice. Therefore, in the teaching process, teachers should constantly innovate teaching models and make full use of multimedia resources for teaching. Improve classroom teaching effectiveness [1].

The PBL teaching method is used to take common clinical cases as cases, and discuss them in groups to solve practical problems encountered in clinical practice. Nursing operations are combined with clinical cases to help students better remember and understand knowledge points on the basis of understanding knowledge points [2]. When students encounter problems in actual operations, teachers provide timely guidance to deepen students' understanding and mastery of knowledge. The application of the PBL teaching method can better cultivate students' clinical thinking ability, hands-on ability and innovation ability.

1.1 Case selection

The selection of cases should be targeted and based on clinical cases. Selecting representative cases can help students better understand the knowledge points involved in clinical cases. When selecting cases, teachers should carefully screen the selected cases to ensure that the selected cases are representative and typical. For example, when explaining children's respiratory diseases, pneumonia, asthma and other diseases can be selected as cases [3]. By explaining and analyzing these diseases, students can master the causes, symptoms and treatment of respiratory diseases. When

explaining nervous system diseases, children's convulsions, cerebral palsy and other diseases can be selected as typical cases. Through the analysis and explanation of different symptoms, students can have a deep understanding of the characteristics of the disease and treatment methods. When selecting cases, teachers should fully consider the students' acceptance ability, record videos, and even select some cases that are close to students' actual life and work.

1.2 Group discussion

The teacher divides the students into several groups. When conducting group discussions, the personnel are evenly divided, and the number of people in each group does not exceed 5. When grouping students, they should be grouped according to the number of students in the class and learning ability, learning interest, gender and other factors. Grouping can better mobilize students' learning enthusiasm and allow each student to play their own strengths. During the discussion, the teacher should divide the students into groups and summarize the discussion content and problems. During the group discussion, the teacher should give appropriate guidance and instruction so that each group can give full play to its advantages. Through group discussions, students can not only solve the problems they encounter in their studies, but also communicate and discuss the problems with other students. Through group discussions, students' clinical nursing ability and teamwork ability can be better improved.

2. Adjusting the course structure

Traditional pediatric nursing teaching is mainly based on teachers explaining and students taking notes, lacking context and interaction. In order to better mobilize students' enthusiasm and initiative in learning, improve students' interest in learning, and cultivate students' ability to learn independently, think independently, and solve problems, in pediatric nursing teaching, we broke the traditional teaching model, combined textbook knowledge with clinical practice, interspersed various simulation scenarios in the classroom, turned the classroom into a simulated hospital, and stimulated students' learning interest and participation awareness through situational drama performances. Taking common clinical pediatric diseases as an example, scenario simulation performances are performed based on theoretical knowledge such as the different characteristics of the disease and clinical manifestations of each disease. Taking the pediatric teaching and research department as an example, multimedia video teaching is used for the first aid process of neonatal asphyxia, the care of neonatal jaundice, and neonatal diarrhea. During the performance, teachers need to pay attention to observe and guide students to correctly observe the children and make corresponding treatments for different symptoms [4]. Through performance, theoretical knowledge is applied to practical operations to deepen students' understanding of theoretical knowledge. In this way, students' enthusiasm and initiative in learning are mobilized, so that students can improve their ability to analyze and solve problems while mastering theoretical knowledge.

Add practical teaching methods that combine various forms such as case teaching method and situational teaching method to the course structure. Combine theoretical knowledge with clinical practice to stimulate students' interest and enthusiasm in learning and better master the knowledge and skills of pediatric nursing. In the process of practical teaching, teachers group students according to their mastery of knowledge and learning ability. Under the guidance of teachers, students conduct self-study, independent thinking, problem solving, group discussion and other activities to deal with problems accordingly. In this way, students' ability to learn and solve problems independently is cultivated. Through situational simulation performances, the knowledge learned in the classroom is applied to clinical practice, and classroom teaching is turned into a simulated hospital, so that students can master theoretical knowledge and skills in actual operations and further strengthen their understanding and memory of the knowledge they have learned.

3. Pay attention to preparation before class

Before the practical teaching begins, the instructor should explain the course content, purpose, requirements and materials to be prepared to the students, so that the students can clearly understand the learning tasks and requirements. Students who are about to engage in clinical work should be trained in clinical nursing skills and familiarized with the environment and work flow of the internship hospital, make preliminary judgments on the children's conditions, and keep nursing records according to the conditions.

3.1 Teachers prepare relevant teaching resources for students before class

Teachers should prepare relevant teaching resources for students before class, including multimedia courseware,

lesson plans, and textbooks. After preparing relevant teaching resources, teachers should select appropriate teaching methods and means based on the teaching content [5]. On this basis, teachers can use a variety of teaching methods such as lectures, case analysis, and group discussions to teach. Provide students with some typical cases and ask them to analyze the problems in the cases. During the discussion, teachers should encourage students to think positively and speak boldly, allowing them to fully express their opinions. Through the application of a variety of teaching methods, students can better understand the knowledge they have learned, enhance their enthusiasm and initiative in learning, and improve the quality of practical teaching.

3.2 Organize classroom learning activities according to teaching content

In Pediatric Nursing, we mainly use the case teaching method. Teachers analyze clinical nursing events, guide students to learn and practice, observe, analyze, summarize, and understand and apply what they have learned to acquire new knowledge and skills. In case analysis, students can learn relevant knowledge and skills on their own or communicate based on their existing experience [6]. For example, in Pediatric Fever Nursing, we use Fever Nursing as an example to explain the content of "Common Causes and Nursing of Pediatric Fever". First, let students learn the causes, clinical manifestations and differential diagnosis of fever diseases on their own; then discuss specific diseases and let students think and discuss questions such as "Why does fever occur?" and "What are the clinical manifestations of fever in children?" In this process, students communicate and discuss based on their actual experience and can express their understanding and views on relevant knowledge. After the discussion, the teacher summarizes and gives corresponding answers. In this process, students can not only deepen their understanding of the knowledge related to the disease, but also improve their independent learning ability. Students deepen their understanding and knowledge of the disease through self-study, communication with others, thinking and summarizing, achieving good teaching results. Case teaching method is a case-based and student-centered teaching method. Students have many opportunities to express their views, understanding and knowledge of a certain problem during the learning process, so as to better master the knowledge they have learned.

3.3 Teachers analyze and summarize students' learning situations, understand their learning abilities, and provide timely corrections and guidance for their existing problems

Teachers analyze students' classroom performance, provide timely guidance and correction for existing problems, and let students master knowledge in a relaxed and pleasant atmosphere. In the practical teaching of pediatric nursing, teachers should carefully analyze the teaching objectives, teaching content, teaching methods, assessment methods, and students' problems and deficiencies, and correct and guide them in time to improve students' learning effects. Teachers should also pay attention to post-class summary and feedback, evaluate the teaching effect in time, and use multimedia courseware to carry out various forms of teaching activities such as online teaching and classroom discussion. At the same time, teachers should pay attention to pre-practice guidance, help students choose a suitable internship hospital, guide students to collect relevant information about the internship department, and let students familiarize themselves with the internship environment and process in advance. The instructor should also organize students to conduct pre-practice training, such as training interns in nurse-patient communication skills, safety management, etc.; training interns in "Basic Skills Operation of Nurses", "Writing of Nursing Documents", "Rescue Cooperation of Critically Ill Children", etc.

4. Hierarchical assessment

During the practical teaching process, students are evaluated and assessed at different levels, and are divided into three levels: excellent, good, and qualified. Students at each level have different tasks in the practical teaching process, and students are helped to achieve the transformation from qualified to good and then to excellent through a progressive approach. Students at the excellent level are required to master the basic theoretical knowledge and basic skills of pediatric nursing, be able to complete basic operations, and be able to observe and care for patients; students at the good level are required to master the basic theoretical knowledge and basic skills of pediatric nursing, be able to complete basic operations; students at the qualified level are required to master the basic theoretical knowledge and basic skills of pediatric nursing, be able to complete basic operations.

After the practical teaching, we conducted practical skills assessment and theoretical performance assessment for each student. The practical skills assessment was conducted in the form of situational simulation training guided by

teachers. One teaching scenario was adopted. Each student completed two typical case simulation training operations in groups under the guidance of teachers. Each student was assessed and evaluated after completing the training task. The theoretical performance assessment was based on a percentage system, of which the written test accounted for 40%, the oral test accounted for 30%, and the clinical practice operation accounted for 30%, with a total score of 100 points. The assessment results were divided into three levels: excellent, good and qualified.

4.1 Excellent level

Excellent students can complete the assigned tasks well in practical training, and can use the theoretical knowledge and basic skills they have learned to provide better nursing services to patients. The assessment content includes:

- (1) Operational skills, mainly including 5 cases such as pediatric feeding and care, pediatric physical examination and pediatric fever care.
- (2) Basic theory, including the etiology, pathogenesis, clinical manifestations, nursing measures and health education of common pediatric diseases, and 5 cases.
- (3) Relevant knowledge, including developing a case based on the development overview of pediatric nursing, basic knowledge of pediatric nursing and theoretical knowledge of pediatric clinical nursing.
- (4) Teamwork ability, including collaboration among team members to complete practical training tasks and reporting training results to teachers.
- (5) Comprehensive quality, including students' ability to apply the knowledge they have learned during the practical training and their ability to communicate with patients. Excellent students can actively discover problems, raise questions, and solve problems during the practical training, and ultimately provide better nursing services to patients.

4.2 Good level

Students with a good level are required to master the basic theoretical knowledge and skills of pediatric nursing, be able to complete tasks according to operating specifications and requirements, perform nursing operations on children skillfully, and have strong clinical nursing and organizational skills. Specific contents include:

- (1) By learning basic knowledge such as "Pediatric Nursing Routine" in the simulated ward, students can better understand and master the characteristics of pediatrics and corresponding nursing methods, and can apply them in combination with actual conditions.
- (2) By learning basic knowledge such as "Pediatrics" and "Child Health Care", students can master the basic theoretical knowledge and basic skills of pediatrics, have a certain understanding of the development history of pediatrics, child health care knowledge, common diseases and nursing methods, and can reasonably apply them in combination with pediatric clinical practice.
- (3) By learning basic knowledge such as "Pediatric Nursing" and "Child Health Care and Development Assessment", students will be able to make simple differential diagnoses of common pediatric diseases and conduct early care assessments for children's diseases.
- (4) By learning basic knowledge such as "Pediatric Nursing Technical Operation Routine", students can perform nursing operations skillfully and complete basic nursing operations.

4.3 Qualification level

Reforming and innovating practical teaching and providing students with more clinical internship opportunities are important means to improve students' comprehensive quality. Through hierarchical assessment and evaluation, we found that after the practical teaching reform, students' learning initiative has been significantly enhanced. It can be seen from the survey results that 84.7% of students agreed and approved of the practical teaching reform; 83.3% of students believed that it improved their interest in learning; 83.3% of students believed that it improved their professional confidence. Compared with the control group, students in the experimental group had significant differences in professional confidence, interest in clinical work, and satisfaction with practical teaching reform ($P < 0.01$).

The hierarchical assessment and evaluation method can help teachers better understand students' feedback on practical teaching, which is conducive to timely adjusting the content and methods of practical teaching and helping students to achieve the transformation from "I have to learn" to "I want to learn". In addition, hierarchical assessment and evaluation can encourage students to consciously discover problems, think about problems, and solve problems.

The combination of self-evaluation, mutual evaluation and teacher evaluation can effectively improve students' autonomous learning ability.

5. Conclusion

Pediatric nursing is a very practical subject. The traditional practical teaching method can no longer meet the needs of education reform under the new situation. It is imperative to explore a new practical teaching model with students as the main body and teachers as the leader. We introduced new practical teaching methods that combine multiple forms such as situational teaching method, PBL teaching method, and simulation teaching method into practical teaching, so that students can master pediatric nursing knowledge and skills in a short time. During the entire practical teaching process, we conduct hierarchical assessment and evaluation of students, allowing students to apply theoretical knowledge to clinical practice, while also improving students' interest and enthusiasm in learning. The use of new practical teaching methods that combine multiple forms not only stimulates students' interest in learning pediatric nursing, but also improves students' ability to discover, analyze and solve problems, and also cultivates students' comprehensive quality and innovative consciousness.

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