

Application Effect of Informationized Teaching Method Based on Evidence-based Nursing in Surgical Nursing Teaching

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Abstract: Objective: The study was to analyze the application effect of informationized teaching method based on evidence-based nursing in surgical nursing teaching. **Methods:** From December 2019 to December 2020, 60 students were selected as the research objects and randomly divided into two groups, each with 30 students in the teaching group. The observation group applied informationized teaching based on evidence-based nursing method, and the control group used the traditional teaching model. The teaching effect was evaluated. **Results:** The test scores of subjective theoretical knowledge and objective theoretical knowledge of the observation group were significantly higher than those of the control group, and the comprehensive ability evaluation of the observation group was also higher ($P < 0.05$). The majority of students accepted the informationized teaching method based on evidence-based nursing, and a few held a neutral or disapproval attitude. **Conclusion:** Informationized teaching method based on evidence-based nursing can improve students' theoretical and practical levels in surgical nursing teaching, and most students also accept this teaching method, which has application value.

Keywords: Evidence-based nursing; Informationized teaching method; Surgical nursing teaching; Application effect

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Informationized teaching mainly uses modern

educational concepts for teaching, which not only uses information resources, but also makes full use of information technology. The teaching process can be effectively optimized, providing students with effective teaching resources and creating good learning conditions. In surgical nursing teaching, the application of informationized teaching methods can provide students with abundant materials and clinical information. Relying on evidence-based nursing, the use of informationized teaching methods for surgical nursing teaching can enable students to master more effective learning resources, which can make surgical nursing teaching more scientific and can effectively solve the shortcomings of traditional teaching methods^[1]. In this study, 60 nursing students were selected as the research objects, and different teaching methods were adopted. The results were as follows.

1 Research objects and methods

1.1 Research objects

60 nursing students were selected as the research objects from December 2019 to December 2020, and were randomly divided into observation group and control group, with 30 students in each surgical nursing teaching group. Students in the control group were 17-18 years old, with an average age of (17.57 ± 0.50), including 11 males and 19 females; and students in the observation group were 17-18 years old, with an average age of (17.53 ± 0.62), including 10 males and 20 females. There was no significant difference in general information between the two groups of students ($P > 0.05$).

1.2 Methods

The surgical nursing teaching of the students in the control group adopted the traditional teaching method. The teacher arranged the preview content before class for the students, explained related theoretical knowledge, and assigned related homework. The clinical nursing teaching for the students in observation group adopted an informationized teaching method based on evidence-based nursing. The specific content included that teachers provided students with abundant learning materials, and applied multimedia technology to lead the process of explaining theoretical knowledge. Students learned relevant nursing knowledge in the multimedia classroom, so that they could master a wealth of surgical nursing content. Teachers also recommended corresponding websites to students and guided students to learn independently. Students not only needed to understand the course introduction, related teaching methods and teaching progress, etc., but also master the drawing method of the experimental report and clarify the specific assessment content. In addition, teachers also guide students learn to use corresponding databases, such as CNKI, Wanfang Data, and CQVIP, so that students can get rich learning materials. In the specific teaching process, the teaching teacher can follow the following steps to carry out informatized teaching: First, the teachers need to understand the actual situation of the students, and group them according to the students' learning ability and practical ability. Each group is controlled by 4 to 6 students generally. Before explaining relevant knowledge, the teaching teacher need to prepare for teaching design. Both the professional course teachers or the part-time clinical teachers need to actively participate in the design of the teaching plan. The teachers should also use the network platform flexibly, especially the reasonable application of WeChat, email, etc. to assign relevant learning tasks and the content of discussion for students, and guide students to search for relevant literature on this basis. Second, in the process of classroom teaching, teachers should group students,

let students discuss with each other, adopt suitable teaching methods according to the actual situation of students, stimulate students' enthusiasm, use information technology to carry out the explanations of key and difficult knowledge, and use sounds, pictures, and videos stimulate students' multiple senses, which can not only create a good learning atmosphere, but also enable effective discussion among students, thereby improving the efficiency of surgical clinical teaching and teaching. Third, after the clinical teaching task is over, the teachers need to arrange related after-school tasks for the students, arrange related essays according to the specific situation of the students, and divide the students into groups so that the group members can be responsible for their respective tasks and complete simple article writing together. In this way, students can cooperate with each other to find relevant information together. In addition, it is necessary to clearly mark the source of the literature in the literature to indicate the relevant grades of evidence-based nursing evidence.

1.3 Effect evaluation

The test scores of students' subjective theoretical knowledge and objective theoretical knowledge were compared to evaluate students' comprehensive ability.

1.4 Statistical methods

In this study, SPSS software version 20.0 was used for statistical analysis of the research results and data, and the t test was used to analyze the measurement data ($\bar{x} \pm s$). $P < 0.05$ was considered as statistically significant.

2 Results

2.1 Comparison of test scores of students in two groups

The test scores of the subjective theoretical knowledge and the objective theoretical knowledge of the observation group were significantly higher than those of the control group, and the comprehensive ability evaluation of observation group was also relatively higher ($P < 0.05$) (Table 1).

Table 1. Comparison of test scores of students in two groups

groups	case number	test scores of subjective theoretical knowledge	test scores of objective theoretical knowledge	comprehensive ability evaluation
observation group	30	91.06±6.42	91.24±6.25	88.03±6.05
control group	30	85.12±5.08	80.15±5.06	76.23±5.42
value <i>t</i>		3.974	7.554	7.957
value <i>P</i>		0.000	0.000	0.000

2.2 Evaluation of teaching methods by students in the observation group

The majority of students accepted the informationized

teaching method based on evidence-based nursing, and a few held a neutral or disapproval attitude (Table 2).

Table 2. Evaluation of teaching methods by students in the observation group

groups	accept	neutral	against
This teaching method is better than traditional teaching mode	27	2	1
This method enhances the ability to analyze and solve problems	26	3	1
This method improves the ability of independent learning and the literature	28	2	0
This method improves critical thinking ability	25	1	4
This method stimulates interest and enthusiasm for learning	25	2	3
This method promotes teamwork ability	24	3	3
This method improves retrieval level and learning efficiency	26	3	1

3 Discussion

In recent years, with the continuous development of information technology, informatization has made many contributions to social development. In various cities, the network coverage is expanding, and information can even be shared in relevant areas at home and abroad. The construction of network platforms has continued to increase, which to a large extent has improved the transparency of information and promoted the development of evidence-based nursing technology^[3]. Informationized teaching refers to the use of modern information technology and resources for teaching, which can be used in surgical nursing teaching to make reasonable arrangements for related teaching links, providing teachers with abundant teaching resources and enriching sharing channels of teaching resources^[4]. What's more, informationized teaching based on evidence-based nursing can create a better atmosphere and mobilize students' learning enthusiasm, enable nursing students to master a wealth of learning resources and enhance their ability to apply information technology and use the information technology to solve practical problems independently in the future learning. In traditional surgical nursing teaching, the teachers are generally responsible for the formulation of the nursing plan, guiding students to learn relevant theoretical knowledge based on their own experience, and training students' clinical operation ability^[5].

While the informationized teaching based on evidence-based nursing has strict requirements in terms of process. Generally, problems are raised first, and then related problems are solved through various information-based approaches. In surgical nursing teaching, evidence-based nursing technology has been widely used, and multimedia classrooms have also been vigorously constructed in many colleges and universities, which is conducive to the realization of autonomous learning goals for students. Informationized teaching based on evidence-based nursing can provide nursing students with an online learning path, which effectively makes up for the shortcomings of traditional teaching, and makes surgical nursing teaching more interesting that many students can listen more carefully in the class^[6]. Teachers can also ask relevant questions and guide students to use information technology to find answers autonomously, which will not only strengthen students' independent thinking ability, but also cultivate students' hands-on operation ability. When students can master effective retrieval methods, it will be of great help to the expansion of their knowledge^[7]. Both teachers and students can retrieve relevant information and data in databases and websites to obtain abundant resources. Teachers and students can communicate and discuss online without being restricted by time and place, so that students can obtain a reliable evidence-based nursing practice basis, which can help to improve the quality

of surgical nursing teaching^[8]. In addition, under the application of informationized teaching method, teachers can teach students in groups, stimulate students' sense of competition, cultivate students' spirit of cooperation, allow students to discuss with each other and discuss related issues in depth, which can effectively create an active classroom atmosphere and train students' expressive skills, and students can make reasonable use of network resources and continuously optimize their own knowledge structure^[9-10].

In this study, the test scores of subjective theoretical knowledge and objective theoretical knowledge of the observation group were significantly higher than those of the control group, and the comprehensive ability evaluation of the observation group was also higher ($P < 0.05$). The majority of students accepted the informationized teaching method based on evidence-based nursing, and a few held a neutral or disapproval attitude.

In summary, in surgical nursing teaching, the use of informationized teaching methods based on evidence-based nursing can effectively enrich students' professional knowledge, improve students' test scores, and greatly help students' comprehensive ability.

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