

## Active methodologies for graduation in nursing: focus on the health care of older adults

*Metodologias ativas na graduação em enfermagem: um enfoque na atenção ao idoso*  
*Metodologías activas en la graduación en enfermería: enfoque en la atención al anciano*

Elaine Fernanda Dornelas de Souza<sup>1</sup>, Amanda Gaspar Silva<sup>1</sup>, Ariana Ieda Lima Ferreira da Silva<sup>1</sup>

<sup>1</sup> Universidade do Oeste Paulista, Graduation in Medicine. Presidente Prudente, São Paulo, Brazil.

### How to cite this article:

Souza EFD, Silva AG, Silva AILF. Active methodologies for graduation in Nursing: focus on the health care of older adults. Rev Bras Enferm [Internet]. 2018; 71(suppl 2):920-4. [Thematic Issue: Health of the Elderly] DOI: <http://dx.doi.org/10.1590/0034-7167-2017-0150>

Submission: 04-01-2017

Approval: 10-01-2017

### ABSTRACT

**Objective:** To describe the experience of the use of simulation as active teaching methodology in the Developmental Psychology discipline and share its impacts on the students' learning process. **Method:** Based on Active Methodologies, the students in Nursing of Universidade do Oeste Paulista – Presidente Prudente-SP developed simulated visits to older users of the Family Health Strategies. **Results:** In accordance with the 2014 National Curriculum Guidelines and the Brazilian Unified Health System, particularities of the needs of older adults at their homes were problematized. **Final considerations:** Addressing the biopsychosocial needs and integrality associated with the health of older adults in simulated home visits provides a differentiated instrument in the development of skills and competence of future nurses.

**Descriptors:** Health of the Elderly; Nursing; Family Health Strategy; Home Health Nursing; Public Health.

### RESUMO

**Objetivo:** Descrever a experiência do uso da simulação como metodologia ativa de ensino na disciplina Psicologia do Desenvolvimento e compartilhar repercussões no processo de aprendizagem dos estudantes. **Método:** Fundamentado nas Metodologias Ativas, os estudantes de enfermagem da Universidade do Oeste Paulista – Presidente Prudente-SP desenvolveram visitas domiciliares simuladas aos idosos usuários das Estratégias Saúde da Família. **Resultados:** Em conformidade às Diretrizes Curriculares Nacionais 2014 e ao Sistema Único de Saúde, foram problematizadas particularidades das necessidades da pessoa idosa no domicílio. **Considerações finais:** Abordar as necessidades biopsicossociais e a integralidade referente à saúde dos idosos na visita domiciliar simulada, um instrumento diferenciado no desenvolvimento de habilidades e competência do futuro enfermeiro.

**Descritores:** Saúde do Idoso; Enfermagem; Estratégia Saúde da Família; Enfermagem Domiciliar; Saúde Pública.

### RESUMEN

**Objetivo:** Describir la experiencia del uso de la simulación con la metodología activa de enseñanza en la asignatura Psicología del Desarrollo y compartir repercusiones en el proceso de aprendizaje de los estudiantes. **Método:** Fundamentado en las Metodologías Activas, los estudiantes de enfermería de la Universidad del Oeste Paulista – Presidente Prudente-SP desarrollaron visitas domiciliares simuladas a los ancianos usuarios de las Estrategias Salud de la Familia. **Resultados:** en conformidad a las Directrices Curriculares Nacionales 2014 y al Sistema Único de Salud, fueron problematizadas las particularidades de las necesidades de la persona anciana en el domicilio. **Consideraciones finales:** Abordar las necesidades biopsicossociales y la integralidad referente a la salud de los ancianos en la visita domiciliar simulada, un instrumento diferenciado en el desarrollo de habilidades y competencia del futuro enfermero.

**Descriptor:** Salud del Anciano; Enfermería; Estrategia Salud de la Familia; Enfermería Domiciliar; Salud Pública.

CORRESPONDING AUTHOR

Elaine Fernanda Dornelas de Souza

E-mail: [efdornelas.souza@gmail.com](mailto:efdornelas.souza@gmail.com)

## INTRODUCTION

Currently, the National Curriculum Guidelines (DCNs) from 2014 for undergraduate courses emphasize pedagogical practices that stimulate transforming, ethical and reflective actions, favoring the students' autonomy so they feel encouraged to reflect and participate actively in the education process in an academic context of innovative practices, aiming at a contemporary education model stimulated by the processes of learning to learn, learning to be and learning to live, as "The Four Pillars of Education", fundamental concepts of education based on the Report to UNESCO of the International Commission on Education for the 21st Century, coordinated by Jacques Delors<sup>(1)</sup>.

In this context, the use of active teaching-learning methodologies stand out, as they aim to improve the processes of student-centered education, favoring the construction of knowledge from real experiences and situations, articulated by an active pedagogy, disassociated from the sovereignty of knowledge focused on the professor, who now assumes the role of an adviser, facilitator or mediator of learning, stimulating reflections and problematizations within social, educational, health, cultural and social relations, in which students are protagonists of their own learning processes<sup>(2-3)</sup>.

Inspired by examples of experiences from the 1960s, performed in Canada (in McMaster) and Holland (in Maastricht), various schools of Medicine and Nursing have been trying to adopt a model that is centered on student autonomy, using active methodologies in their curriculum with the aim of promoting learning so as to understand the relationship between theory and practice<sup>(3)</sup>.

In Brazil, active methodologies are based on Paulo Freire's theoretical principles and on the progressive social-critical pedagogical trend aimed at the education of autonomous professionals, who can solve problems based on knowledge acquired previously to the reality where they live. It is a methodology based on the autonomy of educational practices that enable students to build critical and reflexive knowledge, with responsibilities articulated in real-world situations<sup>(3)</sup>.

Courses in the Health field have been valuing the use of this teaching method for enhancing the appropriation by students of practices developed in primary care focused on individual or collective problem solving, so that they become able to develop and deploy preventive, curative actions, and those associated with health promotion, preparing them to perform in primary care services, which are the gateway to the Brazilian Unified Health System (SUS)<sup>(4)</sup>.

The National Curriculum Guidelines (DCNS) from 2014 suggest the use of active teaching-learning methodologies in the undergraduate course in Nursing, with the purpose of stimulating and promoting active attitudes and skills in students, so that the pursuit of knowledge, and not of information only, may integrate theoretical and practical cognitive contents, contrary to what happens in traditional pedagogical practice<sup>(3)</sup>.

Specifically in Nursing schools, the use of active methodologies aids the education of future nurses, following the Guidelines and Bases for National Education (LDBEN, 1996), which are mostly based on the specialized services offered to the population, establishing reciprocal relations and accepting the importance of

meeting the social demands of the Unified Health System (SUS)<sup>(4)</sup>. In practice, it contributes to the technical and humanized qualification of professional who are sufficiently committed to the well-being of society and who have the necessary skills to manage, implement and lead resolutions of health problems observed, being able to propose actions for the community.

Active methodology is an educational notion that favors the teaching and learning process and that can be used in real or simulated experiences, to promote awareness on the complexity of the social phenomena involved and, consequently, problem solving<sup>(3,5)</sup>.

In this context, it acquired an important role in the education of nurses for assisting students in the development of the necessary skills through the integration between theory and practice. The transformation of the environment into a programmed reality is able to involve students so they may develop skills that are yet to be explored in the theoretical content, contributing significantly to the formation of qualified professionals and promoting technical, ethical and political skills to deal with the health problems in which they are inserted<sup>(6)</sup>.

Simulation offers a dynamic process to education in Nursing, which is similar to that of reality, allowing students to integrate theoretical and practical complexities, generating feedback, evaluations and reflections. It allows students to practice future work situations, so that they may reflect on their actions during the debriefing process, allowing them to rethink their behaviors<sup>(5-7)</sup>.

Debriefing is the moment after simulation conducted by the professor responsible for guiding the activity which allows participants to reflect systematically on their feelings before the situation, their behavior and performance during the simulation experience, establishing a bridge between theory and practice. The goal is to promote reflection, think about what they could do differently and assist students in transferring competencies of the simulated environment to future situations in their profession<sup>(6)</sup>.

In this sense, it is extremely important to give emphasis to the clinical trials conducted with the use of active methodologies to promote the competence of students in providing care to people, qualifying them to work in the future.

## OBJECTIVE

To describe the experience of the use of simulation as active teaching methodology in the Developmental Psychology discipline and share its impacts on the students' learning process.

## METHOD

This experience report present an educational scenario developed in a simulated house, held with students from the first term of the Nursing course at Universidade do Oeste Paulista (UNOESTE) Presidente Prudente – São Paulo, with a focus on Health Care for Older Adults during the home visits to users of the Family Health Strategy (FHS), highlighting the most relevant demands of the older population, qualifying the future professionals in the development of the integrality of practices in the Health field related to the integral condition of comprehension of human beings, in accordance with one of the principles of the Unified Health System (SUS)<sup>(8-9)</sup>.

The content problematized during the experience emerged during the development of the Developmental Psychology discipline, addressing the skills and competencies of future nurses in the care to older SUS users.

A professor with experience in the development of the simulation of home visits and an actress participated in the construction of the scenario. The construction process began during theory classes, through the problematization of the care to the Health of Older Adults. Then, the steps necessary for preparing a scenario for the simulation of a home visit were structured.

Considering the fidelity to the development of the case, it was necessary to construct it previously, determining all variables for possible interventions by the students, such as: the organization of a scenario under conditions like those of an older adult's home, the characterization of the character with clothing, language and makeup with physical and behavioral particularities close to reality.

**Context and Development of the Practical Action**

During the Developmental Psychology discipline, diversified activities of simulation are implemented, where students of the 1st term of the course in Nursing are encouraged to articulate their knowledge, skills and attitudes, to develop skills for the future work in the Unified Health System (SUS). In this sense, the simulations are designed to replicate situations close to reality, on which the structure and security of the physical environment, the actors and the desired level of complexity will be based, in the initial series. In the activities of the Home Visit Simulation (HVS), students receive the case file with the specific goal of the visit, including descriptions that are similar to the information contained in the medical records of users of a FHS. The deepening of relevant points in the development of skills and competencies is encouraged during each stage, through the discussion of aspects related to communication, the nurse-patient relationship, the bond with the FHS team and the biopsychosocial evaluation. The planning of the activities is structured by the laboratory's team along with professors/facilitators of the course, and the characteristics of the case and of the expected cognitive educational approach are what determine the physical space in which the simulation should happen, between the classroom, the simulation lab (LhabSim) or the "Simulated House".

**Environmental interface**

The activity was developed in stages. First, the students were given the case file with the specific goal of the visit, including descriptions that are similar to the information contained in the medical records of users of a FHS. The deepening of relevant points in the development of skills and competencies was encouraged during each activity, through the discussion of aspects related to communication, the nurse-patient relationship, the bond with the FHS team and the biopsychosocial evaluation. The planning of the activity was structured by the team of professors/facilitators of the course, considering the characteristics of the case and the expected cognitive educational approach. This information guided the construction of the particularities of the case.

Next, the prerequisites for the development of the HVS were listed, including: the development of a clinical case that contextualized the study theme, the scheduling of the simulated house,

the scheduling and preparation of the actress representative of the older adult, the preparation of the physical environment of the house, the organization of the scenery, the division of groups in a maximum of 10 students.

Two students were asked to work in the domiciliary visit simulation as nursing professionals, while the remaining students were sent to the interior of the house.

The students acting as nurses were told about the purpose of the visit, the user's age, aspects of her physical and emotional health, and some habits of her daily life. The other students remained inside the house and received the patient's case file. The observing group was instructed not to intervene in the visit even when prompted. This group received a checklist for monitoring the expected actions, to observe and make notes about whether the described criteria had been developed during the HVS. The checklist was structured around the evaluation of the older patient's living conditions.

**Chart 1** – Checklist for the conducting of the Home Visit Simulation

	<b>Actions</b>	<b>Performed</b>	<b>Not performed</b>	<b>Partially performed</b>
1	Did they plan the visit, sought information and explored resources available on the medical records?			
2	Did they introduce themselves? Did they define their role and the objective of the interview?			
3	Did they collaborate for the SUS user to feel comfortable talking about her needs? Did they mitigate any stressful situations?			
4	Did they identify the user? (name, age, gender, place of birth, ethnicity, former and current origin, former and current profession, religion, marital status and education level).			
5	Did they ask introductory questions so that the patient could explain her problems, did they stimulate her when necessary?			
6	Did they check her medical history? Did they perform the physical examination? Did they assess the user's emotional state?			

To be continued

Chart 1 (concluded)

	Actions	Performed	Not performed	Partially performed
7	Did they use a clear language so that the user could understand them?			
8	Were they attentive, considerate and empathetic? Did they focus on the user during the interview?			
9	Did they accept the user's point of view? Did they avoid being authoritarian, arrogant, condescending, self-righteous, or disrespectful during the interview?			
10	Did they identify the living conditions? Condition of housing, family income, family dynamics, life projects, belief, moral values, life habits (feeding, sleep, rest, use of licit and illicit drugs, self-medication, leisure and physical activities).			

**Simulation – Home visit to an older patient**

1 – Focus of the visit: Home visit of nursing professionals to an older user of the Family Health Strategy (FHS): Summary evaluation of the biopsychosocial development and Environmental Conditions.

2 – Scenario: House. For the scenario's composition: carpets in the rooms (living room, bedroom, kitchen and bathrooms), boxes of medicine over the cabinet, closed doors and windows.

3 – Support: An actress to act as an older user of the FHS.

4 – Target audience: 1st term of the course in Nursing.

**Clinical Case – Mrs. Mônica**

During a home visit, the FHS team monitored the case of Mrs. Mônica (76 years old), mother of three children: Bruno, Letícia and Daniel, aged 41, 46 and 51 years old, living in Londrina – Paraná.

Mrs. Mônica is a retired widow who lives alone in Presidente Prudente – São Paulo. She is hypertensive and uses medication for blood pressure control. She reports having a good social coexistence with her neighbors and attending dance parties for older adults that take place weekly in the neighborhood. She attends the Family Health Strategy of the Furquim neighborhood. Community agent Márcia says she has been finding it difficult to get Mrs. Mônica to stick to the medication schedule, and that the patient has reported having to get up often during the night to go to the bathroom, which resulted in her falling when doing so in the last week. The community agent asks during a staff meeting in the Family

Health Strategy that the nursing professionals make a home visit to Mrs. Mônica's residence, to evaluate the case. Mrs. Mônica has used 25 mg hydrochlorothiazide, 01 x day, for six years.

**DISCUSSION**

The problematizing approach of active methodologies has been standing out in the education of health professionals for promoting the curiosity in students to seek theoretical and practical knowledge, to solve problems and overcome challenges of actual or simulated situations<sup>(3,8)</sup>.

In this sense, the development of simulation activities enables students to experience the learning process in contexts similar to reality in an active way, allowing them to reflect on and evaluate cognitive, emotional, social aspects of the older patient and discuss potential referrals during the development of a home visit.

The simulated house is a structured environment similar to a real house, which should be organized according to the requirements of the study scenario. For being a prepared environment, the physical conditions of the furniture, hygiene, social conditions are controlled to suit the context of the activity being developed, favoring the increase in confidence and greater involvement of students in the development of behaviors. From the students' perspective, exercising the theoretical knowledge is extremely beneficial.

Thus, the problematization of the HVS is grounded on the planning, analysis and evaluation of the information on the user's needs. These points structure the development of the HVS, when students are instructed to: 1) plan and identify the central axis of the reason of the visit; 2) observe and analyze the environment and biopsychosocial conditions of the user; and finally, 3) analyze possible referrals and assess the information shared with the health team of the FHS.

After the visit, the sharing of emotions and perceptions of those involved in the action, about the development of the activity, is essential, considering the actors and students acting as nurses. It is appropriate that at this point the possible weaknesses and strengths of the visit are problematized and reflected upon, which does not mean that the student will be punished for their actions. At this point, it is recommended that the students, who usually feel insecure about any "mistakes" they may have made, are put at ease. This justifies the importance of resignifying practice, reassessing knowledge and decisions taken during the scene, making the restructuring of behavior possible<sup>(5)</sup>.

In this sense, the effectiveness of the use of the methodology is associated with the planning, organization and choice of the practices carried out. The training of the faculty members in the use of the methodology and the assimilation of the study model by the students, who usually feel uneasy for believing they are not learning, are also needed. These perceptions are justified as the change in the search and construction of knowledge differs from the traditional teaching model, which is reinforced by the student acting as the protagonist of their own learning process<sup>(8,10)</sup>.

On the other hand, the contributions of the use of active methodologies to education in Nursing stand out for articulating theoretical and practical knowledge, providing students with experiences similar to those observed in real life situations so they may develop skills related to problem-solving, communication and decision making, qualifying professional for working in primary health care<sup>(10)</sup>.

Despite the weaknesses and strengths in the use of simulation as a teaching methodology, it was possible to note the students' satisfaction with the activity, the level of acquired knowledge and responsible participation during the development of the practice, reinforcing its benefits to the quality of teaching and learning through active methodologies.

## FINAL CONSIDERATIONS

The use of active methodologies as pedagogical tools for teaching in graduate courses in Nursing has been allowing students to anticipate the reality of the professional practice scenario, preparing them for new ways to solve health problems commonly seen in the daily life of nurses, and addressing the biopsychosocial needs and integrality associated with the health of SUS users, as well as differentiated instruments in the development of the future nurse's skills and competence.

Given the above, the use of active methodologies can facilitate the teaching-learning process of future nurses.

---

## REFERENCES

1. Delors J, Al-Mufti I, Amagi I, Carneiro R, Chung F, Geremek B, et al. Educação: um tesouro a descobrir: relatório para a Unesco da Comissão Internacional sobre Educação para o século XXI. São Paulo: Cortez Editora [Internet]. 1998 [cited 2016 Dec 10]. Available from: [http://dhnet.org.br/dados/relatorios/a\\_pdf/r\\_unesco\\_educ\\_tesouro\\_descobrir.pdf](http://dhnet.org.br/dados/relatorios/a_pdf/r_unesco_educ_tesouro_descobrir.pdf)
  2. Cyrino EG, Toralles-Pereira ML. Trabalhando com estratégias de ensino-aprendizado por descoberta na área da saúde: a problematização e a aprendizagem baseada em problemas. *Cad Saúde Pública*[Internet]. 2004[cited 2017 Jun 02];20(3):780-8. Available from: <http://www.scielo.br/pdf/csp/v20n3/15>
  3. Berbel NAN. As metodologias ativas e a promoção da autonomia de estudantes. *Semina: Ciênc Soc Hum*[Internet]. 2012[cited 2017 Jun 02];32(1):25-40. Available from: <http://dx.doi.org/10.5433/1679-0383.2011v32n1p25>
  4. Prado ML, Velho MB, Espindola DS, Sobrinho SH, Backes VMS. Arco de Charles Maguerez: refletindo estratégias de metodologia ativa na formação de profissionais de saúde. *Esc Anna Nery Rev Enferm* [Internet]. 2012[cited 2017 Jun 03];16(1):172-7. Available from: <http://www.scielo.br/pdf/ean/v16n1/v16n1a23.pdf>
  5. Oliveira SN, Prado ML, Kempfer SS. Utilização da simulação no ensino da enfermagem: revisão integrativa. *Rev Min Enferm*[Internet]. 2014[cited 2017 May 22];18(2):487-95. Available from: <http://www.reme.org.br/artigo/detalhes/941>
  6. Meakim C, Boese T, Decker S, Franklin AE, Gloe D, Lioce L, et al. Standards of Best Practice: Simulation Standard I: terminology. *Clin Simul Nurs* [Internet]. 2013[cited 2017 Jan 05];9(65):S3-S11. Available from: <http://dx.doi.org/10.1016/j.ecns.2013.04.001>
  7. Bland AJ, Topping A, Wood B. A concept analysis of simulation as a learning strategy in the education of undergraduate nursing students. *Nurs Educ Today* [Internet]. 2011[cited 2017 Jan 15];31(7):664-7. Available from: <http://www.sciencedirect.com/science/article/pii/S0260691710001966>
  8. Marin MJS, Lima EFG, Paviotti AB, Matsuyama DT, Silva LKD, Gonzalez CD, et al. Aspectos das fortalezas e fragilidades no uso das metodologias ativas de aprendizagem. *Rev Bras Educ Med*[Internet]. 2010[cited 2017 Aug 11];34(1):13-20. Available from: <http://dx.doi.org/10.1590/S0100-55022010000100003>
  9. Piexak DR, Freitas, PH, Backes DS, Moreschi C, Ferreira CLL, Souza MHT. Percepção de profissionais de saúde em relação ao cuidado a pessoas idosas institucionalizadas. *Rev Bras Geriatr Gerontol*[Internet]. 2012[cited 2017 Jun 04];15(2):201-8. Available from: <http://dx.doi.org/10.1590/S1809-98232012000200003>
  10. Marin MJS, Lima EFG, Paviotti AB, Matsuyama DT, Silva LKD, Gonzalez C, et al. Aspectos das fortalezas e fragilidades no uso das metodologias ativas de aprendizagem. *Rev Bras Educ Med*[Internet]. 2010[cited 2017 Jun 15];34(1):13-20. Available from: <https://dx.doi.org/10.1590/S0100-55022010000100003>
-