

Exploration and Application of “Trinity” Clinical Practice Education Model in the Cultivation of Postgraduate Nursing Students

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Abstract: To explore the effect of the “trinity” clinical practice education model in the cultivation of nursing postgraduates. A total of 79 Postgraduates of nursing specialty from 2013 to 2016 were selected to conduct clinical teaching under the “Trinity” clinical practice teaching mode. The effect of the questionnaire was evaluated by students' satisfaction with the “Trinity” clinical practice teaching mode. The students' satisfaction with the teaching mode of double tutors was 84.2%, the self-satisfaction of nursing post competence was 94.9%, and the satisfaction with scientific research ability was 44%. The “Trinity” clinical practice education mode is implemented in the cultivation of nursing master's students, which effectively guarantees the quality of the cultivation of nursing master's students, and improves the comprehensive quality of nursing master's students.

1. Introduction

The 27th meeting of the State Council Committee in 2010^[1] decided to add master's degree in nursing, the purpose of which is to cultivate applied high-level nursing professionals with a solid theoretical foundation and systematic professional knowledge, who have clinical analysis and thinking ability as well as clinical research and teaching skills to independently solve clinical nursing issues and adapt to clinical needs of nursing. According to the policy provisions of the Degree Committee of the State Council, clinical practice is the most important and indispensable link in the training mode for postgraduate nursing students. Improving their clinical practice capability constitutes the core for cultivation of postgraduate nursing students^[2].

By consulting related literatures^[3-6], we find that China has a late start in education and training of postgraduate nursing students. Still in its infancy, clinical practice training model faces many problems: First, obvious differences exist in the source of postgraduate nursing students recently enrolled in universities. There are both fresh undergraduates and previous graduates who have received systematic hospital training with work experience accumulated. Their clinical nursing knowledge, skills and nursing practice experiences are quite different. However, no targeted and personalized clinical practice training model has been reported. The clinical practice training model for postgraduate students differs not much from that for undergraduates and specialists. Therefore, targeting at different capabilities of postgraduate nursing students of different sources and personalized training needs of training objectives, it is urgent to explore and build a clinical practice training mode oriented to diversified capability levels. This study aims to explore and build a clinical practice teaching mode oriented to diversified capability levels, in the hope of training postgraduate nursing students into independent, creative, passionate, excellent nursing professionals who serve patients wholeheartedly, so that comprehensive quality of postgraduate nursing students will be improved significantly. The report is as follows.

2. General Information

A total of 79 postgraduate nursing students in grade 2013-2016 of a certain university were selected for training in the “Trinity” clinical practice education mode, of which 70 were females, 9 were males, 48 were fresh students and 31 were previous students, 51 practiced in prefecture-level hospitals, while 31 had internships at provincial hospitals.

3. Methods

3.1 Selection of Tutors for Postgraduate Nursing Students

In 2011, the Ministry of Education reviewed and approved the first batch of 29 units authorized for cultivation of postgraduate nursing students. The school is the only university of Zhejiang province to be included in the first batch of authorized training units. Since 2012, it bears the task of training postgraduate nursing students. The school adopts dual-tutor guidance and teaching mode, in which one tutor is a nursing tutor while the other may be a medical tutor or a clinical medical tutor. The dual tutoring system helps postgraduate nursing students to broaden horizons and knowledge scope, in which the on-campus tutors assume the main responsibility, while the off-campus tutors keep track of clinical internship status of postgraduate nursing students in the internship hospital at any time, and handle the innovation and feasibility of students' degree thesis in topic selection. Meanwhile, clinical teaching teachers of the relevant internship departments are hired for the clinical teaching of the intern in the department.

3.2 Adhere to Inheritance and Promotion of Nightingale Spirit

2.2.1 The school established the first Nightingale Deeds Education Memorial Hall in the country. It conducts Nightingale spiritual education for newly enrolled postgraduate nursing students every year, so that students learn the goods deeds of nursing seniors who have won the International Nightingale Medal in China, love nursing and develop firm ideals and beliefs.

2.2.2 Students are arranged to visit the workplace of the affiliated hospital of the two international Nightingale medal winners and the alumni's Shangbai Dermatological Diseases Prevention and Treatment Center (Leprosy Hospital) in Zhejiang Province, so that they personally trace the footsteps of Nightingale and feel deeply the patient-centered service philosophy and atmosphere of serving patients wholeheartedly.

3.3 Diversified Clinical Practice Education

In the clinical practice stage, we insist on teaching students according to their aptitude. The postgraduate nursing students include previous students with 1-10 years' work experiences, fresh graduates from undergraduate colleges and students with equivalent education background, so the clinical practice ability differs greatly. Basic skills placement tests are arranged at enrollment to understand students' differences and deficiencies in skills operation, so that focused teaching and training can be provided. In addition, postgraduate nursing students with intermediate titles are trained towards nursing specialists, while those with junior titles are trained towards nursing talents qualified as clinical duty nurses.

Postgraduate nursing students are divided into 4 levels of M0-M3 for layered cultivation according to the previous employment duration in nursing. M0 means there is no nursing work experience. Postgraduate students of this level need master the basic theories, basic knowledge and basic skills required for professional care, condition observation, treatment and nursing, health education and rehabilitation guidance. M1 means there is less than 3 years of nursing work experience. Postgraduate students of this level should master the basic clinical nursing procedures. Emphasis should be given to develop their critical thinking ability, improve their ability to find problems, analyze problems and solve problems. M2 means there is 3-5 years of nursing work experience. Postgraduate students of this level should master the basic clinical operation ability and thinking ability in nursing, and provide patients with whole-course, all-round consistent nursing based on method and concept of holistic nursing. M3 means there is more than 5 years of nursing work experience. Postgraduate students of this level should master professional knowledge and skills of nursing, master relevant medical knowledge of common diseases in this specialty, have the ability to handle some complex and difficult nursing problems in their professional fields. They should understand professional nursing development trends and new technology information at home and abroad and develop certain teaching and management capabilities.

3.4 Satisfaction Evaluation

The Satisfaction Questionnaire adopted herein is a self-made questionnaire on student's satisfaction towards the “Trinity” clinical practice teaching mode. After three rounds of expert consultations and pre-surveys, each entry of the questionnaire was evaluated using Likert scale, all of which had a score ≥ 4 points. The retest reliability correlation coefficient is 0.83, so the questionnaire has good reliability and validity, and a formal questionnaire is formed. The questionnaire consists of two parts: general demographic information (gender, age, education, job title, working years, etc.) of the subjects, entries on efficacy of “Trinity” clinical practice teaching mode. Then, postgraduate nursing students of grade 2013-2016 from a certain university were selected for satisfaction survey based on convenient sampling method.

4. Results

A total of 79 postgraduate nursing students in grade 2013-2016 from a certain university were selected for satisfaction questionnaire to evaluate the efficacy of “Trinity” clinical practice teaching mode. The results show that the students' satisfaction with the dual-tutor guidance teaching mode reaches 84.2%, the self-satisfaction in job competence of nursing reaches 94.9%, and the satisfaction towards scientific research ability is 44%. The specific results are as follows.

Table 1 The satisfaction on binary tutor teaching mode

Item	Group	Number of cases	Proportion
Dual tutor guidance and teaching mode	Very satisfied	23	29.1
	Satisfied	29	36.7
	Relatively satisfied	15	19
	Dissatisfied	12	15.2

Table 2 The satisfaction on self - post competency

Item	Group	Number of cases	Proportion
One's job competence	Very satisfied	7	8.9
	Satisfied	44	55.7
	Relatively satisfied	24	30.4
	Dissatisfied	4	5.1

Table 3 The satisfaction on clinical nursing ability

Item	Group	Number of cases	Proportion
Clinical Nursing Ability	Very satisfied	20	25.4
	Satisfied	25	31.6
	Relatively satisfied	31	39.2
	Dissatisfied	3	3.8
Scientific research ability	Very satisfied	6	13.4
	Satisfied	21	26.6
	Relatively satisfied	23	29.1
	Dissatisfied	29	36.7
Teaching ability	Very satisfied	29	15.7
	Satisfied	12	15.2
	Relatively satisfied	13	16.5
	Dissatisfied	25	31.6
Critical thinking ability	Very satisfied	28	14.4
	Satisfied	17	21.5
	Relatively satisfied	21	26.6
	Dissatisfied	13	16.5
Nursing education ability	Very satisfied	41	30.8
	Satisfied	6	7.6
	Relatively satisfied	16	20.3

	Dissatisfied	16	20.3
Communication skills	Very satisfied	38	27
	Satisfied	15	20.3
	Relatively satisfied	16	20.3
	Dissatisfied	9	11.4

5. Discussion

5.1 Analysis on Student Source

At present, the sources of postgraduate nursing students enrolled in universities and colleges include fresh undergraduates, undergraduates with work experience or equivalent graduates with two years of work experience, etc. In this study, sources of postgraduate nursing students are classified into two types of fresh graduates and previous graduates. In clinical practice, we should teach students according to their aptitude. The survey results in this study indicate that: among the 79 subjects, there are 48 fresh graduates and 31 previous graduates, accounting for 60.8% and 39.2%, respectively. Some studies^[8] found that in clinical practice, due to the immature development of nursing master's degree education in China, no complete set of standardized and highly recognized clinical practice training model has been formed. Most clinical teachers teach postgraduates in the teaching mode designed for undergraduates and specialists. No distinction is made between postgraduate students with and without work experience. This affects quality improvement in nursing master's degree education, which adversely affects personalized training of postgraduates and fails to meet postgraduates' expectations and needs for clinical practice. Hence, clinical teaching should be differentiated according to work experience of postgraduate nursing students: fresh graduates can first receive general department rotations, and receive a teaching mode dominant by clinical teachers with supplementary student role to skillfully master basic theoretical knowledge of nursing and various nursing operation skills; then based on individual research directions and hobbies, select specialized departments for rotation, and receive a clinical teaching mode dominant by students with supplementary role of clinical teaching teachers. At this stage, postgraduate students should pay attention to the cultivation of clinical analysis and thinking skills, develop the ability to discover clinical problems and solve them independently. On the other hand, postgraduates with work experience can directly select related departments and specialized departments for rotation based on individual research directions and hobbies to cultivate innovation consciousness and sharp perspective, discover the innovation points of existing theories and technologies and update the frontier knowledge and technology of clinical nursing.

5.2 Dual Tutor Guidance and Teaching Mode

The results of this study reveal that: in terms of satisfaction with the existing dual-tutor guidance and teaching model, dissatisfaction accounts for only 15.2%. It verifies the feasibility of the current dual-tutor guidance and teaching model and its recognition among postgraduate nursing students. The dual-tutor guidance and teaching model can enable postgraduate nursing students to master solid theoretical knowledge and clinical nursing operation skills. In the mean time, the two tutors can also improve and inspire their research ability and innovative consciousness from different perspectives. To a certain extent, it can promote ability improvement of postgraduate nursing students in all aspects, and further improve nursing education quality, which is similar to findings of Lu Qing^[9], et al. Therefore, a dual-tutor guidance and teaching model can be implemented in the clinical practice training of postgraduate nursing students by setting two tutors. One serves as the first tutor, usually a professor or associate professor-level teacher with master tutor qualification in the school to which the postgraduate student belongs. The teacher is broadly responsible for the postgraduate student, including political ideology, psychological literacy, professional level, scientific research ability cultivation, as well as guidance for thesis proposal, dissertation writing of the postgraduate student during the postgraduate study. The other tutor is a clinical supervisor mainly responsible for professional ability cultivation during clinical practice, who should help

postgraduate students grasp the subject research direction so that it does not deviate from the practical problems of clinical nursing. The training plan for postgraduate nursing students in clinical practice should be developed by consultation among the first tutor, clinical tutor and postgraduate students according to the school's training goals, postgraduate students' academic structure and personal experience, research direction, individual interest intention and specific department rotation of the hospital. A targeted and personalized clinical practice rotation plan should be formulated to fully mobilize the enthusiasm and subjective initiative of postgraduate students to meet their expectations and needs for clinical practice as much as possible.

5.3 Job Competence and Self-Core Competence

Job competence ^[9] refers to a combination of abilities and qualities shared by excellent nurses which are prerequisite for nurses and can be measured by indicators. Some studies ^[9] believe that the self-core competence required for postgraduate nursing students includes clinical professional ability, nursing operation skills, nursing education ability, nursing management ability, nursing research ability, evidence-based nursing ability, critical thinking ability, communication and coordination capabilities, nursing professional development capabilities. The findings of this study suggest that: for self-core abilities developed during clinical practice, the subjects are satisfied with clinical nursing practice ability, critical thinking ability, scientific research ability and communication ability, and are dissatisfied with teaching ability, nursing education ability.

5.4 Clinical Practice Rotation

This research survey found that the postgraduate nursing students participating in this study generally reflect that clinical medical practice can somewhat improve their ability to observe and evaluate the disease, ability to find and solve problems independently, clinical thinking ability, critical thinking ability, communication skills, etc. which is consistent with the results of Zeng Jing ^[11] et al. In the clinical practice teaching mode, clinical medical practice rotation is added to allow postgraduate students to receive internships following the doctor or participate in ward rounds organized by doctors, so that postgraduate students can understand the formulation of treatment protocols, special medical examinations, principles and side effects of medications, the purpose and significance of various medical orders, fully grasp the possible conditions and its treatment at different stages of disease development, learn to look at nursing problems from a medical perspective, and solve practical clinical problems using critical thinking and evidence-based perspectives.

5.5 Cultivation of Clinical Practice Research Capabilities

The research survey found that the postgraduate nursing students participating in this study have a satisfaction rate of merely 44% toward their scientific research ability. Nursing is a discipline with strong demands for practice, so the 27th meeting of the State Council Committee ^[1] decided to add master's degree in nursing. At present, the development of nursing mater education in China is gradually transiting to development of clinical postgraduates, with a view to cultivating a batch of clinical-oriented high-level nursing professionals to meet the needs of the society, improve the overall quality of nursing team, and truly give play to the role of nursing education in clinical reliance, clinical services and clinical improvement. For postgraduate nursing student, scientific research ability means a basic ability requirement, which is also urgently needed in clinical practice in China. However, there is currently no fixed setting and model for the cultivation of clinical practice research ability in postgraduate students participating in clinical practice in China, which still stays at exploration stage. In the clinical practice stage, postgraduate nursing students have the most contact with clinical teaching teachers. Therefore, in addition to strengthening professional practice training, clinical teaching teachers should pay attention to cultivating their scientific research capabilities, which is their biggest difference from other nursing interns. Students should be trained to clinically observe the patient's condition, find problems, stimulate research motivation and find solutions to better serve the clinic. Accordingly, during the internship of postgraduate nursing students in our college, the hospital should regularly invite experts from all over the

country, province and city to give scientific research seminars of various forms, strengthen postgraduate students' research foundation, develop their interest in nursing research, thereby further promoting their improvement in clinical research ability.

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