



Development and Effect Evaluation of Distance Nursing Education Curriculum Based on Information Technology

Yanfei Li¹, Dongmei Chen², Yan Zen¹

¹ Hainan Vocational University of Science and Technology, Haikou 571126, Hainan, China

² Hainan Cancer Hospital, Haikou 570312, Hainan, China

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Abstract: In today's digital age, information technology has a profound impact on the field of education, distance nursing education came into being. With the continuous progress of medical technology and the growing demand for nursing services, nursing staff need to continuously update their knowledge and skills. The traditional nursing education model is limited by time and space, which is difficult to meet the learning needs of the majority of nursing staff. Information technology provides a new opportunity for distance nursing education, which can break through the limitation of region and time, and make nursing education resources more widely spread and shared.

Keywords: information technology; development of distance nursing education course; effect evaluation; suggestions for improvement

1. Introduction

With the rapid development of information technology, distance nursing education has become an important way to improve the quality of nursing staff. Pass selection of appropriate information platform, such as online learning platform and mobile applied program, the use of multimedia resources to enhance the intuitiveness and interest of the course. Establish Standard for student recruitment and grouping, and set up learning support team. After the implementation of the course, it will be evaluated in terms of knowledge mastery, skill improvement, attitude change, career ability development and satisfaction. Based on the evaluation result, the paper puts forward some suggestions for course improvement, including optimizing content, adjusting teaching method and strengthening learning support, aiming at improving the quality of distance nursing education to meet the development needs of modern nursing industry.

2. Development of distance nursing education curriculum based on information technology

2.1 Demand analysis

For primary nursing staff, in the scenarios, students need to master basic nursing operation knowledge and skills, such as vital signs measurement, injection, etc. In the community, they need the knowledge of disease prevention and health education; Simple rehabilitation nursing knowledge should be understood in home nursing scenarios. Intermediate nursing staff, hospital needs specialized nursing knowledge and emergency skills; Chronic disease management skills are required for community work; Home nursing should be able to provide complex rehabilitation guidance. Senior nursing staff, hospital needs to master nursing management, scientific research ability; Community should be able to plan nursing service system; Home care should be able to guide the nursing team. Nursing education resources existing shortcomings, such as the lack of the system training for different scene, more focus on hospital care; Slow updating of emerging nursing technologies and concepts; Advanced sex education content in different levels of nursing staff cohesion is not close, the developing direction for course, should pay attention to the scene, the hierarchical, frontier.

2.2 Setting of curriculum objectives

Improve the comprehensive professional quality of nursing staff in different working scenarios, so that they can adapt to modern nursing needs. Enhance clinical nursing capacity to ensure the provision of high quality nursing services; Enhancing nursing management capabilities to optimize the efficiency of nursing teams; Strengthen the ability of information applied to keep pace with the development of medical information. In terms of clinical nursing, master the nursing points of common diseases (such as cardiovascular diseases, diabetes, etc.), and be skilled in nursing norms such as venipuncture and catheterization. In nursing management, learn personnel scheduling, resource allocation, quality control and other skills.

In the applied of information, skilled use of electronic medical record system, remote medical equipment, master nursing information retrieval and analyzed. At the same time, in-depth understanding of nursing ethics and legal knowledge, in the work to protect the rights and interests of patients and regulate their own behavior.

2.3 Course content design

Anatomical knowledge is helpful for nurses to accurately understand the structure of the human body and avoid damage to important tissues and organs during operations such as injection and intubation. Physiological knowledge allows nursing staff to understand the normal function of the body, so that they can be sensitive to the abnormal physiological indicators of patients. Pathological knowledge can help nurses to analyzed the occurrence and development of diseases and provide basis for nursing measures. The nursing of common diseases includes the key points of daily nursing for chronic diseases such as hypertension and diabetes. First aid nursing, such as cardiopulmonary resuscitation, hemostatic dressing and other skills, to save the patient's life in an emergency. Specialized nursing is for the nursing needs of special departments such as obstetrics and gynecology and pediatrics. Nursing team management involved in personnel training, team motivation and so on. Quality management ensures that nursing services meet Standard, such as the development of nursing quality assessment indicators. Resource allocation should reasonably arrange human and material resources to improve nursing efficiency. Electronic medical record management is convenient for nurses to accurately record and quickly query patient information. Remote medical equipment operation can realize remote monitoring of patients' conditions. The applied of nursing information system is helpful to the information flow management of nursing work. Nursing staff should have empathy and other humanistic qualities, when communicating with patients and their families, can patiently listen, clearly explain the condition and nursing measures, establish a good nursery-patient relationship, improve patient satisfaction.

2.4 Application of information technology

The online learning platform has comprehensive functions and features such as course classification management and learning progress tracking. It is suitable for the study of systematic courses and convenient for teachers to manage teaching resources and students' learning. Mobile learning application has convenience, can learn anytime and anywhere. It is easy to operate and is suitable for fragmented learning needs. The video can dynamically show the nursing operation process, such as the operation cooperation process, and visually show the operation steps. Animation can concretize abstract knowledge, such as explaining physiological mechanisms and vividly showing cell activity.

3. Analysis of the implementation of distance nursing education curriculum based on information technology

Teachers play a central role in the learning support team. Students have deep nursing expertise and are able to provide students with comprehensive learning guidance. In terms of curriculum content, teachers can in detail key points of nursing knowledge, such as a key link in the process of specific disease nursing, specification steps of the nursing operation, etc. For students' questions, teachers can give accurate answers based on their rich teaching and clinical experience. At the same time, teachers can guide students to think deeply about, such as in the case analysis to help students thoughts together, improve the ability of solving practical problems. Technicians are responsible for providing technical support. In the information-based distance nursing education, technicians ensure the stable operation of online learning platforms, mobile applied procedure, etc. If students encounter technical problems such as video playback delays and inability to submit testing answers, technicians can troubleshoot and solve the problem in time. Students can also according to teaching demand, optimize the multimedia resources, such as adjusting the animation of clarity, ensuring the smoothness of VR/AR scene, ensuring students have good learning experience.

4. Evaluation of the effect of distance nursing education course based on information technology

Through the theoretical testing before and after course, it is found that most of the students have significantly improved their mastery of nursing knowledge. Disease, for example, the knowledge of nursing, the original pass rate was 60%, up to 80% after course, shows that students on the course content has good absorption. The skills assessment displayed that the students had made great progress in their first aid nursing skills. For example, the correct rate of cardiopulmonary resuscitation operation, which was only 50% before, reached 70% after learning, and the proficiency and standardization of nursing operations for common diseases have also obvious improved. The questionnaire survey shows that the students' attitude towards information-based nursing has changed from the initial suspicion to positive acceptance, and 80% of the

students believe that information-based technology is of great help to nursing work. In terms of nursing management ability, many students said that they could better deploy personnel and manage resources. The overall satisfaction is high, about 70% of the students are satisfied with the course content, teaching method and learning support, which provides the direction for course improvement.

5. Suggestions for course improvement based on information technology

Adjust content according to the needs of different levels of nursing staff. For primary nursing staff, the detailed explanation and practice of basic nursing operations should be added; For intermediate nursing staff, the depth and breadth of specialized nursing knowledge should be emphasized; Senior nursing staff strengthen nursing management and scientific research content. Timely incorporation of the latest nursing concepts, technologies and research results. For example, incorporating emerging wound care techniques and the latest guidelines on disease management into the curriculum. Break down the barriers between modules such as basic nursing knowledge, clinical nursing skills, and management. For example, when explaining disease nursing, the applied of basic knowledge such as anatomy and physiology is integrated to make the knowledge system more coherent. More practical nursing cases under different scenarios will be added to improve students' analyzed and problem solving ability, so that the scenarios of the course can be closer to the actual work needs.

6. Conclusion

In conclusion, this study has successfully developed a distance nursing education course based on information technology, and its effect has been comprehensively evaluated. Through the demand analysis in the process of curriculum development, aim and module Settings, platform selection, resource utilization and student groups, constructed a relatively remote nursing education curriculum system of the system. In the aspect of effect evaluation, it shows the influence of the course on the students from many dimensions, including the improvement of knowledge mastery, the effective improvement of skills, the positive change of attitude, the development of professional ability and the high satisfaction. The future through these efforts, is expected to further enhance the quality of the remote nursing education, to cultivate high-quality nursing talents to make greater contribution.

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