

Exploration on the Application Effect of Virtual Simulation Training in Basic Nursing Teaching

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Abstract: Compared with the traditional teaching and clinical skills training methods, virtual simulation training is a new practical teaching mode, which can reflect the characteristics of the specialty itself and the nature of the discipline. Virtual simulation training has many advantages in basic nursing teaching, which is helpful to cultivate clinical thinking skills and professional learning ability. Virtual simulation training is mainly based on computer technology as the core of the teaching, which can guarantee the virtual relief of hearing, visual and tactile blending, allowing students to have a strong sense of reality, experience, and effective protection of reality and virtual fusion training. Introducing this high-tech technology into nursing teaching can help to stimulate students' individual motivation and interest, and enhance the fun and heart of the classroom. Ensure the teaching effect can be improved to promote the updating and transformation of basic nursing teaching mode. This paper mainly explores the application progress of virtual simulation training in basic nursing, and understands the effect of virtual simulation training in basic nursing teaching.

1. Introduction

Internet technology can easily process images and ensure the reproducibility of graphics. The application of virtual simulation training in basic nursing teaching is to use Internet technology to enable students to create a realistic environment for them from the perspective of hearing, vision and touch, so that students can improve the quality of teaching in the process of actual operation. Compared with Japan, the United States, and European countries, China's virtual simulation training application started late in teaching. At present, China's virtual simulation training is still in its infancy in basic nursing teaching, so virtual simulation in the application of teaching There are still many problems in training.

2. General Situation of Virtual Simulation Training

Virtual simulation training is a virtual environment built using Internet technology. In such an environment, a three-dimensional environment such as touch, vision and hearing is established, allowing students to experience more realistic learning in a realistic environment. In the virtual simulation training, you can create more rich content for teaching, such as architecture, pictures, characters and texts [1,2]. Students can log in through the virtual simulation training system during daily study. In the system, they need to learn the theory and actual operation. Students can open the operation of the computer mouse. They can freely perform the system on the virtual scene and follow the instructions issued by the system. Learning tasks. Collaborative, interdisciplinary medical learning in virtualized simulation training in educational workplaces has gone beyond traditional clinical medical education to expand into related fields such as health sciences and biomedical engineering. With the development of this method in medical practice, the popularization of virtual simulation training in medical education and organization has made it a new way of medical education, effectively improving the quality of medical students' learning and self-learning ability [3]. UNITY engine is mainly used in virtual simulation training, which can guarantee a more scientific and realistic system for real three scenes. In addition, the system uses data statistics, animation, real common, text and dialogue simulation functions and content, which can better achieve the update and extension of the system content. The virtual simulation system

mainly takes the campus network as a platform, and students and teachers login through accounts and passwords [4]. According to the teaching objectives, nursing blood teaching and teaching content, the system task content atmosphere at different levels, mainly at the first, second and third levels of atmosphere. Apply drag and click and other methods to achieve the movement of objects. Each level of tasks can complete the fixed practice, and set the corresponding reward mechanism. The explosion will involve the students in the training and learning, and the students will complete the tasks one by one, and cannot be overstepped. Complete the training. The first level is mainly to learn the training content, such as the basic operation of oxygen inhalation, infusion, etc.; the second level training content learning is mainly the mastery of the basic operation combined operation; the third level training content learning mainly includes different The mastery and application of nursing operations, nursing students are well prepared in clinical practice and internship.

3. Analysis of Advantages of Virtual Simulation Training in Basic Nursing Teaching

3.1 Students' interest in learning can be enhanced and their self-learning ability can be effectively trained.

At present, in the basic nursing teaching in China, students have little time to contact the clinic. The virtual simulation training is added to the curriculum, and students can apply the knowledge they have learned in the classroom to the operation in time. When the virtual simulation training completes the teaching task, the individual's individual learning challenge desire can be stimulated, so that the student can guarantee the self-learning ability to be further improved. The application of virtual simulation training in the virtual environment of teaching allows students to study in different environments, which can ensure that students bring their own identity and let them actively learn and practice as “nurses”. After this kind of operation practice, it can effectively guarantee the interest of learning and further stimulate [5]. At present, the implementation of virtual simulation training in medical schools has been quite extensive. Virtual simulation training motivates students to learn and generate ideas on their own, and to relay their basic care and clinical knowledge, nursing skills and behaviors to become a qualified clinical nurse. In the virtual simulation training course, sufficient availability of learning resources, student-centered learning methods, and challenging questions were presented based on actual conditions. Virtual simulation training has four key principles, including situational learning, operation processing, cooperative learning and self-determination. Modern educational theory holds that the ideal teaching method is conducive to students' critical thinking, knowledge acquisition, practical skills and lifelong professional learning. Different from traditional teaching methods, virtual simulation training is a student-centered teaching method. There are many advantages in combining virtual simulation training with clinical scene. It places professional knowledge in clinical environment and allows students to obtain information from a wide range of perspectives. Through practice and study under the guidance of tutors, students can also help to cultivate their clinical thinking and professional learning [6].

3.2 In practice, students can effectively apply theoretical knowledge to it, and make professional theory into clinical practice

The application of relevant knowledge in basic nursing teaching can not only grasp the professional theoretical knowledge of nursing, but also pay special attention to the practical operation of the major. But in the operation, we need to ensure that his can be skilled in the use of theoretical knowledge, and theoretical knowledge can be repeatedly applied in the actual operation, so that students can be more skilled in the use of professional theory and operation. Because of the condition of running a school and the problem of curriculum setting, students can not repeatedly carry out practical operations. Virtual simulation teaching can make students better use of operational exercises. During the exercises, students can consolidate their professional knowledge. Students can change their external professional theoretical knowledge into practical practical ability

through virtual simulation [7]. Virtual simulation training is superior to traditional teaching method in both theory and practice. Many research results are consistent with the latest research results of pharmacy, pediatrics, physical diagnostics, dental education, basic nursing and other disciplines in China. First, the virtual simulation training teaching mode is a novel teaching mode for most medical students in China, because it has not been exposed to it since the beginning of a small education. Their learning interests can be more easily and strongly inspired by the virtual simulation training method, which helps to promote the knowledge learning process. Second, unlike other subjects, most of the problems and specialization of virtual simulation training allow different imaging modalities to be taught in a comprehensive clinical setting. Third, virtual simulation training encourages students to apply knowledge to solve practical problems. Compared with traditional teaching methods, the advantages of virtual simulation training in clinical skills are more obvious.

3.3 In the teaching of basic nursing, the quality of teaching can be further improved

In the basic nursing teaching, virtual simulation training is added, and the traditional classroom knowledge teaching is reformed. Students do not want to be indoctrinated with knowledge. Virtual simulation training can improve the rigid and tedious teaching atmosphere in traditional classroom and make the knowledge learning in classroom more interesting. It is very helpful for students to understand and consolidate their professional knowledge, and can guarantee students' reality. In practice, we should strengthen the memory of theoretical knowledge so that students can keep in touch with each other repeatedly, so as to further improve the quality of teaching. In addition to improving knowledge and skills, virtual simulation training can improve students' interest, knowledge, self-learning, practical operation, clinical thinking and verbal expression in a better physical and mental state [8]. Unlike traditional teaching-based learning methods, virtual simulation training is well known for inspiring learning interests and improving operational skills. The traditional teaching method makes students rely on passive acceptance of knowledge. In contrast, the virtual simulation training method makes students learn constructive and energetic.

4. Relevant Problems of Virtual Simulation Training in Basic Nursing Teaching

Although virtual simulation training has many of the above advantages, it is not easy to widely apply virtual simulation training in basic nursing teaching in China. Most of the time in China using virtual simulation training is less than 50% of the total clinical time, so it is necessary to balance the positive role of virtual simulation training with the cost of teaching time and resources [9]. In the basic nursing teaching, students apply virtual simulation training, and it is easy to follow the instructions issued by the system. It is easy for students to operate without deep thinking. In the long-term, students are prone to inconsistency in the process of learning. It will be forgotten shortly after the operation. Students use virtual simulation exercises to carry out basic nursing learning. This model environment is mainly built by Internet technology. Under this environment, students carry out professional learning. This makes students easily feel empty about the knowledge they have learned, which reduces the students' learning initiative in the practice operation [10]. In addition, in the process of learning basic nursing knowledge, everyone's living environment is very different. There are great differences between students with different personalities in learning and mastering ability. There is no platform in the virtual simulation teaching system, which can not meet the targeted training of students.

5. Conclusion

Virtual simulation training can effectively enhance students' interest in learning knowledge, effectively protect students' interest and desire for professional operation knowledge, to a large extent, guarantee the improvement and progress of students' performance, and let students feel that learning is applied. Through the virtual simulation training application, the professional students are guaranteed to apply the theoretical knowledge in practice, and the practice is modified according to

the actual situation.

References

- [1] Zhang Yong, He Zhi, Ding Peijie, et al. Application of virtual simulation technology and micro-course in practical teaching of biochemistry test in Higher Vocational Colleges [J]. Health vocational education, 2019, 37 (09): 117-119.
- [2] Mojiaqing. Practical research on experimental teaching of network engineering core course based on virtual simulation platform [J]. Information technology and informatization, 2019 (04): 94-96.
- [3] Wang Dongmiao, Gong Yanhong, Lu Xiaoqing, et al. Application of digital virtual simulation dental training system in dental pre-clinical skills training [J]. Medical teaching research in Universities (electronic version), 2019, 9 (01): 25-30.
- [4] Xu Xiequn, Hua Su-rong, Li Qi, et al. Comparison of the effect of virtual reality and simulation training box in the training of basic laparoscopic skills of medical students [J]. Basic Medicine and Clinical, 2018, 38(11): 1657-1660.
- [5] Hou Yang, Liang Lei, Lin Yanping, et al. Application of virtual surgery training system based on force feedback in clinical teaching of orthopaedic residents [J]. Journal of Spinal Surgery, 2018, 16 (05): 293-296.
- [6] Jiang Weirong, Tan Qiulian. Application and experience of scenario simulation teaching of high simulation model in intensive training of medical students in Higher Vocational Colleges [J]. Health Vocational Education, 2018, 36 (19): 99-100.
- [7] Sun Dalei, Ma Hong, Li Xiaobing, et al. [J] Analysis of the effect of training using medical simulators and simulated skull models in clinical teaching of children's stomatology [J]. Journal of Xinjiang Medical University, 2018, 41 (08): 1051-1053+1056.
- [8] Shi Jianguang, Chen Huajiang, Yuan Wen, et al. Application and Prospect of virtual surgery simulation in teaching, training and operation training of spinal surgeons [J]. Journal of Spinal Surgery, 2018, 16 (03): 174-178.
- [9] Chen Li, Nie Yongsheng, Li Jiajing, et al. Application of virtual simulation technology in diagnostic thinking training in experimental teaching of diagnostics [J]. Basic Medical Forum, 2018, 22(16): 2289-2290.
- [10] Zhang Hui. Development and application of nursing virtual simulation training system [J]. Computer products and circulation, 2018, 06 (03): 115.