Chapter 3

Teaching Methods in Nursing and Teaching of Nursing Practices 8

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Abstract

Today, there are different researches on its use in nursing teaching and practice areas. It has been determined that collaborative teaching methods have more positive effects in the field of nursing instead of traditional teaching methods. The most appropriate method should be chosen for nursing students to learn from a critical perspective and to use interactive and effective communication skills. Not only in nursing undergraduate programmes but also in nursing postgraduate programmes, it is important to prefer methods that direct students to learn, support them to take responsibility and develop rational skills. Therefore, in this article, teaching methods in the field of nursing and teaching in nursing practice are discussed.

1.INTRODUCTION

The World Health Organisation (WHO), in its "Nurse Educator Core Competencies" report, recommends that nurse academicians facilitate learning and rationalise learning outcomes in the education and training process. On the other hand, it recommends that they use appropriate information technologies by selecting appropriate materials and encourages individualised experiential learning. Nurse academics have assumed an important role in providing better health services to the society, creating a better learning space for nurses, implementing modern changes in the education of students, and preparing students as nurses who will manage change and improve health. In this context, in the report of the American Institute of Medicine (IOM) on "The Future of Nursing", it is stated that nurses have an important role in changing the health system to manage change and promote health, as they are at the forefront of health care (Wakefield et al., 2015; WHO, 2016).

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In our country, the Nursing National Core Education Programme (NNCEP) was prepared in 2014 by a commission appointed by the Higher Education Council and evaluations related to nursing education were discussed. The core programme basically aimed to establish certain standards of nursing undergraduate education. In line with the established standards, lifelong learning, effective communication, use of technological products in the clinical field, development of analytical and critical thinking skills of undergraduate students were considered important. In the core programme, while developing nursing education programmes, it is stated that the most appropriate teaching methods and techniques should be used in a way to support each other in order to gain competencies for knowledge, skills and attitudes, and that several teaching methods should be used together instead of a single teaching method (NNCEP, 2021).

Today, developments in the field of science and technology have made many changes visible in areas related to knowledge. Many innovations related to the production, transfer and use of knowledge have affected the field of health as well as other disciplines. The innovations that have occurred have also affected the health care system and therefore nursing, which constitutes the majority of the health field. Therefore, the need for professional nurses who can adapt to changes and provide effective care is increasing day by day. Professional nurses need to maintain their learning and intellectual abilities simultaneously while fulfilling their roles and responsibilities (Sarmasoğlu et al., 2016). For this reason, education programmes that will enable students to actively participate in the learning-teaching process instead of a rotebased undergraduate education are important. In the education process of undergraduate and graduate students, the use of active learning strategies that guide students to learn, enable them to take responsibility, develop their thinking skills and motivate them will positively affect the quality of learning (Kangas-Niemi et al., 2018; Filiz et al., 2017).

Nursing, which is an important discipline in the health care system, should be considered in terms of teaching methods and techniques. A nursing education that includes affective, cognitive and psychomotor learning areas should be at a quality and level that will provide students with the contemporary roles required by the profession. Cognitive area consists of stages such as applying new information and solving problems based on the student's learning at the level of understanding. These stages include knowledge, comprehension, application, analysis, synthesis and critical evaluation. In order for students to gain professional skills and learn effectively, it is essential to use appropriate teaching strategies and methods for all these processes (Dalton et al., 2015). In addition to the theoretical education they receive, nursing students implement care plans by addressing the health problems of patients in clinical practice areas. However, students have difficulty in applying the theoretical education they receive in clinical areas. Therefore, nursing students need to transfer the knowledge gained from didactic education to practice in order to make important clinical decisions in optimal patient care. In this direction, teaching methods come to the fore in nursing education. Innovative teaching strategies are important for standardising nursing education, following innovations, and preparing future nurses for clinical practice areas (Njie-Carr et al., 2017).

2. Teaching Methods in Nursing

2.1. Traditional Learning Methods in Nursing

In the traditional, also known as classical teaching model, the student is more in the role of an individual without participation. Instead of presenting their ideas, the student receives theoretical education in line with the information provided by the academic nurses. The information conveyed by the instructor is certain and unchanging. There is no need for reasoning in the presentation of information, it is ready to be memorised. The instructor is an authority, has a say in his/her field and it is not possible for a student to add anything new to his/her knowledge. Group members take responsibility only for themselves. They focus on individual performance. There is only individual assessability. When assignments are discussed, students do not care much about each other's learning. Teamwork skills are sloppy. Leadership is formed depending on individual participation. Individual achievements are important in rewarding the result, not the achievements of the group. Traditional teaching method in nursing education is mainly used in the theoretical part (Sheikhaboumasoudi et al., 2018; Yılmaz, 2017).

2.2. Collaborative Learning Methods in Nursing

Co-operative learning method is a method created by John Dewey in 1899 against traditional learning that reveals competitive learning. The cooperative learning method, the main founders of which are J. Dewey and Vygotsky, in which students' communication and interaction with each other have an important place, is related to Vygotsky's social constructivism theory. Social constructivism theory focuses on the social dimension of learning and according to the theory, learning is a social activity based on interaction in the classroom environment (Astra et al., 2015).

Educational programmes in which the student actively participates in the learning and teaching process are very important instead of the instructor-

centred and rote-based education of traditional teaching methods. Cooperative learning provides nursing students with opportunities to learn and practice cooperation and helps to improve students' professional knowledge and skill performance as well as academic success, problem solving, critical thinking and interpersonal skills and helps to create quality health care (Karasu et al., 2020). Different studies conducted with students studying in both nursing and other sciences reveal that collaborative learning increases students' success levels, increases their critical thinking and problem solving skills, comprehension and recall levels, learning motivation and social skills as it provides the opportunity to explain their own thoughts and pay attention to the thoughts of others (Yang et al., 2018). In the cooperative learning method, Jigsaw Technique and Flipped Learning Model are mainly used.

2.2.1 Jigsaw Technique in Nursing Teaching

The jigsaw technique, developed by Eliot Aronson in 1978, was created to support co-operation by enabling individuals to communicate with each other. In this technique, each student learns a part of the subject instead of the whole subject and transfers it to their friends (Filiz 2017; Yılmaz 2017). Students research in dialogue with other group members to learn the whole subject and contribute more to each other's success. Working in co-operation instead of competing with peers or working independently enables students to develop high self-esteem. Many sub-techniques of the co-operative learning method have been developed to ensure students' active participation in research. Although the basic philosophy on which the Jigsaw techniques are based is the same, there are some differences in applications (Melinamani et al., 2017).

2.2.2 Flipped Learning Model in Nursing Education

This method is an integrated teaching method that combines online (nonclassroom) learning and face-to-face (classroom) learning techniques. The flipped learning model was first introduced in the literature in 2007 when two chemistry teachers at Woodland High School, Jonathan Bergman and Aaron Sams, produced a software to record powerpoint presentations and to enable students who missed the lecture to record their live lectures and study online (Bergman et al., 2012). In the classical learning method, the student learns the theoretical part of the course or subject from the instructor in the classroom. Then, he/she can make a few short applications as time permits. When the student goes home, he/she struggles alone with the lessons and comprehension. This situation decreases the academic success of the student. In the flipped learning method, students can watch the lecture recorded by

the instructor on videos. This method is seen as a suitable method for nursing students because it encourages dynamic, interactive learning, uses active learning methods, provides both individual learning and group learning and takes the student as the centre. In this method, the course topics are recorded by the instructor and the information is presented to the students in digital environment. The instructor actually guides the students in the lesson. Therefore, students can find answers to their questions by realising their own learning experiences. It is seen as a suitable method for nursing students because it encourages dynamic, interactive learning, uses active learning methods, provides both individual learning and group learning, and takes the student as the centre (Gillispie, 2016). The method enables students to use innovative online resources and research the topic before coming to class. Educators and students use their time in the classroom to create, solve and criticise problems in a dynamic and engaging environment. Thus, it enables students to have critical thinking skills, learn, reason and apply current research results. This educational atmosphere is in harmony with nursing education, as students need to be able to think critically about patient symptoms and intervene in a short time (Njie-Carr et al., 2017; Nishigawa et al., 2017; Hessler 2016).

The Importance and Necessity of Cooperative Learning Method for Nursing Education

In nursing education using traditional learning methods, theoretical and clinical education is considered sufficient for students to acquire knowledge and skills, and this process leads students to competitive behaviours. Students who grow up in this system graduate without being able to experience the process of co-operation with each other and other professional members. Therefore, graduates who are expected to work and collaborate in a multidisciplinary way in their working life are inadequate in collaborating in a team because they lack this skill. Studies on this subject reveal that while health professionals, whose common goal is to provide quality health care as a team, are expected to be able to share their knowledge and skills with each other, the physician is seen as the leader in the clinical field and nurses are seen as the implementer of the decisions made dependent on the physician (Zhang & Cui, 2018).

Outcomes of Collaborative Learning Method in Nursing Education

The cooperative learning method, which is necessary and important for both nursing and other health professionals, reveals effective results in

academic, social, psychological and measurement-assessment dimensions. In academic terms, it supports students' critical thinking, verbal communication, taking responsibility for learning, and maximising their knowledge; in social terms, it supports students' social interactions, ability to take responsibility, leadership and cooperation skills; in psychological terms, it supports their self-esteem development; and in terms of measurement and evaluation, it provides instant feedback to the student by including various evaluation techniques (McWilliams et al., 2017; Bayrakçeken, 2015).

In Saunders, Say, Visentin, and McCann's (2019) study, the collaborative learning method was used within the scope of objective structured clinical exams used to evaluate students' capacity to perform certain behaviours and skills in simulated clinical environments in undergraduate nursing education. As a result of the study, 60.4% of the students stated that they were satisfied with the clinical exam practice with another student, and 43.3% stated that they had more practical applications because they had a partner with them. In addition, in line with the feedback received from the students regarding the collaborative practice, it was determined that collaborative practice increases motivation, reduces anxiety, creates a sense of responsibility towards the partner, improves teamwork skills, performance and communication skills (Saunders et al., 2019).

2.3. Simulation Learning Model in Nursing Education

Nursing is a profession in which cognitive, psychomotor and behavioural skills should be acquired. Psychomotor skills in nursing are coordinated muscle activities guided by conscious mental activity used during the performance of a job. For a conscious mental activity, the student must wonder, learn and apply how to solve the problem faced by the student. The place where psychomotor skills are learnt in nursing education is the professional skills laboratory. These laboratories are generally environments in which learning takes place with teaching methods such as demonstration and role play by using tools such as mannequins and models traditionally, which are in a reliable, controlled structure, where students do not worry about harming the patient and where applications that are limited to be experienced in the clinical environment can also be performed (Uslusoy, 2018; Sezer et al., 2017).

With the developing technology, the use and development of new learning tools in nursing education has also increased. These developments in technology and education have led to the widespread use of simulation applications and tools, which are one of the reliable training methods

that are widely used in nursing education to increase technical and nontechnical skills. It is known that different simulation applications are used in nursing education in accordance with the learning objective. These simulation applications include low-high-featured simulators, interactive patient simulators, video, simulation software, computer-based simulation and virtual reality and haptic simulation applications Simulation can be defined as a continuum from low-quality simulation (LFS) to high-quality simulation (HFS) (Kim et al., 2016).

2.4. Mobile Learning in Nursing Education

With the change in information and communication technologies, learning methods are also changing. One of the new and fastest growing learning models is mobile learning. Mobile learning is generally defined as a learning environment where students and instructors can access the learning system using mobile devices over a wireless network at any time, anywhere. Mobile learning is defined as learning that provides the opportunity to access educational content without being tied to the location, enables communication with others, responds to the individual needs of the user, and increases productivity. In simpler terms, it can be defined as "learning without a fixed place", "mobile technology, mobile phone". The use of mobile learning in nursing education is increasing day by day. However, there is no clear information about the number of schools using mobile devices in nursing education (Keskin et al., 2015; Tekdal et al., 2016). In nursing education, instructors use mobile devices to complete physical assessments, keep records of student assignments and checklists, and document student progress on-site. Another educational tool used on mobile devices is podcasts, i.e. e-recordings. Students reported that they learn better when they hear learning materials more than once and that course podcasts help them retain information. In nursing education, smart device applications can be used effectively for many purposes such as drug dose calculations, drug information, interpretation of laboratory results; however, the use of mobile technology in today's nursing education is not a common practice. It is clearly seen that mobile technology will shift from instructor-oriented teaching to student-oriented teaching. Mobile devices facilitate nursing students' access to evidence-based nursing databases, guidelines, drug guides, e-books and applications in undergraduate programmes, facilitating an important step in evidence-based nursing practices (Şahin et al., 2017).

When we look at the studies conducted with lecturers related to m-learning in nursing education; In the qualitative study of mobile technology in clinical education conducted by Mackay et al. (2017), it was concluded that the use

of mobile devices can have a positive effect on teaching practices (Mackay et al. 2017). In the study conducted by Hay et al. (2017) with undergraduate nursing students; it was shown that students use mobile technology and social media to learn and are willing to continue this in the undergraduate programme (Hay et al., 2017).

CONCLUSION

Teaching methods in nursing have been emphasised in recent years. In particular, classical learning methods have been replaced by more up-to-date and student-centred learning methods. It has been determined that studentcentred collaborative learning methods such as Jigsaw Technique, Flipped Learning Model are more effective. In addition, simulation learning model, mobile learning model are also seen as effective methods that can be used in teaching in nursing.

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