

Application Effect of Case-oriented Teaching Mode in Digestive Medicine Nursing Teaching

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Abstract: In order to explore the application effect of case teaching method in modern digestive medicine nursing teaching, this paper selected 70 new nursing students as the research object, and randomly divided into observation group and control group. The control group used routine teaching, and the observation group used the case teaching method for teaching. After the end of the internship, the two groups of nursing students were assessed to compare the learning ability of the two groups of nursing students and the changes in critical thinking ability before and after teaching. The results show that the implementation of case teaching method in nursing students in modern digestive medicine nursing teaching is conducive to improving the performance of nursing students and critical thinking ability, and improving the comprehensive ability of all aspects of nursing students.

1. Introduction

Gastroenterology nursing is a combination of theory and practice [1]. It not only requires students to master enough theoretical knowledge, but also requires nursing students to accurately master the basic skills of the disease [2]. Clinical internship is an important part of digestive medicine nursing. Through clinical practice, classroom theory knowledge can be combined with clinical practice skills. At the same time, it can promote the transformation of nursing students to clinical nurses and lay the foundation for independent work after graduation [3].

The case teaching method is based on case-based teaching [4]. Under the guidance of teachers, students are organized to read, analyze, think and communicate according to the teaching requirements, so as to improve the ability of patient management, communication skills and team assistance [5]. Case analysis can not only effectively stimulate students' enthusiasm for learning, but also improve students' ability to use knowledge and analyze problems, and help students form critical thinking [6]. Based on this, this paper uses the case teaching method to teach the new nursing students in the Department of Gastroenterology, and has conducted a comparative study with the traditional teaching methods, and achieved the desired results.

2. Data selection and teaching methods

2.1 Data selection

The newly recruited 70 nursing students were selected as subjects and randomly divided into observation group and control group, 35 cases each, all female. The observation group was 19 to 25 years old with an average age of 22. Among them, 17 were junior college students and 18 were undergraduates. The control group was 19 to 26 years old, with an average of 23 years old. Among them, 19 were junior college students and 16 were undergraduate students. The clinical internships of the two groups of nursing students have been successfully passed, and they have obtained the qualification certificate for nursing students. Statistical data were compared between the two groups of general nursing students' gender, age, and academic qualifications. The difference was not statistically significant ($P > 0.05$) and was comparable in clinical studies.

2.2 Teaching methods

The control group used the traditional teaching method. The head nurse chose to digest the typical cases of internal medicine to organize the nursing ward round, and explained the nursing points to the nursing students. The nursing student reports the medical history to the head nurse and proposes a care plan and develops nursing measures. The head nurse organizes nurses to discuss the care plan and record the discussion. The results of the discussion are summarized by the growth of protection. The observation group selects representative and typical cases as the teaching materials according to the teaching plan by the clinical teaching staff. The nursing plan and goals are formulated according to the arranged cases every month, such as perioperative nursing, psychological intervention, health education and discharge of patients with gastroenterology. The intern nurse takes 3 to 4 people as a group and selects a team leader. Through the access to information, the network and contact with patients to obtain answers to questions, and through self-study to collect relevant case data, and organize and summarize the data to identify problems in the patient care process, and analyze the causes and solve problems. The intern nurses discuss and communicate with the patients in small groups, and evaluate and diagnose the cases and propose nursing measures. Conduct group discussions on a regular basis and present your own basis, and evaluate each other's views according to the way of debate. In the group discussion process, the key questions are put forward by the teacher's application system theory and practice, and the nursing students are actively thinking and assisting the nursing students to find a solution to the problem. Finally, the teacher will collect the problems encountered during the internship process, and point out the biggest problems of the nursing students.

3. Evaluation methods

3.1 Academic performance

We assess the performance of the two groups of nursing students after the teaching, including the basic knowledge of the professional field, professional skills and comprehensive professional knowledge [7]. The total score is 100 points. The higher the score, the better the effect.

3.2 Critical Thinking

Before and after the internship, the CCTDL (California Critical Thinking Tendency Questionnaire) was used to evaluate the two groups of nursing students [8]. The scale includes seven dimensions: cognitive maturity, curiosity, open mind, truth seeking, analytical ability, systemic ability, and self-confidence [9]. The total score of the scale is 70 to 420 points. Each dimension has a score of 10 to 60 points. A total of 70 judgmental thinking scales were issued for the two groups of nursing students, which were filled out before and after the teaching. 70 questionnaires were collected and the recovery rate was 100%.

3.3 Comprehensive ability of nursing students

The teacher's evaluation of the two groups' nursing ability, communication ability and learning ability is divided into 100 points [10]. The higher the ability, the higher the score.

3.4 Ability to teach teachers

The teaching ability and professional level of the teaching teacher are evaluated by two groups of nursing students, with a total score of 100 points. The higher the ability, the higher the score [11].

3.5 Statistical methods

The data was processed using SPSS 17.0 statistical software. The measurement data is expressed as t test; the count data is expressed in %, using the χ^2 test. The difference was statistically significant at $P < 0.05$ [12].

4. Application effects

4.1 Comparison of the learning results of the two groups of nursing students

After the internship of the two groups of nursing students, the results of the nursing students' specialist theory, clinical skills assessment and comprehensive examination were significantly better than the control group ($P < 0.01$), as shown in Table 1.

Table 1 Comparison of the learning results of the two groups of nursing students

| Group | n | Nursing specialist theory | Clinical skills assessment | Comprehensive test scores |
|-------------------|----|---------------------------|----------------------------|---------------------------|
| Observation group | 45 | 93.43 | 90.88 | 94.21 |
| Control group | 45 | 86.77 | 86.98 | 85.97 |
| t | - | 6.23 | 8.01 | 7.20 |
| P | - | 0.01 | 0.01 | 0.01 |

4.2 Comparison of critical thinking ability scores before and after teaching in both groups

Before the teaching, there were no significant differences in the scores of critical thinking skills. After the teaching, the scores of critical thinking ability of the two groups were significantly higher than those before the teaching, while the critical thinking scores of the observation group after teaching were significantly higher than those of the control group ($P < 0.01$), as shown in Table 2.

Table 2 Comparison of critical thinking ability scores before and after teaching in two groups

| Project | Observation group | | Control group | |
|--------------------|-------------------|----------------|-----------------|----------------|
| Cognitive maturity | Before teaching | After teaching | Before teaching | After teaching |
| Curiosity | 41.3 | 44.3 | 41.9 | 44.2 |
| Self confidence | 42.3 | 46.1 | 41.3 | 45.9 |
| Skills of analyze | 41.9 | 42.8 | 40.7 | 43.1 |
| Systematic ability | 39.7 | 41.2 | 39.4 | 40.8 |
| Open mind | 40.8 | 42.8 | 40.1 | 41.9 |
| Seeking the truth | 43.8 | 47.1 | 42.9 | 46.9 |
| Total score | 42.1 | 44.2 | 41.9 | 43.8 |

4.3 Teaching teachers to compare the comprehensive ability of the two groups of nursing students

At the end of the internship period, the scores of the observation team's ability to work, communication and learning ability were significantly better than those of the control group ($P < 0.01$), as shown in Table 3.

Table 3 Comparison of the scores of the two groups of nursing students' comprehensive ability

| Group | n | Ability to work | Communication skills | Learning ability |
|-------------------|----|-----------------|----------------------|------------------|
| Observation group | 45 | 86.77 | 89.21 | 91.67 |
| Control group | 45 | 73.89 | 74.62 | 77.81 |
| t | - | 8.91 | 9.19 | 10.29 |
| P | - | 0.01 | 0.01 | 0.00 |

4.4 Comparison of the ability of two groups of nursing students to evaluate teachers

After the internship period expired, the observation group gave the teacher's teaching ability and professional level evaluation significantly better than the control group ($P < 0.01$), as shown in Table 4.

Table 4 Comparison of the scores of the two groups of nursing students on the teacher

| Group | n | Teaching skills | Professional level |
|-------------------|----|-----------------|--------------------|
| Observation group | 45 | 86.11 | 92.01 |
| Control group | 45 | 78.43 | 81.98 |
| t | - | 4.39 | 4.88 |
| P | - | 0.01 | 0.01 |

5. Application effect analysis

In the past, the traditional teaching mode was mainly teacher-oriented and student-oriented. On the basis of preparing lessons, teachers often had indoctrinating teaching problems. The traditional teaching methods that students are responsible for listening to are widely used in clinical nursing teaching.

The case teaching mode is a student-oriented, teacher-oriented heuristic education. Its advantages are reflected in the dynamic, flexible and pertinent teaching process, and highly realistic in the teaching process. The teaching mode provides opportunities for students to learn independently, so that nursing students can think and be innovative, and can timely find and effectively solve nursing problems. The application of the case teaching mode in the current domestic nursing education has just started. The teaching method thoroughly analyzes the basic principles implied in the case under the guidance of the teacher through careful reading, in-depth thinking and multi-party comparison. Basic theory and methods. The student's conclusion is judged by the teacher. The teacher analyzes the wrong part while pointing out the correct part, guides the students to think, learns to combine the cases, and applies relevant knowledge to practice. In the practice of clinical nursing teaching, the application of the case teaching mode promotes students' independent learning, improves learning efficiency, and strengthens the quality of clinical nursing teaching. Students benefit the most from this teaching model. The results of the study showed that after the implementation of the case teaching method in the observation group, the nursing students' professional theory, clinical skills assessment and comprehensive examination scores were significantly better than the traditional education control group, critical thinking ability. The scores of open thinking, cognitive maturity, systemic ability, and analytical ability were significantly better than those of the control group. When the internship period expired, the scores of the observation team's work ability, communication ability, and learning ability were significantly better than those of the control group. Moreover, the evaluation of the teaching ability and professional level of the internship nursing students in the observation group was significantly better than that in the control group. There was a significant difference between the two groups ($P < 0.01$).

The research results show that the application of case teaching mode in modern digestive medicine nursing teaching can stimulate the interest of nursing students, mobilize their conscious initiative, improve their ability of independent learning and critical thinking, and the teaching ability and professional level of teaching teachers are easier to obtain. Recognition of internship nurses. This may be related to the case teaching mode, which requires students to determine their own learning methods, review the information and ask relevant questions, and consult relevant case data, analyze and summarize the relevant data, and combine the clinical situation and use their knowledge to summarize effective nursing measures. In this process, not only the interest of students in nursing students is stimulated, but also the enthusiasm and initiative of the intern nurses in the teaching process are improved, so that students learn to think deeply and improve the learning efficiency of students, so as to achieve the expected effect of teaching.

6. Summary

In summary, the case teaching method is beneficial to the nursing students to develop good study habits in the modern digestive medicine nursing teaching, effectively improve the nursing students'

internship performance and critical thinking ability. At the same time, it can improve the ability of all aspects of nursing students. Moreover, the teaching ability and professional level of teaching teachers in the whole teaching process are more easily recognized by the nursing students, so it is worthy of clinical application. In the results of this study, the total scores of critical thinking ability and the scores of each dimension were higher in the observation group than in the control group ($P < 0.01$), further demonstrating that case-based teaching helps to form critical thinking.

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