

**Innovative nursing care in the COVID-19 pandemic: report of an extensionist experience***Atención innovadora de enfermería en la pandemia de COVID-19: relato de una experiencia extensionista**Cuidados inovadores de enfermagem na pandemia de COVID-19: relato de uma experiência extensionista***Tainá Ferreira Santos Vilhegas<sup>1</sup>**

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**Abstract**

Among the professional skills necessary in the training of nursing students, there is that associated with working in health services. In this context of training, participation in university extension programs increases learning possibilities and allows approximation of theoretical-practical experience, providing activities for the benefit of the community. The objective of this article is to report the extension experiences of the project "Innovative Nursing Care", during the COVID-19 pandemic. This is a descriptive, retrospective and cross-sectional report, carried out based on the experience of professors and undergraduate nursing students. It was possible to observe that the experience of nursing students from different undergraduate periods enabled them to learn about clinical care for patients with chronic conditions, providing better quality training for both scholarship students and volunteers during the stoppage of classes generated by the pandemic.

**Descriptors:** Chronic Disease; Community Outreach; Health Education; Nursing; Technologic Innovation.**Resumen**

Entre las competencias profesionales necesarias en la formación de los estudiantes de enfermería, se encuentra la asociada al trabajo en los servicios de salud. En este contexto de formación, la participación en programas de extensión universitaria aumenta las posibilidades de aprendizaje y permite la aproximación de la experiencia teórico-práctica, brindando actividades en beneficio de la comunidad. El objetivo de este artículo es relatar las experiencias de extensión del proyecto "Cuidados de Enfermería Innovadores", durante la pandemia de COVID-19. Se trata de un informe descriptivo, retrospectivo y transversal, realizado a partir de la experiencia de profesores y estudiantes de graduación en enfermería. Se pudo observar que la experiencia de los estudiantes de enfermería de diferentes periodos de pregrado les permitió conocer sobre la atención clínica a los pacientes con condiciones crónicas, brindando una formación de mejor calidad tanto a los becarios como a los voluntarios durante el paro de clases generado por la pandemia.

**Descriptores:** Enfermedad Crónica; Alcance Comunitario; Educación para la Salud; Enfermería; Innovación Tecnológica.**Resumo**

Dentre as competências profissionais necessárias na formação do acadêmico de enfermagem, está aquela associada à atuação nos serviços de saúde. Nesse contexto de formação, a participação em programas de extensão universitária aumenta as possibilidades de aprendizado e permite a aproximação da vivência teórico-prática, proporcionando atividades em benefício da comunidade. Objetiva-se com esse artigo relatar as experiências extensionistas do projeto "Cuidados Inovadores de Enfermagem", durante a pandemia de COVID-19. Trata-se de um relato descritivo, retrospectivo e transversal, realizado a partir da vivência de docentes e acadêmicos da graduação em Enfermagem. Foi possível observar que a experiência dos acadêmicos do curso de enfermagem de diferentes períodos da graduação possibilitou o aprendizado em cuidados clínicos ao paciente em condições crônicas, proporcionando uma formação de melhor qualidade tanto para o acadêmico bolsista quanto os voluntários durante a paralisação das aulas geradas pela pandemia.

**Descritores:** Doença Crônica; Extensão Comunitária; Educação em Saúde; Enfermagem; Inovação Tecnológica.

## Introduction

Currently, extensionist actions are configured in a thematic axis in graduations in the health area, which enable experiences that favor the formation of conscientious professionals, stimulating the extramural learning of undergraduates and quality service to the population<sup>1</sup>.

According to the National Curriculum Guidelines for the Undergraduate Nursing Course (DCN), extension programs are complementary activities that should be increased during graduation. To make it possible, the extension project in nursing articulates research and teaching applied to reality, so that the assisted population is one of the main subjects to achieve the project's objective, since the activities are aimed at this.

Therefore, the extension project is important for the nursing student, as it allows the articulation of theory with practice, the creation of a bond and provision of service to the population, in this way, the student receives a relevant experience that impacts on their professional qualification<sup>1,2</sup>.

Noncommunicable Chronic Diseases (CNCD) are a group of diseases that represent one of the main causes of death in the population. Due to this fact, the need to create an extension project focused on the care of CNCDs is recognized. In this scenario, the project focuses on caring for the population affected by these diseases, with the aim of preventing risks, reducing damage, treating and improving quality of life. Health education is one of the methods used by academics to create a bond with the population and for them to understand the disease they have, the importance of treatment as a way to prevent injuries and how to reduce the risks of complications with a change in lifestyle<sup>3,4</sup>.

In this way, the professor of the nursing course at a University, together with the students, created the extension project "Innovative Nursing Care" with seven nurses, two scholarship holders and five volunteers as members. The project's target audience consists of patients with chronic noncommunicable diseases, nursing workers, residents of the Clinical and Surgical Nursing program, undergraduate students and family members of patients who are treated at the Polyclinic linked to the University.

In this context, its main objective is to structure and evaluate health care management processes to be applied to patients with chronic conditions treated at the outpatient units of the Polyclinic through innovative health technologies according to the needs of each individual, promoting the quality of care. life and well-being of patients and families. In addition, the project has the prospect of raising the sociodemographic profile of this public and implementing multidisciplinary activities for promotion, prevention and guidance for patients with chronic non-communicable diseases and their families, aiming at mutual learning between members and patients<sup>3</sup>.

Therefore, this report aims to describe the experiences obtained through the extension actions carried out during the COVID-19 pandemic by the aforementioned extension project in the year 2021, through various activities on chronic non-communicable diseases aimed at students, nurses, patients and family.

## Methodology

The present study takes an approach with a focus on a descriptive, retrospective, cross-sectional report, carried out from the experience of university students of the nursing course from different periods of graduation, from a public University in the State of Rio de Janeiro, throughout the activities developed in the extension project entitled "Innovative nursing care", during the COVID-19 pandemic.

The selection of students (scholarship holders and volunteers) took place by completing a two-stage selection process, where skills with social media, textual production in formatting programs and use of other platforms that add to the development of the project were questioned. , in addition to raising the interest of each candidate in the theme, selecting those who stood out the most.

The methodology in question is a descriptive research instrument that is based and focused on the detailed narration about the knowledge and experience acquired by the individuals involved, and this narrative is of interest to the scientific community<sup>5</sup>. Specifically in the present study, they are the reports from the beginning of the pandemic with the suspension of face-to-face activities (March 2020) until the beginning of the gradual return to institutional work in a hybrid way (March 2022).

In the context of the approach taken by this study, it is necessary to highlight the relationship between descriptive research and retrospective and cross-sectional studies. Where they, in a micro conjuncture, are inserted in a macro conjuncture that is this line of investigation. Being the retrospective study, the tool in which the researcher performs a follow-up of past events, such as risk factors and exposure for a certain period, of the individuals who will be reported in the study<sup>6</sup>.

The cross section, on the other hand, brings an epidemiological aspect, where it investigates a certain disease and its new cases, it is dynamic due to the fact that it is inserted in different contexts and different times<sup>7</sup>. These concepts are of extreme importance for the project, as it is a work on productions already carried out, the preliminary follow-up of the same is evident, in addition, for working with chronic non-communicable diseases, and this being prevalent in the current society, there are the deepening of the theme by those involved in the work.

As a reference for the construction of this report, materials were used, such as the courses and lives promoted, the surveys carried out, actions implemented, diagnoses carried out, in addition to consulting the project, which is an official document containing all the information about the objectives and goals achieved. and the new ones they hope to achieve. Considering that the project undergoes an annual evaluation by the Institution, it was reviewed and approved in the same year in which this article was produced.

The reference used describes, in the report below, details of all the actions carried out by the project that take place through the guidance and coordination of the unit's professor.



## Experience Report

In order to face the COVID-19 pandemic and break its transmission and dissemination chain, social distancing was necessary, which induced the compulsory interruption of face-to-face activities in all areas of work and education worldwide, with the exception of essential services<sup>8</sup>.

At this time, Brazilian Higher Education is adapting to the new reality and new teaching and learning processes, based on the technological use and pedagogical use of information technologies, replacing face-to-face classes with online classes and instituting emergency remote teaching, aiming to maintain the academic calendar and strengthen social distancing<sup>9</sup>.

The polyclinic, where the project is being developed, is a teaching, research and assistance unit of medium and high complexity and during the pandemic, it was necessary to contain the spread of the disease, in addition to the implementation of restrictive measures to the agglomeration of people. As it is configured as a unit in the care of the population with CNCs, it became essential that the vacancies available in the Health Services for this exceptional demand were accompanied by safety conditions and a sufficient number of health professionals to carry out this task, ensuring follow-up of specialized outpatient treatments, the interruption of which is not recommended<sup>10,11</sup>.

In view of this scenario, many difficulties were encountered and strategies were needed to make emergency remote teaching possible and to guarantee essential service to users.

This extension project was planned for the use of technologies that would support the extensionist actions online, guaranteeing the partial maintenance of activities for patients with chronic diseases. Between 2020 and 2021, the project carried out several extension activities such as the Nursing Care Systematization Workshop (SAE), workshops to survey the demands for actions for the implementation of the SAE and Dehospitalization, creation of nursing consultation forms, workflows care for patients with chronic diseases and seventeen posts were also made on the project account on the Instagram® platform. In addition, three articles were published, two nursing consultation instruments were developed for patients with diabetes and cardiovascular disease, five videos were produced simulating nursing consultations and presenting results at the Brazilian Nursing Congress (CBEn) and at the Extension Exhibition of University.

The students' performance in social media such as Instagram® and Youtube®, occurred after selecting topics that allowed the sharing of information, aiming at discussions and development of an educational process aimed at patients with chronic non-communicable diseases, at the professionals involved in the care process of these patients and students who make up the student body of the project and others who are part of the educational institution and who want to participate in the promoted activities.

Furthermore, it is worth mentioning the participation in events, which involve partnerships with

other extension projects also linked to the institution, which carry out telemonitoring and realistic simulation work, for example. In addition to the pillar of scientific production, carried out through research and which is included in the works carried out, including course completion, articles and published book chapters.

Regarding the workshops promoted by the project, the themes of Systematization of Nursing Care (SAE) and Dehospitalization were covered and the content made available to nursing students, as well as nursing professionals and users. It is believed that, with such knowledge being disseminated, it contributes to their improvement, since large numbers of interactions were obtained in these courses.

Among the actions developed in partnership with the professionals of the polyclinic, the creation of new nursing consultation forms, the restructuring of others and the reformulation of care flows for patients with chronic diseases with the arrival of the COVID-19 pandemic, were fundamental for the improving customer service, as well as helping professionals involved in these activities. In addition, such actions were also used as a learning moment for the undergraduate students involved, with the aim of training new professionals involved and trained within the theme.

For the community, in turn, the posts made on the project's Instagram® social network were intended to transmit a little about the chronic diseases that affect patients, the safety and monitoring measures necessary with the arrival of the pandemic and the impact that the pandemic brought to people with chronic diseases, reinforcing the role of educator in the health area assigned to nurses. Furthermore, it can be said that some posts were made with a view to presenting the new service flow of the Polyclinic itself to the public undergoing treatment and the general public, disclosing some of its sectors and what work is done in them.

In addition, the project was also related to the care discipline, offered in 7 of the 9 periods at the University in which undergraduate students take part. This discipline is based on the fundamentals of nursing, knowledge and practices that permeate the daily lives of nurses. Therefore, through the improvement of more in-depth knowledge of non-communicable chronic diseases, health education and participation in nursing consultations, through telenursing, a subject that the project articulates with two other Polyclinic projects, the undergraduates were able to expand beyond the classroom. This expansion was extremely important, especially after social isolation, when students were able to partially return to their activities. Thus, we mention the vaccination coverage survey carried out by undergraduates through telephone calls to patients in the cardiology sector, with the aim of relating vaccination coverage in these patients..

Therefore, we cannot fail to highlight the various posts on social media that the project carried out, expanding its contact with the public, its reach and its social interest (Chart 1)



Chart 1. Activities of the Innovative Care Project during the COVID-19 pandemic. Rio de Janeiro, RJ, Brazil, 2020-2022

Type of activity	Titles	Dates	Goals
Live on Instagram social media: farms with simulation and innovation.	Training for the conscious use of PPE in the care of COVID-19; Experience of the Polyclinic in testing health professionals; Technological innovation tools in chronic patient care during the COVID-19 pandemic; COVID-19 testing.	Jun - Jul/2020	Explain about protective measures used in outpatient clinics and conscious use of PPE; Report the experience of testing professionals; Present the technologies used during the treatment of the chronic patient during COVID-19; inform the main differences between the methods of testing for COVID-19.
Posts on the Instagram social media about the project and location.	Discover our project; The outpatient service of the Polyclinic.	Jul/2020	Present the project to the target audience through the Instagram social network, also present the project objectives; Present the outpatient services offered.
Post on the social media Instagram: Care Networks and Guidelines for Chronic Noncommunicable Diseases.	Health care network; Non-communicable chronic diseases; Strategic action plans to face non-communicable chronic diseases; CNCD in Brazil; Do you know what self-care is?; Family included in self-care; Adherence, management and monitoring of patients with CNCD; Difficulties faced by family caregivers of clients with CNCD; Health education; Possible health education actions in the context of chronic diseases.	Jul - Sep/2020	Present the levels of health care and where the project fits into this environment, discuss non-communicable chronic diseases, present the Ministry of Health Guidelines on CNCDs, present epidemiological data on chronic diseases in Brazil, publicize the importance of self-care, pay attention to for low adherence to treatment for CNCDs, adherence in a simple way and showing the advantages of treatment, Expose the objectives behind health education related to chronic non-communicable diseases and the role of educator assumed by nurses.
Live on the social media Instagram.	Good practices in managing COVID-19.	Aug/2020	Live on the social network Instagram to inform about best practices in the management of patients with COVID-19.
Post on the social media Instagram: Technologies.	Get to know telehealth and its fields of action; Health technologies; Health technologies: light, light-hard and hard.	Aug - Sep/2020	Introduce telehealth and expose its fields of action at the Polyclinic; Inform about health technology and its applications; Explain types of technology.
Post on the social media Instagram: Chronic non-communicable diseases.	Nursing in specialized outpatient care; Diabetes Mellitus and insulin therapy; Getting to know the Podiatrics and Foot Care service; Arterial and Systemic Hypertension (SAH); Cardiovascular Risk Factors; Treatment of cardiovascular diseases; Obesity and Fad Diets; Oncological Diseases; Respiratory diseases.	Sep - Dec/2020	Inform about the specialized care provided by nurses; Address the main CNCDs and innovative services available at the polyclinic.
Post on the social media Instagram.	Stress and Anxiety; Main differences between Burnout, Stress and Depression & Anxiety in times of COVID-19; Inflammatory Bowel Disease; Crohn's Disease and Ulcerative Colitis Inflammatory Bowel Disease; Rheumatoid arthritis; Pulmonary Function Test (innovation applicability) Telemonitoring in the polyclinic.	Mar - Jun/2021	Address the risk factors and triggers of stress and anxiety and possible treatments; discuss chronic diseases in outpatient care; present the diagnostic procedures offered at the polyclinic; present the technological and innovative tools used in nursing care at the polyclinic during the pandemic.
Post on the social media Instagram.	International Nursing Day.	May/2021	Pay tribute to the commemorative day of the nursing professional.
Post on the social media Instagram.	Introduction of the new members of the Project.	Sep/2021	Introduce new project members.

**Conclusion**

The project is of great relevance in terms of building knowledge between the teaching, research and extension pillars through the provision of services to the community and the production of knowledge transmitted to users via an extension project, enabling educational actions that influence the transformation of society.

In addition, in articulation with graduation, it allows the production of knowledge and transformation of nursing students, scholarship holders or volunteers, leading to the construction of new knowledge and the implementation of

existing care based on evidence and scientism, as is the case of the systematization of care of nursing.

It should be noted that the project begins a new aspect envisaged with the COVID-19 factor, studying the repercussions of this viral infection on individuals who are already the subject of this study, contemplating the well-being and autonomy of patients and their families. In addition to seeking the implementation of technological innovations that improve the quality of health care, bringing new knowledge in the field of care.



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