



Collaboration of Interprofessional Education to the PET-Health program for student training

Colaboração da Educação Interprofissional no programa PET-Saúde para a formação dos estudantes

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ABSTRACT

The present study aimed to understand the collaboration of the Education Program for Health Work - Interprofessional Edition (PET-Health Program) for academic training. This was an exploratory, descriptive, qualitative study with nine health undergraduates. Data were collected through interviews guided by the following question: What experiences did the PET-Health Program provide in your academic life? Data were analyzed by content analysis. The results were elucidated through three categories: learning acquired with PET-Health, facilitators for IPE, and challenges in the IPE teaching-learning process. In this way, the Program was assertive in the graduation of participants, bringing with it the importance of professional training focused on IPE for comprehensive and humanized care, in addition to providing teamwork, exchange of shared knowledge, and personal development. On the other hand, there are still challenges to its implementation in the curriculum matrix.

Keywords: Human Resources Training in Health; Interprofessional Education; Interdisciplinary Practices; Patient Assistance Team; Students.

RESUMO

em Saúde - edição Interprofissionalidade para a formação acadêmica. Trata-se de um estudo descritivo exploratório de natureza qualitativa, realizado com nove acadêmicos da área da saúde. Os dados foram coletados por meio de entrevistas guiadas pela seguinte pergunta: quais experiências o Programa PET-Saúde proporcionou na sua vida acadêmica? A apreciação dos dados foi realizada por meio de Análise de Conteúdo. Os resultados foram elucidados em três categorias: aprendizados adquiridos com o PET-Saúde; facilitadores para EIP e desafios no processo de ensino-aprendizagem da EIP. Dessa forma, o Programa se apresentou de forma assertiva na graduação dos participantes, trazendo consigo a importância da formação profissional voltada para EIP para um atendimento integral e humanizado, além de proporcionar o trabalho em equipe, troca de saberes compartilhados e desenvolvimento pessoal. Em contrapartida, ainda há desafios para sua implementação nas matrizes curriculares.

Palavras-chave: Capacitação de Recursos Humanos em Saúde; Educação Interprofissional; Equipe de Assistência ao Paciente; Estudantes; Práticas Interdisciplinares.

INTRODUCTION

Interprofessional Education (IPE) consists of “occasions in which members or students from two or more professions learn with others, among themselves and about others to improve collaboration and quality of care and services,” being known as an interactive activity that aims to value the quality of health care.¹ IPE has the function of assisting in the process of reorienting training and work in health, contributing to changes in interprofessional collaboration and improvements in assistance to users.^{2,3}

Since the 1990s, the United Kingdom has been striving to integrate IPE programs into its undergraduate and graduate programs, according to a recent study. IPE has gained global attention, driven by the World Health Organization (WHO) initiative to improve healthcare training through team collaboration.⁴

In the region of the Americas, specifically in Latin America and the Caribbean, the Pan American Health Organization (PAHO) has promoted IPE in the training of health professionals, recognizing it as an effective approach to strengthening health systems.⁴ In 2010, the WHO promoted the Framework for Action on Interprofessional Education and Collaborative Practice, in which it proved, through scientific evidence after five decades of studies, that efficient interprofessional education promotes efficient collaborative practice, in addition to bringing ideas on how to implement it in each context.⁵

In Brazil, the preventive medicine movement with debates about teamwork, such as the formulation of public policies and government initiatives, has required professionals to be better prepared to act in the face of demographic and epidemiological changes; therefore, it is necessary to rethink health training.⁶ In this sense, IPE emerges as a tool to enhance the teamwork process and strengthen health systems, especially

the Unified Health System (SUS), mainly in terms of integrality.⁷

Therefore, for interprofessional work to be implemented, IPE must be guaranteed throughout the training process. Thus, the National Policy for Permanent Education in Health (PNEPS), established in 2004, becomes an ally to help implement this practice, as it aims to act in the process of training professionals and transforming health work practices.^{6,7}

Although the importance and effectiveness of IPE in health are recognized, even today, training and continuing education processes still follow a uniprofessional logic. In this sense, students in the health area begin their academic careers in subjects offered by professors from the same field of knowledge, and even when they cover interdisciplinary content, the classes are made up of students from the same program.^{8,9} The same extends throughout the degree in health so that, recurrently, internships, research and extension practices, as well as other training experiences, are still experienced by students and professors of the same profession.¹⁰ Therefore, when inserted in multidisciplinary teams, it is difficult to work together, causing failure in communication and patient care.

In addition, Resolution 569 of December 8, 2017, also encourages such practice during academic training through the insertion of health students in SUS environments and scenarios, intending to incorporate them into the teaching process, an approximation of public health policies, action alongside interprofessional teamwork and teaching-service-management-community integration.¹¹

Increasingly, Higher Education Institutions (HEIs) have been encouraged to offer activities that aim to complement academic training and encourage the improvement of common and collaborative skills. From practical experience with the community in health services, the student has the possibility of acquiring knowledge in a shared way with other

professionals and students from different areas of health.^{6,11}

Among these actions, the Education Program for Health Work (PET-Health) stands out, which, since 2010, has been an important resource for social inclusion and for strengthening the triad of teaching, research and extension, and teaching-service-community integration. For the development and planning of its actions, projects are submitted by public and private, non-profit HEIs, with undergraduate programs in the health area, to thematic notices of the Program in partnership with the Health Secretariat (State, District, and Municipal).³

In this sense, in 2018, the notice for the Selection of PET-Health Projects was launched, with the ninth edition focusing on IPE and collaborative practices (CP) for students, professors, and health professionals throughout the national territory. This edition was created to help reorient the work process, as well as to facilitate teamwork and learning from other professions.³

Thus, the Federal University of Mato Grosso do Sul, Campo Grande, state of Mato Grosso do Sul campus was awarded and developed its activities within the scope of Primary Health Care (PHC). Therefore, the question arises: were PET activities significant for the teaching and learning process of members during their training process in the health area? Thus, this research aimed to describe the collaboration of the PET-Health Interprofessional edition in the academic training of students.

METHODOLOGY

This was an exploratory, descriptive, qualitative study based on primary data linked to the matrix project "Interprofessionality in the perception of students, professors, professionals and users of the Unified Health System." For development, the guidelines of the Consolidated

Criteria for Reporting Qualitative Research – COREQ¹² instrument were followed.

The study was developed with students from the Nursing, Medicine, Physical therapy, Nutrition, Dentistry, and Psychology programs at the Federal University of Mato Grosso do Sul, Campo Grande, state of Mato Grosso do Sul campus, who participated in PET-Health, Interprofessional edition, in the years 2018 to 2020.

PET grants students the function of developing experiences and producing knowledge, professors the role of academic tutoring to guide experiences, and health professionals the role of preceptorship and direct action in health services. The education-work binomial guides its execution process to articulate services and universities to meet the community's health demands.³

For the development of the study, the PET-Health coordination was initially requested to provide a list with the names of students who participated in the Program from 2018 to 2020. From this, they were individually contacted by email and/or phone call to explain the objective of the research and invite collaboration.

For the selection of participants, an intentional sample was considered, with the following inclusion criteria: scholarship student or PET-Health volunteer, regularly active in tutorial group activities for at least one year, and who voluntarily accepted participation in the research. Therefore, of the 14 undergraduates contacted and eligible, five did not agree to participate in the interviews for personal reasons and were excluded from the sample.

Data were collected between April and June 2021, a pandemic period caused by the new coronavirus Sars-cov-2, which causes an infectious disease known as coronavirus disease-19, COVID-19. Because of this, the collection was carried out online by the secondary researcher, a physical therapy student linked to the matrix project, who had prior training in qualitative

research and had no relationship with the participants or the project under study.

The collection consisted of two stages online. First, an identification form with sociodemographic data prepared using the Google Forms tool was sent to the student. After completion, the interview was scheduled via the Google Meet platform, depending on the availability of the researcher and interviewee. For interview preparation, a pilot test was carried out, i.e., a pre-test phase of the interviews with two test participants, to examine the sensitivity of the questionnaire to the objective of the study. The instrument proved to be adequate and did not undergo any changes.

Thus, the interviews were carried out individually using a pre-established semi-structured instrument, with the guiding question: what experiences did the PET-Health Program provide in your academic life? The interviewee was allowed to freely explain the topic covered, contributing new ideas and questions. The interviews were not returned for corrections.

The interviews lasted approximately 30 minutes and were audio recorded, according to the participant's consent, transcribed verbatim using the We Captioner tool, and duplicated in an individual document in Microsoft Word. To analyze the results, Content Analysis proposed by Bardin was carried out, in which dialogue is seen as a form of expression by the subject, and through it, we sought to understand the individual's thoughts. In this way, the following steps were followed: pre-analysis of the speeches, exploration of the material, with the selection of the meaning cores of the speeches and subsequent categorization according to the similarities and differences of each one, data processing, and inference of results.¹³

All participants signed the Informed Consent. In order to preserve the anonymity of the interviewees, the speeches were identified by the letter "E" corresponding to the interviewee, followed by an Arabic number, corresponding to

the sequence in which the interviews were carried out and the age of the interviewee (example: E1, 21 years old). The research began after approval by the Human Research Ethics Committee of the Federal University of Mato Grosso do Sul Foundation, under Certificate of Presentation of Ethical Appreciation 22845619.1.0000.0021 and opinion 3,780,149, following Resolution 466 of the CNS of December 12, 2012.

RESULTS

Participants were nine students, two of whom had completed their undergraduate studies, and the others were in the last two years at the time of the study. Most interviewees participated in the PET-Health program for two years, i.e., until the end of the edition; only one remained for one year and 10 months due to personal reasons. Undergraduate programs included pharmacy, psychology, physical therapy, dentistry, nutrition, and medicine. The average age of the participants was 23 years old, and only one was male. For a better understanding of the results found, they were divided into three thematic categories: 1) Learning acquired with PET-Health, 2) Facilitators for IPE, and 3) Challenges in the IPE teaching-learning process, which are explained below.

LEARNING ACQUIRED WITH PET-HEALTH

The interviewees were unanimous in stating that, for them, the PET-Health Program brought new experiences and opportunities to deepen, through practice and experiences in services, technical-scientific knowledge presented in the classroom. In this category, the change in attitude in the professional sphere for undergraduates in the health area was noticeable, as well as the recognition that the project contributes to the development of

skills and abilities essential for interprofessional work in health. In the speeches of E8 and E3, the importance and differential of interprofessionality were highlighted, contributing both to students and the health team but mainly to the lives of users of the services.

PET was interesting because it showed that there is this difference between multi and interprofessional. (E8, 23 years old)
Every time I discuss something, I talk about the importance of interprofessionality, and how it adds to patient care and moves away from that traditional model. (E3, 23 years old)

The students also highlighted the contributions of PET-Health Interprofessional to personal growth and empathy between different professions, allowing us to break down barriers that often impair the construction of collaborative practices. For the participants, through the interprofessional team, it is possible to understand that each person has their own space and function for quality care (E1 speech). However, despite the singularities between the professions, the interviewees began to better understand the perspective of other actors, allowing better communication and integration with these subjects. According to the reports, interprofessionality provides movement, i.e., leaving the comfort of their profession to learn from others, as a way of adding knowledge (E2 speech), as can be seen in the following statements:

I learned to look at another profession with a little more of the perspective of the professional of that profession [...] now I can look better at the profession of dentistry with the eyes of a dentist, I can look more at the profession of nursing with the eyes of a nurse, I can understand better the pains of each

profession. [...] When we can visualize, understand, and put ourselves in the other professional's shoes, we can have a better relationship. (E1, 21 years old)
We end up leaving our area, our comfort zone. [...] We can be alone with the patient, but the knowledge we learned about nutritional education and issues related to physical therapy or nursing ends up adding to our approach to the patient. (E2, 25 years old)

Finally, some interviewees stressed the magnitude of the PET-Health Program as an extension project; once during their undergraduate studies, they did not experience the issue of interprofessionality and comprehensive humanized care, looking beyond the disease. In this sense, participants recognize the importance of PET-Health as a pedagogical strategy, capable of enhancing the training processes of health professionals, attentive to the demands of the SUS, and guided by IPE. Furthermore, they also reported that the experience of carrying out the project during undergraduate studies enabled personal development, especially concerning teamwork.

It was a unique experience because it is content we do not have experience with in dentistry school [...] It was important to open our horizons and understand that dentistry really needs to be inserted in this interprofessional context to work with other areas. After all, we don't just treat teeth; we treat people. (E4, 25 years old)
I think it was an enriching experience in every way, both in terms of personal development, which I'm very shy about... I was able to develop this through projects. (E6, 23 years old)

FACILITATORS FOR INTERPROFESSIONAL EDUCATION

By participating in the PET-Health program, students claim that they learned and studied the concept but, above all, the practice of Interprofessional Education. Thus, they understood through experiences and practices there are ways to facilitate the learning process for IPE and teamwork, as well as their insertion in the academic and professional environment. In this sense, the speeches of interviewees E2 and E8 stand out, who believe in the need for new studies and research to consolidate this training.

Another very important issue for interprofessional work is that new research emerges to strengthen our knowledge and our practice. (E2, 25 years old)

There needs to be more research for people to know more about what it is, to have a little more knowledge, and to be able to promote it more assertively among people. (E8, 23 years old)

In the same direction, interviewees E4 and E5 draw attention to education as a facilitator of IPE. Nevertheless, the interviewees also recognize that the way professionals work, as a result of the standard of training offered to them, leaves something to be desired, distancing itself from the IPE proposal. In this way, they question the process of reorientation in health graduation as well as the curriculum matrix; thus, it is emphasized that interprofessionality should be worked on from the beginning of studies and as a mandatory subject within health programs.

Another thing we need to have to develop interprofessional practices is education. Some generations were trained, and nowadays, they don't know how interprofessionality works. So, we need instruction and retraining for profes-

sionals who have already graduated and for those professionals who are still in college. For them to start learning about interprofessionality from an early age [...] I think that, for all professionals, having access to these concepts and this new way of working needs to be mandatory. (E4, 25 years old)

Everyone could take a subject together. I think it's important to take a subject with everyone together with Family Health because all health programs serve the SUS, and there is no subject, anything like that, that they do for all professions. When you get there, you see that you will depend on others to do your job. (E5, 22 years old)

Besides that, some interviewees highlight the professor and the preceptor as facilitators for the experiences lived in the PET-Health/Interprofessional edition. In their speeches, it is possible to perceive the strategic role of teachers, aiming to break with traditional teaching proposals, reorienting pedagogical practice towards IPE, and enabling learning to occur mutually through the encounter of knowledge to serve patients with resoluteness and qualification.

Because my nutrition professor, who was the preceptor, fought hard to have this free time for the nutrition people to be able to participate in the PET. It is a facilitator because they fight to make it happen for us to have this experience. (E5, 22 years old)

On the academic front, professors must also be willing to bring this education to us and to talk to us about it. [...] The faculty should report more about the importance of this project and talk more with students about it. I think it's

something that could make things easier. (E6, 23 years old)

As seen previously, unfortunately, the curriculum matrix does not support the function of offering interprofessional teamwork. Thus, other interviewees reported the importance of events and extension projects focused on the topic of interprofessionalism as facilitators of the teaching-learning process. It is clear, therefore, that through teaching, extension, and research projects, university training could be complemented, guaranteeing health training based on interdisciplinarity and interprofessionalism:

Nowadays, we see many more lectures and conferences on interprofessionalism. So, I think it's a topic gaining more attention now. (E5, 22 years old)

A project here, a project there, enables higher participation by other students and professors. (E9 20 years old)

If I hadn't had access to PET, I wouldn't have had contact with it, I wouldn't have known how important it was, and I wouldn't have needed to want a subject on interprofessionalism. (E1, 21 years old)

CHALLENGES IN THE IPE TEACHING-LEARNING PROCESS

In contrast to the previous category, given the experiences in PET, participants also identified the challenges faced during the teaching-learning process. Thus, positive and negative points emerged. According to the majority of those interviewed, what hinders the most is the uniprofessional training model still based on traditional teaching perspectives. According to participants, this training focused on the biomedical model is still the most recurrent

in their trajectories, through which students learn independently, with isolated subjects and/or content specific to each program in the area.

It is still the biomedical model, which is what hinders the most because the biomedical model is rooted in older professionals and the population. [...] The training of professionals is more focused on uniprofessionalism, so there is still a lack of interprofessional training in undergraduate courses, in courses for health professionals. (E1, 21 years old)

Traditional study is very fragmented in terms of subjects and programs; we don't talk much, and when we go to the field, to practice, we feel this need to think about the context of working in health [...] it ends up creating obstacles to have more complex and more resolute care for the subject, for the patient as a whole. (E2, 25 years old)
What is missing is for the school to promote this exchange of subjects. (E5, 22 years old)

I think that one of the challenges comes from the formative issue, the curriculum matrices of the programs. The way we are taught, the training, and the work also greatly affect the development of work between professions. The system is very fragmented, and this makes contact and conversation between professionals impossible. I think that training and service are what most hinder the issue of interprofessionalism. (E6, 23 years old)

There is a lot of difficulty in the course of the program in placing inter between programs. Perhaps resistance from the program itself, from older staff. (E8, 23 years old)

Students are already taught each one in their own box

[...] how do we then graduate and have to work as a team, whereas we never had this experience during our undergraduate studies? We don't know how to do this. (E9, 20 years old)

In this sense, according to those interviewed, an important point is to comply with public policies aimed at higher education and continuing education. E4 raises the issue that the dentistry school, for example, does not provide training to work directly in the SUS, with a team made up of several different health professionals. Furthermore, E1 reinforces that dependence on political scenarios is not the best way to implement IPE.

Dentistry school, unfortunately, is a very elitist course. So, you are trained as a dentist to work in an office; you are not trained as a dentist to work in the SUS. An office dentist works alone there, and that's it. When you join an inter-professional team, there are several people with completely different views than yours. (E4, 25 years old)

If it depends too much on the political scenario to be able to establish this type of training in the education of professionals, it won't happen; it won't happen anytime soon. (E1, 21 years old)

In addition to political issues, the social issues about different professions stand out in the statements. According to them, there is prejudice among both society and students about undergraduate programs, such as the medical profession, as many people believe that it is superior to nursing professionals and other health workers. Furthermore, there is a dispute between the academic groups that participated in the program, as evidenced by some interviewees:

Unfortunately, we live in a society that has learned to prioritize things and consider one profession more important than another. (E4, 25 years old)

We have some stigmas about some programs; we have some prejudices towards working with some courses. [...] I noticed some situations of competition as to which group will stand out more, do more things than the others, and prove themselves better. (E9, 20 years old)

Finally, some interviewees described the difficulty in working together with different professions, which is a situation that affects IPE. Students explained the issue of disturbing others in their duties, i.e., invading other people's space without intention, which is a great challenge. However, they emphasized the importance of respect, communication, and the exchange of ideas, so that failure to adhere to these concepts becomes an obstacle.

As much as it is very nice to say that you have to work in another profession, at the same time, it is very difficult not to invade the other's space and understand each other's position... it is difficult for you to know how to listen to others, from another profession, who has different things to say. (E3, 23 years old)

This issue of not invading the other's area is a very fine line, and that is what we observed in our group... because, for example, it is a common skill for every professional to know how to instruct the patient about oral hygiene... But the examination and the real instruction on how this should be done co-

mes from the dentist. (E4, 25 years old)
I think the biggest challenge is for certain professions to understand the role of other professions because otherwise, one "goes over the other" and it becomes chaos. (E5, 22 years old)
Knowing how to work on the issue of dialogue, knowing how to respect each person's limits, but also being able to exchange ideas... These are issues that affect interprofessional education. (E9, 20 years old)

DISCUSSION

The principle of IPE is to prepare students, especially those in health programs, to work ostensibly together, promoting an interactive experience with people from other professions.¹¹ This interaction is called interprofessional collaboration, which can be understood by the co-participation of responsibilities, partnership, delegation of functions and objectives, power, and actions that offer the individual answers to their health needs. Interprofessional collaboration was evident in all the speeches of the interviewees in this study, mainly in E8 and E3 (category 1).¹⁴ In line with this, a study carried out with nurses from the Primary Care Network in the municipality of Palmas, state of Tocantins, showed that collaborative practices promote higher agility in solving complex problems and boost bonds between team professionals.¹⁵

In this scenario, the immense value of multidisciplinary, interdisciplinary, interprofessional, and intersectoral approaches must be recognized to fully understand the relationship between work and health in its entirety. Therefore, it is essential to understand the functioning of health teams and reflect on professional and intersectoral roles, as illustrated

in the speech of category 1. This is important to find solutions to problems and negotiate efficiently in decisions related to health.¹⁶

This study indicated the relevance of interprofessionality in mutual learning and the importance of effective communication to improve health care. The literature points out that, for collaborative practice, there should be the integration of knowledge, values, skills, and attitudes that enable this joint work between them and with individuals, families, and community, with the purpose of building a health system centered on patient safety and improving health outcomes.¹⁴ In fact, collaboration and communication between professionals directly interfere with perceptions about patient care. Studies reveal the size of the negative impact, especially when there are failures in collaboration, which can lead to severe conditions and even death.²

The interprofessional team needs to be based on three important aspects: partnership, cooperation, and coordination; for teamwork to occur, professionals must share a team identity. Therefore, the recognition of each professional with their roles is noticeable - according to speeches of E1 and E2 (category 1), the objectives of each one, the actions that must be carried out as a team, and the integrated collaboration, and at the same time, interdependent in all necessary assistance behaviors.¹⁷

The dialogue of interviewees E4 and E6 (category 1), respectively, allege the importance of interprofessional contact for the individual treatment of patients, and personal and professional development. Regarding interpersonal relationships, the ability to create bonds is one of the determinants of effective and quality collaboration. Such a scenario, depending on the length of time working in the same team, provides the construction of respect, trust, and accessibility so that there is communication with each other.¹⁸ In line with this, a study mentions that the degree of interaction between

professions is vigorously linked to the narrowing of interpersonal relationships and the opening of communication channels throughout the development of the work process.¹⁹

Furthermore, in Brazil, the curricular guidelines for health training strongly recommend the integration of areas, subjects, contents, and professions. On the other hand, the statement of interviewee E5 (category 2) explicitly states that this does not occur and that they could have content together. Studies prove the power of IPE as an educational strategy. Adopting it would be a highly valuable training action, whether in the entire curriculum or partially, and could occur in extension or research actions. The issue is to have intentionality in educational planning, implementation, and evaluation from the interprofessional perspective. On the other hand, addressing these issues in full is a challenge for higher education programs in health.²⁰

Scholars point out that many obstacles permeate graduation in many programs in the health areas, which complicate the training process. Among them, the adversities in political-pedagogical projects, biological- and hospital-centered model, professor as a transmitter and student as a passive receiver of information, disruption of curricula concerning the needs of the community, and distancing from the SUS work process stand out.²¹ In the category of Challenges in the IPE teaching-learning process, we have these challenges very well evidenced in the speeches of interviewees E1, E2, E6, and E9.

In this sense, the models being developed in institutions still demonstrate strong fragmentation in teaching, which demands new forms of organization and integration from the beginning of training.²¹ Interviewee E4's speech (category 2) brings up the need for a reorganization of the curriculum matrix, in addition to teaching interprofessionality as a permanent education for working professionals.

The status of IPE and activities aimed at collaborative practices are considered incipient,

especially in mandatory subjects during academic training. After an analysis of the curriculum matrix of medical and nursing programs at a university in Manaus, interprofessionality and its practice are unknown to students since there are no subjects that group other programs, much less the construction of collective critical thinking about comprehensive patient care.²² The article speaks to the present study, as evidenced in the statement of E1 (category 2), which reports that only the PET project provided knowledge regarding interprofessionality.

Therefore, undergraduate programs are still aimed at specialist and individualistic training, contributing to the inefficient construction of professionals in training without the skills to learn from each other. Given this, the implementation of the DCNs is still a challenge concerning curricular integration, the variation of learning scenarios, in addition to articulation with the Unified Health System (SUS), as well as preserving the ethical, humanistic, critical-reflective dimension.²³

The entire process of reorientation and curricular change is difficult; after all, it has been a uniprofessional and independent culture for many years, both as an undergraduate student and a professional at work. However, at the same time, IPE has been gaining momentum for a few years. For this to occur, it is necessary to do more than bring together students from different programs in joint activities, such as offering the same subject. In this way, students' cognitive, affective, and psychomotor resources need to be actively stimulated, and strategies must be opportune for sharing experiences, concepts, and attitudes aimed at caring for the individual.

The magnitude of the use of active teaching-learning methodologies that offer a collaborative, interactive, and meaningful experience is highlighted, which provides the development of essential skills for effective collaboration. A characteristic feature of IPE is the use of active methods, such as learning based on simulations, problem-based learning, learning

based on clinical practice, seminar-based learning, learning based on observation (shadowing), E-learning (e.g., online discussions), hybrid learning (E-learning with another traditional method).²⁴

At the same time, there is the importance of preceptorship and educational development for professors for adequate performance and alignment with the concepts of interprofessionality as a way of mediating the training process. This progress must be supported by the strengthening of skills that incorporate both prior knowledge and the professor's commitment to IPE, as well as the intention for interprofessional teamwork, flexibility, and creativity to experience situations in a shared way with students.²⁰

Moreover, an extremely important role of the professor and preceptor is the facilitation of learning, as demonstrated by interviewees E5 and E6 (Facilitators category). Preceptors must act as mediators of the teaching-learning processes in a way that facilitates dialogue and promotes the resolution of conflicts and problems that arise in the work context. The training of professors and preceptors must be promptly developed to acquire effective interprofessional experiences and to encourage student participation and adherence during the group dynamics process. Therefore, it is necessary to promote bonds and interpersonal relationships between students and all health professionals, as well as users, families, and communities.^{6,20}

Furthermore, in Brazil, there are many studies relating to teamwork theories and their concepts. However, these productions do not inform these conceptions and definitions of interprofessional work and do not expose the results of empirical research. International review studies also point to the scarcity of articles that provide a well-developed conceptual model about teamwork and interprofessionality.²⁵

In this way, the importance of producing new evidence based on reports of experiences and observation is highlighted concerning the

effectiveness and efficacy of interprofessional teamwork to strengthen this learning, according to interviewees E2 and E8 (category 2), who explain the relevance of new studies and research for consolidating training in an interprofessional manner. Furthermore, these studies also mention that the results of studies involving IPE present a better quality of comprehensive patient care, even though limitations in the quality of this evidence were identified.²⁵

Interprofessional education, in addition to enabling joint knowledge between students/health professionals, promotes social and individual well-being as mentioned in the interviews. Thus improving their attributes and skills for collective and teamwork.² Accordingly, studies report that participation in projects is of great value to academics, a positive experience, developing autonomy and proactivity in the academic field. Generally, these tend to stand out among the rest, being able to reap positive results in their professional careers.²⁶

PET-Health/Interprofessional, a policy that induces health training introduced as an extension project, boosted interprofessional education with the support and monitoring of 120 projects throughout the country, in addition to offering 6 thousand scholarships to student participants, professors, or professionals. This action made it possible to meet and share knowledge between the various projects and also events such as the *1st National Seminar on Experiences in Interprofessional Education*, providing a universe of many reflections and distribution of knowledge.^{11,20}

Challenging experiences, especially in the context of learning, have a higher impact on the individual's life. Consequently, they bring greater benefits to the individual and better preparation for professional performance. Furthermore, it is reinforced that research and extension projects that propose the integration of different aspects will have a greater contribution in the future in their professions.¹⁶ This magnitude is confirmed

in the speeches of participants E5 and E9 (category 2). When the construction of knowledge takes place in a dialogic way and with respect for the differences of each member, it provides teamwork with quality health services for the user.

The existence of policies that encourage health training, as well as the world of work, which demands creativity, proactivity, and reflection by professionals, are facilitators of this teaching-learning process - declared by interviewee 4. Furthermore, projects and extension actions are openings of possibilities for the institutionalization of IPE, ensuring that students learn and work together with other health professionals to develop collaborative skills, as evidenced in the dialogues of most interviewees. Therefore, it is up to the HEIs to take sides and structure a political-pedagogical project for the adoption of IPE that aggregates the estimates of university extension.^{6,20}

Another important point that involves the IPE learning process is what interviewee 4 (category 3) states regarding the hierarchy of professions. Studies state that teaching strategies oriented towards isolated practices for the construction of professional identity provoke an opening in the work process for the hierarchization and legitimization of professions. Interviewees E3, E5, and E9 implicitly argue this in their statements in the category of Challenges of the IPE teaching-learning process. This situation arises from the tribalism of the categories in health services, also present in the training process, which makes communication and collective practice unfeasible, developing rigidly separated professional identities.^{27,28}

Finally, it is necessary to highlight that Brazil is experiencing a favorable moment for developing new pedagogical proposals for health training, as is the case of Interdisciplinary Bachelor's Degrees that, since their implementation, have demonstrated favorable results for IPE.²⁹ Additionally, the Ministry of Health, through Resolution 7 of December

18, 2018, required Brazilian higher education programs to offer 10% of their load in extension activities.⁶ In the health field, this strategy can be consolidated as an opportunity to build interprofessional education and work practices, as well as interdisciplinary and intersectoral projects that take the local and regional demands of the SUS as strategies for innovative and, in fact, quality training.

RELEVANCE OF THE STUDY

Interprofessional Education has been discussed for the last thirty years, but it still has many challenges to be included in health training. Studying it more and more makes us realize its importance and efficiency in providing comprehensive patient care. IPE is positive when considering the change in the population epidemiological profile and the need to improve patient safety, taking into account weaknesses in care such as fragmentation of care, errors in the execution of procedures, communication failures, and excessive spending produced by isolated practices. This study demonstrated that IPE makes a difference in training those with the opportunity to experience and learn it, allowing better professional and personal improvement.

CONCLUSION

In view of the above, the PET-Health Program Interprofessional edition was of great value for the learning of the participating undergraduates. This learning, in turn, includes the importance of IPE for professional training and the comprehensive and humanized care of patients. In addition to providing teamwork, the exchange of shared knowledge and personal development. It also promoted empathy between professions and understanding that each has its own functions.

The IPE teaching-learning process, in accordance with the students, presents facilitators such as the relevance of professors and preceptors, teaching and extension projects – such as the PET-Health Program – and the restructuring of the curriculum matrix to include subjects focused on interprofessional action. However, nowadays, there are flaws in health course's training, representing a major challenge for the performance of IPE.

The DCNs recommend that students graduate prepared to act and work in an interprofessional team; however, the courses' curriculum matrices do not contain subjects, much less classes focused on the subject. Interprofessional collaboration allows for a differentiated approach and quality care for individuals, providing professionals with a humanized view of the patient and promoting communication and the development of skills to identify and solve problems at work.

In this context, IPE still has gaps in teaching, but it is already acting positively between projects and research and is gradually gaining strength and space in the academic world. Therefore, it is important to continue the fight for the implementation of IPE in political-pedagogical projects to offer interprofessional training to students in health courses. Thus, in the future, we will have professionals increasingly qualified to face the challenges presented by our health system, working as a team and collaborating in an interprofessional manner.

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