

Application of the “Six-Step Teaching Method” in the Nursing Teaching of Obstetric Interns

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Abstract

Objective: The “six-step teaching method” is a teaching method, which is summarized based on practical experience. This study aimed to explore the effect of “six-step teaching method” in clinical teaching of obstetrics. **Methods:** A quasi-experimental study design was used, 30 nursing students who entered obstetrics practice from March 2022 to July 2022 were selected as the control group according to the order of time, and traditional teaching methods were adopted. From August to December 2022, 30 interns were selected as the experimental group, and the “six-step teaching method” was adopted. After 8 weeks of clinical practice, the assessment results and teaching effect satisfaction of the two groups were compared. **Results:** The scores of obstetrical specialty in the experimental group were higher than those in the control group, and the difference was statistically significant ($P < 0.05$); The evaluation of teaching methods, teaching quality, classroom atmosphere and individual observation ability, clinical thinking ability and nurse-patient communication ability of the experimental group were higher than those of the control group, and the differences were statistically significant ($P < 0.05$). **Conclusion:** “six-step teaching method” can effectively master the professional knowledge of obstetrics, stimulate the clinical thinking ability of interns, and improve the teaching effect and satisfaction.

Keywords

“Six-Step Teaching Method”, Obstetrics Intern, Nursing Education

1. Introduction

Clinical practice is an important way to cultivate the nursing practice ability of nursing students, and its teaching quality directly affects the competence of nurs-

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ing students in future clinical work. As a clinical discipline with strong practice, obstetrics has the characteristics of high risk, rapid change, many emergencies, and strong privacy, and its teaching quality directly affects the basic clinical skills of nursing interns. Therefore, each step of obstetric clinical teaching for nursing interns must be strictly controlled [1] [2]. Starting from the clinical practice, we developed the “six-step teaching method”, namely, the teachers showing the operation, the teacher guiding the interns’ operation, the interns’ independent operation, the interns’ self-evaluation, the evaluation between teachers and interns, and the head nurses’ appraisal replacing the traditional teaching mode, and achieving good teaching effect, which is now reported.

2. Data and Methods

2.1. General Information

A quasi-experimental study design was adopted, 30 nursing students who entered obstetrics practice from March to July 2022 were selected as the control group according to the order of time, and traditional teaching methods were adopted. From August to December 2022, 30 interns were selected as the experimental group, and the “six-step teaching method” was adopted. The students were all female, aged 19 - 21 years old, with an average age of (20.94 ± 3.44) years old, from the same junior college, and the general data of the two groups were not statistically significant ($P > 0.05$), and it was comparable.

2.2. Research Method

The practice time of the two groups was 8 weeks, and the teaching content and difficulties were basically the same. After admission, the interns were assigned to each teacher to complete one-to-one clinical practice teaching. Only the teaching methods of the two groups are different, as follows.

2.2.1. Control Group Teaching

The interns in the control group were taught in the traditional teaching mode, that is, the teachers gave a unified explanation of the obstetrical nursing content and gave demonstration instruction, and then the nursing interns practiced independently, and finally examined the mastery of the nursing teaching content.

2.2.2. Experimental Group Teaching

The interns in the experimental group were first explained the theoretical knowledge by the instructor, and then the “six-step teaching method” was adopted, namely, 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.

1) The teachers showing the operation

The teachers demonstrated the interns one by one, with emphasis on the important links, key steps and precautions according to the operation procedures and specifications. Let the students intuitively accept the teaching content and

operation points through the demonstration operation with the teacher.

2) 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.

3) 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 do not force operation blindly.

4) The interns' self-evaluation

Interns can operate each project 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".

5) The evaluation between teachers and interns

Three teachers rated the interns' self-evaluation as a "proficiency" project and conducted clinical practice evaluations 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.

6) 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.

3. Evaluation Criteria

After 8 weeks of teaching, the two groups of students were evaluated by entrance examination and their satisfaction survey.

3.1. Entrance Examination

It is composed of two parts: theoretical knowledge and skill operation, and the full score of each part is 50 points. The higher the scores is the better the students [3].

3.2. Satisfaction Survey

The two groups of interns were investigated by questionnaire.

3.2.1. Teaching Effect Evaluation

The teaching effect evaluation table is issued, which contains 25 items in 3 dimensions. It evaluates the teaching method (6 items), teaching quality (12 items) and classroom atmosphere (7 items) respectively. The full score is 75 points. The higher the score is the better the teaching effect.

3.2.2. Students' Self-Assessment Questionnaire Survey

The students' self-evaluation questionnaire is issued, which contains 42 items in 4 dimensions, It evaluates the situation of obstetric observation ability (16 items), clinical thinking ability (8 items), nurse-patient communication ability (6 items), and problem-solving ability (12 items) respectively. The full score is 100 points. The higher the score is the better the satisfaction of self-evaluation.

4. Statistical Treatment

The data were processed statistically using SPSS13.0 and Excel software, and the data were expressed as $X \pm SD$, and the t-test was used for comparison, and the difference was considered statistically significant at $P < 0.05$.

5. Results

5.1. The Influence of "Six-Step Teaching Method" on the Evaluation Results of Nursing Interns' Theory and Skills

Table 1 results show that after 8 weeks of obstetrical clinical nursing practice,

Table 1. Influence of "six-step teaching method" on theoretical and skill test scores ($X \pm SD$, $n = 30$).

Group	Cases Number	Theoretical Scores	Skill Scores
Control group	30	34.72 ± 1.06	39.51 ± 1.70
Experimental group	30	47.50 ± 0.72	48.90 ± 0.99
<i>t</i>		12.079	8.338
<i>P</i>		$P < 0.05$	$P < 0.05$

compared with the control group, interns in the experimental group have improved their theoretical and skill assessment scores, among which theoretical scores have improved significantly. It can be seen that compared with skill operation, the “six-step teaching method” has great value in improving interns’ theoretical knowledge.

5.2. The Influence of “Six-Step Teaching Method” on Teaching Effect Satisfaction

Table 2 shows that after 8 weeks of obstetrical clinical nursing practice, compared with the control group, interns in the experimental group have significantly improved their satisfaction with the teaching effect. Among them, classroom atmosphere has the greatest improvement and the most significant effect compared with the other two items, followed by teaching quality and teaching methods.

5.3. The Influence of “Six-Step Teaching Method” on Students’ Personal Ability

Table 3 shows that after 8 weeks of obstetric clinical nursing practice, compared with the control group, interns in the experimental group have higher self-evaluation, among which the improvement effect of obstetric observation ability is the highest, followed by nurse-patient communication ability and clinical thinking ability.

Table 2. Influence of “six-step teaching method” on satisfaction with teaching effect ($X \pm SD$, $n = 30$)

Group	Cases Number	Teaching method	Teaching quality	Classroom atmosphere
Control group	30	46.22 \pm 0.56	53.09 \pm 0.21	32.56 \pm 0.48
Experimental group	30	49.18 \pm 0.38	59.69 \pm 0.13	43.67 \pm 0.23
<i>t</i>		-37.36	-23.58	--42.56
<i>P</i>		$P < 0.05$	$P < 0.05$	$P < 0.05$

Table 3. Influence of “six-step teaching method” on students’ personal ability ($X \pm SD$, $n = 30$).

Group	Cases Number	Obstetric observation	Clinical thinking ability	Nurse-patient communication skills
Control group	30	68.27 \pm 0.43	37.48 \pm 0.11	44.38 \pm 0.57
Experimental group	30	79.48 \pm 1.29	42.98 \pm 0.26	50.67 \pm 0.36
<i>t</i>		5.67	5.38	6.25
<i>P</i>		$P < 0.05$	$P < 0.05$	$P < 0.05$

The above differences are statistically significant ($P < 0.05$). [1] [2] [3].

6. Discussion

Clinical practice teaching is an important transitional stage for nursing interns to become clinical nurses, and it is also the beginning of training a qualified and excellent nursing staff [4]. According to the requirements of national education development, it is necessary to comprehensively improve the quality of nursing personnel training and pay attention to the cultivation of professional ethics, innovative spirit and nursing practice ability. For many years, how to train qualified nursing talents for social and clinical needs and how to combine higher education with clinical nursing have been important issues faced and discussed by nursing educators.

Obstetric nursing is an important part of clinical nursing. Its work is complicated and the relationship between doctors and patients is delicate. It is one of the important and difficult points in nursing teaching.

The traditional teaching mode mainly focuses on teaching theoretical knowledge to the instructor, and its teaching deficiencies have the following characteristics: Firstly, the traditional teaching form is mechanical, the teaching content is single, emphasis on knowledge memorization, light practice and application, teachers teach and indoctrinate, students are used to accepting and inheriting knowledge, resulting in a lack of self-learning ability, making students unreasonable knowledge structure, insufficient practical ability, limited nursing thinking [5]; Secondly, the teacher's teaching concept lags behind, emphasizing that the task of students is to digest and understand the knowledge taught by the teacher, less discussion and interactive learning, and treating students as the object of indoctrination. For students, this learning process is rather boring, so students' "independent learning ability" is not good, they are dependent on the teacher, and students passively perform the learning task assigned by the teacher, which ignores the initiative, creativity and cognitive subject role of students [6]. Thirdly, the teaching of nursing theory and operation is step-by-step and lacks the training of students' critical thinking ability, operation ability and adaptability. As a result, students gradually develop the habit of not asking questions and not wanting to ask "why", and are prone to blindly worship books and teachers, thus affecting students' enthusiasm and initiative in learning and reducing their participation in nursing learning [7] [8]. This poses a great challenge to the training of qualified interns, and the international nursing education community has reached a consensus that as future nurses, students' autonomous learning ability should be one of their core competencies. However, due to the traditional teaching mode of instillation and acceptance, students' self-learning ability is not optimistic. It is urgent to improve teaching methods, enrich learning resources and attract nursing students' attention by using new teaching methods.

Compared with the traditional teaching mode, the "six-step teaching method" gets rid of the traditional injection teaching method, but takes the student as the center and the teacher as the guidance, and turns the students from the passive learning mode to the active learning mode, improves the learning initiative, and

thus improves the core ability of students. Students can practice repeatedly, increase the comprehensiveness of learning, deepen students' understanding of professional knowledge, stimulate innovative thinking and interest, and shorten the transition process from theory to practice, from students to nurses, from classroom to clinical.

From the experimental results, compared with the control group, the experimental group's theoretical performance and nursing skills have been significantly improved, which shows that the "six-step teaching method" has obvious results. It breaks the traditional teaching mode of emphasizing theory and undervaluing practice, and integrates the ideas of "promoting learning with application" and "applying learning to practice" [9]. It guides the teachers to guide the students in zero-distance operation, repeatedly exercising and evaluating until they have fully mastered it. This deepens the students' mastery of obstetrics specialty technology, achieves teaching reflection and evaluation, and effectively combines theory and practice through the extension of evidence-based nursing, and improves the level of clinical practice.

According to the results, the interns in the experimental group have greatly improved their satisfaction with teaching methods, teaching quality and classroom atmosphere. Learning interest is the internal motivation for learning, but also the basis of improving learning efficiency. "Six-step teaching method" gets rid of boring lectures, satisfies students' needs for personalized learning, stimulates their interest in independent learning, and conducts independent exploration through teacher-student interaction and discussion, thus improving students' knowledge and understanding, mastering methods and skills of independent learning, making independent learning truly implemented in practice teaching and becoming an effective auxiliary teaching method of traditional teaching.

The implementation of the "six-step teaching method" provides students with an active, open and diversified learning environment, which is conducive to guiding students to learn, cultivating students' learning initiative, making up for the lack of students' subjective spirit and initiative caused by long-term perfusion education, and promoting students' all-round development. At the same time, teachers are required to improve their own quality, change their teaching philosophy, advocate independent thinking and the spirit of subjectivity, encourage students' creative and challenging thoughts, create an atmosphere to explore the true knowledge of nursing, mobilize students' enthusiasm, and achieve the purpose of thinking, analyzing and solving problems through teachers' inspiration and mutual discussion among students, so as to improve learning efficiency.

In terms of clinical practice, the "six-step teaching method" advocates for students to conduct special evaluations of patients according to the knowledge they have learned, analyze problems and then conduct nursing operations, encourage students to actively consult information, cultivate students' ability to think positively, analyze independently and solve problems, and lay the founda-

tion for entering clinical work. This is of great value to the improvement of interns' personal ability and the training of clinical thinking. It breaks the boundaries of the original teaching mode, creates good conditions for students to study and practice independently, and improves students' ability to think and critical thinking. It stimulates interns' interest in obstetrics clinical teaching content and improves internship enthusiasm. In addition, foreign studies have shown [10] that it is of great significance for interns' development to cultivate their learning ability and pay attention to their self-thinking, do it on their own and comprehensive problem-solving abilities.

The "six-step teaching method" pays more attention to the cultivation of students' personal ability, puts students in the actual teaching, uses the knowledge they have learned to solve problems and improves students' ability to observe the conditions of obstetrics and pregnant women, analyze special problems in obstetrics and solve emergencies. This provides a good basis for training excellent interns, improving clinical nursing level and enhancing clinical thinking ability. In teaching, the teacher focuses on the analysis and summary of the important and difficult points of the content of the students, solving problems and personalized guidance for the students, guiding the students to conduct in-depth discussions to broaden the breadth and depth of the knowledge. After class, teachers timely understand students' learning trends, communicate with students and feedback through teacher-student interaction, so as to create conditions for students to further consolidate knowledge and improve the teaching effect.

The implementation of the "six-step teaching method" is helpful in building a good nurse-patient relationship, achieving the satisfaction of patients and teachers and students, and providing an important guarantee for building high-quality nursing services. The development of teaching cannot be separated from innovation. In order to cultivate more high-quality nursing talents who meet the needs of nursing jobs, diversified practical teaching activities should be carried out with different teaching methods to maximize the learning needs of students for nursing professional knowledge and skills[11]. The "six-step teaching method" is to start from reality, pay attention to the combination of theory and practice, and constantly reflect and improve. Innovative teaching ideas, achieve tripartite supervision (intern, teacher and head nurse), and enhance the value of students' practice.

Thus, it can be seen that the "six-step teaching method" can effectively enhance students' learning interest, promote teacher-student interaction, help to combine theory with practice and improve the satisfaction of the teaching effect. However, this study is a single-center study, which has some limitations. In the future, relevant teaching research should be carried out in multi-centers to further verify its effect.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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