DOI: https://doi.org/10.36489/nursing.2020v23i266p4374-4391

Patient Safety: a specific approach in the Nursing Technical Course

ABSTRACT | The aim was to create an educational booklet to contribute to the practice of introducing patient safety and subsequently provide them to hospitals and health institutions and to develop and apply an extracurricular course on patient safety in a technical nursing course to contribute to the training of a qualified professional. The study was developed at the Technical School: ETEC – Joaquim Ferreira do Amaral- Jaú - Centro Paula Souza, in the Nursing Technician course involving 46 students from the 3rd and 4th modules from the second semester of 2017, with 36 taking the course and 10 performed only the pre- and post-course evaluations. The assessment of knowledge and skills acquired about patient safety in the traditional curriculum of the technical course and after a specific course on the topic was carried out through theoretical tests applied before and after the course and practical evaluation at the end of the course (OSCE). Student's t-test was used to verify differences between the mean scores obtained in the groups that took and did not take the course, with a statistically significant difference between them. It is concluded, therefore, that a specific approach on the subject brings positive contributions to the development of the course provided for in the nursing technician's course plan.

Keywords: Patient Safety; Teaching; Nursing Technician.

RESUMEN El objetivo era crear un folleto educativo para contribuir a la práctica de introducir la seguridad del paciente y posteriormente proporcionarlos a hospitales e instituciones de salud y desarrollar y aplicar un curso extracurricular sobre seguridad del paciente en un curso de enfermería técnica para contribuir a la capacitación de un profesional calificado. El estudio se desarrolló en la Escuela Técnica: ETEC – Joaquim Ferreira do Amaral- Jaú - Centro Paula Souza, en el curso de Técnico de Enfermería que involucró a 46 estudiantes de los módulos tercero y cuarto del segundo semestre de 2017, con 36 tomando el curso y 10 realizaron solo las evaluaciones previas y posteriores al curso. La evaluación de los conocimientos y habilidades adquiridas sobre la seguridad del paciente en el plan de estudios tradicional del curso técnico y después de un curso específico sobre el tema se llevó a cabo mediante pruebas teóricas aplicadas antes y después del curso y una evaluación práctica al final del curso (OSCE). La prueba t de Student se utilizó para verificar las diferencias entre los puntajes promedio obtenidos en los grupos que tomaron y no tomaron el curso, con una diferencia estadísticamente significativa entre ellos. Se concluye, por lo tanto, que un enfoque específico sobre el tema aporta contribuciones positivas al desarrollo de las competencias previstas en el plan de cursos del técnico de enfermería.

Palavras claves: Seguridad del Paciente; Enseñando; Tecnico de Enfermería.

RESUMO Objetivou-se criar cartilha educativa para contribuir na prática de introdução da segurança do paciente e, posteriormente, fornecê-las aos hospitais e instituições de saúde e elaborar e aplicar curso extracurricular sobre segurança do paciente em curso técnico em enfermagem para contribuição na formação de um profissional qualificado. O estudo foi desenvolvido na Escola Técnica: ETEC – Joaquim Ferreira do Amaral- Jaú - Centro Paula Souza, no curso Técnico de Enfermagem envolvendo 46 alunos do 3º e 4º módulo a partir do segundo semestre de 2017, sendo que 36 realizaram o curso e 10 realizaram somente as avaliações pré e pós-curso. A avaliação do conhecimento e habilidades adquiridas sobre segurança do paciente no currículo tradicional do curso técnico e após curso especifico sobre o tema foi realizada através de provas teóricas aplicadas antes e após o curso e de avaliação prática no final do curso (OSCE). Foi utilizado o teste t de student para verificar diferenças entre as medias das notas obtidas nos grupos que realizaram e não realizaram o curso sendo que houve diferença estatisticamente significante entre eles. Conclui-se, portanto, que uma abordagem especifica sobre o tema traz contribuições positivas para o desenvolvimento das competências previstas no plano de curso do técnico em enfermagem. **Palavras-chaves:** Segurança do Paciente; Ensino; Técnico em Enfermagem.

Giovana Cristina Serra D'Amico

Nurse. Master's in Clinical Research by Botucatu Medical School. SP / Brazil. https://orcid.org/0000-0002-3397-0850

Adriana Polachini do Valle

Doctor. Associate Professor at the Faculty of Medicine of Botucatu. SP / Brazil. https://orcid.org/0000-0002-0090-8524

Received on: 06/10/2020 **Approved on:** 06/11/2020

INTRODUCTION

Patient safety is an essential component of the quality of care within public and private institutions, and nursing has a fundamental role in making work activities safe and less risky. This concern has become a matter of growing relevance worldwide in recent years, so much so that, in 2004, the World Health Organization (WHO) launched the Global Alliance for Patient Safety, a global initiative in favor of improving patient safety due to the alarming number of morbidity and mortality in all health systems, in circumstances subject to preventive measures^(1,2).

The WHO emphasizes that patient safety is an issue that affects countries at all levels of development, and estimates of this problem are still scarce, especially in developing countries, where possibly millions of patients each year. suffer disabling injuries or die due to errors in healthcare⁽³⁾.

patient safety D'Amico, G.C.S.; Valle, A.P.; Patient safety: a specific approach in the Nursing Technical Course

It is noteworthy that it is important that managers, health professionals and researchers know the characteristics of preventable adverse events (AEs) and that these can be mitigated by adopting interventions that minimize the risk. And yet, that simple methods can be developed and tested, seeking to monitor and avoid, in real time, the incidents, which have the possibility of resulting in physical, emotional and financial losses for the patient and for the professionals involved in their care⁽⁴⁾.

However, although health care brings enormous benefits to everyone involved, the occurrence of errors is possible, and patients can suffer serious consequences, even death. However, when prevention is effectively implemented, it presents itself as a strategy capable of decreasing the risk of unnecessary harm to the patient and increasing his safety⁽⁵⁾.

In recent years, there has been a high growth in errors of nursing professionals in Brazil where they are being judged and punished with the suspension of the right to act in the area. According to the Federal Nursing Council (COFEN), the main causes of such errors are indicated by specialists as the lack of adequate training and awareness of the function performed⁽⁶⁾.

Many factors can cause ethical-professional incidents, whether related to professional training, working conditions, operational overload, or the absence of situations essential to good professional practice. However, none of these factors, or all of them, can justify professional error, harm to people⁽⁷⁾.

Faced with this context, it is essential that new approaches to the education process must be adopted to guarantee access to training for those who do not yet have it, as well as the permanent education of those who work in units that form human capital and provide health services, who want to expand their professional training.

Thus, in recent years, Brazilian vo-

cational education has undergone significant changes, particularly technical-level courses that have gone from essentially technical, reproductive training, directed, above all, to the execution of techniques and the achievement of some results, to a more globalized education, with the combination of knowledge, which aims to achieve certain competencies for a more gualified performance, with knowledge, skills and attitudes to face the challenges of the labor market and patient safety. This change in the teaching model intended for the technical level was present in the most diverse professional areas, including nursing⁽⁸⁾.

Opposing innatism and empiricism, constructivism (middle path) arises in the 20th century, understanding that knowledge would not be inherent to the subject (apriorism), much less from the medium (external), but an interaction, knowledge would start from the subject-object interaction, as well as social interaction. Constructivist theories arose out of an effort to seek the complexity of the knowledge process, to do so, they relied on scientific research in different areas - biology, psychoanalysis, medicine - to seek understanding of the cognitive process^(9,10).

As profundas modificações deste mundo contemporâneo, o acúmulo exponencial de conhecimento e a incorporação de novas tecnologias fazem com que o antigo ensino tradicional empirista, nas universidades brasileiras, baseado no professor, com o objetivo de transferir o seu conhecimento para os alunos e avaliar o nível de conhecimento adquirido, seja questionado. Por vezes, na área da saúde, determina-se um sistema educacional tradicional com enfoque na ação curativa, individualizada e uni causal da doença, produzindo um ensino dissociado das reais necessidades de saúde vigentes(11-14).

With the intention of complying with the new National Curriculum Guidelines, and the demands of a current

interdependent world, which demand a transforming professional education, educational establishments need to update the methods used in the students' training process, and even with the intention to meet this need, some training institutions in the health area are already proposing changes in their curricula and teaching-learning methods^(15,16).

Therefore, education must have as a precept the need to monitor and intervene critically, having as one of its main characteristics the use of digital and educational technologies as a form of learning. In this context, all teaching modalities have undergone transformations, with digital and educational technologies, the application of more interactive and dynamic concepts, theories and methodologies are being used in education, changing the focus of the teaching / learning process, whether in totally virtual courses and disciplines, as well as semi-presential courses and disciplines, carrying out self-learning.

Technicians and assistants represent the majority of the nursing workforce and their training is of great importance, as they spend only one or two years in vocational education and are already inserted as professionals in the labor market, assuming the responsibility of taking care of the human being together with other health professionals⁽¹⁷⁾.

Thus, given the need to implement an educational process on patient safety in the current curricula of health education institutions, we raised the hypothesis that the organization of a semi-presential extracurricular course with insertions in curricular practice scenarios could contribute to the training of students of the technical nursing course at Centro Paula Souza, in addition to providing referrals to teaching managers at the institution for formal inclusion of this topic in the course curriculum. This pedagogical proposal allows an interaction of all involved, expanding the production of knowledge in a network.

In view of these considerations, we aim to answer, with the development of the research, the following guiding question: How to use and integrate into the curriculum It is mandatory to approach the theme when carrying out a complementary course in Distance Education method using Moodle Computerized Platform and face-to-face classes with evaluation final practice, as a form of contribution and qualification of the professional who will be inserted in the market after the completion of the technical course?

It is understood that research can contribute to the field of nursing, since it places the performance of these professionals as essential to ensure quality and safety for patients. It is also expected to contribute to the involvement of patients and their families in the care process through an educational booklet and that this study will enable the development of research on the theme to recognize its importance, both within hospital organizations and for healthcare professionals. health, especially nursing.

Thus, the objective was to develop and apply a semi-presential extracurricular course on patient safety to students in a technical nursing course and to create an educational booklet for patients and family members.

METHODOLOGY

Prospective study characterized as exploratory and descriptive research, with the purpose of analyzing the knowledge retention of students in a technical course in nursing with the use of a computerized platform in a course parallel to the curriculum.

With a focus on education carried out by the public system at a technical level, the present study was contextualized at the Paula Souza Center, a São Paulo state government agency linked to the Secretariat for Economic Development, Science and Technology, which has the mission of promoting professional edu66

The technical nursing course consists of four modules, the first and second modules covering the requirements for certification of nursing assistants and the third and fourth the requirements for certification of the nursing technician. cation public within benchmarks of excellence, aiming to meet social demands and the world of work.

The Paula Souza Center manages 221 State Technical Schools (ETEC), distributed in 163 São Paulo municipalities that serve around 230 thousand students in Technical Teachers, Technical integrated to High School, distributed in 143 technical courses for the Industrial, Agricultural and Services sectors. Of these, 43 schools have a technical nursing course. This number includes 5 technical courses offered in the semi--presential modality, 4 technical courses in the online modality, 3 technical courses in the open modality, 29 technical courses integrated in High School and 6 technical courses integrated in High School in the Youth and Adult Education modality (EJA). The political pedagogical project (PPP) for these courses is consistent with the National Curriculum References for Professional Education at Technical Level.

The technical nursing course consists of four modules, the first and second modules covering the requirements for certification of nursing assistants and the third and fourth the requirements for certification of the nursing technician. The students who participated in the extracurricular course were in the third module and in the skills already developed they had a superficial approach to the subject of "patient safety".

It should be noted that according to the Political Pedagogical Plan, professionals will be considered nursing technicians by the Paula Souza Center when they have a critical and reflective view, in addition to demonstrating cognitive, psychomotor and affective skills, based on the technical and scientific, ethical, political and educational knowledge that contribute to achieving the quality of nursing care.

The study was developed at the Technical School: ETEC – Joaquim Ferreira do Amaral - Jaú - Centro Paula Souza,

in the Nursing Technician course for 46 students in the 3rd and 4th modules from the second semester of 2017. The course workload was 30 hours. including 15 hours of classroom and face-to-face lectures and 15 hours of distance using a computerized Moodle platform. The Moodle platform is used at the institution and offers important pedagogical resources such as: facilitating student-teacher contact, discussion forums, chats, exchange of files, student monitoring, among others.

The course was created by the author of the research on the topic addressed, based on the six steps on patient safety according to the Ministry of Health⁽¹⁸⁾.

Video lessons recorded by health professionals involved with the theme and assistance from NEAD were used. TIS - Distance Education and Information Technology in Health Center - UNESP - Botucatu as well as forum, didactic material files, videos, chats, evaluation guestionnaires, lecture by the COREN class council, among other resources.

To verify the acquired competences, the students who did not take (G2) and those who took (G1) the specific course on patient safety, were submitted to two essay evaluations on the topic before the beginning and after the end of the course. The correction was accompanied by a template containing previously established responses. The contents covered in this evaluation were the 6 Patient Safety Goals of the Ministry of Health with a maximum score of 10 points.

To promote the development and improvement of professional skills and in an attempt to balance the assessment processes used in technical nursing education, for the assessment of skills and attitudes, a process developed in the United States called OSCE (Objective Structured Clinical Examination) was used, being an objective clinical examination structured for the purpose of evaluating in a structured, objective and protected manner the skills necessary for professional practice⁽¹⁹⁾.

At the end of the course, realistic OSCE simulations were performed for the 2 groups (G1 and G2), with four stations that contained scenes of situations about safe surgery, fall prevention, hand hygiene and pressure injury prevention, which contemplate the goals of



Patient Safety, according to the Ministry of Health. Examiners from each station checked in their check list, the correct answers that the students presented within 10 minutes. The value of the practical test was 60 points and contained 41 topics, obtaining the final grade by dividing 60 by 41, which resulted in a value of 1.46 per topic.

Student's t test was used to verify differences between the mean scores obtained in the groups that took and did not take the course.

The participants in this study corresponded to a total of 46 students regularly enrolled in the Nursing Technician course, with 36 students from the 3rd module who took the course and 10 students from the 4th module who did not participate in the course, but helped with data collection, participating only in applied evaluations. We used the criterion in which only students in the advanced period of the technical course in nursing in the pre-conclusion phase and who had already gone through previous modules where the topic of Patient Safety was covered would participate in the course.

The study project was submitted to and approved by the Research Ethics Committee through Plataforma Brasil under opinion No. 1,932,714, following Resolution No. 466/2012 of the National Health Council (CNS), which regulates aspects ethical aspects of research involving human beings. Students were informed about the research and included in the study after signing the Free and Informed Consent Form.

To assist in the construction of an effective education in patient safety, a booklet was developed for better guidance to patients and their families, where concepts and practices for safer patient care are verified. Thus, it is expected that it will provide elements capable of contributing to the construction of knowledge and development of assistance provided to the population.

RESULTS

An extracurricular semi-presential course was held with the participation of 36 students from the 3rd module of the technical course in nursing with approval and interest from the students and with significant frequency in all activities proposed in the course including tasks, virtual classes, face-to-face and assessments. From August 12 to October 7, 2017.

The course elaborated on the Moodle platform consists of an environment and nine weeks containing an environment with a welcome video, material attached to the course schedule and a news forum.

In the first week, with the inaugural face-to-face class, general guidelines on the course were given and the topics of introduction and concepts that make up patient safety were addressed: quality in health and patient safety: fundamental aspects; patient safety as a strategic issue in the world; background in Brazil. All class material was attached to the Moodle platform, in which they participated in a discussion forum on the importance of the topic in the students' future professional life.

Second week, with the face-to-face class, the theme of patient safety culture was introduced: introduction and concepts that make up patient safety: the challenges of the National Patient Safety Program; the culture of safety as a cross-cutting and multi-professional issue; the axes of the National Patient Safety Program; investigation of adverse events in health services; presentation of the 6 steps of patient safety - Ministry of Health. On the Moodle platform, complementary materials were made available in a digital library on Ordinance No. 529, of April 1, 2013, and RDC No. 36, of July 25, 2013, which include the legal guidelines for patient safety. Online task: maximum score 5 points. Research on news about patient safety issues.

In the third week, class on the Moodle platform, 1st Goal of the Ministry of Health - patient safety: correctly identifying the patient. Video lessons - Nurse Alessandro Gabriel Macedo Veiga - Hospital Amaral Carvalho - Jaú. Complementary material availability for studies: Protocol from the Ministry of Health -Patient identification. Online task: maximum score of 5 points. In groups created in the classroom, searches were carried out on the Internet in two groups, with the first researching the types of patient identification and quality and existing materials and the other group the costs of materials for identification available on the market. After the research, they made a proposal to hospitals and health institutions for the best cost / benefit products they found.

In the fourth week, Moodle platform class, the 2nd Goal of the Ministry of Health - patient safety "Improving communication between health professionals". Video lessons - Nurse Adriane Lopes - Hospital Amaral Carvalho - Jaú. Complementary video availability: proposing new perspectives is the role of nursing in communicating with the patient. Online task: maximum score 5 points. After students watched the complementary video: proposing new perspectives is the role of nursing in patient communication, reviews were made on important points presented.

In the fifth week, Moodle platform class, the 3rd Goal of the Health Ministry - patient safety "Improving safety in prescription, use and administration of medicines". Video lessons - Biochemical Pharmacist - Derli Maria de Souza Lima e Silva - Hospital Amaral Carvalho - Jaú. Complementary material availability: Ministry of Health protocol - safe medication. Online task: maximum score 5 points. After watching the video lesson and reading the Protocol - safe medication, they answered the question: "What are the nine things we should use to make safe medication?".

In the sixth week, Moodle platform

class, the 4th Goal of the Ministry of Health - patient safety "Ensuring surgery in the intervention area, procedures and correct patients". Video lessons - Nurse Gercilene Cristiane Silveira - Hospital Santa Casa de Jaú. Presentation of the WHO safe surgery checklist model. Online task: maximum score of 5 points. Internet research was carried out on the different checklist models for safe surgery and each student selected a model that was adapted to the reality of the hospital that developed it.

In the seventh week, Moodle platform class, the 5th Goal of the Ministry of Health - patient safety "Hand hygiene to prevent infections". Video lesson - Teacher - Giovana Cristina Serra D'Amico - ETEC - Joaquim Ferreira do Amaral - Jaú. Complementary video available with hand hygiene technique. Online task: maximum score of 5 points. Group activity: Group 1: created a video of the 11 steps proposed by the Ministry of Health for hand hygiene; Group 2: created a video where the professionals handled the patient and, after not performing hand hygiene, they left contaminating the environment, utensils and other patients. In this, they used black gouache as a demonstration of contamination.

In the eighth week, face-to-face class, COREN Lecture: Patient Safety - ETEC "Joaquim Ferreira do Amaral". Moodle platform class, 6th Goal of the Ministry of Health - patient safety "Reduce the risk of falls and pressure injuries". Video lessons: Assistant Professor Dr. Adriana Polachini do Valle Department of Medical Clinic - FMB-Unesp- Botucatu. Provision of complementary study material: Protocol from the Ministry of Health - fall prevention and complementary video: prevention of pressure injury. Online task: maximum score 10 points. They read the Ministry of Health Protocol on falls prevention and listed the important points for prevention. After watching the complementary video on pressure

injuries, they described the techniques for prevention.

In the ninth week, Practical assessment: OSCE (Objective Structured Clinical Examination). - maximum score 60 points. The practical evaluation with realistic simulations through the OSCE was carried out with the 2 groups (G1 and G2) and four stations were set up that contained situations about safe surgery, fall prevention hand hygiene and prevention of pressure injury. For each station, a check list was prepared containing the essential items that should be answered by the students and that would be observed by examiners. The duration of each station was 10 minutes, and a colla-

Table 1. Comparison of the averages of theoretical evaluations pre and post-course of groups of students. Test T for equality of means. Botucatu, SP, Brazil, 2018

Group Statistics							
Realização do Curso		Ν	Mean	Р			
Pré Curso	G1	36	4,7083				
	G2	10	4,5000	0,559			
Pós Curso	G1	36	7,2639				
	G2	10	4,0750	0,000			

Table 2. Comparison of means of practical assessment (OSCE) of groups of students. Test T for equality of means. Botucatu, SP, Brazil, 2018

Group Statistics - OSCE							
Realização do Curso		Ν	Mean	Р			
OSCE	G1	21	49,9381	0,00			
	G2	9	40,6222				

Figure 2. Patient Safety Primer Cover. Botucatu, SP, Brazil, 2018



ISBN [978-85-65318-51-8]

borator computed the time elapsed in each station and announced with an audible signal its end. In relation to the course evaluation, data were obtained with the course on patient safety, from the theoretical evaluations carried out before and after the course and the practical evaluation (OSCE).

The comparisons between the average grades obtained in the theoretical and practical evaluations are shown in tables 1 and 2.

It was found that there was a statistically significant difference between the groups, and the group that took the course performed better when compared to the group that did not take the course and these data were statistically proven.

The booklet with guidelines on patient safety was prepared and edited together with NEAD. TIS - Distance Education and Information Technology in Health Center - UNESP - Botucatu and will be provided to hospitals to contribute to patients and family members in the acquisition of knowledge about safety. The contents address the six basic safety goals indicated by the Ministry of Health and the National Patient Safety Program⁽¹⁸⁾ and were organized with simple language and many illustrations to make reading accessible and enjoyable for patients and families.

DISCUSSION

This study aimed to develop and implement an extracurricular course on patient safety for students in a technical nursing course and to create an educational booklet for patients and family members.

The approach to patient safety is a recent topic in undergraduate health curricula. Authors⁽²⁰⁾ evaluated four courses in the area of Health at the Federal University of São Paulo (Unifesp), analyzing the Pedagogical Projects of the Nursing, Pharmacy, Physiotherapy and Medicine courses to identify the contents on patient safety. It was found that, in the

formal curriculum, teaching on patient safety proved to be fragmented, lacking in depth and conceptual breadth.

In this context, the specific approach on patient safety in a nursing technician course can contribute to the necessary advances in this area.

The course was applied semi-face--to-face with 15 hours at a distance and 15 hours in classrooms. The face-to-face activities aimed at introducing the theme with an approach on the themes: Quality in health and patient safety: fundamental aspects, Patient safety as a strategic issue in the world, Background in Brazil, The challenges of the National Patient Safety Program, The culture of safety as a cross-cutting and multi-professional issue, The axes of the National Patient Safety Program, Investigation of adverse events in health services, Presentation of the six steps of patient safety - MS, lecture given by the COREN class council and evaluation practice.

Distance activities essentially addressed the six steps on patient safety, according to the Ministry of Health⁽¹⁸⁾.

The virtual environment favored discussions and reflections on the theme, as can be seen in the forum on the importance of the theme.

Among the students' manifestations, there was a recognition of the magnitude of the problem and one of the students says that:

> "Patient safety is an extremely important topic in our future professional life, because it is through this theme that we will study, that we will pass the patient more security and we will go deeper into the subject so that we can act in the best possible way for the patient and we will be qualified to know what is the best to do in relation to the patient and what are their rights within the health system".

It was also observed, in the students'

66

In this context, the specific approach on patient safety in a nursing technician course can contribute to the necessary advances in this area. reports, a concern with the frequency of errors and adverse events. In one of his quotes the student reports:

> "It is important to learn that the damages / adverse events are not only caused by health professionals, but by problems in the health care process that require protocols and actions that are necessary today to care for the patient".

> "The patient safety course is considered the most important when it comes to quality in health care, everything that is studied and applied in practice is understood so that the risks of these damages decrease to an acceptable level, or even that there is elimination of these risks".

> "In my opinion it will be of great value to my professional life, to have knowledge of the facts and why they occur".

Given these manifestations, we can consider that the objective of motivating and sensitizing students to the theme to be explored has been achieved. With the performance of activities and tasks on the Moodle platform, such as reading the current protocols, research, creating videos, discussion forum, video classes, among others, we were able to observe in students some positive outcomes, such as skills and knowledge, with the help of facilitating tools of the Moodle platform.

The platform was a good tool, and the Open Source Moodle (Modular Object Oriented Distance Learning) (Virtual Learning Environment) is used by educational institutions worldwide, as it is an environment that not only treats learning as a social activity, but focuses attention on learning that happens while we actively build artifacts (like texts, for example), for others to see or use⁽²¹⁾.

The Moodle platform provided valuable interactions in group discussions with increased student interactions, easy access to content, video classes were short-lived, and can be viewed according to student availability and ease between teacher and student contact and monitoring for monitoring and evaluations.

The course is feasible for other institutions at the Paula Souza Center for collaboration with the PNSP, creating the inclusion of the subject of patient safety in teaching and qualifying students in the technical nursing course for professional performance.

The practical assessment (OSCE) contributed to the students being able to articulate and integrate the process of safe performance to care from the scenes created as a simulation and association tool of the theoretical / practical. The performance of the OSCE as a means of evaluation made it possible for the student to observe in the simulation scenario and contributed to the student's perception of how to apply the theoretical knowledge acquired. The experience of teachers who helped in the application of practical assessment was incredibly positive, adding in their knowledge a new way of assessment, close to the reality experienced in practice in stages.

The OSCE has recently started to be used in nursing courses in Brazil, as a way of acquiring knowledge and evaluation, since teachers position the student in face of real situations of decision making and nursing conduct. This constitutes evidence for the relevance of use in nursing, which requires those involved in the teaching-learning process to reflect on the use of this evaluation method.

Studies^(22,23) have shown the effectiveness of the OSCE in standardizing the assessment of students' skills in classroom and distance nursing courses, using specific stations for technical procedures, such as physical examination and clinical reasoning activity. 66

The OSCE has recently started to be used in nursing courses in Brazil, as a way of acquiring knowledge and evaluation, since teachers position the student in face of real situations of decision making and nursing conduct. These studies show that several universities are using the OSCE method as a learning resource and as an assessment tool to identify weaknesses in clinical skills and enable immediate feedback. The integration of the OSCE assessment can be understood as an innovation mechanism and, as such, must meet the necessary security conditions for the change in the course to occur. For this reason, due importance must be attached.

Thus, it is pointed out as a fundamental element in the improvement of teaching-learning, and it may be an opportunity to introduce assessments of skill and attitudes in the ETCs, since most nursing courses carry out practical, but not realistic and structural tests.

In the context of health, the educational process consists of much more than the simple act of teaching. The client, which we often mistakenly refer to as passive individuals, is a fundamental key part in the care process, since the health care process is dynamic and requires the participation of both parties, be it caregiver, or the individual who will receive care⁽²⁴⁾.

The distribution of the booklet to patients and their families will be of relevant importance for the patient's autonomy and for the management of inherent risks regarding their care.

It is evident that there are improvements in health care when the patient receives instructions on safety. The educational activities necessary for the implementation of this type of program are strategic factors for changing culture and for adapting the processes⁽²⁵⁾.

The implementation of a quality and accreditation program can bring significant contributions to the service, such as higher quality, greater security for the customer and for the worker, who feels more secure in performing his activities. The educational activities necessary for the implementation of this type of program are strategic factors for the change of culture and for the adequacy of the processes.

77

The inclusion of a specific course or discipline on patient safety in the formal curriculum of the technical nursing course would be very relevant since in the current curriculum of ETEC – Joaquim Ferreira do Amarall - Jaú this important subject is approached in a superficial way.

The assessment should be an instrument in which it is possible to identify and analyze the student's evolution, performance, and changes, confirming the construction of knowledge. Therefore, it was understood that the use of pre- and post-course assessment can be a good alternative for tracking participant learning when entering and leaving the course.

Nursing supports its practice through evidence and scientific knowledge and, for the quality and safety in nursing care to be continuous, it is important for professionals to feel safe in what they do. For this, constant study and updating are necessary.

To improve health care, the team's commitment and commitment are necessary to always achieve patient satisfaction. Such actions are complemented with training and education for the service; thus, the professional can prepare and give more confidence in the assistance provided, improving the quality of the service.

CONCLUSION

The application of the patient safety course on a computerized Moodle platform contributed to the improvement of the quality of technical nursing education on this topic. This

References

pedagogical proposal enabled an interaction between all those involved, expanding to the production of knowledge in a network.

The booklet with guidelines for patients and their families on patient safety will favor the implementation of patient autonomy and contribute to safer care.

It is concluded, therefore, that the use of the Distance Education method with the Moodle Computerized Platform brings positive contributions to the development of the competencies foreseen in the course plan, and this specific patient safety course, already validated, may reach a wider scope in the teaching units of the Paula Souza Center in the State of São Paulo, contributing to the professional qualification of the students we trained in the technical nursing course.

1. Martinez AA, Montoro CH, González MG. Fortalezas e ameaças em torno da segurança do paciente segundo a opinião dos profissionais de enfermagem. Rev. Lat. Am. Enfermagem. 2010; 18(3):[08 telas].

2. Martinez AA, Vázquez AA, Campo M. El cuidado y La seguridade de lpaciente: algunas consideraciones éticas y legales. Ética Cuid. 2008; 1(1).

3. World Health Organization. Summary of the evidence on patient safety: implications for research: The Research Priority Setting Working Group of the World Alliance for Patient Safety. Geneva: WHO, 2008.

4. Mendes W, et al. Características de eventos adversos evitáveis em hospitais do Rio de Janeiro. Rev. Assoc. Med. Bras. 2013; 59(5):421-428.

5. Carvalho SHDBC, et al. Clima de segurança do paciente: percepção dos profissionais de enfermagem. Acta Paul. Enferm. 2012; 25(5):728-735.

 Conselho Regional de Enfermagem de São Paulo (BR). Conselho Federal de Enfermagem. Anotações de Enfermagem. São Paulo: COREN-SP, 2011. 22 p.

7. Carvalho VT, Cassiani SHB. Erros na medicação e consequências para profissionais de enfermagem e clientes: um estudo exploratório. Rev. Lat. Am. Enfermagem. 2002; 10(4):523-529.

8. Ferreira-Júnior MA, Grígoli JAG, Ivo ML. O ensino por competências na área da enfermagem: interpretações e práticas pedagógicas. Rev. Enferm. Cent. O. Min. 2011 abr/jun; 1(2):143-153.

9. Pontes AL, Rego S, Silva-Júnior AG. Saber e prática docente na transformação do ensino médico. Rev. Bras. Educ. Méd. 2006; 30(2):66–75.

10. Aranha ML. A. História da educação e da pedagogia. 3. ed. São Paulo: Moderna; 2010.

11. Souza CS, Iglesias AG, Pazin-Filho A. Estratégias inovadoras para métodos de ensino tradicionais – aspectos gerais. Medicina (Ribeirão Preto). 2014; 47(3):284–92.

12. Harts AM, Schlatter GV. A construção do trabalho de conclusão do curso por meio da metodologia ativa team-basedlearning. Adm. Ensino Pesqui. 2016; 17(1):73.

13. Mitre SM, et al. Metodologias ativas de ensino-aprendizagem na formação profissional em saúde: debates atuais Active teaching-learning methodologies in health education: current debates. Ciênc. Saúde Colet. 2008; 13(2):2133–2144.

14. Sobral FR, Campos CJG. The use of active methodology in nursing care and teaching in national productions: An integrative review. Rev. Esc.Enferm. 2012; 46(1):208–218.

15. Bollela VR, et al. Aprendizagem baseada em equipes: da teoria à prática. Medicina (Ribeirão Preto). 2014; 47(3):293–300.

16. Honda K, Chirelli MQ. Residência multiprofissional em saúde: formação com metodologias ativas de ensino- aprendizagem desenvolvimento curricular e didática. Indag. Didact. 2015; 7(3):50–61.

17. Orosco SS, Scheide TJF. As diferentes abordagens do processo educativo e seus reflexos no ensino de enfermagem em nível médio. Colloquium (Presidente Prudente). 2008; 5(1):53-68.

 Ministério da Saúde (BR). Portaria MS/GM n.º 529, de 1º de abril de 2013. Institui o Programa Nacional de Segurança do Paciente (PNSP). Brasília: MS, 2013.

19. Medeiros SB, et al. Exame clínico objetivo estruturado: reflexões sob um olhar da enfermagem. Cogitare Enferm. 2014; 19(1):170-173.

20. Bohomol E, Freitas MAO, Cunha ICKO. Ensino da segurança do paciente na graduação em saúde: reflexões sobre saberes e fazeres. Interface. 2016 jul/set; 20(58).

21. Santana DA. O uso da plataforma Moodle na Educação à Distância como forma de democratizar o ensino. Web artigos. 2009.

22. McWillian PL, Botwinski CA. Identifying Strengths and weaknesses in the utilization of objective. Structured clinical. Examination (OSCE) in a nursing program. Nurs Educ Perspect. 2012; 33(1):35-9.

23. Oranye NO, Ahmad C, Ahmad N, Bakar RA. Assessing nursing clinical skills competence through objective structured clinical examination. (OSCE) for open distance learning students in Open University Malaysia. Conthnp nurse. 2012; 41(2):233-41.

 Alvim NAT, Ferreira MA. Perspectiva problematizadora da educação popular em saúde e a enfermagem. Texto Contexto Enferm. 2007; 16(2):315-19.
Franco JN, Barros BPA, Vaidotas M, D'Innocenzo M. Percepção dos enfermeiros sobre os resultados dos indicadores de qualidade na melhoria da prática assistencial. Rev Bras Enferm. 2010; 63(5):806-10.