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# Collaborative competencies in gerontology: perspective of health undergraduate students

*Competências colaborativas em gerontologia: perspectivas de graduandos da saúde* 

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# ABSTRACT

**Introduction:** The discussion about the curriculum of health area courses becomes relevant for the proposal of educational strategies that promote the development of collaborative skills. This situation will enable a change in the culture of health care, especially for the demands of the older adults.

Objective: To assess the collaborative skills acquired by undergraduate students attending the Gerontology discipline.

**Method:** This is a qualitative study, carried out with students from the Nursing, Medicine, and Nutrition courses of a public university, who took an optional course with an interprofessional focus in 2019. Data collection included the conduction of a focus group and the application of a semi structured interview. The data were analyzed using the Content Analysis technique.

**Results:** Nine students were evaluated, and they reported the development of collaborative skills, such as teamwork, effective communication, and the planning of comprehensive care for the older adults.

**Conclusion:** The individualized expressions of the students participating in this study make us believe that interprofessional learning qualifies as an opportunity to develop collaborative skills.

Keywords: Interprofessional Relations; Learning; Interdisciplinary Communication; Higher Education.

# RESUMO

**Introdução:** A discussão sobre a grade curricular dos cursos da área da saúde torna-se relevante para a proposição de estratégias de ensino que promovam o desenvolvimento de habilidades colaborativas. Tal condição possibilitará uma mudança na cultura de atenção à saúde, principalmente, para as demandas da pessoa idosa.

Objetivo: Avaliar as competências colaborativas adquiridas por graduandos em uma disciplina de gerontologia.

**Método:** Trata-se de um estudo qualitativo, realizado com estudantes dos cursos de Enfermagem, Medicina e Nutrição de uma universidade pública, que cursaram uma disciplina optativa com enfoque interprofissional, em 2019. A coleta de dados incluiu a realização de um grupo focal e a aplicação de uma entrevista semiestruturada. Os dados foram analisados por meio da Análise de Conteúdo.

**Resultados:** Nove alunos avaliados relataram o desenvolvimento de competências colaborativas, como trabalho em equipe, comunicação eficiente e planejamento de cuidado integral à pessoa idosa.

**Conclusão:** As expressões individualizadas dos alunos participantes deste estudo nos fazem acreditar que a aprendizagem interprofissional se qualifica como uma oportunidade para desenvolver as competências colaborativas.

Palavras-chave: Relações Interprofissionais; Aprendizado; Comunicação Interdisciplinar; Ensino superior.

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#### INTRODUCTION

Interprofessional Education (IPE) emerges as an innovative strategy, consisting of the interaction between two or more professions jointly learning about working together and about the specificities of each one to improve the quality of care offered to people<sup>1</sup>. In this approach, the development of collaborative skills is the cornerstone for the interprofessional work that will be supported by collaboration, effective teamwork, and centrality in the person, especially older adults.

Population aging is no longer a recurrent fact only in developed countries and is already part of the large world populations<sup>2</sup>. In Brazil, the rise in life expectancy and the drop in the mortality rate have led to population aging, bringing implications for social and health policies, which represents one of the greatest challenges for public health<sup>3</sup>. The aging process is heterogeneous, requiring knowledge and skills for a broad multidimensional assessment and care planning together with other professionals<sup>4</sup>.

There are still gaps in the training of professionals who recognize and meet the peculiarities of older adults due to the demand for more complex care and with an interprofessional profile. Positive experiences of IPE stand out in Brazilian universities, which develop disciplines with a focus on the development of competences for collaborative practices or curricular models, by placing future health professionals in a previous training of interdisciplinary baccalaureate to understand health work and as a team<sup>5</sup>.

In addition to this initiative, creating opportunities for an elective discipline in gerontology with the involvement of several courses favor the getting together of different professionals and promote teamwork. Aiming at the IPE at the undergraduate level without compromising uniprofessional education in nursing, medicine and nutrition, professors at a public university in the North of Brazil proposed an elective discipline on gerontology with a focus on collaborative care, whose guiding question was: "What are the skills acquired by students attending a gerontology discipline with an interprofessional focus?" It is believed that the IPE during undergraduate school prepares the students for effective teamwork and centered on older adults.

For the development and implementation of IPE, learning strategies are needed that allow interactivity and collaboration, thus awakening critical and reflective thinking, encouraging autonomy and lifelong learning<sup>6</sup>. Among these strategies, collaborative learning is mentioned, which is an effective method to teach teamwork, while promoting positive independence, face-to-face interaction, individual responsibility, interpersonal and small group skills, as well as group processing<sup>7</sup>.

Given this scenario, the development of collaborative skills in gerontology will allow future health professionals to be more qualified for teamwork. This effective perspective of training processes capable of establishing more collaborative relationships between health professionals, ensures greater patient safety, reduction of errors by health professionals and costs for the health system<sup>8</sup>.

This study aimed to assess the collaborative skills acquired by undergraduate students attending the gerontology discipline.

#### **METHODS**

This is a descriptive, analytical study with a qualitative approach, carried out with health undergraduate students at the Federal University of Tocantins (UFT), Campus Palmas, TO.

The research subjects were students from the nursing, medicine and nutrition courses who attended the optional discipline "Health Care for the Older Adults: an interprofessional approach", offered for the first time by the Nursing course, in the second half of 2019. We opted for the selection of undergraduate courses focused on the health area available on this campus. Fifteen weekly meetings were held, lasting three hours each, totaling 45 hours. The meetings were conducted by three facilitators, two of whom were professors (nurse and doctor) and a nutritionist, both with experience in geriatrics and gerontology.

The following teaching strategies were adopted: constructivist spiral, Team-Based Learning (TBL), Brainstorming, Brainwriting, clinical cases, visit to a field of practice, whose objective was to plan comprehensive care centered on older adults, considering the ethical-humanistic, interprofessional care.

A total of 16 students were enrolled in the course and were invited to participate in a focus group, in December 2019, on the university premises at a previously scheduled time. The students were instructed about their participation in the research, and the research objectives and the importance of their contribution were explained to them. Then, the focus group was conducted by a professor from the nursing course, with extensive experience in this data collection technique. It is noteworthy that the professors who taught the subject did not participate at this moment to ensure the reliability of the subjects' perceptions.

At first, the group coordinator conducted a semistructured interview with the students, which was recorded and lasted approximately one hour and 30 minutes. The guiding questions for this stage were: a) *How was it for you to participate in this discipline?* b) *What were the skills that you developed by participating in this discipline?* At the end of the focus group, teachers of the discipline applied a questionnaire containing questions about sex, age, undergraduate course, and the Readiness for Interprofessional Learning Scale (RIPLS) score<sup>9</sup>.

To understand the facts and phenomena that occurred in the focus group, the "Content Analysis" technique was used, according to the assumptions of Bardin (2011)<sup>10</sup>. It is noted that to preserve the identity and avoid exposure and embarrassment, for the presentation of the results, the students are represented by the letter "E" and alpha numeric system.

This research was approved by the Research Ethics Committee of the Lutheran University Center of Palmas (ULBRA), under approval opinion number 3.752.175, CAAE number: 26471319.4.0000.5516.

#### RESULTS

Nine students participated in the study: five from the Nursing, two from the Nutrition, and two from the Medicine course. Most of the students were female (66.7%), with a mean age of 23 years (minimum value: 21; maximum value: 26 years). Overall, the mean availability for interprofessional learning was 104.4 points.

Considering the theoretical framework adopted in this research, the students' experiences related to the development of skills for interprofessional performance were categorized according to aspects related to teamwork, interprofessional learning, effective communication, and the planning of interprofessional care directed at the biopsychosocial demands of older adults.

After analyzing the material, we chose not to consider the domain "Ethical practice" – in which the understanding of their own stereotyped views and of others about other health professionals is highlighted, as well as the recognition that the views of each health professional are equally valid and important<sup>8</sup>, because we understand these assumptions are present in the other domains, such as "Teamwork" and "Communication".

#### Teamwork

It was observed that the discipline constituted a favorable scenario for students to develop skills related to working together, especially to act as members of an interprofessional team, as evidenced by the statements below:

"[...] at the beginning I had a little difficulty relating to colleagues from other courses. But then the teachers were mediating this, right? Leaving us well at ease. Then I was able to socialize more with them". [E3]

"[...] more influence on the team, being able to deal with the team, working in a team, making up your role in the team, seeing the role of the other as well". [E5] "[...] mainly working as a team. It's seeing the difficulty of others and, in our humility and knowledge, helping and seeking together". [E6]

In this study, we observed that the discipline took place in an environment that provided opportunities for interpersonal experiences in different contexts, which enabled students to learn about overcoming differences to solve conflicts, as well as to live together and interact in groups. Despite recognizing that there are obstacles to teamwork, they were able to find strategies to overcome them, as can be seen in the following statements:

> "We had difficulties to organize the schedule, since people from different courses have a lot of divergence in their agendas. But I think that the contact was interesting. [...] I particularly liked it, especially having this multiprofessional contact. It wasn't just one professional. It wasn't just a club". [E4]

> "[...] the moment when the team had to receive a patient to be cared for and to be evaluated, I think it was the first moment when we perceived ourselves as a team, taking care of a patient, a multiprofessional team that was taking the patient to be evaluated and cared for. That was the moment that most impressed me. [...] some students had difficulties. But one was helping the other and vice versa, there was this sharing". [E6]

We also noted that the students realized the importance of interaction between professionals from different areas, since they recognized that joint actions favor work processes and qualifies the provided care:

> "I think that this multidisciplinary interaction between the areas is very beneficial. Not only for us, but for the future, as well. We learn to deal with possible scenarios where we have to interact. Ideally, everyone should interact, but we know that in real life this is not always the case". [E4]

> "[...] we were there thinking about a clinical case and a nursing diagnosis, which was also complemented by the medical diagnosis and nutrition diagnoses. Then we performed a food evaluation, and the three were included". [E2]

#### **Roles and responsibilities**

Participating in the discipline helped the students to understand the importance of different professions in the context of health care, and how the knowledge of different areas can be grouped to qualify the provided work, as evidenced by the reports below:

"All the proposed activities were used in interprofessional groups. [...] we have the perspective of nursing, nutrition, and medicine, and that always

made us very interested. So, it's not like "this is from nursing and this is from medicine," but understanding how medicine includes my part of nursing, as well as nutrition. [...] you understand what your place is, how you will collaborate, where you will put it into practice". [E2]

"He had medical personnel asking questions that interested them. This even complemented the nutrition questions, which complemented the nursing questions, which completed the medical questions again". [E4]

In addition to valuing the interprofessional interaction to qualify health care, the students also pointed out, as another positive aspect, the fact of recognizing themselves as an important part of the interprofessional team, as shown in the statements below:

"[...] you were missed here; you would play a part that someone else did not play". [E4]

"[...] and having this responsibility that, if you were absent, a piece of your contribution was missing in the group. [...] I think this is thinking of the team". [E6]

"[...] and if you don't go to class you will be missed by the group, since the group depends on you, and the patient depends on that group. So, your actions have consequences that you often can't even imagine. Responsibility for the patients, to provide care, seeking and thinking about the best way to help them". [E8]

#### Communication

During the discipline activities, the students were able to develop skills related to effective communication. They learned and/or improved their ability to express opinions and points of view, and exercised qualified listening, as evidenced by the following statements:

> "I am very shy, and we needed to talk. We needed to tell the others about our experiences. This requires us to respect the colleagues, respect what they say. It's like recognizing the knowledge that the colleague has and not opposing it but passing along all skills. That was important." [E3]

> "In the care process, something that we developed very well was communication in conflict resolution. [...] everyone really understood their role in the process and became involved in that role." [E5]

Learning how to communicate with others is a complex task, which requires availability and interest. We highlight how important this competence is for the success of interprofessional work, and that to exercise it, in addition to availability and interest, the opportunity to practice is needed.

#### Learning and critical reflection

In the students' testimonies, the interprofessional experience and learning provided the opportunity to overcome fragmented actions in the health-disease processes, and to articulate the different professionals' perspectives, so that human complexity can be considered in health care plans:

"[...] here, I was able to see a different depth. We managed to have more practice, managed to think together. So, I think I got a better viewpoint of the older adults. [E1]

[...] if there was no interprofessional discipline, if it was only the older adult's health aspect that nutrition sees, that nursing sees, perhaps we would not have achieved this result, this better therapy. [...] I think now I can sit with an older adult and be able to assess their health in a broad way. I think it's about taking one's hand and understanding the whole process. [...] the question of comprehensiveness, knowing how to see the older adult. Not only regarding my professional view, but also to understand the role of my other colleagues in health." [E2]

"[...] I think there is no need to make a plan divided by areas, and then everyone ended up discussing the therapeutic plan. And it was not divided, this is the therapeutic plan for medicine, this is for nursing. [...] because the patient is one, "I think that was very clear to us. [...] we managed to unite things." [E8]

Medicine asks a question that complements nutrition, which complements nursing, and so on. [...] physiological questions that medicine asks, but it ends up influencing nutrition too, it was a very cool challenge. We managed to put this into practice and managed to devise a care plan". [E9]

# Relationship with patients and identification of their needs

The discipline made it possible for students to have contact with the older adult's world/life. The experiences in these scenarios contributed to reconsider health practices, as evidenced by the statements below:

> "I was very moved by the patient's story. Until then, I had never collected a story. I had never done an anamnesis, talked to the patient together with other professionals. So, sometimes, some questions that I would never ask, emerged, and I would have never thought to ask that. And then we see the importance of that. So, I think that was very good. But this is important, it works like this in practice. So, for me this was the activity that most impressed me personally and also professionally". [E1]

> "One important point was to focus on the older person, mainly. In my course and because of the way we are taught, the focus was on the therapy to be developed for the older adult or on the older adult's pathology.

So, we were always worried about what to do for the older adult or the disease condition, "what does this disease cause?" And at that moment we ended up being focused on the older adult who was there, how we can help, what we can do for the older adult. We bring a better quality of life, an improvement in life for them". [E4]

Providing practical experiences and integrating several professionals in this performance was a strategy potentially capable of favoring collaborative interprofessional work and the implementation of humanized actions, as indicated by the statements below:

> "I feel very contemplated by what we can see. It provided me a very important security, I was able to look at the older adult in a broad way. Even if you can't solve it, you know the strategies to seek, looking for a way to solve it. Developing, finding an answer. [...] the expanded view, an expanded view of health issues. [...] and bringing up a social issue that is very important for the older adult situation, the social evaluation, family evaluation, evaluation of family support. This was an important issue". [E5]

> "[...] the main moment was that of being with us in a multidisciplinary way. Being with the older adult, together with the other actors, was very important for us to see that this approach was really important". [E6]

> "[...]in there, I didn't come across only one older female person, there were several other older persons and not only that specific woman. [...] an institution has great power. I felt thankful when I left. [...] before going there my thinking was different". [E7]

> "What struck me most was the visit. [...] even then, in my undergraduate years, I did not know an institution that received many older adults, many people. And then there was that situation of asking questions together with other professionals, medicine and nursing, as these are questions that complement each other, they end up complementing". [E9]

Understanding the world in which the older adult lives, their weaknesses and potentialities, aroused in the student's feelings of solidarity, empathy, compassion, and respect for the other. Such aspects can contribute to comprehensive care and to direct health actions to the real demands of patients, families, and the community, considering psychosocial aspects in addition to biological aspects.

# DISCUSSION

The findings regarding sex and age were similar to the study by Nuto et al.<sup>9</sup>. Among the evaluated courses, the curricula are structured in a perspective of uniprofessional education. The Nursing and Nutrition courses have disciplines in common until the third semester, due to the Restructuring Support Program and Expansion Plans of Federal Universities (REUNI, *Reestruturação e Expansão das Universidades Federais*)<sup>11</sup>. This program enables the interaction and exchange of shared learning among these students; however, they are not enough to develop skills for collaborative practice.

A study evaluated 307 undergraduate courses in health, of which only 5.2% of higher education institutions (HEIs) have the IPE proposal<sup>12</sup>. However, there is a growing approach to interprofessional training based on curricular internships, various extracurricular activities, extension activities (such as the Academic Leagues of Geriatrics and Gerontology), and research, whose visibility denotes the power of developing collaborative skills<sup>13-15</sup>.

This provides opportunities to offer the disciplines an interprofessional focus capable of sustaining effective teamwork, the recognition of professional identity, and patient-centered care. Although it was not significant, in this study, we observed that the mean of the availability items for significant learning between courses was like the one found in the literature<sup>5,12,14,16</sup>.

It is noteworthy that IPE involves three interrelated dimensions to obtain quality health care: macro, meso, and micro. The macro dimension involves health and education policies that support the reality of health training and work. The meso dimension refers to curricular organizations, description of course programs, teaching and learning methodologies, and evaluation. Finally, the micro dimension is related to interpersonal and interprofessional relationships in daily training and health work<sup>8</sup>.

The students of the study pointed out the following skills for interprofessional work: teamwork, roles and responsibilities, communication, critical learning and reflection, and planning for collaborative care centered on the older adult's needs.

Teamwork is understood as working with other professions in different types of services, establishing the role and responsibility of each profession, respecting the skills and limitations<sup>8</sup>. Thus, socialization, communication between peers, knowledge sharing, and respect and appreciation for the other were aspects mentioned by the students during the experiences of the discipline, indicating an interprofessional learning and that this strategy can significantly contribute to a collaborative practice and better results for patients and families. This has also been a resource that mobilizes the act of coping with the problems of the care model and the workforce and contributes to the effectiveness of health systems.

Another highlight for this topic is the role of the teacher as a "facilitator". Teacher training is one of the dimensions of IPE that allows the facilitator to recognize and value the differences between professions, plan learning strategies, and establish bonds of trust and respect, preparing the future professional for the collaborative work<sup>17-19</sup>.

The integration of knowledge contributed to overcoming the Cartesian and biologicist model of health care, making it possible to value the unique experiences of the assisted older adult, and the students' individual and collective potential. The different points of view joined care actions, favoring a comprehensive and humanized practice, qualifying care, and highlighting the importance of interprofessional action<sup>20</sup>.

As the statements indicate, the interprofessional experience in health care settings is still a current challenge. Thus, strategies of experience and interprofessional work, as occurred in the discipline, show the potential for reflection on the importance of joint actions for professional enhancement, to improve the work environment and to qualify care practice.

It was possible to overcome the difficulties of working with people, professions, demands, and scenarios that were different from the usual ones, and the students developed interpersonal skills, as well as flexibility and appreciation for other professions. This scenario was also identified by other authors, who reinforced a good integration between students of health courses, sharing experiences, and learning together<sup>21</sup>.

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Regarding the roles and responsibilities, one can see that the developed actions are important for the work and contributed for the students to feel professionally valued, to strengthen the importance of their role in interprofessional teamwork and to favor the subject's empowerment for a collaborative, comprehensive, and humanized practice. This fact legitimizes IPE and provides the learning of coordinated actions and collaborative attitudes, to emphasize a more general professional training, which can contribute to a more coherent practice in SUS<sup>22</sup>.

The need to communicate effectively was also identified in the reports. Interprofessional communication is essential for collaboration and is present in professional-professional and professional-patient/family interactions, being necessary to develop effective and understandable communication in different areas of activity, as well as in conflict resolution and promotion of a harmonious environment within the team<sup>23</sup>. One of the tools used to improve communication is SBAR (Situation, Background, Assessment and Recommendation)<sup>23</sup>. Knowing how to listen and speak, respecting differences, and proposing solutions comprised attitudes experienced by the students during the optional discipline, thus ensuring spaces for teaching and academic/professional performance, by a dialogical relationship, resulting in a new intersubjectivity and at the same time stimulating a critical reflection on the concrete reality to be transformed<sup>19</sup>.

The students also learned to implement a collaborative care practice and understood the importance of each professional in the process of planning actions. There was a break regarding the limits of each profession for the construction of an integral and single practice, in which each professional is inseparably integrated to the sum of the whole<sup>23</sup>.

Regarding patients and their needs, the provision of health services to older adults is fragmented, with several consultations by specialists, unshared information, numerous drugs, tests, and other procedures. Thus, one must provide care focused on the older adults aiming at a multidimensional evaluation and referenced services to improve health care for this group<sup>24</sup>.

One of the limitations of this study is the low adherence of students enrolled in the discipline in participating in the focus group. This fact occurred due to the incompatibility of student schedules for group participation, due to the accomplishment of final exams for the semester. However, the experience of the facilitators in gerontology and geriatrics, as well as in the appropriation of teaching strategies, allowed a synergy in the teaching-learning process. Furthermore, the limited number of students allowed the efficient application of active teaching strategies, building links between students and facilitators. Although it is not a required discipline, the presence of professors engaged in IPE in gerontology enables the development of interprofessional skills aimed at caring for the older adults.

Another positive point of IPE in gerontology can be attributed to the nature of its specialty, because it is collaborative, it allows students to solve geriatric problems in a decisive and equitable way, thus increasing the quality of the patient-centered care efficiency<sup>25</sup>.

#### **FINAL CONSIDERATIONS**

This study allowed us to identify the availability of interprofessional learning as well as the development of collaborative skills. The mean availability for learning among Nursing, Medicine, and Nutrition students was 104.4 points. According to the students' reports, learning about collaborative skills such as working in a team, effectively communicating, and planning comprehensive care for the older adult was notorious.

The socialization among the students enabled an approximation and connection between them and was a source

of learning and knowledge sharing. The appropriation, by the students, of the shared work as an important means for the comprehensiveness of care was also significant. The interaction with care and the older adult allowed the students to be close to their future professional practice, in addition to the reality of communities, patients, and their families.

# **AUTHORS' CONTRIBUTION**

Paula Fleury Curado and Daniella Pires Nunes have equally participated in the idealization, formulation and application of questionnaires, interpretation of data and writing the text. Leidiene Ferreira Santos assisted in the analysis and interpretation of data. Ivanete Pereira da Silva, Erika da Silva Maciel, Ruth Bernardes de Lima Pereira realized the critical review of manuscript. All of the authors approved the version submitted for publication.

### **CONFLICTS OF INTEREST**

The authors declare no conflicts of interest related to this study.

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