

The Application of Mixed Teaching Mode in the Reform of Medical Nursing Training Course

Wei Meng*

Changchun Humanities and Sciences College, 130117, Changchun, China

**Corresponding author. Email:402276235@qq.com*

ABSTRACT

Objective: In order to improve the independent learning ability and practical operation ability of nursing students, and cultivate learning interest. **Methods:** The CDIO teaching mode and the multi-functional simulation person were applied in the medical nursing training course. A autonomous learning ability scale and a self designed questionnaire were used to investigate the students, and compared the situation of the nursing students' independent learning ability, learning interest, practical operation ability and other aspects before and after the application. **Results:** After the curriculum reform, the nursing students' autonomous learning ability was improved ($P < 0.01$), 100% of the students were satisfied with the curriculum reform, 95.24% thought that the curriculum reform could improve their learning interest, 94.05% thought that the curriculum reform could improve their practical operation ability, and 95.83% thought that their comprehensive analysis ability was improved. **Conclusion:** The mixed teaching mode had achieved good teaching effect in medical nursing training course, and could improve students' ability in some aspects.

Keywords: *Medical nursing, Mixed teaching mode, Course reform.*

1. INTRODUCTION

Internal medicine nursing is a compulsory basic course for nursing major, and it is the main course for nursing students to obtain the nurse qualification certificate. The training course is very important in the course of internal medicine nursing. Through the training course, students' ability of practical operation, comprehensive analysis and team cooperation can be cultivated. The traditional training course is "teacher-centered", and the teaching content is completed by means of video playback, which is not conducive to the cultivation of nursing students' autonomous learning ability. Therefore, this paper applied the mixed teaching mode in the practical training course of internal medicine nursing, and achieved certain effect of education and teaching reform.

2. RESEARCH CONTENT

2.1. Research Object

Nursing undergraduates of grade 2018 in college of nursing and welfare of Changchun Humanities and Sciences College were selected as the research object.

The students of this grade had completed the basic medicine and basic nursing courses, and had the basic conditions to complete the research. There were 168 students in total. They were divided into two teaching classes with 84 students in each class. They were divided into four groups and had classes in four training rooms at the same time. There were 22 students in each training room.

2.2. Research Methods

2.2.1. Teaching Method

2.2.1.1. CDIO Teaching Mode

The CDIO teaching modes included conceive – design-implement-operates. **Conceive:** before class, the teacher would send the cases to the students in advance according to the teaching objectives and syllabus. **Design:** students in each training room were divided into 4 groups, and each group assigned roles (nurses, doctors, patients, family members, etc.) and tasks according to the cases. **Implement:** students used their spare time in the training room for role-playing and simulation training, and teachers provided guidance. **Operate:** in the training course, students showed the

results, reported the case content in the form of role play according to the nursing procedures, and then reported the knowledge points learned by the team through ppt. After all the students showed, the teacher summarized to ensure the teaching quality.

2.2.1.2. Multi Functional Simulator

The application of multi-functional simulator, combined with the given cases, let students simulate the common signs and symptoms of patients, it not only could exercise the students visual, touch, percussion, listening skills, but also could cultivate students' assessment and diagnostic ability, and provided guidance for the use of nursing procedures to provide care for patients.

2.2.2. Survey Tools

2.2.2.1. Autonomous Learning Ability

Using the college students' autonomous learning ability evaluation scale" compiled by Lin Yi and Jiang Anli [1], we conducted a questionnaire survey on students before and after the implementation of the mixed teaching mode. There were 28 items in the scale, which were divided into three dimensions: self-management ability (10 items), learning

cooperation ability (7 items) and information ability (11 items). Each item was scored by Likert grade 5, with a total score of 28-140. The higher the score was, the stronger the students' autonomous learning ability was. The Cronbach 'α coefficient of the scale was 0.86.

2.2.2.2. Self Designed Questionnaire

To investigate students' evaluation with the mixed teaching mode.

2.2.3. Statistical Method

Statistical Package for the Social Sciences (SPSS) 22.0 for Windows was used to perform the statistical analyses. The counting data were described by constituent ratio, the measurement data was described by $\bar{x}\pm s$, the scores of the two groups were compared by t test and a significance level of 0.05 or lower was considered statistically significant.

3. RESULTS

3.1. Effect of Curriculum Implementation

Comparison of self-learning ability of nursing students before and after the implementation of curriculum reform (see Table 1).

Table 1. Comparison of autonomous learning ability of nursing students before and after implementation ($\bar{x}\pm s$, n=168)

Groups	Total score	Self management ability	learning cooperation ability	information ability
before and the implementation	81.42±8.31	29.16±4.27	20.32±3.68	31.94±4.52
after the implementation	86.24±8.41	31.23±4.19	21.87±3.54	33.14±4.43
<i>t</i>	5.116	4.587	3.834	3.417
<i>P</i>	0.000	0.000	0.000	0.000

Table 2. Students' evaluation of mixed teaching mode (n=168)

	Number of people	constituent ratio(%)
Satisfied	168	100
Dissatisfied	0	0
Improve learning interest(Yes)	160	95.24
Improve learning interest(No)	8	4.76
Improve practical operation ability(Yes)	158	94.05
Improve practical operation ability(No)	10	5.95
Improve comprehensive analysis ability (Yes)	161	95.83
Improve the ability of comprehensive analysis(No)	7	4.17

3.2. Students' Evaluation of Mixed Teaching Mode

See Table 2 for student evaluation.

4. DISCUSSION

4.1. The Mixed Teaching Mode Can Improve the Autonomous Learning Ability of Nursing Students

The former research showed that [2] the autonomous learning ability of undergraduate nursing students was in the middle level and their autonomous learning ability need to be improved. The improvement of self-learning ability of nursing students help to increase their professional identity [3]. The results showed that the mixed teaching mode could improve the self-learning ability of nursing students ($P < 0.01$), and their self-management ability, learning cooperation ability and information ability were improved. In the implementation process of CDIO teaching mode, through conceive-design-implement-operate, students could take the initiative to learn new knowledge, improved the ability to retrieve information, increased the communication between teams, and help to improve the ability of cooperation.

4.2. The Implementation of Mixed Teaching Mode Can Improve the Satisfaction Rate of Nursing Students to the Internal Medicine Nursing Training Course

This study shows that the implementation of the mixed teaching mode, 100% of nursing students give satisfactory evaluation, which showed that the teaching reform of internal medicine nursing training course had achieved good reform effect. 95.24% of the nursing students thought that the mixed teaching mode could improve their learning interest, which may be related to the increase of students' participation in the classroom, the interesting role play, the novelty and attractiveness of the application of the simulator. 94.05% of the nursing students thought that it could improve the practical operation ability, which may be because in the implementation process of the teaching mode, nursing students need to play a role according to the characteristics of the disease. Through the process of nursing evaluation, diagnosis, planning, implementation and evaluation, nursing students themselves need to exercise and display a series of operation skills, so the practical operation ability has been improved. In addition, 95.83% of the nursing students think that their

comprehensive analysis ability had been improved. In the process of simulation performance, nursing students need to solve the existing or potential health problems for patients, and learn to communicate effectively with patients. These could make them exercise their critical thinking ability. At the same time, they need to combine what they had learned to comprehensively analyze the nursing problems of patients. At the same time, the ability to solve and analyze problems of nursing students had been improved. In conclusion, although the mixed teaching mode had achieved good results in the medical nursing curriculum reform, some students still thought that they had not improve their learning interest, practical operation ability and comprehensive analysis ability. It is hoped that in the future teaching practice, further research, teaching reform and innovation will be carried out to improve the teaching level and teaching quality, so as to cultivate practical nursing talents in line with the needs of social development.

5. CONCLUSION

The mixed teaching mode had achieved good teaching effect in medical nursing training course, and could improve students' ability in some aspects. In the future, we will continue to carry out teaching reform and constantly improve the teaching effect.

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