

<http://dx.doi.org/10.1590/0104-07072018003210016>

STRATEGIES USED FOR TEACHING URGENCY/EMERGENCY IN A NURSING UNDERGRADUATE COURSE¹

Luiz Alves Morais Filho², Jussara Gue Martini³, Daniele Delacanal Lazzari⁴, Mara Ambrosina Vargas⁵, Vânia Marli Schubert Backes⁶, Glauce Maciel de Farias⁷

- ¹ Article extracted from the dissertation - Teaching professional care in urgency/emergency in an undergraduate course in nursing in Rio Grande do Norte, presented to the Nursing *Programa de Pós-Graduação em Enfermagem (PEN)*, Universidade Federal de Santa Catarina (UFSC), in 2015.
- ² Ph.D. in Nursing. Professor Department of Nursing, *Faculdade de Ciências da Saúde do Trairi, Universidade Federal do Rio Grande do Norte (UFRN)*. Natal, Rio Grande do Norte, Brazil. E-mail: moraisfilho2004@hotmail.com
- ³ Ph.D. in Education. Professor, Department of Nursing and PEN/UFSC. Florianópolis, Santa Catarina, Brazil. E-mail: jussarague@gmail.com
- ⁴ Ph.D. in Nursing. Professor, Department of Nursing, UFSC. Florianópolis, Santa Catarina, Brazil E-mail: danielaelazza@gmail.com
- ⁵ Ph.D. in Nursing. Professor, Department of Nursing and PEN/UFSC. Florianópolis, Santa Catarina, Brazil. E-mail: maraav@terra.com.br
- ⁶ Ph.D. in Nursing. Professor, Department of Nursing and PEN/UFSC. Florianópolis, Santa Catarina, Brazil. E-mail: vania.backes@ufsc.br
- ⁷ Ph.D. in Nursing. Professor, Department of Nursing, UFRN. Natal, Rio Grande do Norte, Brazil. E-mail: glauceamaciel@gmail.com

ABSTRACT

Objective: to identify teaching and assessment strategies used for the contents concerning the urgency and emergency in an undergraduate nursing course.

Method: single case study with a qualitative approach, which is part of an undergraduate nursing course in the state of Rio Grande do Norte. The data collection was carried out from August to December 2014. We interviewed 13 professors, Brazil, observed 18 practical laboratory classes, and analyzed 13 course plans, in addition to the Pedagogical Project of the Course. The data analysis was anchored in the case study structure and Content Analysis.

Results: from the analysis of the data, two categories have emerged: Strategies used in theoretical and practical classes in laboratory and services and Assessment of students in the teaching of urgency and emergency. It was possible to identify that, despite the intentionality, the concept of content transmission was still present, besides the difficulty for its selection. The assessment of the students was also a difficulty, not only for the construction of the instruments, but also due to the way that the teacher has developed this process.

Conclusion: there are many possibilities to be explored for the qualification of teaching in nursing, from the adoption of new positions consistent with the educational policies and their intentions, to the use of the most varied ways of teaching and evaluating.

DESCRIPTORS: Teaching. Educational measurement. Curriculum. Emergency. Professional practice, Education nursing.

ESTRATÉGIAS UTILIZADAS PARA O ENSINO DE URGÊNCIA/ EMERGÊNCIA EM UM CURSO DE GRADUAÇÃO EM ENFERMAGEM

RESUMO

Objetivo: identificar estratégias de ensino e avaliação utilizadas para os conteúdos relativos à urgência e emergência em um curso de graduação em enfermagem.

Método: estudo de caso único, analítico, com abordagem qualitativa, que se constituiu em um curso de graduação em enfermagem do estado do Rio Grande do Norte, Brasil. A coleta de dados ocorreu de agosto a dezembro de 2014. Entrevistou-se 13 professores, observaram-se 18 aulas práticas de laboratório e analisaram-se 13 planos de disciplinas, além do Projeto Pedagógico do Curso. A análise dos dados foi ancorada na estrutura do estudo de caso e na Análise de Conteúdo.

Resultados: a partir da análise dos dados, emergiram duas categorias: Estratégias utilizadas nas aulas teóricas e práticas em laboratório e serviços e Avaliação de alunos no ensino de urgência e emergência. Foi possível identificar que, apesar da intencionalidade, ainda estava presente a concepção de transmissão de conteúdos, além da dificuldade para sua seleção. A avaliação dos alunos foi igualmente uma dificuldade, não apenas para a construção de instrumentos, mas também, de como o professor desenvolveu esse processo.

Conclusão: há múltiplas possibilidades a serem exploradas para a qualificação do ensino na enfermagem, desde a adoção de novas posturas condizentes com as políticas educacionais e suas intenções, até a utilização das mais variadas formas de ensinar e avaliar.

DESCRIPTORIOS: Ensino. Avaliação educacional. Currículo. Emergência. Prática profissional. Educação em enfermagem.

ESTRATEGIAS UTILIZADAS PARA LA ENSEÑANZA DE LA URGENCIA/ EMERGENCIA EN UN CURSO DE GRADUACIÓN EN ENFERMERÍA

RESUMEN

Objetivo: identificar estrategias de enseñanza y evaluación utilizadas para los contenidos relativos a la urgencia y emergencia, en un curso de graduación en enfermería.

Método: estudio de caso único, analítico y con abordaje cualitativo que se constituyó en un curso de graduación en enfermería del estado de Rio Grande do Norte, Brasil. La recolección de datos se realizó de Agosto a Diciembre del 2014. Se entrevistaron 13 profesores, se observaron 18 clases prácticas de laboratorio y se analizaron 13 planes de materias, además del Proyecto Pedagógico del Curso. El análisis de los datos se fundamentó en la estructura del estudio de caso y en el Análisis del Contenido.

Resultados: a partir del análisis de los datos emergieron dos categorías: Estrategias utilizadas en las clases teóricas y prácticas en laboratorio y servicios, y Evaluación de alumnos en la enseñanza de urgencia y emergencia. Fue posible identificar que, a pesar de la intencionalidad, todavía estaba presente la concepción de transmisión de contenidos además de la dificultad para su selección. La evaluación de los alumnos fue igualmente una dificultad no solo para la construcción de instrumentos sino también sobre cómo el profesor desarrolló ese proceso.

Conclusión: hay múltiples posibilidades para ser explotadas sobre la cualificación de la enseñanza en la enfermería, desde la adopción de nuevas posturas condescendientes con las políticas educacionales y sus intenciones hasta la utilización de las más variadas formas de enseñanza y evaluación.

DESCRIPTORES: Enseñanza. Evaluación educacional. Currículum. Urgencias médicas. Práctica profesional. Educación en enfermería.

INTRODUCTION

The training of critical nurses with reflective, creative, technical and political skills for the professional exercise, in line with the National Curricular Guidelines of the Undergraduate Nursing Course (NCG), necessarily follows the adoption of new strategies to teach, as well as the improvement of the existing ones, aiming at favoring the different forms of appropriation of contents.¹⁻² The use of active methodologies and the protagonism of students who are co-responsible for their training aim at the revision of strategies that allow new and varied learning experiences.

The pedagogical trends of the undergraduate nursing course point to the desire to break with the Cartesian model in the learning-teaching process.³ It is notorious for undergraduate health courses that the professional training remains based on the use of traditional methodologies, strongly influenced by the compartmentalization of curricula, resulting in fragmentation of contents and, consequently, knowledge.

In this reality, the adoption of postures only transmissible by the professor attributed to the student the role of spectator or receiver of information. Thus, when reflecting on the current needs regarding the desired professional profile for health workers, it is observed that the technical efficiency with specialized knowledge and critical, reflexive and political training demand changes not only in the positions of the professors, but also in the way the student and the teaching have been perceived.⁴

From the organization of nursing as a science and profession, the teaching of the knowledge that is part of it has also evolved, in a context in which

it is necessary to think not only about the relations in the classroom, but in other dialogical spaces, such as the fields of practice. In the latter, more intensely, the need arises to integrate knowledge from multiple areas coordinated with the development of abilities, especially those related to clinical reasoning and doing. It is particularly important to observe this reality in areas where the specialized knowledge guides the acquisition of manual skills, as much as it requires knowledge of public policies, in addition to that of the specialty.⁵

The nurse's role in urgency and emergency services requires a variety of knowledge, indispensable for the care of patients with complex needs. The current technologies, the permanent need for scientific improvement and the humanization of care, configure particularities to the actions of the nurses.⁶ From the implementation of the *Sistema Único de Saúde* (SUS) - Brazilian health system the need to direct the training of health professionals in order to act in a regionalized and hierarchical service network of comprehensive care to the emergencies arose, through the National Policy of Care to Urgencies and Emergencies.⁷

In line with the intended profile of professionals by the NCG, with the public policies, with the need for specialized knowledge and teaching in nursing, it is essential to adopt teaching methodologies that are not only accountable for the understanding of the current health scenario, but also allow for critical, creative and reflective training. There is, therefore, a demand for the use of non-individualizing teaching strategies, in addition to the perception that appropriating the individual characteristics of students strengthens the learning.⁸⁻⁹

Therefore, it is questioned: what are the teaching and assessment strategies used for urgency and emergency content in the nursing undergraduate course? Thus, the purpose of this study was to identify teaching and assessment strategies related to urgency and emergency in an undergraduate nursing course.

METHOD

Single case and analytical, exploratory study with a qualitative approach. The case selected was a nursing undergraduate course at a public institution in the Northeast region of Brazil. This course has been chosen because it belongs to a public university, being one of the oldest in the state of Rio Grande do Norte and having a high degree of representation in terms of the number of students graduated. Its organization happens in semesters, grouped in nine thematic axes/phases, and the teaching activities developed are organized through integrated disciplines and training activities of mandatory or optional nature; complementary disciplines and activities of an optional nature; integrated internships throughout the course; and, obligatory supervised internships.

The focus is centered on the teaching of urgency and emergency contents in nursing in the disciplines related to Nursing Sciences, both those specific or responsible for the teaching of contents of urgency and emergency, as well as those that approach this theme in their area. The Pedagogical Project of the Course (PPC) and the teaching plans of the disciplines were analyzed; the practical classes were observed in the skills/simulation laboratories; and the teachers were interviewed. After the initial contact and approval of the course coordination and contact with the professors via e-mail, the plans were provided by them. The choice of these for the interview occurred from the analysis of the disciplinary plans and the relation of the discipline that they ministered with the contents related to urgency and emergency. The interviews lasted from 40 to 50 minutes and occurred in the professors rooms, or in the classroom, in a private way, being recorded in audio and the observations registered through a field journal. For the occurrence of the interviews, a semi-structured script was constructed.

The inclusion criteria were: to be a professor of specific urgency and emergency disciplines or disciplines that deal with relative contents and any stage of the life cycle; practical classes in the laboratory that developed actions pertinent to the urgency and emergency; teaching plans of specific disciplines on

the content of urgency and emergency, or dealing with topics related to this specialty at any stage of the course.

It was evidenced that urgency and emergency education happens transversally throughout three phases: 5th, 6th, 7th. In the 5th phase, the discipline called Attention I is the curricular component in which the first contact with the urgency and emergency area occurs through some topics. In this phase, the basic life support content is taught through theoretical and practical classes in the laboratory.

In the 6th phase, Attention II is considered the discipline responsible for teaching urgency and emergency, but not exclusively. Urgency and emergency are taught together with the contents related to the critical patient in the Intensive Care Unit (ICU). At this stage, the student, in addition to the theoretical and practical classes in the laboratory, develops activities in services such as *Unidades de Pronto Atendimento* (UPAs) – Emergency Care Units

In the 7th phase, the discipline Attention III, addresses maternal and child health in the three levels of complexity. There are urgent and emergency contents inserted in the areas of pediatrics and obstetrics. The classes are theoretical and practical in the laboratory and in a specific pediatric emergency service. In the area of obstetric emergency, the classes are theoretical and practical in the laboratory (there are activities in the delivery room, joint housing, maternal ICU and neonatal ICU, however, they are general for all types of care, not only those related to urgency and emergency).

Thirteen professors who teach the contents of urgency and emergency (in specific subjects of the area or not) were identified, being that all accepted to participate in this study, totaling 208 minutes and 12 seconds of recording. Observations were made in 18 classes in the skills laboratory, totaling 40 hours and 10 minutes, with an average of 2.2 hours per class. Thirteen course plans were analyzed.

The analysis of the data was anchored in the structure of the case study, with successive readings of the material, to carry out the codifications and the categorizations. In order to do so, Content Analysis proposed by Bardin¹⁰ was used, composed of three phases: pre-analysis; exploration of the material; treatment of results and interpretation. First, it was analyzed the content of the interviews. Subsequently, the documents and observations recorded in the field journal were examined. To assist in the organization of the data, the Atlas.ti[®] software version 7.5.4 was used.

After coding, the data were organized into categories. The research followed the principles, norms and ethical guidelines for research involving human beings, in accordance with the Resolution No. 466, of December 12, 2012, of the National Health Council. The project was approved by the Research Ethics Committee of the Federal University of Rio Grande do Norte, with REC Opinion No. 764,031, August 22, 2014, CAAE: 31745514.5.0000.5568. All the participants signed the Free and Informed Consent Term. The anonymity was preserved through the identification of the professors by the letter "P" followed by the number corresponding to the order of the interview. The observations were identified by the acronym "OBS" and number corresponding to the reading order. The plans of the disciplines were identified by the letters "PD", and number according to the order of analysis.

RESULTS

Two categories of analysis emerged: Strategies used in theoretical and practical classes in the laboratory and services; and, Assessment of students in the teaching of urgency and emergency.

Strategies used in theoretical and practical classes in the laboratory of skills and services

Regarding the theoretical classes, the choices were identified through the dialogic expository classes, seminars and discussion of texts/scientific articles. One of the disciplines was centered on the pedagogical proposal of the Problem-Based Learning (PBL)

It consists of dialogic expository classes, in the reading and discussion of scientific publications based on evidence. (P01)

The classes are theoretical, with the maximum possible participation. We use the participatory methodology in the classroom, seminars, dynamics, and the lecture itself. (P07)

The methodological approaches are also evidenced in the teaching plans: Methodology [...] centered on the pedagogical proposal of problem-based learning (PBL), in which the professors position the student in the face of a real decision-making situations and nursing behaviors. (PD05)

Methodology [...] an expository and dialogued class; clinical cases; presentation of scientific papers; practical activities. (PD09)

It was possible to observe that part of the practical classes was centered on the figure of the

professor as executor of some technique and students as observers

The theoretical presentations and role-plays/simulations for the resolution of a clinical case, by a group of six students. In each class there was a group responsible for resolving this clinical case regarding the theme of the class. Usually there was only one practical demonstration during the resolution of the case; there was no execution of the practice by the rest of the class. After that first moment, the professor, or an expert guest, would close the class with a theoretical discussion of the subject, resuming the case as well. (OBS01) The theoretical classes take place in practice stations. It is distributed to the students the theoretical basis, the scientific articles, the care service protocols, as well as what is already of national and international knowledge, implanted in the pre-hospital care. During the week, the students study clinical cases, make practical stations, and discuss and debate in plenary. (P02)

During the observations it was identified that, in a same class, more than one methodological approach was used.

The methodology used in class was the resolution of the clinical case by means of simulation/role-play by the students; discussion during presentations; lecture given by the teacher; video about the theme. (OBS02)

We vary the strategies, but the content is huge. It is complicated to want to address the complexity of Urgency/Emergency in small stages or classes for very large groups. (P06)

Regarding the classes in the skills laboratory, the methodologies were varied: lectures and demonstration of equipment and techniques. Activities were carried out for small groups of four to six students, with the presence of two professors and the use of two mannequins. At that moment, the professors made a theoretical review with the demonstration of the technique. After this phase, these small groups were subdivided into groups of two to three students. At that time, the practice was performed on a mannequin and monitored by a professor. Each procedure was repeated several times. The students were then given a clinical case to be resolved. (OBS03)

As for the practical classes, it is demonstrated the whole process of basic care support. So that everyone has the notion of the beginning to the end of the service, knowing the material, the equipment, the sequence. Then, they are subdivided into small groups, then they practice on the mannequins. (P10)

The students carried out cardiac compressions, simulate the shock, think of the possible causes of cardio-respiratory arrest. (P03)

The Basic Life Support class was conducted with

groups of four to six students. Every Monday there was an exclusive class for these small groups. The class was coordinated by two professors, two to three mannequins were used per class. It is important to emphasize that they had already participated in a theoretical class on the subject with the whole class. (OBS09)

By observing the laboratory classes, it was possible to identify the fragmented teaching approach, with the students performing part of the practice, isolated from the whole process.

The advanced life support was worked separately, in stages. There was demonstration by the professors and repetition by the students. But there was no simulation in which the students could carry out the whole process. (OBS06)

In the classes that took place in the services, the proposal was for the student to experience all the work process of the nurse. They observed all the cases that arrived at the service, but provided direct care to the already stabilized patients. The care provided to the most serious patients depended on the situation and the evaluation of the professor, if he/she considered that the student had the competence to do so. (OBS07)

It is not so easy; we cannot deliver all the possible content with the desired depth. The clinical cases help us in this, we can work on a set of situations in only one case, but we have an idea of how much we slice the content until we generate better understanding. It is still difficult, of course, for students to reason clinically. (P05)

There is difficulty regarding the number of students, the service only accepts three students per professor in high complexity. Then, the student stays six days in a single UPA, and another six days in an ICU. That is their entire internship. We had to do so, because before, the student was basically two days in each sector. So they did not have a great learning. (P12)

In spite of the limitations, regarding the number of students in the fields of practice and of the strategies adopted by the professors, the contents related to urgency and emergency, because of their complexity, consist sometimes of contents isolated or developed in a way that hinders the development of clinical and reflective reasoning. The amount of content to be worked in a short period of time depending on the intended general training can limit learning.

Assessment of students in the learning of urgency and emergency

As for the assessment, all the disciplines used the written test and of these, one assessed practical skills in the laboratory. The assessment of the simu-

lation was through the Objective Structured Clinical Examination (OSCE) method, used in a discipline. The participation in seminars and presentations of clinical cases were also strategies adopted to compose the assessment.

The evaluation of the theoretical and practical content is carried out by a written test and a practical test. [...] Students must solve some clinical cases with procedures in simulated situations within the skills lab. (P01)

A theoretical assessment, a pre-test, a post-test and an assessment in practical stations using the OSCE method. (P02)

Case study at the end of the internship, as well as a report experience article on the two internships, the ICU and the urgency and emergency unit. (P12)

And they must also, at the end of the experience in the service, elaborate an intervention proposal. Then, they identify a problem and study this problem, identify some possible solutions, and build an intervention project. That is passed on to the hospital administration as a feedback. (P01)

As for the methodological approaches of the assessments evidenced in the teaching plans of the disciplines, it was emphasized that all the disciplines propose practical assessment in laboratory, however, the OSCE proposed in the plan "PD06" was not perceived in practice.

The assessment is procedural and consists of written evaluations, bibliographical research, presence and participation in the class, simulation methods (such as structured clinical objective evaluation - OSCE). (PD05)

When observing the lessons/practical assessments, it was possible to identify the structure of the OSCE, as well as the checklist used to evaluate students.

The stations were on several themes. For each one of them, there was a scenario in a room that simulated the reality of the service or a pre-hospital context. At each station there were guidelines with the case and action that the student should take, and two professors with a checklist to conduct the assessment. At two stations there were "actors/elderly people" role-playing patients. The students performed the practice in pairs and had 6 minutes for each station. After performing care in the six stations, the students waited in a room where the debriefing/feedback was held. (OBS17)[...]

The checklist evaluated the following aspects: scene safety, use of PPE, specific skills on the subject, teamwork, and overall student assessment. The themes of scene safety, PPE use, and teamwork were evaluated across all the stations. (OBS17)

As for the methodological approach, the

PPC of the course, in coherence with the profile one wishes to form, proposes the use of active and problematizing methodologies, developed in small groups and articulating theory and practice, as well as the use of the formative evaluation.

[...] *using active and problematizing methodologies developed in small groups articulating theory and practice, accompanied by a process of formative evaluation.* (PPC01)

The incentive to use several methodologies was included in the PPC and there were many evaluation tools and strategies mentioned by the professors and observed in classrooms and teaching plans. The forms for evaluation were present, as well as the observation of the students' performance. No evidence of self-assessment was found.

DISCUSSION

In line with what is proposed in the NCGs and in other countries, studies on nursing education have signaled the need to program and evaluate teaching strategies that help students develop critical thinking, decision making and communicative competence.¹¹

A professional training that privileges learning through doing; which integrates theory and practice into reflective teaching, based on the process of knowing-in-action; reflection-in-action and reflection about the reflection-in-action, whose ability to reflect is stimulated through professor/student interaction in different practical situations.¹² Evidence-based nursing, portfolio, problem-based learning, simulation and virtual learning environments, conceptual maps, nursing process, case studies, seminars, dialogues, debates, games and play activities, among others, are possible strategies for teaching in nursing.¹¹

Regarding the strategies used in the theoretical-practical classes in the skills laboratory and in the services, it was noticed the mismatch between the formal proposal of the course via PPC and the use of these in the professors' daily life. The multiplicity of usable strategies does not eliminate the need to change long-standing philosophies in education, particularly in higher education, for its character still professionalizing in some areas, in which, traditionally, what matters to the professor is the field of specialty. In this sense, the development of the reflective thinking is a key element, mainly on the part of the professors.^{8,13} The advances that have occurred in the sense of thinking and proposing new ways of teaching, in a gradual distancing from

exclusively expositive classes, impose the challenge of understanding and adopting these new strategies, aiming at the development of critical awareness, clinical reasoning, thinking about doing, attributing new meanings to it.

If the desire from the NCGs was to overcome the teaching model focused on the transmission of information, with emphasis on the verticality of the professor/student relationship through active learning methodologies,¹⁴ its solidity will be perceived with the paradigmatic change in the way of conceiving teaching and perceiving the student. The proposals of the professors participating in this research for their academic routines are still strongly focused on strategies, such as theoretical and/or dialogic lectures, seminars, discussions based on texts or articles, demonstration of equipment and techniques. Although the Problem-Based Learning, role-play and simulation are adopted, the logic of the need for repetition of procedures is followed, after observation of the professor, with the teaching following a fragmented approach and execution of parts of the techniques inherent to the profession by some of the students (such as the observation of content related to advanced life support, worked in stages).

Even when it is proposed to think of teaching in general education, through the specialty bias, such as urgency and emergency, it is imperative, in this context, to reorient the care model, decentralizing it from the disease to a model that favors the social production of health. Thus, the adoption of innovative methodologies implies understanding and fostering education based on critical teaching and learning processes.¹⁵ Contents isolated or given in a way that does not favor the critical, reflexive reasoning, as observed in this research, or even the amount of content to be worked in a semester deserve attention on the part of the professors, not only pointing to the urgency in adopting critical positions from other understandings about how the student learns. To act as a facilitator of the teaching process and to mediate the production of knowledge, learning about the learning styles and the singularities of the students compose one of the professors' needs for teaching in addition to a critical perspective.¹⁶⁻¹⁷

There are limits and contradictions felt in the sphere of the absence of training for teaching among the professors interviewed, especially in what concerns the adoption of methodologies in an instrumental way only, disconnected from a posture whose breadth accounts for using the most varied strategies, in a permanent context of articulation

with the reflexive, critical and creative presuppositions, which embrace the limits of the students' clinical reasoning.¹⁸ This panorama is extended to the other courses in the area of health, whose mastery of specialty in the absence of pedagogical preparation still guides the idea of who is a good professor or a reference professor.

In the area of urgency and emergency, the need to teach, even in the logic of the generalist professional, the action for immediate care, integrated to the technical knowledge and skill, mediated by the wide use of technology,¹⁹ is also a challenge. However, it is important to demarcate nursing training and the emergency nurse training, qualified to work in the field of urgency and emergency care, since the clinical teaching in nursing demands practical and theoretical training, with the development of competences in an integrated way. Therefore, students should not be required to have the same understanding of the skills of reasoning as the emergency nurse.

Through the possibility of students experiencing the nurses' work process in a field of practice, it was observed that the care provided to critically ill patients depended on the situation and the assessment of this by the professor, delegating to the students the direct care to the already stabilized patients. Therefore, if the professor considered that the student had the competence to do so, the student would be responsible for the care under the professor's supervision. The relationships between professors and students are a fundamental part of the development of teaching strategies, and the establishment of relationships of trust is permeated by values, behaviors and affections established through the pedagogical encounter.²⁰

From this perspective, the active trends guide, in the logic of the establishment of affections, the protagonism of the student, being responsible for it by their own process of formation and contributing to the process of their peers, stimulating the criticality, reflexivity and creativity.¹⁵ A study²¹ that aimed to subsidize the necessary transformations in a curriculum of a nursing undergraduate course, pointed out that, regarding the construction of the student's autonomy, the professors, participants in the study, acknowledged the existence of difficulties in establishing limits of safety for the patient, when the student initiates the care practice. Other studies²²⁻²³ propose, in addition to the diversification of strategies, the understanding of the neo-systemic curricular meta-theory for the development of the student's autonomy, with a meaningful, contextual-

ized and globalized teaching.

Regarding the assessment, the student's participation is of great importance, including to evaluate the teaching models adopted by the professors of this research and their performance in teaching. The curricular innovations should include assessments and not just content and strategies to teach. No matter how many teaching strategies are feasible, the assessment of the student is part of the process and should deserve as much attention as defining what and how to teach. The classificatory and excluding evaluation process that only makes it possible to evaluate the student's ability to retain information. However, in the new model it would assume a formative and diagnostic character of teaching-learning, pointing out to difficulties and facilitating the pedagogical interventions, generating data that allow to evaluate the development of competences.²¹

The assessment, no longer being an element of power, with classificatory and selective aspects, can constitute a means for the existence of dialogue between those involved and a strategy of joint growth, both in the professional and personal spheres. As an intentional action of the educational process, it distances itself from the learning through the reception/repetition that approaches the accumulation of knowledge without reflection about it, which is remarkable in the traditional teaching. Thus, the challenge for the professors of this research is to make the assessment a dynamic, reflexive, critical and creative stage.¹²

Despite the stimulus to the use of new and varied methodologies, in addition to the need to understand the teaching process through other paradigms, as far as the assessment of the students is concerned, written tests or evaluation of acquired skills are almost always used, as pointed out by the participants of this research. Although the course PPC guides the use of active methodologies and formative assessment, this occurs through the completion of forms, checklist and observation by the professors, without the possibility of self-evaluation by the students.

The evaluation applied in a classificatory way, by means of tests and results of grades, can sometimes be a misunderstanding, since the development of the learning-teaching process is based on the relations between the subjects. If perceived as a diagnostic method, it may alienate the professor from the role of disciplinarian.²³⁻²⁴

The methodological strategies need to seek not the accumulation of knowledge, but the develop-

ment of knowledge, skills and attitudes, including those related to the care of urgencies and emergencies, in the logic of a generalist formation.

Despite the limitations of this study, mainly due to the research method chosen, exploring the strategies adopted by professors fostering the need for revision in the way in which teaching is perceived, can contribute to a broader understanding of the subject.

CONCLUSION

Although it was possible to perceive the intentionality for the diversification of strategies expressed in the PPC or in the professors' testimony, the concept of content transmission is still present. Expositive classes and the observation/repetition system may, depending on the way of conduction, strengthen the instrumental, fragmented teaching that little contributes to the critical, creative and reflective formation.

The training time to structure the generalist professional contributes to the feeling that the content practiced is never enough or that the student will remain with knowledge gaps to be filled. Regarding the evaluation, it seems to be continuously the Gordian knot of the teaching-learning processes. The difficulties consist not only in the construction of forms, but also in the aspects to evaluate, when to evaluate and how the professor will develop this process.

REFERENCES

1. Meira MDD, Kurçgant P. Competências de egressos graduados em enfermagem: avaliação de gestores empregadores. *Rev Cienc Gerenc* [Internet]. 2015 [cited 2016 Jan 23]; 19(30):60-4. Available from: <http://pgsskroton.com.br/seer/index.php/rcger/article/view/3666/3140>
2. Cotta RMM, Silva LS, Lopes LL, Gomes KO, Cotta FM, Lugarinho R, et al. Construção de portfólios coletivos em currículos tradicionais: uma proposta inovadora de ensino-aprendizagem. *Ciênc Saúde Colet*. 2012;17(3):787-96.
3. Lazzari DD, Martini JG, Busana JA. Teaching in higher education in nursing: an integrative literature review. *Rev Gauch Enferm* [Internet]. 2015 [cited 2016 Fev 23];36(3):93-101. Available from: <http://seer.ufrgs.br/index.php/RevistaGauchadeEnfermagem/article/view/49670/35065>
4. Rodrigues CCFM, Carvalho DPSRP, Salvador PTCO, Medeiros SM, Menezes RMP, Ferreira Júnior MA, et al. Innovative nursing education from the perspective of epistemologies of the South. *Esc Anna Nery Rev Enferm* [Internet]. 2016 [cited 2016 Jun 10]; 20(2):384-9. Available from: http://www.scielo.br/pdf/ean/v20n2/en_1414-8145-ean-20-02-0384.pdf
5. Carvalho ACO, Soares JR, Maia ER, Machado MFAS, Lopes MSV, Sampaio KJAJ. Teacher planning: report on methods of assets used in nursing education. *J Nurs UFPE on line* [Internet]. 2016 [cited 2016 Jun 10]; 10(4):1332-8. Available from: http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/7685/pdf_10004
6. Formiga LMF, Gomes LCP, Oliveira EAR, Duailibe FT, Sousa LSN, Lima LHO. Atuação dos profissionais de enfermagem no serviço de emergência: um estudo descritivo. *Rev Enferm UFPI* [Internet]. 2014 [cited 2016 Jun 10]; 3(1):53-8. Available from: http://www.ojs.ufpi.br/index.php/reufpi/article/view/1429/pdf_1
7. Zandomenighi RC, Mouro DL, Oliveira CA, Martins EAP. Cuidados intensivos em um serviço hospitalar de emergência: desafios para os enfermeiros. *REME rev. min. enferm*. 2014;18(2):404-14.
8. Bulman C, Lathlean J, Gobbi M. The concept of reflection in nursing: qualitative findings on student and teacher perspectives. *Nurse Educ Today* [Internet]. 2012 [cited 2015 Nov 24];32(5):8-13. Available from: http://ac.els-cdn.com/S0260691711002693/1-s2.0-S0260691711002693-main.pdf?_tid=0ce484ee-4f64-11e6-90be-00000aab0f27&acdnat=1469120361_c156fad19e10b9426d7c28c9f8d75d32
9. Allan H, Smith P. Are pedagogies used in nurse education research evident in practice? *Nurse Educ Today* [Internet]. 2010 [cited 2015 Nov 24]; 30:476-9. Available from: http://ac.els-cdn.com/S0260691709002019/1-s2.0-S0260691709002019-main.pdf?_tid=65364722-4f64-11e6-ba83-00000aab0f27&acdnat=1469120509_3dec2539438ade64ef132f26f028e14a
10. Bardin, L. *Análise de conteúdo*. Lisboa (PT): edições 70, 2011.
11. Oliveira LB, Díaz LJR, Carbogim FC, Rodrigues ARB, Püschel VAA. Effectiveness of teaching strategies on the development of critical thinking in undergraduate nursing students: a meta-analysis. *Rev Esc Enferm USP* [Internet]. 2016 [cited 2016 Jun 21]; 50(2):350-9. Available from: <http://www.scielo.br/pdf/reeusp/v50n2/0080-6234-reeusp-50-02-0355.pdf>
12. Chicharo SCR, Florêncio MV, Alves SZSP, Cortez EA, Andrade M, Valente GSC. Factors facilitating the teaching-learning in nursing education: an integrative review. *Rev Pesqui Cuid Fundam (Online)* [Internet]. 2016 [cited 2016 Jun 10]; 8(2):4099-108. Available from: http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/3408/pdf_1841
13. Draganoc PB, Sanna MC. Assessment of nursing teachers abilities to facilitate adult learning. *Cogitare Enferm*. 2015;20(3):554-61.
14. Ramos SM, Barlem JGT, Lunardi VL, Barlem ELD, Silveira RS, Bordignon SS. Satisfaction with academic

- experience among undergraduate nursing students. *Texto Contexto Enferm* [Internet]. 2015 [cited 2017 Mar 27]; 24(1):187-95. Available from: <http://dx.doi.org/10.1590/0104-07072015002870013>
15. Prado ML, Medina-Moya JL, Martínez-Riera JR. La producción del conocimiento en educación en enfermería en España y Brasil: una revisión integrativa. *Texto Contexto Enferm*. 2011;20(3):607-15.
16. Avelino CCV, Borges FR, Inagaki CM, Nery MA, Goyatá SLT. Development of a course in the Virtual Learning Environment on the ICNP®. *Acta Paul Enferm* [Internet]. 2016 [cited 2016 Jun 21]; 29(1):69-76. Available from: http://www.scielo.br/pdf/ape/v29n1/en_1982-0194-ape-29-01-0069.pdf
17. Cotta RMM, Costa GD, Mendonça ET. Portfólio reflexivo: uma proposta de ensino e aprendizagem orientada por competências. *Ciênc Saude Coletiva*. 2013;18(6):1847-56.
18. Sobral PHAF, Silva AMP, Santos VEP, Santos RAA, Santos ALS. Practice nursing in emergency services: systematic review. *Rev Pesqui Cuid Fundam (Online)* [Internet]. 2013 [cited 2016 Jun 10];5(4):396-07. Available from: http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/1655/pdf_892
19. Rios IC, Schraiber LB. A relação professor-aluno em medicina - um estudo sobre o encontro pedagógico. *Rev Bras Educ Méd*. 2012; 36(3):308-16.
20. Meira MDD, Kurcgant P. Nursing education: training evaluation by graduates, employers and teachers. *Rev Bras Enferm* [Internet]. 2016 [cited 2016 Jun 21];69(1):10-5. Available from: http://www.scielo.br/pdf/reben/v69n1/en_0034-7167-reben-69-01-0016.pdf
21. Nguyen DN, Zierler B, Nguyen HQ. A survey of nursing faculty needs for training in use of new technologies for education and practice. *J Nurs Educ* [Internet]. 2011 [cited 2015 May 12]; 50(4):181-9. Available from:10.3928/01484834-20101130-06
22. Vásquez ET. Los retos de la reespecificación curricular en autonomía universitária: aporte de la metateoría curricular neosistémica. *Invest Educ Enferm* [Internet]. 2012 [cited 2015 Jan 21]; 30(1):108-23. Available from: <http://www.scielo.org.co/pdf/iee/v30n1/v30n1a13.pdf>
23. Silva LAA, Soder RM, Schimdt SM, Noal HC, Arboit EL, Marco VR. Teacher archetypes: perceptions of nursing students. *Texto Contexto Enferm* [Internet]. 2016 [cited 2017 Mar 27]; 25(2):e0180014. Available from: <http://www.scielo.br/pdf/tce/v25n2/0104-0707-tce-25-02-0180014.pdf>
24. González-Chordá VM, Maciá-Soler ML. Evaluation of the quality of the teaching-learning process in undergraduate courses in Nursing. *Rev Latino-am Enfermagem* [Internet]. 2015 [cited 2016 Jun 10]; 23(4):700-7. Available from: <http://www.revistas.usp.br/rlae/article/view/105677/104397>

Correspondence: Luiz Alves Morais Filho
Universidade Federal do Rio Grande do Norte, Centro de Ciências da Saúde,
Departamento de Enfermagem. Campus Universitário,
BR 101 S/N
59072970 - Lagoa Nova, Natal, RN, Brazil.
E-mail: moraisfilho2004@hotmail.com

Received: August 19, 2016
Approved: May 07, 2017

This is an Open Access article distributed under the terms of the Creative Commons (CC BY).