

Modern nursing training

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Abstract. Nursing is a science, an art and a profession. The competencies, abilities, as well as the psycho-motor, cognitive and relational skills necessary for the nursing practice are conveyed and improved by the nursing teachers’ art of teaching. They must select and use the teaching methods which shape the personalities of the trainers or students, enabling them to provide individualized, personalized care in real-world context of health problems. In the “Fundeni” Sanitary Post High-school the nursing teachers pay special attention to the professional development of the students, while also focusing on the skills needed for the nursing practice of the care process. The methods and strategies used by us are aimed at communicating and exploring the patients’ health problems, as well as selecting the proper ways to solve them. Among them are different variants of the case studies, role plays, tours or visits to different locations, the Philips 6/6 method, the Frisco method, the communication experiment method (“Communication with the patient”). During the partnership proposed to the students, the nursing teacher provides them with the chance to form their character and personality, in order to achieve the objectives of professional training.

Keywords: nursing, competencies, abilities, teaching methods, case studies, role plays.

1 INTRODUCTION

The “Fundeni” Sanitary Post High-school in Bucharest was founded in 1950 and is now the most important public education institution in the domain of nursing training.

By definition, **nursing** means **caring**. It is a profession within the health care sector focused on the care of individuals, families and communities so they may attain, maintain or recover optimal health and quality of life. However, there is a subtle difference between the two: nursing is widely considered as an art and a science, wherein caring forms the theoretical framework of nursing. Nursing and caring are grounded in a relational understanding, unity, and connection between the professional nurse and the patient. Task-oriented approaches challenge nurses in keeping care in nursing. This challenge is on-going as professional nurses strive to maintain the concept, art, and act of caring as the moral centre of the nursing profession. Keeping the care in nursing involves the application of art and science through theoretical concepts, scientific research, conscious commitment to the art of caring as an identity of nursing, and purposeful efforts to include caring behaviours during each nurse-patient interaction. The competencies, abilities, as well as the psycho-motor, cognitive and relational skills necessary for the nursing practice are conveyed and improved by the nursing

teachers' art of teaching. They must select and use the teaching methods which shape the personalities of the trainers or students, enabling them to provide individualized, personalized care in real-world context of health problems.

In the Post-secondary Healthcare School "Fundeni" the nursing teachers pay special attention to the professional development of the students, while also focusing on the skills needed for the nursing practice of the care process.

The methods and strategies used by us are aimed at communicating and exploring the patients' health problems, as well as selecting the proper ways to solve them. Among them are different variants of the case studies, role plays, tours or visits to different locations, the Philips 6/6 method, the Frisco method, the communication experiment method ("Communication with the patient"). Learning by experience and by applying certain gained knowledge in practice is the most efficient method of training skilled nurses.

1.1 Definitions of nursing

Although nursing practice varies both through its various specialties and countries, these nursing organizations offer the following definitions:

Nursing encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings. Nursing includes the promotion of health, prevention of illness, and the care of ill, disabled and dying people. Advocacy, promotion of a safe environment, research, participation in shaping health policy and in patient and health systems management, and education are also key nursing roles.

— *International Council of Nurses*

The use of clinical judgment in the provision of care to enable people to improve, maintain, or recover health, to cope with health problems, and to achieve the best possible quality of life, whatever their disease or disability, until death.

— *Royal College of Nursing UK*

Nursing is the protection, promotion, and optimization of health and abilities; prevention of illness and injury; alleviation of suffering through the diagnosis and treatment of human responses; and advocacy in health care for individuals, families, communities, and populations.

— *American Nurses Association*

The unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge.

— *Virginia Avenel Henderson*

1.2 The evolution of nursing

Historically, nurses were subservient, responsive to the orders, instructions, and direction of other disciplines, specifically physicians. Physicians delegated tasks to nurses, and nurses did not necessarily question physician orders. Nursing was primarily a profession of giving, and it lacked the application of scientific methodology to inform nursing practice. Nursing had not formulated formal principles of practice or evidence for procedures performed. Independent, nurse-directed regulations did not exist; autonomous decision making was limited.

In the past, the orientation of nursing was one of mother surrogate, tending and watching over a dependent ward of patients, or of a helping person. Today, laypeople often define nursing as taking care of the sick to help them get well – a definition based on media images

and household ideas that is in large part a reality. The problem with this description, however, is that it limits nursing to a task-oriented, robotic duty and inaccurately depicts the complex union of art and science in nursing. A definition of nursing focused on clinical hand-on functions is limiting and inconclusive. Consequently, this definition undermines the professionalization of nursing, failing to reflect its artistic and scientific foundations.

Professional nurses have now shed the handmaiden role to become caregivers on the frontlines of health care. Nursing is known as a scientific profession based on research, theory, and concepts – centred on the art of caring and focused on health care outcomes. Nursing is composed of a diverse set of practices and functions, each requiring specialized knowledge and skills. Therefore, nursing functions do not define the essence of nursing. The essence of professional nursing care is best embraced by an approach that includes its artistic and scientific dimensions.

1.3 Nursing as a profession

The authority for the practice of nursing is based upon a social contract that delineates professional rights and responsibilities as well as mechanisms for public accountability. In almost all countries, nursing practice is defined and governed by law, and entrance to the profession is regulated at the national or state level.

The aim of the nursing community worldwide is for its professionals to ensure quality care for all, while maintaining their credentials, code of ethics, standards, and competencies, and continuing their education. There are a number of educational paths to becoming a professional nurse, which vary greatly worldwide; all involve extensive study of nursing theory and practice as well as training in clinical skills.

Nurses care for individuals of all ages and cultural backgrounds who are healthy and ill in a holistic manner based on the individual's physical, emotional, psychological, intellectual, social, and spiritual needs. The profession combines physical science, social science, nursing theory, and technology in caring for those individuals.

Nurses may follow their personal and professional interests by working with any group of people, in any setting, at any time. Some nurses follow the traditional role of working in a hospital setting.

Despite equal opportunity legislation, nursing has continued to be a female-dominated profession. For instance, in the UK and USA males make up around 10% of the nursing workforce. Nurses are typically regarded as female and males in nursing can find themselves referred to by the public and patients as 'male nurses' or 'murse' to distinguish them from other nurses.

2 INTERACTIVE DIDACTIC STRATEGIES (I.D.S.) IN THE CONTEXT OF MODERN AND POST MODERN EDUCATION

In time, during the development of the human society, two education systems have emerged, a traditional and a modern one. Modern and postmodern education appeared as an alternative to the traditional education based on learning as a process of knowledge, skills and habits accumulation and storage. So, a theory emerged according to which the teaching-learning-evaluation act has to be a guided and programmed activity, involving a cognitive and emotional effort, undertaken simply and efficiently. In a pupil/student group, it is necessary to create an atmosphere of collaboration, communication, evaluation and self-evaluation based on the coordination of the common efforts, through a mutual message exchange. For this reason, the organization of the pedagogic act (design, application, analysis, appreciation) needs to rely on efficient didactic strategies by which the teachers should facilitate to the pupils/students the access to knowledge and the development of their intellectual skills, know-how, habits, aptitudes, feelings and emotions, by means of a complex and circular set of

methods, techniques, means of education and forms of organization of the complementary activities.

In the post-modernist school, the types of strategies tend to diversify, the relation teacher-student being reconsidered: dialogue and negotiation are seen as leading to an efficient and autonomous learning. The student makes decisions concerning the learning options, concerning the way in which the acquired knowledge shall be used and the way in which they shall be assessed. The relation between the group members intensifies and cooperation, mutual help, taking responsibilities, learning from one another shall become factors that will increase the dynamism of the instructive-educative process. The creative teacher shall determine a simulative climate, creating and supporting the pleasure of learning.

The interactive didactic strategies aim to help the young person develop in the context of the social interactions favouring the emergence of a cognitive and socio-affective support meant to delineate the individual intellectual and psychological profile and at the same time, to integrate the person in the society.

The didactic strategy is a complex and circular set of methods, techniques, means of education and forms of organization of the activity, complementary to one another, based on which the professor elaborates a plan for his work with the pupils, in order to attain an efficient learning.

The same objective may be achieved in a variety of ways during the process of teaching-learning. We do not follow different paths out of some gratuitous need for variety, much rather we insist on a range of teaching-learning methods because of scientific exigency and expeditiousness. It has been proven from an epistemological and psychological perspective that the various learning strategies lead to different learning results, as it has also been demonstrated that the different learning contents can be processed through different learning paths and with varying efficiency. As long as the successful realisation of educational objectives is at stake, disciplinary methodology and didactics cannot ignore which teaching-learning paths and methods lead to the predefined objectives.

3 CLASSIFICATION OF THE INTERACTIVE GROUP METHODS AND TECHNIQUES

A modern and progressive education is one that assures a methodology focused on the combination of the didactic activities related to: learning, independent work, cooperation, group learning and interdependent work. Out of the classifications of the interactive group methods and techniques proposed by prominent personalities of the Romanian pedagogy and psychology, we have chosen the one proposed by Crenguța Lăcrămioara Oprea, who groups them according to their main didactic function.

1. Group interactive teaching-learning methods and techniques: the method of mutual teaching/learning, Mosaic Method, Comprehensive reading, Waterfall, STAD-the method of teaching in small groups; the method of team-based competition; the method of pair exchange; the pyramid method; the dramatized learning method; heuristic conversation; group debate and discussion; group problem definition; didactic game; case study, etc.

2. Knowledge consolidation and systematization and alternative interactive verification/evaluation methods and techniques: cognitive/conceptual map; matrixes; cognitive chains; causes and effects diagram; cobweb; lotus flower technique; ATQ (Answer-Throw the ball – Interrogate/Question) method; lighting cards; individual or/and group portfolio; reflexive diary; case study; investigation, etc.

3. Problem-solving methods and techniques stimulating creativity: brainstorming; stellar explosion; thinking hats methods; roller coaster; multi-vaulting; round table; group interview;

Philips 6/6; the technique 6/3/5; the creative controversy; the Frisco method, synectics/the analogy method; the Delphi method etc.

4. Group research method: group research theme or topic; experiment on teams; group portfolio, etc.

4 INTERACTIVE DIDACTIC STRATEGIES APPLIED IN NURSING TRAINING

We shall focus our attention selectively on the methods and techniques that could be applied in the domain of our choice – nursing. The teaching-learning-evaluation methods for nursing can be found in the configuration of the global system of general methods, some of them having a frequency of application higher than others, depending on the specifics of the domain but also on the targeted goal.

4.1 The Philips 6/6 method

The Philips 6/6 method was developed by Donald J. Philips Professor of literature (hence its name), who tested it at the University of Michigan. It is similar to brainstorming and the 6/3/5 method, but it is individualized by limiting the discussions between the 6 participants to only 6 minutes. This aims at enhancing their creative spirit.

It is a method we have been using for different modules, especially when the lesson topic is patient care in a medical emergency requiring rapid intervention and nurses' competence, until the arrival of the doctor. (E.g. In the module "Pulmonology and nursing in pulmonology", the lesson topic is "Patient care during an asthma attack").

The stages of the method:

1. The teacher sets up groups of 6 students, each with four common members, 1 secretary and 1 group leader. The Secretary has the task to record the ideas of the group members. The leader directs discussions within each group, and finally presents the group's ideas.
2. The teacher announces the proposed topic - "Emergency nursing intervention in patient care during asthma attacks" and explains the vital importance of these interventions for the patient. Then, the teacher writes the topic on the board and each secretary transcribes it on a piece of paper where they will also note the interventions suggested by the group members.
3. For 6 minutes, within each group, the students will propose emergency interventions in the order considered adequate and the secretary will write them down after the group members reach a consensus.
4. The teacher asks each group leader to present the proposed interventions, possibly by recording them on the board.
5. The collective discussion that follows will establish (under the guidance of the teacher) the required interventions and the order in which they should be carried out to improve the general condition of the patient and to remove the danger of worsening it.
6. Finally, the teacher validates the work of students, the contents submitted by them and the effectiveness of the proposed interventions.

The advantage of this method is to train the students - future nurses - to work in a mixed team of health care professionals, to develop their personal and collective responsibility, as well as their speed of thought and reaction in decisive moments. It allows the strengthening of the group cohesion and involves the pupils / students in the process of (self-)assessment. Cooperation within the team combines with the competition between groups.

The difficulty occurs when the number of students is not a multiple of 6 and / or when the six minutes are not enough to solve the task proposed by the teacher.

4.2 The Frisco method

In the Frisco method participants must play a specific role, covering a certain side of personality, approaching a problem from multiple perspectives. Each group member will have to play in turn the conservative role, the exuberant role, the pessimist role and the optimist role. The method has been proposed by the research team "Four boys of Frisco" (four boys from San Francisco), and its aim is to identify complex and difficult problems, along with simple and effective ways to solve them. The Frisco method is based on directed brainstorming and calls for empathic abilities and critical thinking in students, with a focus on stimulating thought, imagination and creativity.

We believe that this method can be used while covering the topics in the "Ethics and Deontology" module.

The stages of the Frisco method:

1. The stage of determining the problem - the teacher or pupils / students identify a problematic situation and propose it for consideration;

2. The stage of organizing the team - the roles are established: conservative, exuberant, pessimistic, optimistic, along with who has to play each. The roles can be addressed individually or, in case there are many teams, the same role can be played by several participants simultaneously, these ones forming another team.

3. The stage of collective debate - each of them plays the chosen role and supports their point of view in agreement with the character's traits.

He who plays the conservative role has the task to review the old solutions and to give his or her support for maintaining them, without excluding the possibility of any improvement.

The exuberant suggests seemingly impossible ideas to apply in practice, thus providing a creative and innovative framework for discussion and motivating the other participants to see the things the same way they do. This approach relies on a contagion phenomenon. A pessimist is one who does not have a good opinion about what is being discussed, censuring the initial ideas and solutions proposed. He reveals the unpleasant aspects, the intractable situations, the difficult ethical issues. The optimist strives to remove the shadow left by the pessimist, by encouraging the participants to look at things from a real, practical and achievable perspective. He finds realistic grounds and opportunities to achieve the solutions proposed by the exuberant, stimulating the participants to think positively.

4. The stage of systemizing issued ideas and drawing conclusions on the solutions found.

The Frisco method is similar to the "thinking hats" method, both in terms of development, and advantages or limitations.

4.3 The Expedition Method

The expedition method or the teaching trip is a form of organizing the educational process which provides the opportunity for a direct contact with reality by means of direct observation and the study of objects and phenomena in natural conditions. The educational trips are organized in the natural environment, in cultural institutions or economic entities, in order to achieve educational objectives related to certain topics stipulated in curricula.

They offer students the opportunity to make observations on objects and phenomena as they present themselves in their natural environment, on the on-going process, on the relationships between people and the concrete results of their work. They are meant to

stimulate the learning activity, to complete and perfect what students have acquired in the lessons. Their content varies depending on the subject of education.

By using the same criteria used for the classification of the lessons – the fundamental teaching task - you can define the following types of trips and visits:

1. Trips and introductory visits

They are organized before teaching a chapter or a topic, in order to prepare the students for the understanding and assimilation of the knowledge to be taught. The students will be guided to pursue various practical matters, to collect information, to collect teaching materials etc. The results of this work will then be used in the teaching lessons.

2. Trips and visits organized in order to communicate new knowledge

By traveling with students in the natural environment or to various institutions and companies, the teacher aims to effectively transmit the information provided in the school curriculum.

3. Trips and final visits (to consolidate and strengthen the knowledge)

They are organized after completing a module, chapter or topic, the main aim being to apply the taught knowledge, as well as to systemize and strengthen it.

In the three basic types we can distinguished plenty of choices depending on their content, the venue, the internal succession of the steps to be followed, the teaching strategies used, etc.

During the trip multiple activities are combined: research, observation, investigation, processing, evaluation, generalization, reevaluation.

The main function of a teaching trip is the cognitive function. During the trip, the training is done by correlating sensory knowledge with symbolic knowledge, starting from the first one and moving to the second one. Some other specific functions will join the cognitive function in the process: relational, behavioural, etc.

The educational efficacy of the teaching trip depends on the compliance with the requirements, which include: a thorough preparation of the teachers and students for the trip; determining in advance the content in relation to the pursued objective and the level of students' knowledge; creating beforehand a favourable climate for activities that involve travelling (objectives, content, duration, stages); compliance to the requirements for the specific activities during the trip, as well as the assessment and reevaluation of the results.

For example, at the end of the module "Nursing and the Human Being", after studying the theory of Virginia Henderson and the patient care process, we can organize a trip to a park where students can practise collecting information through discussions with common people (Fig. 1) : parents with children, grandparents with grandchildren or other people of different ages. Then, upon their return to school, everyone will create a patient care process that will be discussed and evaluated.

Finally, the teacher can ask the students to express their feelings experienced during this activity.



Fig. 2. Asking people to fill in a survey

4.4 Role-playing

The role play option involves dividing students into pairs. In each pair the students will be in turn the patient who has vision problems (played blindfolded) and the nurse who leads him to a medical practice for investigations (Fig. 2); then they switch roles. Students will go down the hall and down the stairs on a path determined by the teacher.

Finally, the students return to class and each tells how he felt during the exercise how he preferred his colleague to react and to guide them, along with some personal observations.

Through this exercise the students become aware of the patient's situation, develop their empathetic attitude and improve their behaviour as nurses, develop their personal, socio-communicative skills and their abilities for professional life.



Fig. 2. Role-playing

4.5 The communication experiment

In the "Professional Communication" module we suggest the following exercise so students can discover how different are the meanings we give to words and pay attention to the phrases

used by patients: the teacher writes a word on a sheet of paper, shows it to the first student, then covers it and asks him or her to write a definition. Then the student shows his classmate the definition and asks them to write the word guessed from the definition. And so on until the last student. Finally, the teacher asks students to say the first word and the last one or the last definition and after that he or she reads all the chain of words and definitions. Thus the students realize how fragile communication can be and how it is influenced by the personal vocabulary, personal experience, professional and educational level of each of them, including the ones of their interlocutor or interlocutors.

4.6 The case study

It is a method of training and active learning with an important formative role. The students learn to gather information, to select, to make and to develop decisions based on arguments.

This activity develops the ability to examine critically the various strategies and options to solve problems, along with the ability to anticipate developments and make effective decisions. The students must provide reasons for their own hypotheses and explanations and to actively participate in solving the case.

The teacher should lead the case study throughout its development, so that it becomes a search and discovery exercise.

An alternative to the case study is realized by dividing the class into 5 groups of 6 students each (a class usually consists of 30 students). The tasks and roles will be divided within each group in the following manner: one leader, who ensures that each group member expresses his or her own ideas, one secretary who records the answers to the teacher's demands which all members have agreed with and four other members. The groups will be positioned in the corners of the classroom with the fifth group positioned in the middle, so groups won't bother each other during discussions.

The teacher gives each group the information collected from the same patient and the requirements: to select manifestations of addiction, to enunciate addiction or care issues, to identify threats or impediments, to enunciate the care diagnosis, to set care goals and to plan nursing interventions.

In 45-50 minutes, all the group members reunite and each group leader will present the results of the activities performed, followed by reasoned debates, in order to reach an agreement at the classroom level.

The teacher will provide a synthesis of the materials presented, highlighting the positive, accurate and reliable aspects in patient care - the subject of the case study.

The advantage of this method consists in the development of the students' professional skills and their ability to work as a team.



Fig. 3. The case study

5 CONCLUSION

The afore mentioned methods can be used for different modules depending on the aims of training, the learning objectives, the training needs of the students, the professional and social responsibilities of the nurses and the time allocated for the completion of the module.

Using interactive methods in the process of teaching is very important in developing skilled nurses. They enhance practical thinking, communicability, problem solving skills and the quickness of thought in real-life situations. Well prepared nurses eventually help to form a reliable health system in the future, with good services and flawless patient-nurse relations.

It is therefore very important for achieving this purpose that material, financial and human resources are being used at their full potential.

During the partnership proposed to the students, the nursing teacher provides them with the opportunity to form their character and personality, in order to achieve the objectives of professional training.

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