

Institutional aspects for the adoption of Interprofessional Education in nursing and medical training

Aspectos institucionais para a adoção da Educação Interprofissional na formação em enfermagem e medicina

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DOI: 10.1590/0103-11042019S105

ABSTRACT The theoretical-conceptual and methodological frameworks of Interprofessional Education in Health (IPE) have been widely recognized throughout the world as useful for the development of collaborative competences for effective teamwork. This article aims to explore the perceptions of nursing and medical students regarding the institutional factors that interfere in the adoption of IPE initiatives in their training contexts. It is a case study, which adopted the qualitative approach and the exploratory perspective. The research participants were nursing and medical students from two public universities from a Brazilian Northeastern state – one state and one federal. The focus group was chosen for data collection, and the categorical content analysis technique was used, observing the phases of pre-analysis, material exploration and treatment of results. Three thematic categories were built a posteriori: the importance of teamwork, the institutional contexts for the adoption of the IPE and challenges for the adoption of the IPE. Although the realities researched present advances in curricular changes, such as the approximation of teaching with the reality of services, the adoption of more active methods for the formation of critical and reflexive subjects, the gaps in the development of collaborative competences are still notorious.

KEYWORDS Education. Higher, schools. Interprofessional relations.

RESUMO Os marcos teórico-conceituais e metodológicos da Educação Interprofissional (EIP) em saúde vêm sendo amplamente reconhecidos em todo o mundo como úteis para o desenvolvimento de competências colaborativas para o efetivo trabalho em equipe. O artigo teve como objetivo explorar as percepções de estudantes de enfermagem e medicina sobre os fatores institucionais que interferem na adoção de iniciativas de EIP em seus contextos de formação. Trata-se de um estudo de caso, que adotou a abordagem qualitativa e a perspectiva exploratória. Os participantes da pesquisa foram estudantes de enfermagem e medicina de duas universidades públicas de um estado do Nordeste – uma estadual e outra federal. O grupo focal foi escolhido para coleta de dados, e foi utilizada a técnica de análise de conteúdo categorial, observando as fases de pré-análise, exploração do material e tratamento dos resultados. Três categorias temáticas foram construídas a posteriori: a importância do trabalho em equipe, contextos institucionais para adoção da EIP

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e desafios para a adoção da EIP. Embora as realidades pesquisadas apresentem avanços nas mudanças curriculares, como a aproximação do ensino com a realidade dos serviços, a adoção de métodos mais ativos para a formação de sujeitos críticos e reflexivos, ainda são notórias as lacunas no desenvolvimento de competências colaborativas.

PALAVRAS-CHAVE Educação superior. Instituições acadêmicas. Relações interprofissionais.

Introduction

Interprofessional Education (IPE) has been discussed, over the past 30 years, as a way of encouraging new relationships among health professionals, through collaboration, and, consequently, improving the quality of health services. During this period, many efforts have been done to consolidate the debate, overcoming theoretical misunderstandings, to identify evidence of its effectiveness in changing the attitudes and skills of health professionals, to transform the reality of health systems, to build a theoretical background and to discuss methodologies and strategies that support the logic of IPE¹.

Scholars and researchers, based on important historical accumulations, engaged themselves in building a definition capable of meeting emerging demands in the field of health professionals' training, on the need to overcome the great distance between health professionals and the commitment to improve the quality of care and the quality of life and health of people^{2,3}.

The Center for Advancement of Interprofessional Education (Caibe)⁴⁽²⁾, an important institution that encourages and supports the IPE in the United Kingdom, argues that "Interprofessional Education occurs when two or more professions learn from one another, in order to improve collaboration and quality of care".

Systematic review study, in turn, seeking to highlight the central aspects of interprofessionalism, argues that the IPE

[...] occurs when members of more than one health and/or social care profession learn together, in an interactive manner, with the explicit purpose of improving interprofessional collaboration and/or the health/well-being of patients/customers⁵⁽⁵⁾.

A central aspect of this definition is the intentionality for the development of collaborative competences. Learning opportunities among students or professionals of different categories should be strengthened by intentionally planned strategies so that collaboration replaces the traditional competition in training and health work.

In the definitions on IPE, it is possible to perceive the evolution about the understanding that the professional formation takes place in several scenarios, both in the reality of the production of health services and in the formal and informal spaces of health workforce training, as well as in the importance of this process to be shared by the actors involved, students and/or professionals³.

Another aspect that draws attention is that the maturation of the debate allowed to define IPE as a presupposition for the collaborative work, placing in the centrality of the process the social and health needs of the users; as well as to overcome the current model of training in professional silos, where there is little or no opportunity for shared learning, and that ends up determining practices that are also separate and isolated⁶.

Discussing education and interprofessional practice retakes the reflection on the centrality

of users in the elaboration and execution of health actions, showing coherence with the purpose of strengthening health systems through more effective responses to health problems. It revives the debate around the necessary dialogue between the many fields of knowledge and practices to address health problems and needs that become complex in a social dynamic that also needs multiple perspectives and actions.

Based on the relevance of IPE for the training of health professionals more able for collaboration and effective teamwork, the elaboration of this study was guided by the following leading question: how nursing and medical students perceive the institutional aspects for the adoption of the IPE in their training contexts?

Thus, the article aims to explore the perceptions of nursing and medical students about the institutional factors that interfere in the adoption of IPE initiatives in their training contexts.

Material and methods

Reasoned on the nature of the problem researched and the objectives established, it is a case study. Although the study had been carried out with participants from different educational institutions, the institutional aspects that influence the adoption of interprofessional training in nursing and medicine are adopted as a case study. In this way, the institutional context is considered as “a delimited and contemporary system of real life”⁷⁽³²⁾.

Considering the classification in relation to the approach and the reach of the objectives, it is a both qualitative and exploratory research. The qualitative approach proved to be adequate insofar as it allows to understand the phenomenon beyond its measurable characteristics and the capacity to understand, discuss and explore sensations and experiences existing in social relations⁸. The

exploratory perspective is justified by the intention to explore aspects of a particular phenomenon, especially when the aspects that constitute it are still not well known⁹.

The study was developed in two universities of a state in the Northeast – one state and one federal. Between the two of them, there are important differences in structure, organization, internalization and in relation to the research, teaching and extension processes. The choice was motivated by the fact that the two universities have a tradition of participating in reorientation policies for professional health training.

The research participants were nursing and medical students from two public universities located in the Brazilian Northeast. To ensure the confidentiality of the participants, it was used codes composed of the letters NS – for Nursing Students – and the letters MS – for Medical Students – followed by a numeral.

The focus group was chosen for data collection because it raised issues related to availability for shared learning, professional stereotypes, limitations or difficulties for interprofessional learning. The focus groups were homogeneous, and this format allowed the participants the opportunity to provide more concrete information on their points of view about students from other professional areas¹⁰.

The discussion in the focus group was conducted by the moderator, research coordinator, and by an observer, responsible for recording attitudes and gestures that could complement observation and content analysis¹¹⁻¹³. In order to problematize the reality of health services and raise questions regarding the institutional aspects that interfere in the adoption of IPE in health training for the development of competencies for collaborative work, the discussion in the groups was guided by some initial questions: what is the importance of teamwork for health work? Which aspects of the training reality are close to IPE? Which

institutional aspects make it easier or more difficult for IPE?

Regarding the size and duration of the group, the average was eight participants, and the duration ranged from 50 to 80 minutes. The choice of a small group is justified by the possibility of allowing greater interaction among the participants, facilitating the communication and discussion of the issues raised.

Four focus groups were held at the state university, two groups in each course, with a total of 33 participants. At the federal university, two focus groups were held in nursing (first and second half) and a focus group with students from the second half of the medical course, totaling three focal groups, with 25 participants in these groups. The focus groups were recorded and, then, transcribed, composing the *corpus* of the research analysis.

The accomplishment of the analysis technique respected the pre-analysis phases, exploration of the material and treatment of the results. In the pre-analysis, a floating reading was carried out, which allowed the initial contact with the documents, the content obtained, from the speeches of focus group and interviews. The transcripts of each focus group and interview were read to get an immersion in the discourse, having a first approximation of the messages, arguments and justifications that have contributed to a greater clarity of the hypotheses, allowing greater clarity of the main messages¹².

Subsequently, the 'constitution of the *corpus*' was carried out. At this stage, the exhaustiveness rule was observed, and the data were organized to respond to validity standards, considering all aspects raised in the discussion, without omission of any aspect; representativity, which ensured that the data (messages, speeches, expressions) were representative of the totality; homogeneity, which obeyed precise criteria of choice, ensuring that the data referred

to the same theme, collected through the same techniques in similar individuals; and relevance, which made it possible to recognize that the *corpus* was adequate to the objectives of the work¹⁴.

In the third stage, the 'formulation of hypotheses and objectives' was carried out, which ensured that some provisional affirmations were made, from the previous phases. The formulation of the objectives was made from the selection of the units of analysis, through the process of categorization, *a posteriori* or empirical, in which the categories that emerged were described and discussed from the existing theoretical background^{12,14}.

The last step was the preparation of the material, before the analysis itself. At that moment, the numbering of the elements of the *corpus* was carried out, as well as the identification of the units of analysis, which, for this study, were highlighted with different colors.

The stages of material exploration, treatment and interpretation of the results were facilitated by the stages, and their phases, which preceded them. The units of analysis were codified, decomposed and enumerated, facilitating the interpretation of these results from the objectives proposed by the research.

This study was registered and approved by the Ethics Committee of the University Hospital Onofre Lopes, of the Federal University of Rio Grande do Norte, through Opinion n° 16.652, which observed the research objectives, risks and benefits to which the participants were submitted.

Results

The data from the focus groups brought significant features on the reality of health training for the adoption of the IPE. Thus, the *corpus* of the research allowed grouping the results into thematic categories of analysis, subcategories and units of analysis, as summarized in *table 1*.

Table 1. Categories of analysis obtained by focus groups

Categories	Subcategories	Analysis units
Importance of Teamwork	Integral Care	14
	Integration of Knowledge/Professionals	15
	Difficulty of Interaction in the Logic of the Care Model	8
	Intense Hierarchy	5
The institutional contexts for IPE	Teaching and Extension Activities	11
	Teaching/Learning Activities shared without systematization	16
	Interdisciplinary activities (areas of knowledge of a single course)	8
	Teaching staff reproduces the separation among areas	21
	Individual initiatives (teachers or students)	08
	Conceptual Confusion	08
Challenges for adopting IPE	Physical Space/Physical Structure of Universities	16
	Much Emphasis on Specific Training/Traditional Training Model	19
	Hierarchy/Culture of Professional Roles	09
	Stereotype/Little knowledge of other areas	08

Source: Own elaboration.

Importance of teamwork

In focus groups, students demonstrated a good understanding of the relevance of teamwork, reiterating the interaction among professionals as an important element to improve the quality of care and to obtain better results for health problems and needs. The need for comprehensive care appeared very frequently in the speeches and discussions.

We have already seen in theory the importance of teamwork to provide a more qualitative service, to improve the resolutivity for the user, and with practice, we saw the importance of integrating professionals into teams. (MS1).

Patient care must be comprehensive. We cannot - nursing, medicine, physiotherapy - none of these professions provide comprehensive care to

the patient that responds to the needs, being independent of each other. (NS1).

Students often emphasized the importance of teamwork as an opportunity to exchange knowledge and the construction of new knowledge, demonstrating the need for dialogue between the subjects and overcoming the understanding of the team that only occupies the same space, without the necessary communication for the effectiveness of teamwork. They also brought up the importance of the centrality of the user/patient and the need for a common goal, capable of facilitating the interaction between the different professionals.

I think when all the professionals who work together and prioritization of a common goal is teamwork. And this is necessary. (NS2).

I think any work you are about to do, involving any area, you cannot do it alone, everyone needs to collaborate a little, everyone needs to communicate. I think the fundamental question also of teamwork is communication and a good coexistence. (MS6).

Although it was possible to identify the maturity of students in the debate, dialogue as an important element to enable collaborative work appeared more emphatically in only one group. The capacity for dialogue arises in the discussion as competence that varies according to the individual opening and independently of the professional category. Participants reported that there are shortcomings in the relationships between the different professionals, making it difficult to work in teams in the perspective of collaboration.

The medical class in general [...] is placed on a pedestal on one side and the other professionals on the other side. So, there is a very big confrontation between medical professionals and the other categories. (MS8).

On the team, every professional has his point of view. The professional sees the problem from his point of view and each team member can accumulate what he thinks with what others think, and they will come to a common good. Because sometimes we are very focused on what we do and fail to consider the contributions of others within the team. (NS6).

Institutional contexts for adopting IPE

Most participants stated they had never heard of IPE. When instigated to talk about the approach to the IPE debate, students, despite showing little knowledge of the discussion, attempted to explain it from the prefix 'inter'. In the discussion, they referred to interdisciplinarity and multiprofessional work. A small group of medical students claimed to know the topic, however, during the debate, they

demonstrated conceptual confusion, pointing to the understanding of multiprofessionality, multidisciplinary and interdisciplinarity as synonymous terms.

Interprofessional Education?! This topic, I have never heard of it. (NS5).

What comes to mind is the interaction between professions. (NS3).

Interdisciplinary work we have already heard [...], but being really educated all together in an interprofessional way we have not! (MS4).

The little approximation with the discussion is not enough to ensure that in the researched reality no initiative is taken in the direction of the development of collaborative competences. Based on this assumption, the participants were encouraged to talk about the strategies/actions that tried to bring students from different courses in the training process, to qualify students for teamwork.

Teaching activities and research and extension projects were cited as experiences that bring students from various courses closer together. In the speeches, it was possible to identify an important variety of actions and objectives. In some reports, the intentionality of interaction, exchange of experiences and approximation between subjects is perceived.

We have two disciplines that are made for this integration. They are students of physiotherapy, nutrition, pharmacy, medicine and nursing and social service sometimes. These students meet in a health facility and think together about how to act in that community. (NS1).

One of the places we learned the most [...] was to participate in the Health Work Education Program (PET), which had nursing students as well. We had to get together, had to collaborate with each other and in that some visions were broken, both of themselves and the people. (MS6).

The systematized initiatives of shared learning mentioned by the participants are still based on the multidisciplinary and multiprofessional logic, reflecting the great difficulties to carry out the interaction between the different professions. The lack of intentional and systematized actions can be understood as barriers to the incorporation of the theoretical-conceptual and methodological landmarks of IPE.

I was thinking ... I do not see any moment of our training contributing to this teamwork ... (NS11).

I haven't seen a concern, since the beginning of college, in team working. In fact, [...] you come to consider the human being in a holistic way in general, but at no time they taught us how to work as a team. (MS7).

And what I also think, in relation to our curriculum, a lot is missing. We are very ignorant about what the other is doing, about what the physiotherapist does, what are the duties of the physiotherapist, the nurse, the speech therapist. (MS8).

Students expose two aspects of reality: difficulties in implementing systematized initiatives and complete absence of actions that aim at the interaction of students from different courses to develop collaborative skills. Participants report that encounter with other students, often, happens by chance and without planning, making it even more difficult to strengthen interpersonal and inter-professional relationships.

On the bed when we arrived, the patient was with the medical students, we waited for them to finish and then we began our care. (NS11).

Last week we were having an intervention with a child in bed and students of physiotherapy arrived. They waited for us to finish the intervention to get in. The nursing knowledge were with us and the knowledge of physiotherapy was behind

the door and we could not articulate. (NS14).

During medical school is not explored, I feel this desperate need in our course, really work even in a more integrated way. (MS7).

It also appeared in the speeches that at times when students meet by chance or coincidence, by sharing the same spaces of practical classes, the interaction faces strong structural and cultural barriers. They also mentioned that, when it happens, it is because of the individual initiative of students. They emphasize the interest that this interaction happened as a natural process in effecting the health work.

Certainly, if it was not because of my initiative, there would be no articulation. There wouldn't be this mutual interaction. (NS2).

The interaction that existed was an initiative from the students. (MS7).

This articulation is much more favored in supervised stage. But it depends on each student. (NS12).

The reality presented by the participants of the focus groups is complex and draws attention to the teaching performance in the training process. The relationships among teachers from different departments appeared as an aspect that goes against the skills training for collaborative work.

I think the big problem is that we're not being trained to work as a team. What is the harm for the teacher of a discipline in sitting with the physiotherapy teacher and try to articulate the action agendas to be done together? We see this in college. Many times, we do a job twice, because the team says it is interdisciplinary, but we cannot manage to sit down to discuss. We see the differences within the team of the same discipline. We are not yet being formed by a team. So, the professional does not leave prepared to work as a team. Despite the team speech. (NS10).

The teachers are very dismantled. Even those in the same department. We see this disarticulation in the tests. In shared disciplines we know who elaborated each question. (MS15).

Challenges for adopting IPE

The reports of the students draw a reality of important positive points for the adoption of IPE, as an approach for the reorientation of health training. However, when they narrate the lived experiences, they present important challenges for the realities to advance in the perspective of the training of professionals more apt to the collaborative work in the production of the health services.

Initiatives, despite presenting problems with implementation, constitute powerful spaces for the construction of strategies based on IPE. However, many challenges were reported by students. In view of the aspects that emerged in the technique of data collection, the mentioned difficulties are from several spheres and show the need to think about the role of the university.

An important challenge brought by medical students was the disarticulation between theory and practice. According to the participants, the debate that takes place in the classroom addresses some points during practical classes, but the reality experienced by students in health services is different, turning the debate of teamwork into chimera.

The [health] system does not think in a multi-professional way. So, we will never be multiprofessional. The system mentality is this and we cannot go against it. It's no use spending thirty classes talking about a multiprofessional team, if when we go there, you see no multiprofessional. In the classroom we see in a superficial way. It's in reality we really learn from. (MS1).

We have at the beginning, the theoretical parts. Professors say that care should be centered on the patient. It has the initiative. It's the beginning.

But when we go to the services, we realize that it is different. We stand between doing what we learn or doing as we can see in the reality of health services. We think we're going to put everything we've learned into practice, but when we get there, we have to shape ourselves a bit. (NS4).

The physical structure, often, appeared as one of the elements that impairs the interaction between students of different courses with the goal of shared learning. Both realities present important limitations of the physical structure that accentuate the problems already reported. Colleges have their own buildings and separate structures, often distant, hampering dialogue between students and teachers.

The medical department is so far away. So does the pharmacy. I think this makes it harder. How can I talk to someone, if I don't even know him? (NS4).

We have our building that is named faculty of health sciences and only contains the medical course. (MS5).

Another major challenge reported in the groups is professional identity and historically established roles. Thus, the debate about professionalization gains space as a way of understanding how the professions acquire identities that end up defining, also, the possibilities of relations with other professions.

Students from the Medical Course recognize that there is a cultural barrier to dialogue with other professional groups. This barrier is legitimized both by the category and users who attribute to the uniprofessional action, according to reports, greater trust in service. Establishing dialogues with other professionals can express professional insecurity.

Nursing students also report the existence of resistance among medical and nursing students. They also claim that the naturalization of hierarchy and vertical relationships exists in the nursing team itself.

We are not going to deny that there is among doctors a certain prejudice of saying that there is the need of a second opinion from another professional who is not a doctor. This is a fact. (MS2).

There are certain backgrounds that isolate the professional, as if only the work of a professional category was better. We find resistance. This is a limited vision that does not allow the articulation of our work. (NS3).

Discussion

Although the need to establish limits to the professions is recognized, the current scenario, of great and important changes, demands a new professionalism in which professionals are able to teamwork and committed to strengthening health systems and capable of establishing new relationships among users of health services¹⁵.

The understanding of participants demonstrates the approximation with the literature about the benefits and necessity of teamwork, although there is a variety of definitions for this type of work. In all definitions, however, they reiterate the interaction among professionals as a prerogative to meet the complex and dynamic health needs in the present times¹⁶.

The essence of this work, in which collaboration takes over a central role, places the users of services and their needs as fundamental in the process of producing health services. The complexity and nature of problems and needs of users suggest the need for complementarity, based on communication, to share experiences and knowledge, capable of guiding decision-making, to address the problems presented¹⁷. Recent researches indicate that teamwork in the perspective of collaboration favors patient safety, based on the centrality of their needs^{5,18}.

Based on this problem, studies and experiences witnessed in several countries stand up for IPE as an important tool to change the focus of professional practices, overcoming models focused on their specificities, as a way to enable shared learning processes, capable of stimulating the improvement of collaborative skills¹⁹.

The IPE in health aims to create, in the learning process, conditions to improve the relations between members of different professions, overcoming the historical difficulty of communication, enabling the formation of subjects able to work collaboratively, in the attention to the health of the people. The IPE constitutes, therefore, as a proposal to overcome the training model, based on the multiprofessional or uniprofessional perspective⁵, which has presented many limitations in the training of professionals capable of meeting the demands that emerge in the current context.

Among the barriers or challenges, is the need to think about logistics and the recognition of the importance of rigorous planning and the need for resources to achieve the expected results; the curricular designs present themselves as another barrier, insofar as they are organized, based on the specific training needs of each profession, requiring greater effort for the negotiation and flexibility of these designs; the current culture that reinforces the professional limits and the dialogue and interaction between the different professional categories and the learning relations very focused on traditional perspectives that little contribute to the effectiveness of the collaboration and interaction²⁰.

A fundamental point to discuss the context of the realities researched for the adoption of IPE is institutional support for initiatives that stimulate changes at the macro, meso and micro levels of reality²¹. Aspects of the micro and medium domains can seriously jeopardize the implemented initiatives, which points to the understanding that the

changes must occur in an articulated and planned process, in exhaustion, to guarantee impact on the problems of professional training in health^{20,22}.

Likewise, despite the existence of policies (macro level) that encourage the reorientation of professional training in health, there are important gaps in the adoption of strategies (medium domain) capable of overcoming the relationships established in health work, as reported by the participants in the research, who can minimize the barriers imposed by the physical structures in the contexts researched.

It is verified, then, the importance of the aspects of the meso²¹ domain for the accomplishment of changes. Students feel the need for greater incentives to build new skills in order to advance in interprofessional training. However, it is not a simple task to develop interprofessional activities because it involves great efforts to overcome not only the physical barrier, but also to think of possible strategies, given the specificities of each course: number of students, different curricular designs, schedule of very different activities and which are built within the faculties or departments²¹, without the necessary articulation or dialogue, which can be seen in the two universities studied.

The reality studied indicates the existence of moments, planned and unplanned ones, upon which students from different courses come together, but who have come much closer to the multiprofessional perspective. Existing initiatives are few or nonexistent and suffer from a lack of planning, culminating in the reproduction of the traditional model of training, enabling individuals with little commitment to transforming the current scenario of education and health care.

The current reform policies of the health professionals' training process have enabled the inclusion of students from all areas in health services, considering adequate space for the training of more critical and

reflective professionals. However, the reality marked by the strong division of labor does not stimulate, in the academy, the construction of skills for collaborative work. The teacher can take advantage of the spaces of concrete reality to create a space suitable for collaboration among students. For this purpose, the teacher must incorporate the importance of IPE to obtain the necessary transformations²³, in the realities studied.

Regarding the micro dimension, it does deserve discussion the process of constructing professional identities which ends up delineating roles, values and attitudes that go far beyond education and training processes²⁴. Society incorporates these identities, further strengthening the barriers to dialogue. This process contributes so that dialogue and interaction become increasingly difficult. Occupational identities, historically constructed, build strong barriers to interprofessional interaction^{25,26}. It is interesting to note that the speeches of the students maintain adherence to the literature.

The literature and the reality researched highlight issues that deserve attention in the debate on IPE: power relations, which gain strength through the professional hierarchy, and gender relations, which were present in the debates about the interactions between doctors and nurses²⁷. The training process, which is a useful tool to achieve the necessary transformations, should review the way in which hierarchical relationships are addressed and how the specificities of the professional categories justify this format of relations²⁸.

Studies show that students from the health area participating in activities, from the perspective of IPE, develop better communication and teamwork skills, have more clarity about the roles of the various professionals that make up the team and are more apt to manage conflicts that may arise in the dynamics of health work²⁹. Regarding power relations, it is possible to say that the difficulty of dialogue and collaborative work has taken shape throughout history,

legitimized by the idea of superiority of one profession over the other³⁰.

Points such as respect, knowledge of the roles of co-workers and hierarchies are still seen as problematic, further reinforcing the need to think strategically, in the training process, to stimulate and encourage new habits and attitudes towards effective teamwork.

Final considerations

Although reality presents important advances in curricular changes, such as the approximation of teaching with the reality of services and the adoption of more active methods for the formation of critical and reflexive subjects, the gaps in the development of collaborative skills are still notorious. IPE presents itself as a useful, and necessary, approach to the realities researched, with a view to overcoming the strong barriers established for the improvement of relations and interprofessional interactions.

The insertion and strengthening of the topic in the contexts of the higher education institutions researched do not imply the adoption of the term, indiscriminately, in the official documents. It cannot be configured as a fad, or as mere conditionality in evaluation processes. It demands a commitment from the formulators of the current health policies to the performance of students and teachers, in the teaching and learning spaces.

This is not a simple task, due to the strong cultural barriers incorporated in the scope of the university, professional categories and society itself. The IPE evidences the need to discuss the strong idea of hierarchy, the historical sovereignty of areas of knowledge or professional categories and the urgency to (re)situate the individuals, attributing them centrality, which is not strange for the health system Brazilian, thought from the integrality, universality and equity. Aspects which are very present in the reality of training demonstrated in this research from the perception of the

participating students.

Existing initiatives in both universities, induced by current policies or by the historical accumulation around the process of reorienting vocational training in health, should be strengthened and improved to ensure vocational training on a new basis; and institutions must be constituted as a legitimate space for the collective construction of new university, society and health projects. This way, and, for all that has been discussed here, there is the belief in the potential of IPE and collaborative work as necessary tools for these projects.

It is essential to insert the debate on IPE in the current reorientation policies of the professional training in health, as well as to expand this research to explore other realities and to assure the consolidation of the discussion, as political commitment, in the search of professionals more apt to the collaboration and willing to face, collectively, the problems presented by the current society.

It is essential, therefore, that the ideals that underpin the Unified Health System (SUS) stimulate a commitment to broaden the debate on IPE in the Brazilian reality, as an important ally for overcoming historical problems, that seriously compromise the quality of health care in coping with the complex and dynamic health needs of the population.

Collaborators

Costa MV (0000-0002-0573-0622)* contributed to the design, planning, analysis and interpretation of data; critical review of content; and approval of the final version of the manuscript. Azevedo GD (0000-0002-7447-7712)* contributed to the design, analysis and interpretation of data; critical review of content; and approval of the final version of the manuscript. Vilar PJP (0000-0002-8765-8571)* contributed to the design, planning, analysis and interpretation of data; critical review of content; and approval of the final version of the manuscript. ■

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References

1. Barr H. Interprofessional education: today, yesterday and tomorrow. A Review. 2005.
2. Hammick M, Freeth D, Koppel I, et al. A best evidence systematic review of interprofessional education: BEME Guide no. 9. *Med. Teacher*. 2007; 29(8):735-51.
3. Reeves S, Perrier L, Goldman J, et al. Interprofessional education: effects on professional practice and healthcare outcomes (update). *Cochrane Database Syst Rev*. 2013; 28(3):CD002213.
4. Centre for the Advancement of Interprofessional Education. The Centre for the Advancement of Interprofessional Education. CAIPE: United Kingdom; 2002.
5. Zwarenstein M, Goldman J, Reeves S. Interprofessional collaboration: effects of practice-based interventions on professional practice and healthcare outcomes. *Cochrane Database Syst. Rev*. 2009; 8(3):CD000072.
6. Bainbridge L, Wood VI. The power of prepositions: A taxonomy for interprofessional education. *J Interp Care*. 2012; 27(2):131-136.
7. Yin RK. *Estudo de caso: planejamento e métodos*. 2. ed. Porto Alegre: Bookman; 2009.
8. Turato ER. Métodos qualitativos e quantitativos na área da saúde: definições, diferenças e seus objetos de pesquisa. *Rev. Saúde Pública*. 2005; 39(3):507-514.
9. Gray DE. *Pesquisa no mundo real*. 2. ed. Porto Alegre: Penso; 2012.
10. Liamputtong P, Ezzy D. *Qualitative Research Methods*. New York, USA: Oxford University Press; 2005.
11. Dawson S, Manderson L, Tallo VL. *A manual for the use of focus groups*. INFDC: Boston; 1993.
12. Minayo MCS. *O Desafio do Conhecimento: Pesquisa Qualitativa em Saúde*. 11. ed. Rio de Janeiro: HUCITEC; 2008.
13. Barbour R. *Grupos Focais*. Porto Alegre: Artmed; 2009.
14. Bardin L. *Análise de Conteúdo*. Lisboa: Edições 70; 2009.
15. Cuff P, Schmitt M, Zierler B, et al. Interprofessional education for collaborative practice: views from a global forum workshop. *J Interp Care*. 2014; 28(1):2-4.
16. Xyrichis A, Ream E. Teamwork: a concept analysis. *J Adv Nurs*. 2008; 61(2):232-241.
17. Clements D, Dault M, Priest A. Effective Teamwork in Healthcare: Research and Reality. *Healthcare Papers*. 2007; 7(sp):26-34.
18. Mickan S, Hoffman SJ, Nasmith L. Collaborative practice in a global health context: Common themes from developed and developing countries. *J Interp Care*. 2010; 24(5):492-502.
19. Oandasan I, Reeves S. Key elements for interprofessional education. Part 1: The learner, the educator and the learning context. *J Interp Care*. 2005;19(sup1): 21-38.
20. Institute of Medicine. *Interprofessional Education for Collaboration: Learning How to Improve Health from Interprofessional Models Across the Continuum of Education to Practice: Workshop Summary*. Washington, DC: The National Academies Press; 2013.
21. Oandasan I, Reeves S. Key elements of interprofessional education. Part 2: Factors, processes and outcomes. *Journal of Interprofessional Care*. 2005; 19(sup1):39-48.
22. The New York Academy of Medicine. *Interprofessional Care Coordination: Looking for The Future*. Policy Research, & Practice. 2013; 1(2):1-20.

23. Mellor R, Cottrell N, Moran M. "Just working in a team was a great experience..." – Student perspectives on the learning experiences of an interprofessional education program. *J Interp Care*. 2013; 27(4):292-297.
24. Weller J. Shedding new light on tribalism in health care. *Med. Educ*. 2012; 46(2):134-136.
25. Reeves S, Rice K, Conn LG, et al. Interprofessional interaction, negotiation and non-negotiation on general internal medicine wards. *J Interp Care*. 2009; 23(6):633-645.
26. Martimianakis MA, Maniate JM, Hodges BD. Sociological interpretations of professionalism. *Med. Educ*. 2009; 43(9):829-837.
27. Keddy B, Gillis MJ, Jacobs P, et al. The doctor-nurse relationship: an historical perspective. *J Adv Nurs*. 1986; 11(6):745-753.
28. Reeves S, Macmillan K, Van Soeren M. Leadership of interprofessional health and social care teams: a socio-historical analysis. *Journal Nursing Manag*. 2010; 18(3):258-264.
29. Baker MJ, Durham CF. Interprofessional Education: A Survey of Students' Collaborative Competency Outcomes. *Journal Nursing Educ*. 2013; 52(12):713-718.
30. Allen D. The nursing-medical boundary: a negotiated order? *Socio. Health & Illness*. 1997; 19(4):498-520.

Received on 01/03/2019
Approved on 05/07/2019
Conflict of interests: non-existent
Financial support: non-existent