

The Application of the Novel “Six-Step Teaching Method” In the Teaching Management for the Nursing Interns

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Abstract

Objective: To study the application of the novel “Six-Step Teaching Method” in the teaching management for the nursing interns.

Methods: Seventy nursing interns in the year of 2018 and 2019 practiced in The Fourth Hospital of Shijiazhuang were selected and divide into control group and observation group. The control group received the traditional teaching method for nursing practice, and the observation group was given the new “Six-Step Teaching Method” for nursing practice. The novel “Six-Step Teaching Method” includes the teachers showing the operation, the teacher guiding the interns operation, the interns independent operation, the interns self-evaluation, the evaluation between of teachers and interns, and the head nurses’ appraisal. After the interns practiced 10 months, the theoretical achievement, the practical operation skills achievement, the satisfaction between the teachers and interns each other and adverse events happened in the interns of two groups were recorded and compared.

Results: Compared with the control group, the theoretical achievement increased by 29.82% ($P < 0.05$) and the practical operation skills achievement increased by 22.60% ($P < 0.05$). The satisfaction of teachers to interns of each other was raised 13.40% and 19.83%, respectively. The adverse events happened in interns was lowered by 62.50% in the observation group, as compared with control group.

Conclusion: The novel “Six-Step Teaching Method” can raise the theory and practice level, enhance the satisfaction between the teacher and the nursing interns and lower the adverse events happened. These results suggested that the novel “Six-Step Teaching Method” has a good practical value in the teaching management for nursing interns and is worth for application in the clinic.

Keywords: The Novel “Six-Step Teaching Method”, the Nursing Interns, the Teaching Management

Clinical practice is a bridge for nursing students to transition from theoretical study to clinical practice, and it is also an important link to further cultivate nursing students’ ability to solve clinical practice. At this stage, it not only consolidate the basic theory they have learned, but also train students’ skills and comprehensive quality. The research on the clinical ability self-assessment of nursing specialist interns in China shows that the ability of nursing clinical nursing, communication and collaboration is at a middle level, and the ability of health education and self-learning is at a low level [1]. Therefore, how to improve the quality of clinical practice of nursing interns and cultivate qualified nursing talents is a subject that hospitals are constantly exploring [2]. In recent

years, our hospital from the teaching management and clinical practice effect of internship students has worked out a novel “six-step teaching method”, which includes, the teachers showing the operation, the teacher guiding the interns operation, the interns independent operation, the interns self-evaluation, the evaluation between of teachers and interns, and the head nurses’ appraisal, so as to cultivate students’ practical operation ability and achieve the purpose of “substituted post exercitation” for nursing interns, thus making clinical nursing internship work accessible and moving towards procedural, standardized and scientific gradually. In this study, the effect of the novel “six-step teaching method” on the teaching management of nursing interns was discussed to judge

its practical value. This research content has not been reported at home and abroad.

Data and Methods

General Information: A total of 140 nursing interns were selected from our hospital, including 70 in 2018 as the control group and 70 in 2019 as the observation group. Both groups of nursing students are ordinary full-time college students, have completed the study of theoretical knowledge in school and the two groups of nursing students age, sex, entrance results, academic qualifications and other baseline data comparison differences are not statistically significant. It is comparable. ($P > 0.05$).

Inclusion Criteria:

1. Completed the theoretical study of medical basic knowledge and professional knowledge, and the internship time in the hospital > 2 months;
2. Informed consent, willing to participate in this transfer.

Intervention Methods

Traditional Teaching Method with Nursing Interns

In the control group, interns used the traditional teaching method to teach, that is, the teacher was taken to teach, the interns digested in class, and were assessed after class. The traditional teaching method mainly used classroom theory to teach, arranged internship assignments and examination questions to check the nursing interns' grasp of relevant knowledge.

The Novel "Six-Step Teaching Method" for Nursing Interns

The interns in the observation group were first explained with theoretical knowledge by the instructor, and then were instructed with the novel "six-step teaching method" that is, the teachers showing the operation, the teacher guiding the interns operation, the interns independent operation, the interns self-evaluation, the evaluation between of teachers and interns, and the head nurses' appraisal.

The Teachers Showing the Operation

The teachers based on the operation procedures and specifications to demonstrate the interns one by one, with emphasis on the important links, key steps and precautions. Let the students intuitively accept the teaching content and operation points through the demonstration operation with the teacher.

The Teachers Guiding the Interns Operation

After being taught by the teachers, the interns performed imitative operations. After the operations were completed, the teachers commented on the students' operations, confirmed their correct operations, pointed out the existing problems, and put forward suggestions for improvement.

The Interns Independent Operation

After many times of imitative operation, understanding and digestion, the teacher believes that the interns have mastered the technical essentials and operation specifications basically, so that the students can operate independently. At this point, the teacher instructed to let go and without looking, special attention was paid to observe student operations to ensure clinical safety secretly. At

the same time, interns also pay special attention to any difficulties encountered in the process of independent operation, especially when it comes to patients' safety issues, they immediately consult the teacher, and not forced operation blindly.

The Interns Self-Evaluation

Interns can operate each project for more than five times smoothly and independently, and they can accurately understand and master each operation step, content and precautions, and communicate effectively with patients to the satisfaction of patients and teachers. Only when patients and teachers are satisfied and no mistakes occur can interns self-evaluate as "proficient".

The Evaluation Between of Teachers and Interns

Three teachers rated the interns' self-evaluation as a "proficiency" project and conducted clinical practice evaluation at any time. The evaluation contents were carried out from the aspects of interns' operation specification, operation steps, interaction with patients, safety precautions, etc. The head nurse and the teachers formed an evaluation group. Only interns who reached the proficiency level could enter the next stage.

The Head Nurses' Appraisal

The head nurse evaluated the teaching teacher's "mastering" project for the intern, conducted further assessment in the daily clinical nursing practice, and verified in strict accordance with the department's system, standards, and operating procedures to judge whether the intern could be admitted to the operation.

Each of the above steps was performed strictly in accordance with the standardized nursing process, and the contents such as the first teaching time, the first guidance operation time, the first independent completion time of the internship nurse, the self-evaluation time of the internship nurse, the evaluation time of the instructor, and the identification time of the head nurse were carefully filled in the Intern Growth Manual by the relevant responsible persons such as the interns, the teachers, and the head nurse, and signed the name in full. If any step fails, the examination shall be conducted again from the first step until the operation for the intern reaches the admission.

Evaluation Criteria

Theory and Skills Assessment

Theoretical Assessment: According to the content of the sixth edition of Obstetrics and Gynecology nursing science, the nursing world software was used for theoretical assessment, which involved three types of questions: single choice, multiple choices and judgment, including: basic theoretical knowledge, related knowledge and case analysis, with the scores of 50, 30 and 20 points respectively. The test papers of the candidates were statistically summarized, and the assessment results were judged by the score. The higher the score, the better the theoretical score of internship.

Practical Skills Operation Assessment

The skills commonly used in the process of clinical internship were assessed, including basic nursing skills, related instrument operation and case nursing, two of which were randomly selected by lot for assessment. The whole assessment process included pre-

operation, in-operation, after-operation and precautions, with a total of 100 points. The key points were scored with prominent points. The teachers and head nurses were responsible for scoring and evaluating. The assessment results were evaluated based on the scores. The higher the score was, the better the internship performance would be.

Satisfaction Questionnaire

The questionnaire was issued using the Questioning Star software to conduct a two-way questionnaire among interns and teachers [3].

The Evaluation Contents of Nursing Interns by Teachers

It included practical ability, comprehensive analysis ability, team cooperation ability, communication ability, learning consciousness and behavior, with 10 points for each one, and a total of 50 points. The satisfaction degree was judged by the comprehensive score. The higher score is the more satisfaction.

Nursing Interns' Evaluation of Teachers

It was evaluated based on the self-made nursing teaching quality survey scale, covering teachers' sense of responsibility, medical ethics, labor discipline, theoretical knowledge, operation level, teaching methods and attitude, and care for nursing interns. There were eight items in total, with 10 points for each item and 80 points for the total. Satisfaction was judged based on the comprehensive

score. The higher the score, the more satisfied it was.

Investigation of Adverse Events among Nursing Interns

After the ten-month nursing practice, the adverse events of the nursing interns in the observation group and the control group during the nursing practice were counted and classified using the teaching teacher and the head nurse attendant system. The contents of the statistics included four items, such as adverse events due to instrument use, improper communication, nursing check-up error and nursing handover error. The more times the adverse events occurred, the worse the effect of the practice.

Statistical Analysis

Data were statistically processed using SPSS13.0 and Excel software. The data were expressed as $X \pm SD$, and the differences were statistically significant if $P < 0.05$ by t-test.

Results

The Influence of the Novel "Six-Step Teaching Method" on Nursing Interns' Theoretical and Skill Assessment Results

The results in Table 1 show that after ten months' clinical nursing practice, the novel "six-step teaching method" can improve the theoretical and skill assessment scores of nursing interns. Compared with the control group, the average scores of theoretical examination and practical skill operation examination of interns in the observation group increased by 29.82% and 22.60% respectively, with statistical significance ($P < 0.05$) (Table 1).

Table 1: The Influence of the Novel "Six-Step Teaching Method" on Nursing Interns' Theoretical and Skill Assessment Results ($X \pm SD$, $n=70$)

Group	Number of cases	Theoretical scores	Skill scores
Control group	70	59.7±1.06	72.51±1.70
Observation group	70	77.50±0.72	88.90±0.99
t/z		-74.079	-8.338
P		<0.05	<0.05

The Impact of the Novel "Six-Step Teaching Method" On the Satisfaction of both Nursing Teachers and Interns

Table 2 results show that after ten months of clinical practice, the novel "six-step teaching method" has significantly increased the satisfaction between teachers and interns. Compared with the

control group, the job evaluation satisfaction of nursing interns from teachers in the observation group was increased by 13.4%, and the average satisfaction of nursing interns with teachers was increased by 19.83%, both of which were statistically significant ($P < 0.05$) (Table 2).

Table 2: The Impact of The Novel "Six-Step Teaching Method" on The Satisfaction of Both Nursing Teachers and Interns($X \pm SD$, $n=70$)

Group	Number of cases	Teachers are satisfied with nursing interns	Nursing interns are satisfied with the teachers
Control group	70	43.22±0.06	64.00±0.11
Observation group	70	49.20±0.18	76.69±0.03
t		-30.36	-123.58
P		<0.05	<0.05

The Novel “Six-Step Teaching Method” on the Nursing Adverse Events

Table 3 results show that the novel “six-step teaching method” can significantly reduce the incidence of adverse events in intern care. Compared with the control group, the incidence rate of adverse events of interns in the observation group during the nursing practice was decreased by 62.50%, among which, the incidence rate of adverse events due to instrument use was decreased by

86.67%, the incidence rate of adverse events due to improper communication method was decreased by 70%, the incidence rate of adverse events due to nursing check-up error was decreased by 47.83%, the incidence rate of adverse events due to nursing handover error was decreased by 56.25%, and the incidence rate of adverse events due to instrument use was decreased by the most (Table 3).

Table 3: The New “Six-Step Teaching Method” on the Nursing Adverse Events

Group	Improper use of the instrument	Improper communication method	Nursing check-up error	Nursing handover error	Total
Control group	15	10	23	16	64
Observation group	2	3	12	7	24
The magnitude of the decline	86.67%	70%	47.83%	56.25%	62.50%

Discussion

With the opening of the two-child policy, the demand for nursing posts increases significantly, and the consequent number of nursing interns is also growing [4]. Clinical practice is an important stage for nursing students from theory to practice to master the operation of nursing skills [5]. As an important base of nursing teaching, our hospital is responsible for the important task of intern teaching management. Therefore, how to strengthen the practice teaching management of nursing interns is very important [6].

The traditional teaching mode of nursing clinical practice focuses on the teaching of skills and theoretical knowledge, ignoring the application and cultivation of practical skills, which has the disadvantages of “teachers are tired of teaching, students are bitter in learning” [7]. This study is based on the traditional teaching methods combined with teaching management experience, summed up the new “six-step teaching method” for nursing interns to carry out teaching learning. The novel “six-step teaching method” involves the teachers showing the operation, the teacher guiding the interns operation, the interns independent operation, the three steps break the traditional mode of emphasizing theory while neglecting practice, and integrates the ideas of “using to promote learning” and “applying learning” into it [8]. The teacher guides the students to operate at zero distance to improve the interns’ learning interest and theoretical and practical level. The interns self-evaluation, the evaluation between of teachers and interns, and the head nurses’ appraisal. The three steps are the combination of interns’ self-evaluation and other evaluation. Through nursing students’ self-audit evaluation, teachers’ evaluation and head nurses’ two-item others’ evaluation, it is not only the acceptance of teaching results, but also the strengthening of students’ specific practical operation. In the evaluation, the deficiencies are made up and the teaching content is refined [9]. This is the feature of our teaching management, and it is an initiative that has not been previously reported.

Compared with the control group, the theoretical scores and nursing skills in the observation group were significantly improved, and it could be seen that the novel “six-step teaching

method” had significant effects. From the point of test satisfaction of the two groups, the satisfaction of the teachers and interns in the observation group was higher than that in the control group. It could be seen that the novel “six-step teaching method” strengthened the interaction between teachers and students, realized that students were the main body and teachers were the leading role. In addition, domestic and foreign studies show have that it is important to cultivate interns’ learning ability, pay attention to their ability to think for themselves, do it themselves and solve problems comprehensively, and it is of great value to improve the importance of nursing students to practice and the sense of responsibility of clinical teachers [10, 11].

Compared with the control group, adverse nursing events in the observation group were significantly decreased. A study showed that inappropriate feedback might make nursing students feel frustrated and give feedback in a negative attitude, which is not conducive to further learning and evaluation [12]. However, the novel “six-step teaching method” cultivates the students’ spirit of being cautious and independent, treats nursing work seriously, and regulates their own words and deeds.

From the level of managers, the novel “six-step teaching method” has trained excellent teachers, improved their teaching and skills, and strengthened the construction of teaching team. It also enables interns to make progress in their studies and achieve self-improvement. Managers will take it as an assessment index, strengthen the intern teaching management, in order to determine the intern’s grasp of skills, improve the access system, so that interns before graduation to achieve the purpose of “internship”, to achieve the optimization of work and value [13].

Thus, the novel “six-step teaching method” is close to the reality, pays attention to teaching management, and promotes the improvement in teaching quality. It has great practical value and is worthy of clinical promotion.

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