

Research on the ability of undergraduate nursing health assessment under the mixed teaching mode

Ji Haixu, Liu Xuyan, Zhang Wenxi

Sanquan College of Xinxiang Medical University, Xinxiang, Henan, China
zhinnng22@163.com

Abstract: *Objective: To study the ability of undergraduate nursing health assessment under the mixed teaching mode. Methods: The health assessment ability of the test group and the control group was analyzed by the analytic hierarchy process. Then add the test of t value and p value to make a significant analysis of the health assessment ability of the test group and the control group. The mixed teaching mode and the traditional teaching mode were used to teach the health assessment ability of the experimental group and the control group respectively. Results: The overall evaluation of the health assessment ability of the experimental group was higher, and the quality of nursing was improved. Conclusion: The use of mixed teaching mode can effectively improve the quality of nursing teaching and plays an important role in the improvement of nursing quality.*

Keywords: *Mixed teaching mode; Undergraduate; Nursing; Health assessment ability*

1. Introduction

Health assessment ability is an important indicator reflecting nursing staff's profession. Through the analysis of the patient's consciousness state, breathing state, circulation state, body temperature state, symptom assessment, physical examination, judgment auxiliary examination, psychosocial assessment, predictive assessment and other dimensions, the assessment of the patient's physical condition can effectively improve the quality of care [1]. For undergraduate nursing students, health assessment ability is a knowledge point in the textbook, and students' cognition of health nursing is low, which affects the quality of nursing. In the process of health assessment, students often become mere formalities and fail to reflect patients' real health problems [2]. The reason for this problem is that nursing students lack practical teaching and rely on the book content, which limits the students' thinking and leads to the reduction of nursing quality.

The health assessment ability of undergraduate nursing students lacks the test of reliability and validity. Only by training the students' health assessment ability, can the quality of nursing be guaranteed [3]. The mixed teaching mode is to combine the online+offline teaching method with the advantages of traditional learning methods and online learning methods. In the process of teaching, teachers should give priority to guiding students' thinking, encourage students to practice, and stimulate students' internal potential [4]. After integrating the mixed teaching mode with the undergraduate nursing specialty, nursing students can learn practical nursing content through the network platform, and apply the practical knowledge learned on the platform to the offline classroom, fully combine knowledge and skills, and maximize the nursing quality of nursing students. Therefore, this paper studies the ability of undergraduate nursing health assessment under the mixed teaching mode.

2. Object and method

2.1. Research object

In this paper, 512 undergraduates majoring in nursing at Grade 2020 of X University were selected as the experimental group and 488 undergraduates majoring in nursing at grade 2021 as the control group to study the health assessment ability of undergraduates majoring in nursing at grade 2020 and undergraduates majoring in nursing at grade 2021.

2.2. Research methods

This study uses the analytic hierarchy process to analyze the health assessment ability of the test group and the control group. The mixed teaching mode is used to teach the health assessment ability of 2020 undergraduate nursing students, and after the teaching is completed, the health assessment ability is evaluated, with the health assessment ability score as the evaluation index [5]. After a 2-week interval, 10 of the 512 students in Grade 20 were selected for re-evaluation to ensure the reliability and validity of the evaluation. After the evaluation of the health assessment ability of the experimental group is completed, the traditional teaching mode is used to teach the health assessment ability of 2021 undergraduate nursing students, and after the teaching is completed, the health assessment ability is evaluated in the same way.

In this study, based on the principles of purpose, comprehensiveness, practicality and science, the scale of health assessment ability of undergraduate nursing students was prepared [6]. After the scale was compiled, it was sent to grade 20 students and grade 21 students' nursing teachers to check and analyze the accuracy of the evaluation indicators of the scale.

In this study, the health assessment indicators in the scale were tested by consistency test. When both CI and CR were less than 0.1, the scale was illogical, and it was retested [7]. The statistical concept of t value and p value was added in this study. The probability of difference occurrence was tested by t value, and the probability of extreme result occurrence was tested by p value. Through the test of t value and p value, the health assessment ability of the test group and the control group was significantly analyzed. In the process of teaching students in 2020, this paper constructs an online and offline teaching mode, as shown in Figure 1 below.

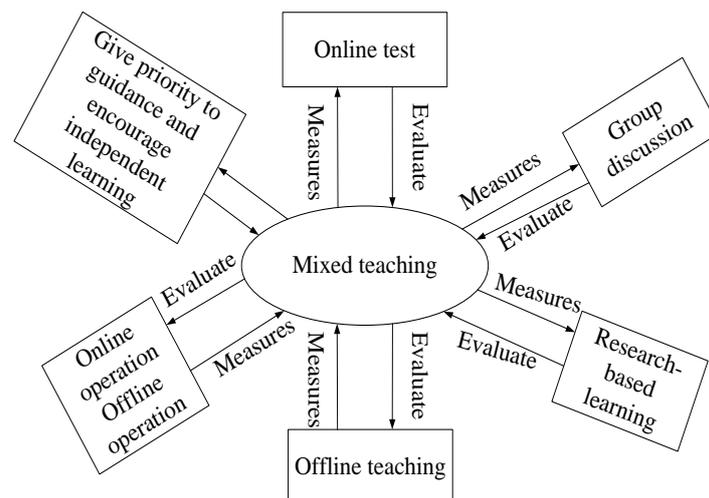


Figure 1: Mixed teaching mode

As shown in Figure 1, this paper adopts the mode of online + offline to upload teaching resources to the teaching platform. The platform resources are presented in the form of audio and video, which greatly attracts students. In addition, bullet screen, contribution and test are used to improve students' learning attention when they inquire teaching resources [8]. After finishing the offline teaching, the teacher divided the students into several groups and asked the students to discuss by themselves. The difficult points in the class were solved within the group. If the students in the group cannot answer it, the group leader will report the difficulty to the teacher, who will answer it in the offline course. At the end of the course, teachers set aside online and offline assignments for students' performance in class to test their learning results. While the teaching of Grade 2021 students will be based on traditional teaching, including pre-class preview, in-class guidance and homework, to ensure the teaching comparison effect of Grade 21 students.

3. Results

In this paper, the ability of health assessment is divided into consciousness, breathing, circulation, body temperature, symptom assessment, physical examination, judgment assistant examination, psychosocial, predictive assessment and other dimensions in the offline teaching, and the learning effect of students is judged in the online test, and the ability of each dimension is scored, as shown in

Table 1 below.

Table 1: Health assessment ability scoring table

Dimension	Health assessment ability score(n=512)	Health assessment ability score(n=488)	T value	P value
State of consciousness	11.2±1.02	9.6±0.87	0.003	0.012
Respiratory state	10.6±0.45	8.7±0.56	0.195	0.017
Cycle state	12.9±0.98	10.0±0.94	0.592	0.016
Body temperature status	9.6±0.69	6.4±0.50	0.050	0.004
Symptom assessment	10.5±1.19	9.2±1.18	0.320	0.011
Physical examination	13.5±2.13	10.0±2.80	0.866	0.035
Judgment auxiliary inspection	11.1±1.17	10.3±1.61	0.031	0.015
Psychosocial	8.1±1.92	5.6±1.72	2.815	0.024
Predictive assessment	11.6±1.17	10.9±1.42	0.283	0.013
General comments	92.1±10.72	70.2±11.60	0.001	0.020

As shown in Table 1, this paper analyzes the health assessment ability of undergraduate nursing students under the condition that *t* value is consistent with *p* value. Small *t* value and large *p* value in the overall evaluation can ensure the real effect of the test. As can be seen from the table, the nursing students in the experimental group had a high degree of grasp of circulation status and physical examination, and scores of other dimensions were all above 8.0 points, and the overall score was 92.1±10.72 points, which was high, which could ensure the teaching and learning effect of students' health assessment ability. While the nursing students in the control group had a higher degree of mastery of auxiliary examination and predictive evaluation, and a lower degree of mastery of body temperature status. The total score was 70.2±11.60 points, which was significantly lower than the total score of the experimental group. It can be seen that the use of hybrid teaching mode can effectively improve the health assessment ability learning of undergraduate nursing students, which plays an important role in improving the nursing quality of students after employment.

4. Discussion

The health assessment ability of undergraduate nursing students is the basis to ensure the quality of nursing. Nursing is different from other disciplines. The patients who are exposed to it usually have various symptoms of unknown causes. If the health assessment ability of the patients cannot be strengthened during the nursing process, it is likely to cause irreparable losses to the patients. According to the above research, after using the mixed teaching mode, the health assessment ability of students in 2020 is significantly higher than that of students in 2021, which indicates that the mixed teaching mode can carry out auxiliary teaching, improve the teaching effect of teachers and promote the learning effect of students. Similar to the launch of "MOOC", "SPOC" and other online teaching platforms, the online+offline teaching mode is more respected, which not only improves the shortcomings of the traditional teaching mode, but also cultivates the ability of students to learn actively. The advantage of online teaching is to adapt to the learning needs of students. As young people, students prefer new things, have greater interest in online teaching platform, and will also increase their interest in nursing.

In this paper, health assessment ability is divided into consciousness state, breathing state, circulation state, body temperature state, symptom assessment, physical examination, judgment auxiliary examination, psychosocial assessment, predictive assessment and other dimensions. Under the test conditions of *t* value and *p* value, it is concluded that the mixed teaching mode of health assessment ability has better teaching effect. After the hybrid teaching mode is used, the preview test can be conducted before class for students in offline teaching, online testing, guided learning, homework, group discussion, research and learning, and the targeted offline teaching can be conducted according to the preview test results, making it easier for students to understand the course content. At the same time, watching nursing science related videos on the online teaching platform, obtaining nursing knowledge from multiple channels, and carrying out nursing practice in offline courses. The process of group discussion is the process of practical training organized by the students themselves. The students in the group form two or two teams to carry out health assessment on each other, and then the teachers carry out health assessment display, so as to ensure that the students can receive dual

teaching in theory and practice. The design of online homework is helpful to test students' pre-class preview, cultivate students' ability to actively evaluate patients, and conduct emotional management on patients' different needs. The design of offline homework is helpful to check the students' learning in class, and analyze the students' grasp of health assessment in the form of theoretical homework test and practical homework test. Research-based learning is to encourage students to participate in nursing practice activities, find out their own shortcomings in practical nursing, and really improve their own nursing quality.

5. Conclusion

In recent years, clinical nursing has put forward higher requirements for nursing quality of nursing staff. Health assessment ability is the main index for nursing staff to judge the health of patients, so it is very important to improve the ability. At present, there are more undergraduate nursing students. As one of the professional courses, the students have a thorough understanding of the theoretical knowledge. Knowledge and skill are different abilities, understanding health assessment theory may not be able to practice. Aiming at the problem that health assessment of undergraduate nursing students is merely formal, this paper studies the subject of health assessment ability of undergraduate nursing students under mixed teaching mode. Through the way of experiment, to test the students' cognition degree of health assessment, really improve the quality of nursing.

Acknowledgements

2020 General project of the 13th Five-Year Plan of Education science of Henan Province: Practice research of six-dimensional integrated teaching model in nursing professional courses during epidemic period, Project Approval Number: 2020YB0386.

References

- [1] CHEN Zhilong, SHI Lei, LIN Mei, et al. Discussion on Model of Theory Teaching Based on Nursing Clinical Thinking Training in the Course of Health Assessment[J]. *China Continuing Medical Education*, 2021, 13(23):105-110.
- [2] Li Huimin, Feng Haixia, Liu Chang, et al. Application effect of objective structured assessment model in nursing postgraduate training[J]. *Journal of Nurses Training*, 2021, 36(13):1187-1190.
- [3] ZHANG Ruixia, LIU Hui, WANG Xiaoling. Effect of Clinical Demand-oriented Project Teaching on Health Assessment Ability of Higher Vocational Nursing Students[J]. *HEALTH VOCATIONAL EDUCATION*, 2021, 39(10):91-93.
- [4] Han Donghong, Qin Qin, Chen Ling, Xie Jinhui. Study on the Application Effect of Situational Teaching Method in Health Assessment Nursing Experimental Teaching Physical Examination[J]. *Heilongjiang Science*, 2020, 11(17):38-39.
- [5] YANG Pingping, CAO Hong, LI Hongmei. Effect of blended learning based on situation simulation in the practical teaching of health assessment[J]. *Journal of Shenyang Medical College*, 2020, 22(03): 281- 284.
- [6] SHAO Qiongjie, HUANG Weidong, ZHANG Min, et al. The Enlightenment of Nursing Undergraduate Training Program Based on the Analysis of Clinical Nurses' Tasks[J]. *Jilin Medical Journal*, 2020, 41(03):766-769.
- [7] YAN Caiyan, ZHANG Runfang, YAN Shengjuan. Investigation on Mental Health Assessment Ability of Nursing Students in the Context of Core Literacy Cultivation and Analysis of Influencing Factors[J]. *Journal of Inner Mongolia Medical University*, 2021, 43(S2):124-126.
- [8] Tan Qin, Zheng Luqing, Wu Jianjun, et al. Application of Situational Teaching Based on Min-CEX Assessment in Clinical Thinking Training of Health Assessment[J]. *HEALTH VOCATIONAL EDUCATION*, 2022, 40(04):65-66.