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CASE REPORT ARTICLE

OBJECTIVE STRUCTURED CLINICAL EXAMINATION IN BASIC LIFE SUPPORT TEACHING

EXAME CLÍNICO OBJETIVAMENTE ESTRUTURADO NO ENSINO DE SUPORTE BÁSICO DE VIDA

EXAMEN CLÍNICO OBJETIVAMENTE ESTRUCTURADAS EN LA ENSEÑANZA DE SOPORTE VITAL BÁSICO

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ABSTRACT

Objective: to describe the objective structured clinical examination method in the basic life support teaching in the nursing graduation. ***Method:*** descriptive study, experience-report type at a University Center. ***Results:*** the use of this teaching method occurs with the empowerment of students about basic life support; followed by the assessment planning by professors and the organization of activities in classrooms and laboratories with emergency fictitious simulations. ***Conclusion:*** this evaluative method is effective for facilitating the learning, with a dynamic innovation that differentiates the teaching and learning model, and corroborating the formation of critical and reflective nurses. ***Descriptors*:** Emergency Nursing; Teaching; Knowledge; Methodology; Problem-Based Learning; Patient Simulation.

RESUMO

Objetivo: descrever o método do Exame clínico objetivamente estruturado no ensino de Suporte básico de vida na graduação de enfermagem. ***Método:*** estudo descritivo, tipo relato de experiência em um Centro Universitário. ***Resultados:*** a utilização deste método de ensino se concretiza com o empoderamento dos estudantes acerca do suporte básico de vida; seguida do planejamento da avaliação pelos docentes e a organização das atividades em salas e laboratórios postas às simulações emergenciais fictícias. ***Conclusão:*** esse método avaliativo é efetivo por ser uma ferramenta facilitadora de ensino, de uma dinâmica inovadora que diferencia no modelo de ensino-aprendizagem e corrobora para a formação de um enfermeiro crítico e reflexivo. ***Descritores*:** Enfermagem em Emergência; Ensino; Conhecimento; Metodologia; Aprendizagem Baseada em Problemas; Simulação de Paciente.

RESUMEN

Objetivo: describir el método de examen clínico objetivamente estructurado en la enseñanza de soporte vital básico en la graduación en enfermería. ***Método:*** estudio descriptivo, de tipo relato de experiencia en un Centro Universitario. ***Resultados:*** el uso de este método de enseñanza se realiza con la potenciación de los estudiantes acerca de soporte vital básico; seguido por la planificación de la evaluación por parte de los profesores y la organización de actividades en aulas y laboratorios, con simulaciones de emergencia ficticias. ***Conclusión:*** este método de evaluación es efectivo por ser un facilitador del aprendizaje, con una dinámica de innovación que se diferencia del modelo de enseñanza y aprendizaje, y corrobora la formación de enfermeros críticos y reflexivos. ***Descriptores*:** Enfermería en Emergencia; Enseñanza; Conocimiento; Metodología; Aprendizaje Basado em Problemas; Simulación de Paciente.

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INTRODUCTION

The Basic Life Support (BLS) can be understood as a set of emergency procedures that can be performed by health professionals or by trained lay people and is justified by both social and economic importance, because it can contribute to reducing co-morbidity and morbidity of the population victim of sudden onset, cardiorespiratory and foreign body airway obstruction.[1]

Throughout time, this proposal has been improved and worked to ensure greater conditions of success in health care. Teaching these tools in nursing graduation allows complying with the standards set for this care modality, optimizes the comprehensiveness of care, reduces serious consequences and potentiates the positive prognosis for victims.

Given the need to teach BLS in Nursing graduation, working traditional approaches to education is of great importance, which should be linked to innovative ways of evaluation, in order to verify better the student's performance and facilitate the training of skilled professionals to act in care practice.[2] Increasing the need for objective and standardized assessments, able to test skills and predict students' performance in the clinical scenario.[3]

The Objective Structured Clinical Examination (OSCE) represents a fundamental element in the improvement of the teaching-learning process, since it is a tool for measuring clinical skills with the adoption of standardized procedures. In addition, it rescues the prior knowledge acquired by the student, expanding the learning opportunities in a clinical setting. A professor-evaluator is responsible for observing the attitudes and skills developed by students and marking on an instrument what they have, or have not, performed. At the end of the assessment, the student receives an evaluative feedback, so that he/she can know his/her right and wrong attitudes.[4]

Applying the simulation of real clinical cases in academic formation means encompassing a problematizing focus that helps, especially, in the learning construction.[5] Both Problematization as Problem Based Learning (PBL) promote ruptures with the traditional way of teaching and learning, leading the student to learn by doubt, reflexive questioning and constructing his/her own knowledge. These methodologies stimulate participatory management of the protagonists of the experience and reorganization of the relationship between theory and practice, but have different potentials in terms of conception of education.[6]

OBJECTIVE

- To describe the objective structured clinical examination method in the Basic Life Support teaching in the nursing graduation.

METHOD

Qualitative study, descriptive, experience-report type, on the use of the OSCE method as a guiding instrument for the teaching-learning process of the theoretical framework of Basic Life Support of the Nursing graduation, held at the University Center Tabosa de Almeida (ASCES/UNITA), in the city of Caruaru-PE, during November 2016. This pedagogical methodology of simulation and evaluation was inserted in the curriculum in the same year 2016 by professors of the Higher Education Institution (HEI), applied in classes of the fisrt Module that experiences the Thematic Unit: *Prehospital Care in Urgencies and Emergencies*.

The Nursing course curriculum of the teaching institution is integrated, which enabled the insertion and adequacy of the OSCE method, since the integrated curriculum aims at the formation of critical and reflective professionals, who meet the needs of the health system, in addition to the requirements of the labor market. All grades of course are structured in interdisciplinary modules. In these, activities develop around key concepts, in order to facilitate the achievement of performance essential for the nurse's formation.[7]

The submission to the Resrach Ethics Committee was not necessary, because it is an experience report intended to contribute from the experience of implementing the OSCE in the Nursing Course of a University Center.

The scenario structured from the organization in classes adapted to the assessment condition. Such spaces had a different scenario, specific to the thematic approach of basic life support, such as primary assessment and cervical control, cardiopulmonary resuscitation, immobilization of the fractured limb and maneuvers of handling and transport of victims of traumatic events. It used materials and instruments necessary for the procedures, such as dummies, manual ventilatory resuscitator, splints, bandages and Individual Protection Equipment (IPE).

RESULTS

♦ The theoretical-practical foundation needed to build the skills and competences

In the first stage, the students gathered for theoretical and demonstrative classes about BLS along with professors and aid of monitors. In the integrated curriculum of the institution, the Thematic Unit (TU) Prehospital Care in Urgencies and Emergencies has a workload of 162 hours/class, in which 98 hours/class are intended for the Theoretical Reference (TR) of Basic Life Support, and the rest is distributed in the TRs of Human Physiology, Human Anatomy, Ethics and Bioethics, ensuring an integration of fundamental knowledge to build the proposed skills and competencies. The experience of the students in the first semester of the course with the emergency scenario allowed them the appreciation of discursive theoretical classes in the form of problematization methodology, linked to simulating practices of first aid in laboratories and rooms suitable for practical activities.

The contents discussed in the TR were: Introduction to pre-hospital care; Pre-hospital care definition according to the Ministry of Health; Notions of biosafety; Statistics of deaths from accidents; Trauma care – Basic Life Support; Trauma kinematics; Management with the trauma victim; Withdrawal of helmet; Rauteck key; Heimlich maneuver; Assessment of vital signs; Practical cardiopulmonary resuscitation class; Immobilizations and transport; Care for victims of burn and electric shock accidents and Accident with poisonous animals and in cases of exogenous intoxication.

These programmatic contents intend to develepo the student's competences regarding the recognition of situations of pre-hospital urgency and emergency, making decisions and intervening in the work process through effective communication with the client, community and multidisciplinary health team and assessing and conducting interventions in clinical and traumatic situations, proposing basic health support behaviros, with the immediate objective to maintain and recover life, preventing sequels, as well as the performances while approaching the victim, assessing the situation and general condition at the accident site; identifying potential situations of risk and ensuring the safety of the victim, spectators and rescuer and characterizing care and first aid procedures in situations of burns, poisonings, hemorrhage, shock, convulsive crises, trauma and fractures.

♦ The use of the Standard Operational Protocol (SOP) as a learning facilitator

A literature review was develop to search for the most current evidence as well as the bases of knowledge related to these activities for constructing protocols to base practical activities, which were made available for the students. The SOP based theoretically and technically on the following actions: primary approach and 3s (Safety, Scene, Situation); cardiorespiratory resuscitation; Use of cervical collar; Vital Signs; immobilization with splint; Bearing and stretchering; Withdrawal of helmet; Heimlich maneuver and Rauteck Key. The structure defined for protocols followed means to facilitate the students' understanding about the technique as well as offered theoretical mechanisms to strengthen the actions developed by them, consisting of the following preparation steps: Expected results; Necessary materials; Activities; Special care and Actions in case of non-compliance.

After building the protocols, their validation by all professors of the referred TU occurred, as well as their explanation with the students as a measure of validation and consistency for the use of this tool for teaching and learning.

♦ Organizing the OSCE assessment in the teaching planning

This second stage occurred from the pedagogical meeting of the professors responsible for the TR of BLS, in which they listed the distribution of clinical situations for each station, the spatial organization, people trained to act, faculty evaluators and organizer, sufficient material for the students to use and discard in the procedures, the time required for the rotation in stations, the costing of materials used and the training of the involved monitors, since the competent and enabled monitor stimulates, motivates, helps, solves basic questions and becomes an effective agent in learning.[4]

Thus, the professors structured the OSCE from three rotating stations, followed with their respective clinical situations. Each station possessed a Checklist for evaluation as a control instrument, composed by a set of conducts and items followed by students and assessed by the professor. Figure 1 shows the used clinical situations.

Station	Clinical Situation
1	Unconscious man, on the street, after feeling strong chest pain radiating to left arm, jaw and epigastric region. A passer by the victim's side is calling for help. Conduct: Perform primary approach and cardiorespiratory resuscitation.
2	Young male in back position, seen on a busy avenue, victim of a motorcycle accident. He is conscious, with exposed fracture in RLL (Tibia), without abundant blood loss. Conduct: Perform fracture immobilization.
3	Female victim of trauma with motorcycle. She is awake and wearing a helmet. Perform the victim's primary approach to helmet removal and cervical collar placement. Conduct: Perform primary approach, cervical control and removal of the victim's helmet.

Figure 1. Stations and their respective clinical situations applied in the BLS OSCE. Caruaru (PE), Brazil, 2016.

♦ Implementing BLS procedures based on the OSCE evaluation method

The third step consists of an evaluative practical activity. In principle, all 37 students are concentrated in the pre-confinement room, where complementary and integrative therapies were offered, such as acupuncture and Reiki, aiming at their relaxation. In this moment, electronics (tablets, laptops, mobile phones, and others) cannot be used. To start the OSCE, three students positioned on each side of the distinct seasons, at the start point. When arriving at each station, the students met a prehospital care simulated environment, with a positioned dummy patient and the respective clinical tasks they ought to perform.

Each scenario has inputs for the student to use or not to meet the requests of the procedures. The clinical situations were presented to the students through a sheet fixed on the entrance door of the room, in order to facilitate the reading. First, the case was presented (brief summary of clinical condition), and then the clinical conducts they should perform. The students had five minutes to perform each station, which resulted in fifteen minutes to make the entire evaluation, in addition to the time for the feedback from the evaluating professor. A facilitator guides the process, providing, after the simulation, an immediate feedback, allowing the reflection focused on the established goals.[8] Thus, the evaluator does not interfere in the actions performed by the students, but only observes and records in the evaluative instrument previously structured the performance regarding the clinical skills and attitudes of the student during the assessment.[4]

After observing the procedure, the station evaluator met with the student, read each item of the evaluative instrument, explained and accounted for the successes and errors the student may had committed, enabling an exchange of knowledge and understanding of the potential and challenges during the evaluation process. However, after the end of the evaluation process, the students went to a post-confinement room, where they waited for the completion of evaluation and, then were released.

DISCUSSION

Therefore, the planning assumes such importance that becomes a theorization object and develops from the professor's action that involves deciding on the objectives to be achieved by the students, curriculum appropriate to achieve the objectives, strategies and resources he/she will adopt to facilitate learning, evaluation criteria, etc.[9]

Given this organizational process, the OSCE planning also happens based on the elaboration of SOPs as an important tool for consolidating the proposed contents in a standardized form regarding the prehospital care practical procedures, showing each sequential step that students should perform. SOPs intend to guide the performance of procedures and clarify doubts, and should be updated and followed by students in a standardized way.[10]

Taking into account the OSCE practical experience, the clinical simulation has its differential, in the reflective moment after the scene execution, which is called debriefing. This reflection area is an essential point for integration and confidence in both interpersonal as technical skills for an effective clinical outcome.[11] It is also a useful pedagogical approach that provides nursing students opportunities to practice decision-making and skills through various real world experiences without compromising the patient's well-being.[12]

Thus, the evaluation process ceases to be an element of power, with classificatory and

selective aspects, and becomes a means of dialog between those involved, a strategy of growing together, in both professional as personal aspects. In this way, it makes assessment, which is intrinsic to the formation, into something lighter, interesting, dynamic, reflective, critical and creative thinking.[13]

CONCLUSION

From the report, one can see the efficiency and effectiveness of the OSCE, not only as an evaluative method, but also as a facilitator tool that provides satisfactory teaching and learning. It is a dynamic and innovative learning approach, allowing students to intensify the basic life support study and construct abilities and skills essential for professional practice. Implementing this evaluation process in the curriculum of educational institutions is of great value, because the hollow of education based on the questioning and the OSCE allows the formation of critical and reflective nurses.

The OSCE method aggregates in the student's education for providing experiences in order to develop simulations in environments that have actual components, which allow applying knowledge in order to understand the technical aspect and behavioral deficits in attention. The effect of this type of assessment allows verifying the actual construction of the ability, considering the establishment of minimum standards for practice, known and practiced in previous occasions by the student, as well as the development of theoretical knowledge, in an integrated manner, which equips his/her actions at the time of evaluation.

Environments that promote the best simulation of skills that will be evaluated are still necessary, onde they, sometimes, do not present a context that involves the student in order to express his/her real knowledge and skills in adverse situations.

For the student, this experience is shocking, because it is new and unknown. However, we realize that his/her self-assessment regarding his/her posture and expression of knowledge at the time of the simulation lead him/her to understand the importance of strengthening the behavioral aspect and its importance in relation to crises, pressure and decision-making.

Developing this evaluation modality requires caution in the formulation of simulation environments, in their levels of complexities during the development and the behavioral diagnosis of students facing situations of stress and decision-making. Nevertheless, it becomes extremely positive and fruitful in the sense of developing new tools for assessment, making the student realize him/herself while critical and active professional in the care decision making process and especially remove the practical teaching of the "imagining" areas and taking them to the everyday life of learning.

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