

Realistic simulation as an extensionist tool for undergraduate nursing: an experience report*La simulación realista como herramienta extensionista para el pregrado en enfermería: relato de experiencia**Simulação realística como uma ferramenta extensionista para graduação em enfermagem: um relato de experiência***Andressa de Oliveira Nunes Pinto¹**

ORCID: 0000-0002-8174-6896

Jhully Soares Braga¹

ORCID: 0000-0002-1156-6005

Camilla Garcia de França**Gonçalves¹**

ORCID: 0000-0003-3441-9339

Giovanna Costa Guimarães¹

ORCID: 0000-0002-9550-1267

Larissa Martins de Andrade¹

ORCID: 0000-0003-0981-0133

Priscila Sanchez Bosco¹

ORCID: 0000-0001-8583-9371

Sara Cristina Venturino Ignacio¹

ORCID: 0000-0003-1743-860X

Hanna Oliveira Temperini¹

ORCID: 0000-0003-4432-2098

Alessandra Sant'Anna Nunes¹

ORCID: 0000-0001-7435-2568

Advi Catarina Barbachan Moraes¹

ORCID: 0000-0002-1470-2623

¹Universidade do Estado do Rio de Janeiro. Rio de Janeiro, Brazil.

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Corresponding author:

Advi Catarina Barbachan Moraes
E-mail: advicbmoraes@gmail.com

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Abstract

The aim was to report the experiences of the project and its positive effects on the development of the clinical reasoning of the undergraduates, as a result of the experience with realistic simulation in the faculty of nursing. It is a descriptive, retrospective and cross-sectional report, based on the experience of the project team. In addition to planning meetings for activities carried out by the project, 74 posts were made on social media and 3 meetings were held at virtual events. There was a good response from all event participants, and numerous positive feedbacks on the published content. Realistic simulation promotes the development of clinical reasoning, greater autonomy and improved communication between patient and nurse. In addition, it prepares students for the numerous challenges of the clinical-hospital environment, promoting greater safety and, consequently, better performance in nursing care.

Descriptors: Simulation Training; Chronic Disease; Nursing Process; Professional Competence; Health Education.

Resumen

El objetivo fue relatar las experiencias del proyecto y sus efectos positivos en el desarrollo del raciocinio clínico de los estudiantes de grado, como resultado de la experiencia con simulación realista en la facultad de enfermería. Es un informe descriptivo, retrospectivo y transversal, basado en la experiencia del equipo del proyecto. Además de las reuniones de planificación de las actividades que realiza el proyecto, se realizaron 74 publicaciones en redes sociales y se realizaron 3 reuniones en eventos virtuales. Hubo una buena respuesta de todos los participantes del evento y numerosos comentarios positivos sobre el contenido publicado. La simulación realista favorece el desarrollo del razonamiento clínico, una mayor autonomía y una mejor comunicación entre paciente y enfermera. Además, prepara a los estudiantes para los numerosos desafíos del entorno clínico-hospitalario, promoviendo una mayor seguridad y, consecuentemente, un mejor desempeño en el cuidado de enfermería.

Descriptoros: Entrenamiento Simulado; Enfermedad Crónica; Proceso de Enfermería; Competencia Profesional; Educación en Salud.

Resumo

Objetivou-se relatar as experiências do projeto e seus efeitos positivos no desenvolvimento do raciocínio clínico dos graduandos, em decorrência da vivência com simulação realística na faculdade de enfermagem. Trata-se de um relato descritivo, retrospectivo e transversal, realizado mediante a experiência vivenciada pela equipe do projeto. Além de reuniões de planejamento das atividades realizadas pelo projeto, foram feitas 74 postagens nas mídias sociais e 3 encontros em eventos virtuais. Houve um bom retorno de todos os participantes dos eventos, e inúmeros feedbacks positivos acerca dos conteúdos publicados. A simulação realística promove o desenvolvimento do raciocínio clínico, maior autonomia e a melhoria na comunicação entre o paciente e o enfermeiro. Além disso, prepara os estudantes para os inúmeros desafios do ambiente clínico-hospitalar, promovendo maior segurança e, consequentemente, melhor desempenho nos cuidados de enfermagem.

Descriptoros: Treinamento por Simulação; Doença Crônica; Processo de Enfermagem; Competência profissional; Educação em Saúde.

Introduction

With the purpose of promoting the expansion of technical and scientific knowledge, the graduation in nursing allows the insertion of students in university extensions. In these environments, actions are developed that contribute to the formation of a comprehensive professional, through the formulation of articles, integrative activities, use and management of social media, realistic simulations, among other programs¹.

Therefore, graduation extensions mean the possibility of going beyond the physical grids of educational institutions and moving towards actions that will have an impact on society. Therefore, students delve deeper into a specific topic of interest, research and promote educational actions, while the general population benefits from enjoying all the interventions promoted by the team¹.

According to Paulo Freire², extension projects cannot achieve their ideals when executed in a way where there is only the transfer of knowledge from those who have more to those who have less. Therefore, the exchange of information through communication would be the correct way to maximize learning.

To this end, it is understood that the profile of the student working in an extension project must be related to a future engaged professional, with a deep interest in the progress of scientific research and in improving the quality of life of the population³.

Following these premises, the Extension Project entitled "Realistic Simulation: clinical decision-making strategy through the Systematization of Nursing Care by undergraduate students and nursing residency" of a university located in the state of Rio de Janeiro started in 2020, aims to develop scenarios similar to those found in health units, which place students as promoters of knowledge, thus putting into practice what is seen in theory.

This study aims to report the experiences of the project and its positive effects on the development of clinical reasoning, as a result of the experience with realistic simulation in the faculty of nursing.

Methodology

This is a descriptive, retrospective and cross-sectional report, based on the experience of the Extension Project in Realistic Simulation of a Higher Education Institution in the State of Rio de Janeiro, from January 2020 to March 2022.

The experience report is a network of processes that invoke various reflective and associative skills based on experienced situations, creating scientific constructions, especially in the field of research⁴.

For the construction of this report, the following materials were used: Minutes of the meetings held by the team about the activities carried out in the simulation scenarios, calendar of activities produced by the team, student response forms in the validated scales of the Student Satisfaction and Self-Confidence in Learning (ESAA) or Student Satisfaction and Self-Confidence in Learning Scale (SSSCL), created by the National League for Nursing (NLN) and The Simulation Design Scale^{5,6}. There was also the

creation of an Instagram profile for the dissemination of information and guidance, enabling the discussion of the methodology of Realistic Simulation and Systematization of Nursing Care with clinical cases, nursing procedures, evolution and various health disorders. In addition, workshops and face-to-face events were held with online transmissions, online classes and content videos were prepared and performed, made available on the following platforms: Instagram®, Youtube®, Skype® or Meeting®, and partnerships were established with different Academic Leagues of the Faculty of Nursing.

The Realistic Simulation intends to involve undergraduate Nursing students in remote and face-to-face activities that generate knowledge fixation and improvement of critical thinking. For this, Realistic Simulation activities were set up with Briefing and Debriefing Flow, in addition to checklists for Skills Training. A feedback instrument was also built to assess student learning during simulation scenarios.

Experience Report

The changes in the world scenario due to the manifestation of the COVID-19 pandemic demanded the elaboration of a new social management, when implementing the restructuring of daily activities. Social isolation was a sanitary measure adopted to contain the spread of the SARS-CoV-2 virus in the population, which directly impacted the teaching-learning process of education in Brazil. Therefore, the use of remote teaching has become necessary in universities throughout the country⁷.

In the nursing course, the integration of the curriculum and the online model has become a major challenge, since disciplines with a practical workload mostly cover the academic training of nurses. However, carrying out re-planning made it possible to apply new scenarios, expanding communication between students, participants and society, enabling the intensification of online interpersonal relationships and the sharing of thoughts⁸.

Among the new strategies, the use of social networks was adopted in the development of publications in the form of posts and educational lives as a way of disseminating knowledge, due to its scope and social reach⁷.

For this extension project, the selection of relevant topics for discussion and, consequently, the process of health education was planned. Therefore, the action in the face of the COVID-19 pandemic was framed in the purpose of helping the scientific community, demonstrating to the population explanations regarding the world scenario, allowing a source of reliable, scientific and instructive information. In addition, via social networks, certain types of masks recommended for use as individual and collective protection were discussed, as well as specific clothing for use by health professionals, reinforcing the importance of these Personal Protective Equipment (PPE).

In addition, the explanation of the systematization of nursing care became a prominent theme, by presenting Workshops and publications addressing the use of standard nursing languages, bringing the reader and the project closer to the integration of the nursing process and practices that



contribute to care. adequate. Thus enabling the participation of the academic community in the media, being a new study tool for students, health professionals and offering knowledge to society.

Another tool used was the simultaneous online meetings, commonly known as lives, which allowed for greater exchange of knowledge, questions and contact with the participants, acting in a way to propagate the domains of the project. Topics like “Does only practice make perfect? Talking about Deliberate Practice in Fast Cycles” and “Introduction to Realistic Simulation” were accompanied and had active participation from members of the academic community. It is worth noting that this material is saved and accessed virtually on the project's social network page.

Following this path, a structure of content relevant to health was also implemented, when addressing chronic non-communicable diseases (NCDs). NCDs are a group of diseases which have a high prevalence and incidence in today's society due to several new harmful lifestyle habits. In many cases, they are marginalized and directly impact the quality of life of the population. In view of this, the project is integrated in the educational dissemination in relation to the group of diseases, their impact on society and the care provided to encourage improvement in the patient's quality of life⁹.

Currently, with the opportunity to return in person and the adoption of the new way of living, the extension project provides the performance in realistic simulation in a practical field of study, thus diversifying the perception and obtaining new interpretations.

The construction of the health professional demands practical classes, experience and discussions of the perspectives of each experience. Thus, integrated with the purpose of developing technical and non-technical nursing skills, the project promotes face-to-face event sessions presenting scenarios of chronic non-communicable diseases (NCDs), simulating a given clinical case for the performance of practical nursing activities.

These events are scheduled monthly and students are immersed in a simulation scenario with the purpose of improving clinical reasoning, professional attitude and care management (empathy, decision making, team spirit and leadership awakening). All simulated scenarios are structured and follow the Briefing Flow, scenario development and Debriefing, and may occur in simulation laboratories, relevant environments for building immersion and in loco at the university's health units.

Thus, the execution of the Simulated Scenario begins with the briefing, which contains information about the scenario so that the students understand how their performance will be, carrying out the scenario and ending with the Debriefing, which is the discussion about the situation experienced so that the acquired knowledge is fixed. This experience allows the student to perform procedures in a safe and learning place before performing them in the fields of outpatient or hospital care¹⁰.

After the simulation scenario, feedback forms and already validated scales are used to measure the students' impressions and learning. For this, two scales were used as a methodological resource: satisfaction and self-confidence in learning with questions addressed to students to survey prior knowledge related to the subject and acquired during the scenario and simulation, in addition to suggestions for possible changes in the model performed.

Therefore, the project expands its contact with the public and its social interest, structuring itself in the development of online (Table 1) and face-to-face activities. Carrying out these face-to-face activities, addressing clinical cases similar to those found in the health care complex environments, help in the academic and professional construction of each participant, thus expanding their framework of technical and non-technical knowledge and positively impacting the construction of the professional nurse that this will come to be.

Chart 1. Activities developed by the project. Rio de Janeiro, RJ, Brazil, 2022

Theme	No.	Quality	Dates	Objectives
Realistic Simulation	3	Post	May/20	Describe what realistic simulation is and its processes.
Nursing care	18	Post	October - January/21	Dissertation on the practices carried out by nursing, recalling the theory for the student and nursing professional.
Cervical cancer	1	Clinical case	March/22	Stimulate the clinical reasoning of the nursing student and resident.
COVID-19	9	Post	June/20	Provide realistic information about the COVID-19 pandemic, spreading the knowledge and security of the academic and social community.
CNCD	9	Post	September - October/20	Disseminate knowledge on how to care for patients with non-communicable chronic diseases.
Kidney disease	3	Post and clinical case	March/21	Evidencing the problems concerning a renal patient and demonstrating how to care for and welcome this client.
February Purple and Orange	14	Post	February/21	Disseminate about nursing care related to Fibromyalgia, Alzheimer's and Leukemia.
Hand hygiene and COVID-19	1	Post	May/21	Show the whole community the importance of hand hygiene and its assertive way of carrying out this procedure.
January White	6	Post	January/22	Talk about mental health and the importance of taking care of it.
Pressure injuries (PI)	2	Post	June/21	Disseminate knowledge about PI and its prevention.
Leukemia	1	Clinical case	February/22	Stimulate the clinical reasoning of the nursing student and resident.



May purple and yellow	5	Post	May/21	Awareness campaign on inflammatory bowel diseases and traffic safety.
March blue and lilac	6	Post	March/22	Discuss colorectal cancer and cervical cancer.
NANDA, NIC and NOC	1	Workshop	November/21	Promote the dissemination of knowledge about the fundamental books of the nursing process NANDA, NIC and NOC
Systematization of Nursing Care	2	Workshop	March and September/20	Bring or complement knowledge about Systematization of Nursing Care for all undergraduates and residents.
Realistic Simulation and Innovation	4	Live	June - July/20	The project invited professors to discuss topics involved in the importance of realistic simulation for the training of health professionals.
Realistic Simulation, nursing, death and mourning	1	Post	March/21	Clarify how to handle death situations and the role of nursing in this process.

In the midst of the COVID-19 pandemic, the publications and events held by the project were extremely important for the training of nursing professionals¹¹. Since, there was a reformulation of knowledge, previously developed only in the practical field, for social media. Fundamental bases of nursing were addressed in posts and lives on Instagram®. In addition, workshops were held on Youtube® on subjects involved in daily work, leading the student to develop clinical reasoning, getting as close as possible to reality. These activities carried out obtained positive returns from viewers, through feedback forms released at events or evaluations from social networks. Comments like “Very enlightening workshop”, “This class was very rewarding, thank you very much!” and “Very well organized” became recurrent in the project’s media.

Conclusion

The Realistic Simulation project adapted during the period of social isolation, maintaining activities for the dissemination of knowledge and promoted, through videos

and face-to-face meetings, the improvement of skills in nursing students, developing the ability to communicate verbally and non-verbally with the patient, learning through faster resolutions to problems, developing autonomy, improving technique and patient care.

This methodology introduces the student to the clinical-hospital universe, allowing him greater confidence to face future challenges. The last phase, the Debriefing, makes the students think critically about the facts experienced, developing clinical reasoning skills and exchanging information with the other participants, allowing the construction of new knowledge. Thus, it is possible to state that Realistic Simulation is a positive active methodology for the individual as an academic and as a future professional.

It is also worth mentioning that for the planning of the year 2022, several activities will still be carried out, such as: Nursing Care Systematization Workshop, Nursing Week, Physical Examination Workshop, Workshop Simulation of a shift in a clinical ward.

References

- Freire Paulo. Extensão ou comunicação? 7. ed. Rio de Janeiro: Paz e Terra; 2014.
- Silva ALB, Sousa SC, Chaves ACF, Sousa SGC, Andrade TM, Filho DRR. A importância da Extensão Universitária na formação profissional: Projeto Canudos. Rev enferm UFPE on line. 2019;13:e242189 <https://doi.org/10.5205/1981-8963.2019.242189>
- Costa ED, Kreling MCG, Araújo NM. Contribuições de um projeto de extensão para a formação profissional de alunos dos cursos de enfermagem e de medicina. Extensão em foco. 2020;21:18-34. <http://dx.doi.org/10.5380/ef.v0i20>
- Daltro MR, Faria AA. Relato de experiência: Uma narrativa científica na pós-modernidade. Estudos e pesquisas em psicologia. Estud. psicol. 2019;19(1):223-237. <https://doi.org/10.12957/epp.2019.43015>
- Costa RRDO, de Medeiros SM, Coutinho VRD, Mazzo A, de Araújo MS. Satisfaction and self-confidence in the learning of nursing students: Randomized clinical trial. Esc. Anna Nery Rev. Enferm. 2020;24(1). <https://doi.org/10.1590/2177-9465-EAN-2019-0094>
- Almeida RGDS, Mazzo A, Martins JCA, Pedersoli CE, Fumincelli L, Mendes IAC. Validation for the Portuguese language of the simulation design scale. Texto & Contexto - Enfermagem. 2015; 24(4):934-940. <https://doi.org/10.1590/0104-070201500004570014>
- Valente GSC, Moraes EB, Sanchez MCO, Souza DF, Pacheco MCMD. Remote teaching in the face of the demands of the pandemic context: Reflections on teaching practice. RSD [Internet]. 2020 [acesso em 25 dez 2022];9(9):e843998153. Disponível em: <https://rsdjournal.org/index.php/rsd/article/view/8153>
- Silveira A, Santos NO, Wilhelm LA, Soccol KLS, Tisott ZL, Prates LA. Estratégias e desafios no ensino remoto na enfermagem. Enferm. foco. 2020;11(5):98-103. <https://doi.org/10.21675/2357-707X.2020.v11.n5.4302>
- Simões TC, Meira KC, Santos J, Câmara DCP. Prevalências de doenças crônicas e acesso aos serviços de saúde no Brasil: evidências de três inquéritos domiciliares. Ciênc. Saúde Colet. 2021;26:3991-4006. <https://doi.org/10.1590/1413-81232021269.02982021>
- Neto AS, Fonseca AS da, Brandão CFS. Simulação Clínica e Habilidades na Saúde. 2. ed. Rio de Janeiro: Atheneu; 2020.
- Costa CMA, Matta TF, Santos Junior EC, Araújo LM, Martins ERC, Spíndola T. Saberes e práticas de alunos de enfermagem na atenção à saúde das minorias sexuais. Glob Acad Nurs. 2020;1(3):e42. <https://dx.doi.org/10.5935/2675-5602.20200042>

