# Analysis of the Effect of Role-Playing Situational Teaching Method in Practical Teaching of Surgical Nursing

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**Abstract: Objective:** The purpose of this study was to analyze the effect of role-playing situation teaching method in practical teaching of surgical nursing. **Methods:** from January 2018 to January 2019, 50 students from surgical care class were selected to participate in the investigation and study, and randomly divided into the experimental group and the conventional group (n=25). The conventional teaching method was implemented in the experimental group, and the role-playing situational teaching method was implemented in the experimental group. The test results and classroom teaching satisfaction of the two groups were compared. **Results:** compared with the students in the conventional group, the students in the experimental group had relatively higher scores in professional theory test and practical skills test, and the difference was statistically significant (p < 0.05). The classroom teaching satisfaction rate of students in the conventional group was 80%, and that of students in the experimental group was 96%, and the data gap was statistically significant (p < 0.05). **Conclusion:** the application of role-playing situation teaching method in surgical nursing practice teaching can improve students' professional knowledge acquisition ability and practice level, and students' satisfaction with this teaching methods is high, which is suitable for the promotion in teaching.

Surgical nursing education is an important part of China's nursing education system [1]. Since the founding of the People's Republic of China, especially after the reform and opening up, it has developed rapidly and played a unique role in China's economic construction and social development [2]. However, in general, the practical ability of surgical nursing students is not enough to meet the needs of society. Strengthening practical teaching is the key to achieve the goal of training surgical nursing education talents and the basis of training skilled nursing talents [3, 4].

In this study, the student-centered method was used to design nursing teaching cases in the nursing clinical practice process. It aimed to provide students the comprehensive training opportunities, stimulate students' initiative and creativity, and encourage students to realize their own lack of knowledge, strengthen the flexible use of knowledge and timely improvement, so as to guide students to learn independent, improve students' self-renewal ability, and better adapt to the development of society. The traditional clinical practice teaching is to compile the case by the teacher, the students participate passively, the drill process is rigid and procedural, and the assessment is mainly based on the summative evaluation [5]. However, the "student-centered" situation simulation teaching must highlight the main role of students in practical teaching activities and guide students to take the initiative in learning, discovering and solving problems [6, 7]. This way can not only improve students' operational skills, but also enhance students' comprehensive practical ability. "Student-centered" situation simulation teaching is also a great challenge for teachers [8]. Although students are in the main position instead of teachers, teachers still need to actively guide the entire situation simulation teaching process [9, 10]. This means that teachers should have a wider range of knowledge, stronger adaptability and control ability: such a teaching process is also helpful to expand teachers' teaching thinking, mobilize teachers' enthusiasm, and realize "both teaching and learning" [11]. By changing the concept of nursing practice teaching, making full use of the existing teaching resources for teacher training, and implementing the student-centered role-playing situation teaching method in clinical practice teaching, the

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comprehensive practice ability of surgical nursing students has been significantly improved [12, 13].

Role-playing situational teaching method is to guide students to carry out practical training on the basis of the syllabus and in combination with the actual work situation, so as to improve students' knowledge acquisition effect and enhance their practical ability [14, 15]. Surgical nursing involves a lot of work, and patients' condition changes rapidly, which puts forward higher requirements for nursing staff's professional ability and practice level [16, 17]. In order to have an in-depth understanding of the application effect of role-playing situational teaching method in surgical nursing practice teaching, 50 students from surgical nursing class were selected from January 2018 to January 2019 to participate in the investigation and study, and the discussion was conducted based on the results of the group investigation, and the contents were summarized as follows.

#### 1. Materials and Methods

#### 1.1 General information

During the period from January 2018 to January 2019, 50 students from surgical care class were selected to participate in the investigation and study, and they were divided to the experimental group and the conventional group (n=25) in an arbitrary number mode. The ratio of males and females in the conventional group was 2: 23, with the age ranging from 19 to 23 years old, and the mean value was  $(21.25 \pm 0.15)$  years old. The proportion of males and females in the experimental group was 1: 24, with the age ranging from 19 to 23 years old, and the mean value was  $(21.21 \pm 0.16)$  years old. There was no significant difference in the general data between the groups, so grouping investigation could be conducted (p > 0.05).

# 1.2 Method

The conventional group adopted the conventional teaching method, and the teachers directly explained the teaching knowledge. In the experimental group, the role-playing situational teaching method was adopted. The students were divided into groups of 8 - 10 persons, the group leader was determined, and the members' ability and interest in this group were basically balanced. The specific methods were as follows.

# 1.2.1 Preparation before class

The objectives and contents of the course, the way of role-playing and the precautions were introduced to the students. According to the teaching content or teaching objectives, clinical cases were selected and representative cases were sorted out. Teachers need to distribute materials to students one week in advance, while students need to inquiry relevant materials and case in groups, and do a good job in role-playing design activities. The leader of each group needs to divide the roles of members in the group, including a nurse, a doctor, a patient and several family members. In the way of role-playing, each student is able to participate.

# 1.2.2 Classroom learning

In the situational simulation mode, the students' knowledge mastery degree and skill operation level were tested. Taking appendicitis patients as an example, it was necessary to make targeted nursing and scientific nursing plan on the basis of comprehensive collection of patient data. Caregivers and physicians needed to examine the patient. At the same time, nursing staff also needed to play the role of psychological counseling, encourage patients, introduce the value of disease treatment, treatment process to patients, and pay attention to the communication between patients and their families.

# 1.2.3 Classroom summary

The teacher needed to organize the students to summarize the role-playing activities in the group and conclude the gains and problems during the role-playing, and so on. The group leader made a

speech on the results of the group discussion, which enabled students to think actively, find problems and enhance their problem-solving ability. After the discussion, the teacher summarized the results, awarded the group with good performance, and put forward suggestions for further situation creation.

#### 1.3 Evaluation standard

The test scores and classroom teaching satisfaction of the two groups were compared.

# 1.4 Statistical processing

SPSS 20.0 software was used as the statistical analysis tool,  $x^2$  was used to calculate the counting data, and the measurement data was tested with two independent samples t. A difference of less than 0.05 was considered to be statistically significant.

# 2. Results

# 2.1 Professional and practical skills test scores of students in the conventional and experimental groups

Compared with students in the conventional group, students in the experimental group had relatively higher scores in professional theory testing and practical skills testing, and the difference was statistically significant (p < 0.05). The details were shown in Table 1.

Table 1 Test results of professional theory and practical skills of students in the conventional group and the experimental group

Group	Professional	theoretical	test	Practical skills test (point)
	(point)			
Experimental group (n=25)	$92.55 \pm 3.11$			$90.16 \pm 3.04$
Conventional group (n=25)	$80.87 \pm 3.16$			$81.46 \pm 2.87$
t	11.33			10.15
_p	0.000			0.000

# 2.2 Comparison of classroom teaching satisfaction rate between conventional group and experimental group

The satisfaction rate of classroom teaching in the conventional group was 80%, and the satisfaction rate of classroom teaching in the experimental group was 96%. The data gap was statistically significant (p<0.05). The details were shown in Table 2.

Table 2 Comparison of satisfaction rate of classroom teaching between conventional group and experimental group

Group	Satisfied (n)	Acceptable (n)	Unsatisfied (n)	Overall satisfaction rate (%)
Experimental group (n=25)	17	8	1	96
Conventional group (n=25)	8	13	5	80
$\mathbf{x}^2$	-	-	-	5.97
p	-	-	-	0.022

#### 3. Discussion

Nursing is a practical and applied subject, and an important index to measure the teaching level of nursing colleges is the students' comprehensive clinical practice ability [18]. Although the surgical nursing education in China has developed for decades and has a set of mature teaching and practical management experience, there are still some problems. The key link to cultivate students'

comprehensive clinical practice ability is clinical practice. However, with the continuous expansion of nursing enrollment scale, nursing clinical practice places with high-quality teaching resources are insufficient. In addition, the social progress and development make patients' awareness of safeguarding their rights and medical ethics continuously enhanced, which to a large extent restricts students' clinical practice. The traditional clinical practice teaching model can't meet the requirements of the comprehensive practice ability of nursing students, so a new teaching method is urgently needed to adapt to and meet the teaching requirements under the new situation. "Student-centered" role-playing situational teaching method is undoubtedly the best choice. Role-playing situational teaching method is to use various advanced technologies to simulate the actual scenes of clinical nursing work [19]. It enables students to practice in high-simulation and risk-free situations, which can basically solve the dilemma of current nursing practice education. The core is to establish a high-simulation work situation, so that students can consolidate theoretical knowledge and improve their professional skills and practical ability through exercises in this situation. After entering the practical work, students can deal with it in an orderly way. The case design of situational teaching is an important step of situational simulation teaching. At present, many teachers in China have adopted the case teaching method, but the case design is mainly completed by the teacher before class, and students don't participate. This kind of teaching method doesn't give full play to students' initiative, which is helpful to improve students' operational ability, but has no significant effect on improving students' comprehensive ability of theory and practice.

Role-playing situational teaching method is a teaching method that simulates the work environment in the classroom and can integrate theoretical knowledge with practical skills [20]. The abstract and theorized knowledge in the textbook becomes more intuitive and visual through the combination of reality, thus maintaining students' interest in learning and enhancing students' learning ability.

The application of role-playing situation teaching method in classroom teaching can make students learn to think in other people's shoes. Through case introduction and role playing, students can truly participate in clinical practice.

The results of this data survey showed that students in the experimental group had relatively high scores in professional theory testing and practical skills testing. Compared with the conventional teaching methods, the application of role-playing situational teaching method can enhance the students' knowledge and skills mastering effect, and has a greater impact on students' future career development. The classroom teaching satisfaction rate of students in the conventional group was 80%, and that of students in the experimental group was 96%. Students generally recognized role-playing situation teaching method, which was of great significance to teaching promotion.

To sum up, the application of role-playing situation teaching method in surgical nursing practice teaching can improve students' professional knowledge acquisition ability and practice level, and students' satisfaction with this teaching method is high, which is suitable for the promotion in teaching.

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