

Perceptions of academics and nursing staff about the extension project: “Walking through the hospital”

Percepções de acadêmicos e equipe de enfermagem sobre o projeto de extensão: “Caminhando pelo hospital”

Percepciones de los académicos y del personal de enfermería sobre el proyecto de extensión: “Caminando por el hospital”

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ABSTRACT

Objective: To know the perception of academics and nursing staff about the extension project “Walking through the hospital”.

Method: Qualitative study conducted in a Brazilian university hospital from November/2019 to April/2022 with nursing students and professionals participating in a university extension project. Data were collected using instruments on the Google Forms[®] platform and submitted to Content Thematic Analysis. The project was approved by the Ethics Committee.

Results: Fifteen academics, four nurses and six nursing technicians participated in the study. Four categories emerged from the analysis: “Knowing the hospital environment/dynamics”, “Articulation between theory and practice”, “Bond between academics and health care professionals” and “Work process in the unit”.

Final considerations: The findings highlight the importance of university extension in providing knowledge and experience of hospital clinical practice, which can contribute to strengthening teaching and academic training in nursing.

Keywords: Hospitals, university. Students, nursing. Education, nursing. Community-institution relations.

RESUMO

Objetivo: Conhecer a percepção de acadêmicos(as) e equipe de enfermagem sobre o projeto de extensão “Caminhando pelo hospital”.

Método: Estudo qualitativo realizado em hospital universitário brasileiro de novembro/2019 a abril/2022 com acadêmicos e profissionais de enfermagem participantes de um projeto de extensão universitária. Os dados foram coletados por meio de instrumentos na plataforma Google Forms[®] e submetidos à Análise de Temática de Conteúdo. Projeto aprovado pelo Comitê de Ética.

Resultados: Participaram do estudo 15 acadêmicos, quatro enfermeiros e seis técnicos de enfermagem. Da análise, emergiram quatro categorias: “Conhecendo o ambiente/dinâmica hospitalar”, “Articulação entre teoria e prática”, “Vínculo entre acadêmicos e profissionais da saúde” e “Processo de trabalho da unidade”.

Considerações finais: Os achados evidenciam a importância da extensão universitária ao proporcionar conhecimentos e experiências da prática clínica hospitalar, o que pode contribuir no fortalecimento do ensino e da formação acadêmica em enfermagem.

Palavras-chave: Hospitais universitários. Estudantes de enfermagem. Educação em enfermagem. Relações comunidade-instituição.

RESUMEN

Objetivo: Conocer la percepción de los estudiantes y el personal de enfermería sobre el proyecto de extensión “Caminando por el hospital”.

Método: Estudio cualitativo realizado en un hospital universitario brasileño de noviembre/2019 a abril/2022 con estudiantes y profesionales de enfermería participantes en un proyecto de extensión universitaria. Los datos se recogieron mediante instrumentos en la plataforma Google Forms[®] y se sometieron a un análisis temático de contenido. El proyecto fue aprobado por el comité de ética.

Resultados: Participaron en el estudio 15 académicos, cuatro enfermeros y seis técnicos de enfermería. Del análisis surgieron cuatro categorías: “Conociendo el entorno/dinámica del hospital”, “Articulación entre la teoría y la práctica”, “Vínculo entre los estudiantes y los profesionales sanitarios” y “Proceso de trabajo en la unidad”.

Consideraciones finales: Los resultados ponen de manifiesto la importancia de la extensión universitaria al proporcionar conocimientos y experiencias de la práctica clínica hospitalaria, que pueden contribuir al fortalecimiento de la enseñanza y la formación académica en enfermería.

Palabras clave: Hospitales universitarios. Estudiantes de enfermería. Educación de enfermería. Relaciones comunidad-institución.

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INTRODUCTION

University extension, as an educational process, has a political and legal trajectory of discussions and achievements, with its integration to the teaching, research and extension tripod being an important milestone, as provided in the Brazilian Constitution of 1988 as inseparable for the university's performance⁽¹⁾. In 2001, the National Curriculum Guidelines (*Diretrizes Curriculares Nacionais – DCN*) determined the need for theoretical and practical activities within the scope of nursing from the early stages of training, which were established through the National Council of Education and reinforced by the National Education Plan (*Plano Nacional de Educação – PNE*)⁽²⁾. This plan sets goals and strategies involving education in the Brazilian context for the period 2014-2024, among which university extension occupies 10% of the curriculum credits with actions, preferably, developed in areas of social relevance⁽³⁾. The effective implementation of this goal faces challenging obstacles, as it needs to break the archaic conception that valuable knowledge is produced only within the university⁽⁴⁾. However, the institution where this study was conducted already has a resolution that provides general rules for the curricular inclusion of university extension in pedagogical projects and curriculum of undergraduate courses in the health area⁽⁵⁾.

To provide meaningful learning and fully fulfill their social role, nursing courses must articulate theory and practice, promote dialogue and different experiences of reality. To do so, they need to seek new teaching methodologies in order to comply with the current legislation. By balancing the three spheres – teaching, research and extension –, the university enables interaction between society and the reality in which it is inserted, and enhances the understanding of the world of the individual in training, providing knowledge and experiences to academics, which strengthens the teaching and research, a fundamental function of universities^(1,6).

The current Pedagogical Project of the Undergraduate Nursing Course⁽⁷⁾ of the teaching institution under study provides undergraduates with direct contact with hospital practices from the fourth stage, when they have completed the basic theoretical ground to develop care activities in health institutions. Thus, academics in the early semesters end up having little or no contact with the professional reality, creating gaps in knowledge that can be filled by complementary activities offered by the university.

Among the various activities offered to academics, the university extension project entitled "Walking through the hospital" stands out. It consists of an observational activity centered on the Radiology Service of a teaching hospital, which aims to provide contact with hospital practice

– especially with the temporary transfer of patient care⁽⁸⁾ – so that students experience the reality of a health institution even in the early stages of their training. This initiative allows students to have a broad view of the work of nurses in a highly complex hospital, as it enables direct contact with the diverse areas of activity, contributing to the training of generalist professionals.

This extension project is integrated with the precepts of the Teacher-Assistance Integration Program, one of the resources used by the federal government to join efforts in a process of articulation between education institutions and health services, adapting to the real needs of the population⁽⁹⁾. Thus, bringing education closer to health care services is a viable proposal for health and education planning to modify professional practices and care models and qualify health services according to the demands of the community.

Thus, studies on this theme are relevant for the qualification of the Curricularization of University Extension in the Nursing field, since there is a lack of studies that seek to understand the scenario experienced by academics and institutional professional staff involved in these activities. In addition, there was both academic and institutional interest in knowing the perceptions of those involved about the project, as it was an innovative experience. In this perspective, this study aimed to answer the following research question: What is the perception of academics and the nursing staff about the project "Walking through the hospital?", with the objective of knowing the perception of academics and nursing staff about the extension project "Walking through the hospital".

METHOD

The research description was guided by the Consolidated Criteria for Reporting Qualitative Research (COREQ)⁽¹⁰⁾ tool. This is a qualitative, exploratory and descriptive study, that aims to think and produce theory about the studied problem or to understand and explain cultural and historical processes interrelated in a dynamic way in the constitution and development of the individual and society⁽¹¹⁾.

The study was conducted at a large university hospital in southern Brazil – focused on care, teaching, extension, research, and innovation – which serves, mostly, patients from the Unified Health System (*Sistema Único de Saúde*). This project is centered on the hospital's Radiology Service, where around 46,000 patients are transported annually between the diagnostic-therapeutic procedures unit and the units where patients are hospitalized.

The object of this research consisted of a university extension project that is offered to undergraduate nursing students at a public university in southern Brazil since

the second semester of 2017. Its nature is not mandatory, and the academic's participation depends on their interest and initiative.

Each semester, fifteen vacancies are offered to be filled by students. The weekly workload is ten hours; to obtain the certificate, it is necessary to total a minimum of 120 hours throughout the semester. To be part of the project, the academic initially participates in a selection interview, when they are guided about its characteristics and functioning (dynamics, uniform, personal protective equipment, schedules, possibilities). Subsequently, it is necessary to do online training on good hospital practices, in addition to the code of conduct course available in the Virtual Learning Environment of the hospital institution.

Upon joining the activity, the student is introduced to the unit and the professionals of the multidisciplinary team and invited to participate in a meeting with the nursing staff of the Radiology Service, which has six nurses, sixty-four nursing technicians and a professor university, responsible for the project. The service provides complex care technologies and serves several units and beds, being responsible for transferring children and adults hospitalized, to perform imaging tests throughout the hospital. Academics are distributed between the morning and afternoon shifts – on different days of the week – according to their availability and the course's curriculum, so as not to interfere with their regular academic activities. Initially, they are linked to specific employees to integrate in the sector; subsequently, they are allocated according to their curiosity and the needs of the unit.

In this project, academics have the opportunity to participate in the temporary transfer of care, which consists of redirecting responsibility for patient care^(8,12). In the institution under study, forms were implemented that summarize relevant patient information to perform this activity, which is an important safety tool for the patient/care team during transportation and the patient's stay in the unit of procedures and diagnostics⁽⁸⁾.

Students who participate in this project can experience – in practice – the completion and use of this important instrument, for the continued care of patients within the various units of the institution. The care provided by the nursing team – venous infusions, vascular accesses, probes, drains and dressings, moving the patient from the bed to the stretcher or chair, as well as the use of personal protective equipment – are also activities that can be observed in practice by academics. Furthermore, there is the possibility of accompanying radiology technicians and medical team in carrying out diagnostic tests, nurses in procedures and nursing consultations, in addition to the opportunity to

develop communication skills through dialogue with patients and the health care team, making the experience even more enriching.

During the extension period, the academics are allocated in a room designated for the organization of patient transfers together with the nursing and administrative staff of the radiology unit; as the activities take place, the academics follow the staff in patient transfers. The radiology team is guided by the project coordinator to welcome and explain all care and procedures routinely performed with patients, in order to contribute to the training of academics. Likewise, they are also instructed to question whenever they observe something different or unknown. This strategy aims to make the activity important for professionals and attractive and formative for academics.

The participants in this study consisted of nursing academics from the educational institution who participated in the extension project, from 2017 to 2020, and members of the nursing teams of the Radiology Service who lived with the extension workers during the activities. The sample was by convenience and – as inclusion criteria – we considered the participation of students who completed a workload equal to or greater than 120 hours and day shift professionals who accompanied the project participants for at least one semester. There were no exclusion criteria.

The collection of information was conducted by a group of researchers that included a professor, a master's student, an undergraduate student and three scientific initiation students. Before data collection, all were trained by the researcher responsible for the project, and the instruments were tested and adjusted after a pilot test with two health professionals and two academics. The researchers had contact with the students and professionals and circulated in the unit with the role of welcoming and resolving situations involving the extensionists during the activities.

In order to maintain the anonymity of the participants, the invite was sent to all nursing professionals of the day shift – (five nurses and 42 nursing technicians) in the radiology sector. However, in the invitation email, there was information that only professionals who had accompanied the students for at least one semester during the activities of the study period should complete the questionnaire. This strategy was used since there was no record, throughout the project, of the professionals who effectively accompanied the students. This circumstance is justified by the dynamism of activities and the insertion of academics in the team according to the service needs and interests of academics. As for the participants, they were explained on the motivations of the research and how the data collection would happen, followed by an invitation to participate in the study.

The collection was conducted from November 2019 to April 2022, through different instruments (professionals and academics) available online on Google Forms® platform, sent by email. 55 academics and 47 nursing professionals and five nurses and 42 nursing technicians were invited to participate in the study. The instruments were developed by the researchers and contained variables to characterize the students (gender, age, workload, current stage of the undergraduate course, stage that was attending during the activity), professionals (age, gender, professional category, time working in the profession, time working in the Radiology Service and time accompanying the project) and essay questions about the experiences and perceptions during the project for both groups. The expected time to complete the instrument was ten minutes.

The information was submitted to Thematic Content Analysis, which consists of a set of analytical communication techniques with pre-analysis, material exploration and treatment of results – inference and interpretation. The analysis used systematic and objective procedures to describe the content of the messages, understanding knowledge related to the conditions of the object of study from merging the characteristics of the text and the logically deduced factors, which are determined by the use of indicators⁽¹³⁾. After this stage, the statements were edited and compressed to maintain the clarity of the text.

This study complied with Resolution 466/2012 and 510/2016 of the National Health Council, and was approved by the Research Ethics Committee of the institution, under Opinion no. 3.8063. The instruments were answered – via Google Forms®, anonymously – to ensure the absence of embarrassment. By answering it, the participants consented to the use of the data for the research. With a view to distinction, the participants were referenced in the statements by codes of letters that differentiate academics (A), nursing technicians (NT) and nurses (N), followed by numbers.

RESULTS

Fifteen academics, four nurses and six nursing technicians participated in the study. Among the academics, all were female, and the mean age was 21 ± 2.3 years old. Regarding participation, 12 (80%) completed 120 hours and three (20%) had a workload beyond the minimum stipulated. Most of the interviewed students participated in the project before starting the regular activities of disciplinary practice (fourth stage of the course), since 14 (93.3%) were in the first, second or third stage of the course. For the same number

(93.3%), the project was the first contact they had with the hospital setting. These academics were able to accompany approximately 1,800 (4%) patient transfers between the Radiology Service and their units of origin, representing 150 participations/month.

Regarding professionals, nine (90%) were female and one (10%) male. Professionals' mean age was 43 ± 7.6 years old and the time in the profession was 20 years. The time working in the Radiology Service ranged between four and 18 years. Seven (46.6%) professionals accompanied the project students for six semesters; three (28.6%) for four semesters.

The qualitative analysis of the interviews resulted in indicators that were grouped into four categories: "Knowing the hospital environment/dynamics", "Articulation between theory and practice", "Bond between academics and health care professionals" and "Work process in the unit". Titles were used that best expressed the content revealed by the participants regarding their perception of the university extension activity. The categories are described below:

Knowing the hospital environment/dynamics

This category corresponds to the impressions of participants during the familiarization with the hospital environment and dynamics where the extension project activities are performed, evidenced by the statements:

It was very important to have this first contact with the environment, and the dynamics of the hospital, it allowed to know different units and see the transfer of care in practice [...]. (A11)

I got to know mainly the roles of nurses and nursing technicians. I was able to closely observe how the patient is transferred [...] what care should be taken, communication with the patient, correct identification, checking the procedure performed in the medical record [...]. (A2)

It is a space where we students, can learn both from reports and conversations and from observation of care practice, always with all professionals willing to clarify our doubts. (A3)

[...] It was my first contact with the role of nurses in hospital care, allowing to deepen my knowledge [...], as well as observe the activities performed by nursing technicians and other professionals. (A8)

We went to various areas of the hospital [...] I got to know the particularities of each area, nursing station and how it worked. The nursing technicians explained

about the patient, the exams, the therapeutic equipment they were often using, about the importance of checking the patient's identification wristband and having empathy. (A10)

I learned a lot about routines, contact with the patient and the staff. This experience was very important because when I got to the 4th semester [...] I already had a brief knowledge. (A9)

It was an incredible experience where I got to know the hospital, routines, the importance of transfer of care [...] transfer of care with devices (probes, catheters, infusion pumps, oxygen therapy...), what is a MDR, precautions [...]. (A14)

Participating in the training of students in the early stages it broadens and unites us, I feel important. (NT1)

Living with students at this stage is very rewarding. (N2)

Showing the hospital and our responsibilities as nurses to those starting was an interesting and motivating experience. (N4)

Also, the importance of this extension appears in the statements, so that the academics can better understand the course they chose and nurses' work:

[...] having the opportunity to know a little about the hospital routine at the beginning of the course made me sure of the course I chose. I think it is important this initial contact with the reality of the área. (A13)

I was able to understand how the routine of the nursing team really works within a hospital. This first contact clarified some doubts I had about the course and the hospital environment, clarifying whether this is the path I wanted to follow. (A7)

I was able to have my first contact with the patients and the hospital, get to know each corner better and find out if nursing was really what I wanted to study and that was very important. (A13)

Articulation between theory and practice

The university extension can be understood as a health promotion strategy as it produces knowledge within the context and daily routine based on experiences of professional practice. In this sense, the statements demonstrate the potential of university extension to perform the articulation between theory and practice:

I noticed several things that I had no idea how they worked. The project allowed me to learn practical questions to better understand the theoretical classes. (A2)

Seeing closer and live the practice performed and explained by the professionals was fundamental for my learning [...] The basic and essential for care started with the project. (A15)

Observing the procedures was very interesting for us to better understand the theory. (A5)

The project gave more meaning to the course classes, as I had no idea what was really like the professional practice of nurses in a hospital. (A6)

With the professionals, I learned a lot of techniques, care and bases that were very useful for my training, it was uplifting. (A8)

It was an excellent opportunity to learn, visualize the care, the relationship with patients, with the multiprofessional team, understanding the responsibility of the nursing team, especially nurses, all this in a lived way. (A14)

I followed several exams [...], because it is only in practice that we can visualize some difficult situations. And I managed to understand how to deal with several specific cases! (A15)

Explaining what we do and why we take certain precautions to students was important, as theory is one thing, and our daily life is another. (NT6)

[...] We encourage the search for knowledge for each pathology, catheter, device and we even transfer patients together. (NT2)

Teaching those who are starting in the profession and who still don't know what nurses do, was a different and interesting experience. It was good to see the shine in the students' eyes and to associate theory with practice. (N3)

Bond between academics and health care professionals

This category addresses the meaning of interpersonal relationships, translated by the opportunity offered to academics to exchange knowledge with professionals from different areas and patients in different contexts. The relationship between professionals and academics contributed to the learning process and was verbalized in the statements:

I had the opportunity to get into contact with different professions such as nurses, nursing assistants and

technicians, radiology technicians, physicians [...] I heard many life stories of patients and their realities. (A6)

At the beginning, I didn't know how to act in certain situations, and I was embarrassed to ask, but that changed over time, as I realized that I had the freedom to expose my doubts with the tranquility that they would be properly answered [...] the professionals gave me all their knowledge with a lot of patience and empathy. (A8)

I always felt very welcomed by the team, the nursing technicians were very important in this process, they showed everything, they taught about the processes in the hospital and the procedures performed in the unit. (A9)

My experience in the project was great, the radiology team is very receptive and receptive to the students. (A11)

The team was very welcoming. (A12)

The team always treated us with great affection and welcomed us, most of the team was always willing to solve our doubts and teach us. (A13)

My relationship with the students participating in the project was friendly, loving and collaborative. (NT2)

We provide observation of care and provide guidance on patient care. (N2)

I'm always available to answer questions and provide guidance. (N3)

Whenever possible, I try to pass on some knowledge or routine of the unit to them. (N4)

The academics recall, in their statements, the established bonds. However, some reported that the radiology team needs to be better prepared to receive them, since being welcomed and inserted in the context of the professionals' work is essential for their learning.

I got along very well with the team [...] Some show more interest in wanting to help and instruct us than others. (A7)

Radiology is a very good environment to work in, the team is very welcoming: some professionals were not very open (as there are in all areas) others I meet at the hospital and I still talk to them today! (A15)

According to the statements, the university extension provides a space for reflection on the different realities in which students lives, so that they are not just executors of procedures, but question, research, plan, evaluate and reflect on their actions as health care professionals.

[...] they taught me a lot [...] sometimes I asked something, and they didn't know, but they always looked for the answers. (A1)

Hospital professionals are very receptive and teach us a lot during this period. (A3)

Every time they ask something about work, I try to explain how it works at the hospital. (NT4)

We usually read together the clinical data of each patient's exam request that we are responsible for, clarifying the specific precautions. In front of the patient, the approach is always done in a respectful and welcoming way. Care, affection, safety are essential, and each patient is unique [...] over the years we have acquired a broad perspective on the needs of each patient, and we pass it on naturally to the students of the project, because for many, this is the first contact at the bedside. (NT2)

I try to establish a friendly relationship so that academics feel comfortable to ask, we form a great team, and they help us a lot. (N1)

Work process in the unit

In their statements, the professionals recognized the positive impact of the extensionists' participation in activities performed in the unit, especially in the temporary transfer of patient care between units.

The presence of students reduces the waiting time for the transfer of patient care, they help us. (N1)

The project contributes to the work process because students help transport patients, especially on stretchers and beds [...] I think the project could be better publicized to students in more advanced semesters [...]. (N2)

Likewise, academics find their experiences helpful:

The project had a lot of impact on my academic life, it was my first contact with a work team, their demands, personnel sizing, and contact with patients [...] it prepared me for the first mandatory internship. (A10)

The activity consists of going to the floors to collect patients for the X-ray, I had access to the results of the exams while they were being performed, contact with patients, contact with the teams, and the work process of the professionals. (A12)

I learned the meaning of each exam, its interpretations, what each patient had, devices used, health condition and activities performed by nurses. (A13)

The activities are dynamic, they involved collecting and taking radiology patients to the most diverse areas of the hospital [...] transfer of patient care to radiology technicians, transfer patients from bed to stretcher or wheelchair, and in the midst of all this there is always the relationship with the team. I have eternal gratitude, admiration and respect for the radiology team that welcomed me and included me in the team, taught me with patience, dedication and I was able to develop a very nice friendship[...]It was an extraordinary opportunity, I recommend that all students do it, the personal and professional growth that this project provides is undeniable! (A14)

■ DISCUSSION

The analysis of the statements reaffirms the effectiveness of the project in providing the academics with familiarization with the hospital dynamics, since it gives opportunities for the construction of knowledge arising from the work practice of nurses in the most diverse settings in tertiary care. The activity allowed students to understand the functioning and organization of the institution by knowing the tasks of nurses and nursing technicians, and observing their relationships with patients and other professionals who work in a health institution. This perception of academics is corroborated by a study⁽¹⁴⁾ that points out to extension as a facilitator for knowledge acquisition about their future field of work, as well as development of skills based on real situations experienced during contact with clinical practice.

The university extension activity – although it is mostly observational – allows academics to participate in various activities. Among these, stand out those related to patient safety during the temporary transfer of care to Radiology, as well as those related to hand hygiene, identification, and nursing records.

Participation in the extension activity allowed the articulation between theory and practice, as according to the statements, there was a translation of the theoretical knowledge learned in the classroom with the praxis of professional reality. All participants referred – in their statements – greater ease in absorbing learning in the classroom after participating in the activity. In the academics' reports, it is possible to identify the potential of extension in making them more prepared to start their work in later internships; real practices

from the early periods of the undergraduate nursing course strengthen teaching and allow for a meaningful experience.

In this way, the extension works as a viable tool to improve the comprehensiveness of health care in its different levels due to its power to unite technical-scientific and popular knowledge that helps in the promotion of health through educational practices with appropriate knowledge for the social context⁽¹⁵⁾. The importance of human interactions in the learning process is evident; however, in health-related courses, it is a lot about theory guiding practice, but not about practice eliciting and validating theory⁽¹⁶⁾. A study points out that university extension activities have been shown as a way of articulating academic practices with social demands that, through a dialogical relationship between university and society, contribute to the democratization of academic knowledge and assistance to the community⁽⁶⁾.

In this context, it is evident the pedagogical dimension that contributes to the learning and training of university students. Participation in such activities enables greater social engagement and the qualification of academics, since it has the role of fostering knowledge and the development of skills during their interaction with society. During the activity, extensionists were constantly encouraged to meet social demands through humanized care practices. Immersion in care practice allows for critical-reflexive thinking by academics, enabling them to establish links with theoretical content and nursing care practices developed in diverse scenarios in which nurses work. In this way, students feel safer for carrying out internships and – consequently – for their future professional practice.

It is clear, in the statements, the importance given to the bonds between academics and health care professionals in a welcoming environment, in which professionals can resolve doubts and maintain a good relationship with students. This is essential for building an educational environment, providing better use of the activity and facilitating learning⁽¹⁴⁾.

In the student training process, these relationships imply that the professional in contact with the academic is able to learn, work in a team, communicate well and have a propositional attitude, attributes often not contemplated in traditional training, still prevalent in university institutions. This task is not always easy, but it is possible in an environment that favors the construction of good interpersonal relationships based on dialogue and patience. Having this welcoming profile with the students allowed the development of skills and competencies, such as improving communication techniques. Such progress is described in another study, which highlights that the extensionist experiences

situations that value the quality of building relationships, appreciates the understanding of the individual as a citizen and recognizes the importance of humility in the exercise of listening⁽¹⁷⁾.

The extension of knowledge to reality appears as an important teaching strategy, since it allows the improvement of knowledge through practice and also the production of new knowledge from the interaction with the community⁽¹⁸⁾, making it easier for the student to recognize their professional role outside the walls of the university. During the project, this seemed to occur through the affective base relationship and exchange between the extensionist and the professional, who also assumes the role of professor. All the learning acquired in these moments is significant and contributes so that both can think, feel and act.

Extension, therefore, proves to be extremely necessary in academic training, as contact with the professional reality is a differential in teaching, as it is perceived by students as a key element in the development of critical and reflective sense during nursing training⁽¹⁷⁾. This process includes, in addition to technical learning, the improvement of skills and competencies such as ethics, responsibility and social commitment, transforming the academic into a professional committed to the needs of the population^(17,18).

The university is a place where extracurricular experiences are essential for the development of transdisciplinary professional training. University extension projects favor the opportunity to exchange knowledge and experiences between professionals, students and the population served by the health service. Such activities provide the necessary conditions for the teaching-learning process through the problematization of everyday life^(17,19). In the health area, relationships in extension act as a differential that allows for new experiences aimed at humanization, care and qualification of health care, application of the expanded concept of health^(15,19). A systematic review on university extension and health promotion in Brazil selected the main contributions of these activities to the theme, among which the following were identified: the creation and expansion of interaction and support networks for users, professionals, social services, health, social integration, and the formation of affective bonds. In addition to these, the study cites the strengthening of participatory management and social control, the identification of organizational demands of health services and health care professionals, awareness of the determinations of the health-disease process and humanistic training⁽²⁰⁾. Initiatives such as the one described in this study are particularly important due to their ability

to strengthen the teaching-research-practice triad, becoming an instrument that enhances change in health education actions.

According to the statements, the university extension activity has a positive impact on the work process in the unit, especially for the nursing team. The academics' statements were presented at a meeting at the Radiology Service; based on this feedback, the professionals showed the desire to increase the number of participating academics by expanding the dissemination and filling all available vacancies per semester. These findings are corroborated by other studies^(6,14,15) that also point out the significant contribution of university extension on student learning about their participation in care, on the perception on the relevance of teamwork, on the integration between teaching, extension and research, allowing the reflection between theory and practice, with repercussions on professional citizens who are co-responsible for their community.

The participation of academics in the work process reduced the number of professionals assigned to patient transfer on a stretcher, which requires two people, or at times when two or more patients in wheelchairs, coming from the same unit, are transported. In this way, the remaining professionals can perform other activities and assist other patients, increasing the productivity of the unit, which is beneficial to the nursing team by reducing the work demand, and to the patients, by reducing the waiting time to perform their exam or return to their bed.

The literature brings studies^(1,6,14,15,17) that show university extension as an important part in the personal and professional training process, as well as its importance in the integration between teaching, care and research. Hospitals are complex management organizations, since they need a humanized look; therefore, of great sensitivity during its various activities, among them the transfer of patient care between units. Therefore, it is essential, a management that can balance these activities through the efficient use of available resources minimizing possible organizational failures that may harm their patients or the professionals involved.

The interactions perceived between the extension activity and the institution are in line with what was established by Art. 207 of the 1988 Federal Constitution and by the Nursing Course DCN, as well as by Goal 12.7 of the PNE (2014-2024), which defined that universities must guarantee, at least, 10% of the total curricular credits required for undergraduate courses in university extension programs and projects⁽³⁾. Recently, Resolution No. 7 of December 18, 2018 of the

Ministry of Education regulated the PNE and established guidelines for Extension in Brazilian Higher Education, defining that it be implemented in all curricula of undergraduate courses by December 2021⁽²¹⁾. This document, in addition to generating a wide mobilization of universities to offer theoretical and practical activities at all stages of undergraduate course in an integrated and interdisciplinary way, is a step forward for the curricularization of extension, a challenge perceived in the struggle for recognition of extension as an academic function⁽¹⁾.

When analyzing the statements of the participants – supported by the literature – it is observed that the extension project under study is in line with the guidelines and principles of the Resolution⁽²¹⁾, which define that the activities must be based on the dialogic interaction between the academic community and society through the exchange of knowledge and everyday experiences, aspects often highlighted by academics. In addition, the document cites the contribution to a comprehensive and generalist education of the student, in order to contribute to the development of critical and responsible citizens. Constructive dialogues between actors must be able to transform institutions and sectors of society, as expressed in the professionals' statements with tangible examples of the contributions of the academics in the Radiology Service.

As limitations of the study, there is a scarcity of articles that specifically describe the initiation of academics in the early stages of the course in hospital practice, due to the unprecedented nature of this experience, making it difficult to provide a more in-depth analytical description of the outcomes. Moreover, the reduced number of participating professionals and academics is attributed to contributing factors: not meeting the inclusion criteria and, mainly the collection period during the COVID-19 pandemic. However, it is believed that promoting a university teaching strategy that contributes to the integration of teaching with practice makes it possible to qualify undergraduate courses and patient care.

■ FINAL CONSIDERATIONS

The repercussions of the project from the perspective of academics and nursing staff were translated into the categories: "Knowing the hospital environment/dynamics", "Articulation between theory and practice", "Bond between academics and health care professionals" and "Work process in the unit". The statements showed that participating in the project expanded technical-scientific knowledge by providing opportunities for contact with health care professionals and hospital practice.

In the perception of the participants in this study, the extension allowed them not only to observe reality, but to experience and participate in the context in which they are inserted, including contributing to the work processes of the Radiology Service, translated into a positive exchange between academics and health professionals. In addition, it allowed students to acquire the necessary knowledge and experience from the perspective of understanding the world in which they are inserted in order to become protagonists in their teaching-learning process. Therefore, it reinforces concepts such as learning by doing, experiencing practices in the training of new professionals as early as possible.

Finally, the training/learning strategy based on a university extension action challenged students and professionals to break the academic barrier, sometimes limited by theoretical teaching, to enter into knowledge that is guided by contact with practical reality, contributing to the formation of critical-reflective thinking that can be applied in their professional performance in various spheres.

It is hoped that this experience may stimulate the achievement of studies related to the continuity of this extension project, as well as encourage the development of other extension activities according to the guidelines of the curricularization of extension in university institutions, thus expanding this initiative with the potential to strengthen the teaching-research-assistance triad and provide the translation of theoretical knowledge to the nursing care practice.

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