Research on the Optimization and Innovation of Nursing Students' Practical Ability Training Model

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Abstract: As an important part of medical education, the cultivation of practical ability is crucial for nursing students to transition into clinical practice, ensuring patient safety and quality of care. With the continuous advancement of medical technology, traditional nursing practice teaching models face numerous challenges. This paper analyzes the current state of nursing students' practical ability training, exploring specific pathways for optimizing and innovating training models, aiming to provide theoretical support and practical guidance for nursing education.
***Keywords*:** nursing; practical ability; training model; innovation; optimization

1. Introduction

The core goal of nursing education is to cultivate nursing professionals with a solid theoretical foundation and practical skills. However, the current nursing teaching model often relies on a combination of classroom instruction and clinical internships, where the limited availability of practical teaching resources and the restricted capacity of instructors hinder the improvement of students' practical abilities. Therefore, exploring optimized and innovative practical ability training models has become a key focus in nursing education research. This paper examines the deficiencies in the current training model and proposes pathways for optimization and innovation, promoting the sustainable development of nursing education.

2. Current Status of Nursing Students' Practical Ability Training

2.1 Limitations of the Traditional Training Model

Currently, most nursing schools adopt a "theory + internship" model. During their academic tenure, students learn basic nursing theories and perform experimental operations in classrooms, followed by clinical internships in hospitals. However, this model presents several limitations:

Limited clinical practice opportunities: With numerous interns in teaching hospitals, opportunities for actual clinical operations are scarce. As a result, students often engage in observation or auxiliary tasks, which limits the development of their practical abilities.

Limited guidance from clinical nurses: Clinical nurses not only undertake heavy nursing duties but are also responsible for supervising students during internships. This limits their ability to provide individualized guidance and assessment.

Outdated teaching content: Some nursing schools' teaching materials fail to reflect the latest clinical nursing techniques and concepts. Consequently, students struggle to integrate classroom learning with actual clinical operations during internships.

2.2 Current Status of Students' Practical Abilities

Under the traditional training model, the cultivation of nursing students' practical abilities is far from ideal. Despite acquiring theoretical knowledge, students often exhibit unfamiliarity with operations and insufficient emergency response capabilities in complex clinical environments. Nursing work requires not only proficient operational skills but also critical thinking and clinical decision-making abilities. However, the traditional teaching model emphasizes operational training, neglecting the comprehensive development of students.

3. Optimization Pathways for the Nursing Students' Practical Ability Training Model

3.1 Building a Diversified Practical Teaching System

To overcome the limitations of the traditional model, a diversified practical teaching system should be developed to

enable students to enhance their practical skills at different learning stages and settings. Specific strategies include:

Enhancing simulation-based teaching: Introducing high-fidelity simulation teaching equipment and designing various clinical scenarios allows students to practice operations in a virtual environment. This method enables students to repeatedly practice skills in a safe setting, honing their ability to respond to emergencies.

Establishing standardized patient (SP) training: Standardized patients are trained actors who simulate various clinical conditions based on scripts, allowing students to practice clinical operations and communication skills. The SP model not only improves students' practical skills but also develops their communication abilities and humanistic care awareness.

Developing online practical teaching platforms: Leveraging information technology, virtual nursing operation platforms can be created to provide various virtual cases and scenario simulations. This allows students to conduct self-directed learning and operational exercises online, compensating for the lack of real-world internship opportunities.

3.2 Strengthening University-Hospital Collaboration to Improve Clinical Internship Quality

Clinical internships are a crucial aspect of cultivating nursing students' practical abilities. To enhance the effectiveness of internships, university-hospital collaboration must be strengthened through the following measures:

Optimizing internship arrangements: Based on the characteristics of hospital departments and the students' academic progress, scientific internship rotation plans should be developed to ensure that each student has ample practical opportunities in different nursing areas.

Implementing the “mentor system”: A one-to-one mentor system between students and clinical nurses should be established, where experienced clinical nurses supervise students during internships, providing regular feedback and evaluation. This personalized guidance helps students quickly adapt to the clinical environment and improve their skills in a timely manner.

Establishing clinical teaching bases: Nursing schools should collaborate with multiple hospitals to establish long-term partnerships and set up clinical teaching bases. This ensures that students have sufficient clinical internship opportunities and enhances the teaching capacity and resource utilization of the teaching hospitals.

3.3 Promoting the Development of Critical Thinking and Clinical Decision-Making Skills

Nursing work requires healthcare professionals to make quick and accurate decisions in complex clinical environments, making the development of students' critical thinking and clinical decision-making skills essential. Specific strategies include:

Problem-based learning (PBL): By introducing the PBL teaching model, where real clinical problems are used as a guide, students are encouraged to think independently, consult literature, discuss, and solve problems. In this process, students not only consolidate theoretical knowledge but also develop critical thinking and problem-solving skills.

Scenario simulation and reflective learning: In simulation teaching, complex nursing scenarios can be designed to encourage students to reflect and engage in group discussions after their operations, analyzing the problems encountered and proposing improvement measures. This process effectively enhances students' clinical decision-making skills and teamwork awareness.

3.4 Strengthening the Cultivation of Professionalism and Humanistic Care

Outstanding nurses must possess not only professional nursing skills but also noble professional ethics and a spirit of humanistic care. Therefore, nursing education should integrate the cultivation of professionalism and humanistic care into practical teaching. Specific strategies include:

Enhancing communication and collaboration skills training: By setting up patient communication scenarios and nurse team collaboration scenarios, students are trained to improve their communication skills with patients and their families, as well as their teamwork awareness.

Offering humanistic care courses: Humanistic care should be incorporated into the nursing curriculum to cultivate students' empathy and sense of responsibility, enabling them to meet patients' psychological needs and provide comprehensive nursing services in clinical practice.

4. Innovative Exploration of Nursing Students’ Practical Ability Training Model

With the development of big data and artificial intelligence (AI), personalized teaching models are gradually being applied in nursing education. Through intelligent teaching platforms, students' learning data can be collected in real time, analyzing their progress and weaknesses to provide personalized learning recommendations and practice content. Additionally, AI technology can be used for virtual nursing operation training, simulating real clinical scenarios to help students improve their operational skills and clinical decision-making abilities.

Nursing work involves not only medical knowledge but also close relations with psychology, sociology, and other disciplines. Therefore, nursing education should explore interdisciplinary training models to promote students' comprehensive ability development. For example, interdisciplinary courses can be jointly offered with psychology and social work to cultivate students' comprehensive nursing perspectives and interdisciplinary collaboration skills.

As globalization progresses, nursing education should focus on cultivating students' global vision and international nursing capabilities. For instance, students can be encouraged to participate in international nursing exchange programs to learn about nursing practices in different countries and regions, enhancing their cross-cultural nursing abilities.

5. Conclusion

The cultivation of nursing students' practical abilities is a critical task in nursing education. Although the traditional training model has certain effectiveness, it still presents several limitations. By optimizing the practical teaching system, strengthening university-hospital collaboration, promoting the development of critical thinking and clinical decision-making skills, and exploring the application of emerging technologies in nursing education, students' practical abilities can be effectively enhanced. In the future, nursing education needs to further innovate training models, combining theory with practice to provide broader developmental opportunities for nursing talent.

References

[1] Chen Ling, Cui Ting. Research on the Optimization of Clinical Nursing Education Based on the Needs for Innovation Capability Cultivation [J]. Chinese Scientific Journal Database, 2024(002):000.

[2] Tian Jingbo, Ben Yali, Ran Qinqin. Exploration of Practical and Innovative Ability Cultivation Models for Nursing Students under the New Medical Education Background [J]. Innovative Education Research, 2022, 10(2):4.

[3] Qian Jun. Practical Research on the Innovative Training Model of "Student Standardized Patients" through Nursing Skill Competitions in Higher Vocational Education [J]. Chinese Scientific Journal Database, Social Science Edition, 2022(11):3.

[4] Liu Yue. Construction and Practical Path Research of the Modern Apprenticeship Talent Training Model for Higher Vocational Nursing [J]. Economic and Social Development Research, 2024(10):0247-0249.

[5] Zhang Ningning. Practice and Research on the School-Enterprise Integration Talent Training Model for Secondary Vocational Nursing [J]. Century Star - Exchange Edition, 2022(7):0196-0198.

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