Interprofessional education and the formative actions of the emergency provision axis of the More Doctors Program

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ABSTRACT This article aimed to identify if the formative actions of the axis the emergency provision of the More Doctors Program are based on theoretical and methodological elements of interprofessional education from the perspective of the participants of the program. It is an exploratory study, developed in 2016, in Brazil. Data were collected through individual interviews (n=30) and nine focus groups (n=52), and treated by content analysis, which produced three categories: Assumptions of interprofessional education set forth in the formative cycles of the More Doctors; Changes in the process of teamwork, from the perspective of the elements of interprofessional education, triggered by the formative cycles; Difficulties for the approach of interprofessional education in the formative cycles. Among the elements enunciated in the formative processes are the learning about the role of each profession, the sharing of experiences, and the centrality of care in the patient. However, the fundamental precept of interprofessional education of learning between two or more professions is not applied. The More Doctors constitutes a propitious policy for the strengthening of interprofessionality, because its proposal is based on the logic of permanent education, which demands the establishment of a relationship of mutual influence between education and work in health.

Introduction

The strengthening and consolidation process of the Unified Health System (SUS), based on the principles of universality and comprehensiveness, has found important references that support the need for reforms in the production of health services based on collaborative teamwork, with a view to ensuring the centrality of the user in the health care process.

In the same direction, worldwide recommendations point to the need for greater efforts to strengthen professional collaboration, having as referential the approach of Interprofessional Health Education (IPE)\(^1,2\). In Brazil, however, it is still scarce studies that deal with this theme, which has gained notoriety as of 2010 after two publications pointed to IPE as a promoting element of a necessary reform in the model of professional training in medicine and medical professionals in the Brazilian territory. By including, in its proposal, the restructuring of the medical training in the Country, the PMM constitutes a propitious field for the adoption of inducing initiatives of the IPE and collaborative practice.

Following this line, the axis of the program related to medical training presents as one of its results the publication of new National Curricular Guidelines for undergraduate courses in medicine, instituted in 2014\(^5\), which indicate that the undergraduate student in medicine should learn in an interprofessional way, from the exchange of knowledge with health professionals, stimulating the improvement of collaboration. Moreover, it stimulates shared learning, interprofessional communication and initiatives that value users as the central subject of the production of health services\(^6\).

The axis of the emergency provision axis of doctors to work in places of greater need and vulnerability, in turn, requires that the...
doctors of the PMM be submitted to formative processes, with the purpose of improving the practice of family medicine and community according to the model of health care in Brazil.

The scope of the foreseen pedagogical activities is structured in two formative cycles. The first one contemplates a Specialization Course in Family Health offered by a higher education institution that is forming part of the Open University of the Unified Health System (UNA-SUS, Portuguese acronym); while the second one provides a set of educational activities at the level of improvement and extension, which aim to deepen knowledge on topics that are relevant to act in primary care. Under these two cycles, there is the figure of the tutor, responsible for coordinating and indicating the activities to be performed by doctors and supervisors; and there is the academic supervisor, who follows the activities of doctors in loco.

On the second axis of the PMM, an investigation of the Pedagogical Political Projects (PPP) of the specialization courses offered in the first cycle of training pointed out that, although none of the PPP make clear interprofessionality as pedagogical basis, they present some level of correspondence with the elements of the IPE. Furthermore, it convenes the realization of new studies that, among other resources, give voice to the different actors imbricated in the formative processes of the PMM, since the envisaged in terms of documents is not necessarily operationalized.

Based on the context presented and the understanding that, in addition to the specialization, the improvement processes, which use the reality of the service as a pedagogical resource, represent an important opportunity for the development of interprofessional competences, it is questioned: does the set of foreseen formative actions in the PMM emergency axis aligned with the theoretical and methodological frameworks of IPE to promote changes in professional practices towards the development of interprofessional collaboration in health? To answer this question, this study aims to identify if the formative actions of the emergency provision axis of the PMM are based on theoretical and methodological elements of the IPE, from the perspective of the participants of the program.

Methods

It is an exploratory, cross-sectional, qualitative approach study, developed in November and December 2016.

The research scenario was the territory under the action of four of the five supervising institutions of the emergency provision of the PMM in the state of Minas Gerais: Central Region – Municipal Health Secretariat of Belo Horizonte (SMSA-BH); North – State University of Montes Claros (Unimontes); Vale do Jequitinhonha – Federal University of the Jequitinhonha and Mucuri Valleys (UFVJM); and Triângulo Mineiro – Federal University of Uberlândia (UFU). These institutions are responsible for the supervision of 52% (n=448) of the total number of doctors allocated by PMM in the state.

Considering the size of the territory, it was decided to select a set of municipalities for the development of this study: Belo Horizonte, Montes Claros and Uberlândia, under the supervision of SMSA-BH, Unimontes and UFU, respectively; and Diamantina and Couto Magalhães, under the supervision of UFVJM. The choice of these municipalities occurred because they were part of the territory of the main author, during the period in which the data were collected.

The research population was constituted by doctors, tutors, supervisors and professionals of the primary care teams, to which the doctors participating in the project are linked.

To determine the representative sample of the territory, it was sought to include three teams of the Family Health Strategy (FHS) by supervising institution: a team with doctors of Brazilian profile, that is, doctors of Brazilian nationality and education; a team of doctors
with an exchange student profile; and a team of doctors originated from the cooperation established between the Pan American Health Organization (PAHO) and Cuba.

When it comes to research involving human beings, in compliance with the guidelines of Resolution nº 466, of December 12, 2012, of the National Health Council, the project was submitted to the Research Ethics Committee of the University of São Paulo and approved under the Opinion nº 1.264.019.

For the selection of those involved in the research, the following inclusion criteria were adopted: (1) for doctors: to be linked to the PMM by the emergency provision axis and have minimally performed the first formative cycle of the project (Specialization Course on Family Health); (2) for the professionals: to be a health professional who works directly with the PMM doctor, preferably, but not exclusively, a component of the minimum FHS team (nurse, technician/nursing auxiliary and Community Health Worker – CHW), with minimum time of performance in the FHS of one year; (3) for tutors and supervisors: to be linked to one of the supervising institutions chosen by this study for, at least, one year.

The delimited exclusion criteria were not participate in the discussion during focus groups or request for withdrawing from the survey after data collection. Neither of these criteria needed to be applied.

The final sample totaled 82 individuals, of which 52 health professionals were members of the family health teams, including nurses, technicians and nursing assistants, CHW and social worker, 12 supervisors, 11 doctors and 7 tutors.

Data were collected through an in-depth interview, applied to doctors, tutors and supervisors, and a focus group, carried out with the other members of the family health teams. It should be clarified that only one participation of each volunteer was necessary in the moments of data collection.

The interviews were carried out with the help of an unstructured script, composed of seven questions related to the formative cycles of the emergency provision axis of the PMM and working process in the FHS with a focus on the IPE approach. The focus groups, in turn, were conducted by a script with four triggering issues pertinent to the work processes of the teams.

30 interviews and 9 focus groups were carried out with mean duration times of 58 and 93 minutes respectively. All testimonials were recorded on digital audio equipment. The data were treated based on the proposal of content analysis, which presupposes three phases: pre-analysis; exploration; and analysis and inference.

In the pre-analysis, the full transcription of the interviews and focus groups was carried out, giving rise to the analytical corpus, followed by the floating reading of the material. The material exploration stage was aimed at highlighting the semantic order of the corpus, which expressed elements of IPE predicted in the guidelines proposed by Barr for the construction and evaluation of educational contexts in the perspective of IPE.

Therefore, the analytical corpus was composed of the following cuttings: joint learning between two or more professions; development of skills for collaborative practice; learning about the role of each profession; professional collaboration as a strategy to improve the quality of care; interprofessional learning as a pedagogical strategy of curricular integration; use of pedagogical resources that promote sharing among different professions and that use the context of work as a trigger for learning; learning based on the inclusion and centralization of the user and on the effective participation of service professionals in educational practices. These cuttings were
grouped by similarity into three categories and their respective subcategories.

Likewise, in the inference and interpretation phase, the informations were condensed and highlighted, making possible the interpretation and critical analysis of the material. Subsequently, to guarantee the anonymity of the participants of the group, the systematized speeches were identified only by the insertion of the participant in the PMM: doctor, tutor, preceptor or FHS team to which the research subject belongs.

Results

The analysis of the statements revealed three thematic categories: The assumptions of the IPE set forth in the formative cycles of the PMM; The changes in the teamwork process, from the perspective of the IPE elements, triggered by the training cycles; and Difficulties for approaching IPE in formative cycles. They are listed, with their respective subcategories, in chart 1.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Subcategories</th>
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<tr>
<td>The assumptions of the IPE set forth in the formative cycles of the PMM</td>
<td>Learning about the role of each profession</td>
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<td>Professional collaboration as a strategy to improve the quality of care</td>
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<td>The stimulus to collaborative professional practices</td>
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<td>Shared learning based on the health needs of the population</td>
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<tr>
<td>The changes in the teamwork process, from the perspective of the IPE elements, triggered by the formative cycles</td>
<td>For doctors: change of attitude in favor of the better functioning of the team</td>
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<td></td>
<td>For trainers: reduction of conflicts and maximization of communication processes</td>
</tr>
<tr>
<td></td>
<td>For health professionals: more integrated teamwork</td>
</tr>
<tr>
<td>Difficulties for approaching IPE in formative cycles</td>
<td>Uniprofessional training</td>
</tr>
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<td>Theory versus practice</td>
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<td>Support for trainers</td>
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Source: Own elaboration.

The assumptions of the IPE set forth in the formative cycles of the PMM

The results of this category showed that some theoretical and methodological elements of the IPE are set forth in the pedagogical processes developed within the scope of the emergency provision axis of the PMM, among them the learning about the role of each profession, considered as one of the central assumptions for overcoming the professional hierarchy and attention focused on the doctor:

It helped a lot to define the roles of each professional, the community agents, the nurse and what is our connection with them. (Doctor with exchange profile).

It made it a lot easier because I could see the role of each professional in my scope of work, so that
we could make it easier, for the work to evolve. (Brazilian doctor).

The modification of care practices based on professional collaboration was identified as essential for the improvement of health outcomes, as stated in the central objective of the IPE. There is recognition of the relevance of teamwork to adequately address the needs and health problems of users, families and communities:

One of the concerns is to teach health professionals that teamwork is of great importance in improving the health of the population. The people who work in team have greater resolutivity regarding the questions they have attended every day. (Cuban doctor).

It makes the service more efficient, improves the satisfaction of the user. [...] Not every professional comes out with this vision of the importance of multidisciplinarity, interaction among professionals. (Brazilian doctor).

The collaborative professional practices stimulated within the formative cycles include team meetings, sharing experiences and building joint care plans: “At our locoregional meetings we try to work on this issue of sharing experiences, teaching and learning” (Tutor).

It’s very stimulated the formation of educational groups, in which they should not only work in health education, but also help in the education and qualification of CHW. [...] And I have seen that some doctors, especially the Cubans, try to incorporate this systematics, in which they talk and train nurses, nursing technicians and CHW. (Supervisor).

In the course there were classes that stimulated us to give some ideas of what we could do in practice, construction of knowledge, operating groups, give ‘feedback’ to the team about what was being learned. (Brazilian doctor).

My supervisor also encourages introducing cases and the importance of teamwork, how it works when everyone has a common agreement. (Doctor with exchange profile).

In all supervision I ask how the practice is going on, if they are grouping with other professionals, if they are doing home visit together with the nursing. [...] and that’s where we can identify the flaws, and try to stimulate, encourage to see if it has any effect. [...] Many times we call the nurse to talk, to see if we can structure primary care more appropriately in each place, but it is a great challenge. (Supervisor).

Professionals understand the needs of individuals, families and the community as a key element in the level of interaction between professionals and the dynamics of health work itself. This perception is close to the shared learning presupposition based on the health needs of the population, an element of IPE that ratifies the patient as the central subject, and not as an object of health care:

We were encouraged to know the city and the municipality in which we were inserted, the reality, hit the street and see the problems, talk to the references of the neighborhood. (Doctor with exchange profile).

In order to finish the specialization course, we presented a TCC [undergraduate thesis]. And it depended on teamwork, problem identification... It was not me who defined the problem to be discussed and work on in the community. It has been identified by the community and team members. (Cuban doctor).

When we started to develop health diagnosis of the area of coverage, we had to work with the health workers, with nurse, nursing students, who helped us a lot. This stimulated us to make a teamwork, many opinions, rains of ideas and that in the end was what helped us to know the main health problems of the population. (Cuban doctor).
The changes in the teamwork process, from the perspective of the IPE elements, triggered by the formative cycles

This category presents the apprehensions of changes, stated by the PMM actors, that relate to the assumptions of the IPE. It is verified that, in the speeches of the different actors – doctors, trainers and professionals of the FHS –, a different perspective emerged, but which, together, lead to the same outcome: greater professional collaboration in the daily life of the health work.

From the perspective of some doctors, the knowledge acquired through the formative cycles triggered a certain change of posture, on the part of them, before the other professionals of the team:

We started having regular meetings with the staff. (Brazilian doctor).

It changed work management. It made it a lot easier because I was able to see the role of each professional in my scope of work, how each one acts so that the work evolves. (Brazilian doctor).

From the point of view of the tutors and supervisors, the greatest impact is related to the resolution of conflicts between the team members:

It contributed to reinforce the work itself, the importance of each professional to work in team. (Supervisor).

We could better develop the issue of teamwork, showing different perspectives, different teamwork modalities, know how to understand each other within their difficulties, which is one of the great problems of teamwork. I think it has improved a lot. (Tutor).

From the perspective of health professionals working with PMM doctors, the perceived changes are associated with the professional profile of the doctor, not the program specifically. In this sense, they consider that foreign doctors, in particular, Cubans, are more sensitive to collaborative work:

In my view, we learned a lot from him, and he learned a lot from us. (FHS team – Cuban profile).

You have the possibility of exchanging further information with the doctor, of working more together... he does not only get here to serve and leave. He exchanges experience, listens to your point of view, and discusses some cases. (FHS team – Cuban profile).

I think there’s a very big difference in the relationship. They [Cubans] are more open, more accessible. There’s not that thing ‘I’m a doctor, please don’t talk to me’. It is easier to come closer, we are not afraid to ask and discuss cases. (FHS team – Cuban profile).

There’s the tutor who appears and always looks for information with the other professionals about the doctor’s work, getting people involved in teamwork, joining the nurse’s experiences with the doctor to try to bring resolutions to the patients. (FHS team – Brazilian profile).

In the speech of professionals, it is also stated that the absence of the doctor limits the work of the FHS; and, in this sense, the PMM becomes opportune to ensure the completeness of the primary care teams.

The strength is comprehensive care. The community worker talks about diagnosis, talks about the environment, of social vulnerabilities. I with my perception, the assistant with hers, the doctor with his. We can manage. […] When we unite the whole team, each giving an opinion, we can do something, at least momentarily to try to heal the need or the fragility at that moment. (FHS team – medical exchange program profile).
Difficulties for approaching IPE in formative cycles

This category includes the vulnerability points of the formative cycles that act as parties involved for the adoption of pedagogical actions based on the IPE. Among them – and, perhaps, most importantly –, is the fact that the formative cycles of the PMM include, formally, only doctors in the training processes. This option is in line with the fundamental precept of the IPE of learning between two or more professions, and reinforces the logic of uniprofessional training and hierarchical verticality of professional relations:

I think the specialization course should be interdisciplinary, the discussion environment would be richer, because each one could bring the experience of their own area. (Brazilian doctor).

I do not remember doing, in those three years of program, any formative process that formally involved other staff members. (Supervisor).

The coordinator [of the team] has to be the doctor, because we get upset... a person gets here and says that it is not this way and it has to change, a person who is on a level... it is not about underestimating, but how will a nurse question my job? This is absurd. (Cuban doctor).

It was evidenced that the elements of IPE, which are largely stated from the theoretical formative processes, are little applied and discussed in the practical context. This fragile integration between theory and practice makes it difficult to develop collaborative skills:

It could be a little more practical, because we have not dealt so much with each other’s duties or teamwork in evaluations with the supervisor; if he could show some dynamics, something that shows us how it works in practice. (Doctor with exchange profile).

Health training, especially in the case of permanent education processes, due to its complexity, requires the adoption of dynamic pedagogical benchmarks and methods based on meaningful learning and the reality of services. On the other hand, the demand of the use of such methods by the trainers implies enabling them to do so and guaranteeing them conditions and spaces for the development of educational actions:

The PMM asks us to use many methodologies to conduct supervision, but we do not always know all of them. So, we could be trained to understand the methodologies so that we can use methods other than the usual ones. (Supervisor).

Supervision is not considered within 8 hours intended for the permanent education of doctors, which means that we had to do supervisions within working hours, which impacts care. (Supervisor).

I believe that if we had a theoretical framework to work on, if we were trained to develop a permanent education project aiming at a better multi-professional interaction, we would certainly have good results. But we have never been requested for that and it has never been told us that this approach should be carried out. (Supervisor).

Discussion

Medical provision is configured as a strategic policy to improve the quality of health care given the scenario of inequality in the inter and intra-regional distribution of this professional in Brazil. This inequality stems, in particular, from the difficulty of establishing doctors in remote or socially vulnerable areas and due to the historical model of disciplinary medical training, little committed to the social transformations and that has valued the training of specialists to the detriment of the training of general practitioners to act in primary care10-12.
It is important to undertake this consideration to demarcate the importance of PMM in the current Brazilian scenario, which shares the same difficulties as the rest of the world: gap between training profile and health needs, limited context analysis capacity; difficulty in teamwork and unequal distribution of health professionals in different regions of the country\textsuperscript{13-15}.

Through the importance of this politics is that the transformation capacity of the PMM is recognized and of the coherence that the provision is accompanied by educational initiatives, once the change in the logic of work needs to be accompanied by processes of changes in the training of health professionals. It is in this understanding that is based the need to systematize the use of IPE principles in formative cycles of the PMM, a pedagogical approach that has been widely discussed all over the world given its capacity to improve, in the long term, the quality of care\textsuperscript{16,17}.

Based on the assumption that IPE is configured as the occasion when different health professions learn together, interactively, with the clear intention to improve the work process and the quality of health care\textsuperscript{19} it is possible to affirm that the first purpose of this approach is the development of collaborative skills\textsuperscript{19}. However, bringing together, in the same environment, people from different professions is not enough for the development of these skills.

It is necessary to assume the intention to train health professionals more apt to the collaboration for the true teamwork, indispensable for the attendance of the complex health needs. This intentionality implies the systematized organization of contents and teaching and learning methods, theoretical and practical, that stimulate the development of professional cooperative capacities\textsuperscript{20}.

Collaborative competencies are defined as those that enable effective, resolutive and aligned health work\textsuperscript{21}. Scientific production presents valuable contributions that can contribute to the recognition, construction and/or adjustment of these competences, in line with the context in which IPE works.

The most well-known publications on the international scene are the competency matrices of Canada\textsuperscript{22} and the USA\textsuperscript{23}, which serve as a guide for the development of curricula for health training processes. Both ratify the importance of recognizing the role of the other as a presupposition to improve interaction, recognizing the complementary and interdependent character between the different professional categories.

On this, in this study, it was evidenced that the central domains presented in said matrices\textsuperscript{22,23} are addressed in the formative cycles of the PMM: the recognition of the role of the other; the functioning of the team; interprofessional communication; and recognition of the need to (re)situate the demands of users, families and the community as the core of the health work process.

The centrality of the user and their demands, an essential feature of collaborative practices, takes place on the occasion of greater involvement of the team in the processes of discussion and planning of actions to address health problems in the territory, which requires, in turn, the recognition of common goals among health professionals. From this recognition, the team identifies the role and contribution of each category, improving the level of interaction in a more fluid communication movement, which has as ramifications the improvement of the quality of health care and the increase of user satisfaction\textsuperscript{24}.

Another aspect that deserves emphasis in the results found by this study is that the policy of medical provision made possible the reversal of health scenarios, in which FHS teams, incomplete due to the absence of this professional, were considerably limited to promote comprehensive care to the populations\textsuperscript{15}. The analysis of health situations from the perspective of different professionals – combined visions – ensures a deeper understanding of the determinants of health and, at the same time, enables expanded interdisciplinary and
Interprofessional education and the formative actions of the emergency provision axis of the More Doctors Program

Interdependent activities. In this perspective, interprofessionalism is a catalytic strategy for the change of the health care model.

According to the speeches of the participants, partnership, interdependence, sharing and conflict resolution are foundations of professional collaboration as expressed in the formative cycles of the PMM, although the exercise for the development of these competencies has not been completely ensured by pedagogical strategies, especially, in the practical field. It should be noted that, to a large extent, these principles anchor the work proposal of the FHS, and it is up to the training processes to strengthen this approach.

Although the PMM presents itself as a powerful space for IPE, there are still important gaps that, once fulfilled, can lead the program to more effectively achieve its goals. Among them, the most striking is the directing of educational offers only to doctors. It is true that the policy is assumed as a proposal to change the logic of work and medical training to one that is aligned with the needs of the SUS. However, this change can only be fully implemented if all the actors involved in the production of care participate.

Moreover, joint learning is a sine qua non condition for the overcoming of hegemonic manifestations of power and professional silos, which are anchored, roughly, in the logic of the fragmentation of areas of knowledge, and are, therefore, contrary to the principle of comprehensiveness.

This study has also identified that the PMM encourages trainers – supervisors and tutors – to adopt innovative pedagogical methods, as predicted by the IPE, according to which they are essential for shared and interactive learning. However, the stimulus is not accompanied by processes of teacher development, as punctuated by the interviewees.

Assuming the teaching development as a set of actions used to qualify the teaching staff on their roles, in order to potentiate the training processes, it becomes core to the transformation of pedagogical practices and, therefore, of health work practices. For the IPE, the teacher acts as a mediator in learning situations, a competence that demands the development of the formative actors, placing it as a central axis in the face of educational innovations, the potency of practice scenarios as safe and profitable spaces for sharing knowledge and the complex process of discussing professional roles.

The commitment to a training based on the presuppositions of interprofessionality, however, cannot be reduced to the figure of the trainer. Institutional support is required – from universities, health services and the State –, that stimulate the creation of a training culture and work in comprehensive, collaborative and interprofessional health.

Thinking of strategies to strengthen IPE in the PMM is an important way, and necessary, for the policy to be sustainable and for the desired results to be achieved and solidified. The statements of the participants indicate that the dynamics of health work in the FHS is favorable for the development of collaborative skills. The great leap will be possible when the principles of IPE can be better incorporated into the formative itineraries of the PMM.

**Final considerations**

The study has evidenced that some of the central elements of IPE are set forth in the training processes developed within the emergency provision axis of the PMM, such as learning about the role of each profession, the sharing of experiences and the centrality of care in the patient. On the other hand, the fundamental precept of the IPE of learning between two or more professions is not applied systematically, since the formative cycles are destined, formally, only to the doctors of the program. Such fact, however, does not exclude the possibility of developing collaborative skills, from the inclusion of the different professional categories in the training processes operated in the health care production scenarios.
The More Doctors is configured as an adequate space for the IPE, as it ensures the minimum conformation of the FHS team, providing, thus, an integralized work dynamic. In this scenario, the intentional and systematic introduction of IPE principles, so that collaborative competencies can be developed, can have great repercussion on improving the quality of care – which is the major horizon of this strategy.

This exposed, it is concluded that the PMM constitutes a powerful and propitious policy for the strengthening of interprofessionality, especially since its proposal is based on the logic of permanent education, which demands the establishment of a relation of mutual influence between the education field and health work.

Considering the PMM as a recent policy and the incipience of documented experiences on IPE in the national context, it is imperative to establish a permanent process of reflection and evaluation of these proposals. In this perspective, more studies are necessary to test their influence on teamwork and, therefore, on the capacity to respond to the health demands of the population.

Given the weaknesses identified in the formative cycles that are related to the theoretical and methodological elements of IPE that hinder the collaborative practice, it is recommended to construct an educational offer about IPE and professional collaboration, to be made available to the doctors of the emergency provision of the PMM and, in due course, to the other members of the FHS teams. It becomes clear, in this proposal, a strategic opportunity to present and consolidate the concept of IPE and to stimulate the development of skills and collaborative practices in the daily life of health work.

Collaborators

Freire Filho JR (0000-0003-1306-9368)* contributed to the design, planning, analysis and interpretation of data; to the elaboration of the draft, critical review of content and final approval of the manuscript. Magnago C (0000-0001-8799-3225)* contributed to the design, planning, analysis and interpretation of data; to the elaboration of the draft, critical review of content and final approval of the manuscript. Costa MV (0000-0002-3673-2727)* contributed to the analysis and interpretation of data; to the elaboration of the draft, critical review of content and final approval of the manuscript. Forster AC (0000-0002-2720-5802)* contributed to the design and planning of the proposal, critical review and approval of the final version. ■

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