

## Multiprofessional residency in health: a document analysis of political pedagogical projects

*Residências multiprofissionais em saúde: análise documental de projetos políticos pedagógicos*  
*Residencias multidisciplinares en salud: análisis documental de los proyectos político-pedagógicos*

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### ABSTRACT

The object of the present study was collaborative education in multiprofessional residency in health (MPRH) through interprofessional education (IPE). **Objective:** To analyze MPRH political pedagogical projects (PPP) developed in the state of São Paulo and identify scenarios that are highly favorable to IPE. **Method:** This was a descriptive exploratory study conducted through document analysis. **Results:** The analysis revealed a heterogeneous scenario regarding the curricula, didactic and pedagogical organization, educational objectives, pedagogical matrices and evaluation systems employed. One of the programs was identified as providing a highly favorable setting for IPE. **Conclusion:** The analysis adequately evaluated IPE in educational settings and found a highly favorable scenario for it, identifying didactic, pedagogical, political and organizational MPRH elements.

**Key words:** Nonmedical Internship; Graduate Education; Interprofessional Relations; Health Personnel.

### RESUMO

Este estudo tem por objeto a formação para a prática colaborativa nos programas de residência multiprofissional em saúde (PRMS) por meio da educação interprofissional (EIP). **Objetivo:** analisar os projetos político-pedagógicos (PPP) de PRMS do estado de São Paulo e identificar os cenários altamente favoráveis à EIP. **Método:** estudo descritivo, exploratório, que utilizou a análise documental. **Resultados:** a análise revelou um cenário heterogêneo no que diz respeito a currículos, organização didático-pedagógica, objetivos educacionais, matrizes pedagógicas e sistemas de avaliação utilizados. Um dos programas foi identificado como um cenário altamente favorável à EIP. **Conclusão:** a análise empreendida mostrou-se adequada para avaliar a EIP nos cenários educacionais e para identificar o cenário altamente favorável a EIP, por meio dos elementos didáticos, pedagógicos, políticos e organizacionais dos PRMS.

**Descritores:** Internato Não Médico; Educação de Pós-Graduação; Relações Interprofissionais; Pessoal de Saúde.

### RESUMEN

Este estudio tiene como objeto la formación para la práctica de colaboración en programas de residencia multidisciplinarios en salud (PRMS) a través de la educación interprofesional (IPE). **Objetivo:** analizar los proyectos político-pedagógicos (PPP) de PRMS en el estado de São Paulo e identificar escenarios muy favorables la EIP. **Método:** estudio descriptivo, exploratorio, que utilizo el análisis de documentos. **Resultados:** el análisis reveló un escenario heterogéneo con respecto a los planes de estudio, la enseñanza, la organización pedagógica, los objetivos educativos, las bases pedagógicas y el sistema de evaluación. Uno de los programas se identificó como un escenario muy favorable para el EIP. **Conclusión:** el análisis ha demostrado ser adecuada para evaluar la EIP en los centros educativos y para identificar el escenario altamente favorable la EIP, mediante la identificación de los elementos didáticos, pedagógicos, políticos y organizativos de los PRMS.

**Palabras clave:** Internado No Médico; Educación de Postgrado; Relaciones Interprofesionales; Personal de Salud.

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## INTRODUCTION

Interprofessional education (IPE) in health is a priority subject under discussion in the field of health throughout the world, especially in the United States and in Europe, where it has been widely discussed as a tool for honing professional education and health practices through collaborative practice<sup>(1-2)</sup>. Collaborative practice happens when providers from different health professions and with distinct professional backgrounds, and who have been trained in IPE, are capable of working in interprofessional teams, developing joint practices, as they understand how to complement the skills of their team members, manage cases, and produce higher quality health practices for individuals and collectivities<sup>(3)</sup>.

In light of the current global health workforce crisis, the World Health Organization (WHO) considers IPE to be an innovative strategy through which health workers are prepared to work as a part of interprofessional teams, capable of developing collaborative practice<sup>(3)</sup>. It can be used to reduce professional corporatism and favor the education of collaborative professionals, positively impacting health systems and improving health outcomes in the population<sup>(1-2)</sup>.

IPE is defined as "occasions when two or more professionals learn with, from and about each other to improve collaborative practice and the quality of care"<sup>(4)</sup>. The difference between IPE and multiprofessional education lies in the fact that, in the first case, students from two or more professions learn through interaction and involvement with group members about each other's professions, whereas in the latter, they learn side by side, parallel to, about and with other professions, without interactive learning<sup>(4)</sup>.

In current educational models, training in health is uniprofessional, as educational activities occur only between students of the same profession. There is little or no interaction with students from other professions, which contributes to the lack of recognition of the specific skills and responsibilities of each profession and also to the development of stereotypes and prejudice<sup>(4-5)</sup>.

The essential characteristics of IPE are teamwork and the recognition of professional roles in order to identify not only the specificities of each profession, but also common skills. Furthermore, the individuals involved must be committed to problem-solving and negotiating decision-making within a collaborative perspective. For this to occur, three skills must be developed: those common to all professions, those specific to each area, and collaborative skills. Moreover, certain pedagogical strategies must be adopted, such as andragogy, which is learning based on experience and interaction<sup>(2)</sup>.

In Brazil, IPE experiences and initiatives are still scarce, as are publications on the theme. Those that do exist are related to multiprofessional actions at the undergraduate and graduate (specialization programs) level, especially programs developed by the Ministry of Health. In this sense, multiprofessional residencies and the Pró-Saúde and PET-Saúde health projects are potential tools for its development.

However, in a publication regarding multiprofessional residency in health<sup>(6)</sup>, the Brazilian Ministry of Health identified

that the programs currently underway in Brazil presented great variation regarding their design. In general, they defend the use of active and participative learning methodologies, whose structural axis is continuing education, comprehensiveness of care and transdisciplinary knowledge. The study also identified challenges to be overcome in terms of the organization and functioning of these programs: difficulties in partnerships between teaching institutions and local health networks, lack of interaction between tutors and precepts, lack of tutors with the profile and availability for the position and lack of preparation of the individuals involved for collective work<sup>(6)</sup>.

Thus, this study is justified due to the relevance of the theme, widely discussed throughout the world, but still poorly investigated in the Brazilian context, especially in graduate programs. The still limited number of scientific studies on this topic in the country also shows the importance of conducting research that can contribute to deepening discussions on the topic, directed especially at multiprofessional residency in health and IPE.

## OBJECTIVE

The objective of this study was to analyze the political pedagogical projects (PPP) of multiprofessional residency in health (MPRH) programs in the state of São Paulo. Specifically, it sought to investigate education for collaborative work attempting to identify programs with highly favorable scenarios for IPE.

## METHOD

This was a descriptive qualitative exploratory study conducted through document analysis of MPRH political pedagogical projects. These were focused on basic care or in the concentration areas of family health or collective health in the state of São Paulo.

Document analysis is a research technique that uses various documents as its source, analyzing them in-depth to extract information and indications relative to the object of study<sup>(7)</sup>. This method allows for expanding knowledge on a given phenomenon that requires historical and sociocultural contextualization<sup>(8)</sup>.

Political pedagogical projects are the expression of the educational and political values and principles adopted by programs, fruit of a collective production, with the objective of guiding and conducting the process of professional education, aiming to overcome political and pedagogical challenges<sup>(9)</sup>.

To this end, PPPs of MPRH programs were analyzed in the areas of public health and collective health in the state of São Paulo. Although there is no public reference system about multiprofessional residency programs in São Paulo institutions, it is known that seven programs exist. The analysis was conducted on six of them, as one did not send their PPP, and it was unavailable on their website. The PPPs were read in-depth in search of information that could answer the directives set forth by Barr in 2003<sup>(10)</sup> to assess the quality of IPE in educational contexts.

**Box 1 -** Guiding questions for assessing quality of Interprofessional education

GUIDING QUESTION	PURPOSE OF THE QUESTION
Do the aims as stated promote collaboration?	Check if the program is interprofessional
How do the objectives contribute to collaboration?	Check if the objectives are reached
Do the aims and objectives contribute to improving the quality of care?	Check if the program includes collaborative practice as an aim
Are aims and objectives compatible?	Check the compatibility between multiprofessional and interprofessional objectives
How is IPE built into the program?	Check how interprofessional dimensions or emphases are built into the program
Is the program informed by a theoretical rationale?	Ask that planners, teachers and evaluators consider and carefully select their theoretical framework
Is the program evidence-based?	Favor the use of evidence-based decision making
Is the program informed by interprofessional values?	Recognize if the educational program adopts interprofessional values
Does comparative learning complement common learning?	Check if common and comparative learning form a coherent whole
Are learning methods interactive?	Ensure the possibility of interactive learning
Is small group learning included?	Check if group learning is used
Will numbers from the participant professions be reasonably balanced?	Optimize interactive learning as much as possible
Are all professions represented in planning and teaching?	Ensure that the needs of all professions are met
Are users and carers involved?	Ensure that users and carers are collaborators in learning and work
Will the interprofessional learning be assessed?	Strengthen the value given to IPE
Will it count towards qualification?	Strengthen the value given to IPE
How will the program be evaluated?	Provide answers to those interested and contribute to evidence databases
Will findings be evaluated?	Contribute to mutual support and exchange in IPE

Source: Barr, 2003<sup>(10)</sup>.

The present study was submitted to the Research Ethics Committee of the School of Nursing at the University of São Paulo (Process n. 30210014.0.0000.5392). In compliance

with Resolution 466/2012, all ethical precepts were observed. To preserve anonymity, the MPRH programs were identified as follows: Program A, B, C and so forth until the letter F.

**RESULTS**

An in-depth reading of the PPPs was conducted in order to answer the 18 questions developed by Barr<sup>(10)</sup>. These questions investigate different elements that help determine whether a given scenario is favorable to IPE.

Question 1 (*Do the aims as stated promote collaboration?*) allowed us to investigate if the programs could be considered interprofessional. The PPP of the five programs did not use the terms “IPE” or “collaboration”; however, they contained elements similar to these concepts, such as an emphasis on educating for work in multiprofessional and interdisciplinary teams, sharing knowledge, and comprehensiveness in health actions. Only program E made explicit reference to interprofessional characteristics in their educational objectives, such as training professionals capable of sharing knowledge and developing specific, common and collaborative competencies. Consequently, the program was considered interprofessional, while the others were considered as presenting interprofessional potential.

The purpose of question 2 (*How do the objectives contribute to collaboration?*) was to identify how the aims as stated were developed in order to achieve collaborative practice. Program E contained objectives that contributed to collaborative practice, as it adopted competency based education and proposed to develop competencies common to all professional fields, those specific of each field and collaborative competencies, essential to interprofessional work. Interprofessional education was at the core of the activities developed by the program, which mentioned education for collaborative practice via IPE in its PPP.

Program A presented elements that can contribute to collaborative practice, considering the pedagogical and educational strategies mentioned. However, collaboration was not mentioned in the text. Programs B and C also showed potential for collaborative practice, as they adopted pedagogical strategies adequate for collaborative training, such as problem-solving and problem-based learning (PBL). As educational aims, the projects emphasized teamwork and the exchange of knowledge in order to construct new knowledge. The PPP of program C used the expression “multiprofessional and interdisciplinary teams”, seeking a comprehensive view of the population’s health problems. However, these PPPs did not explain the means through which collaborative education occurred.

Program D also showed potential for collaborative practice. However, even though it contained pedagogical elements that could contribute to collaboration and educating professionals to work in the context of interprofessional teams and to develop interdisciplinary, intersectoral and interinstitutional practices, no other collaborative element was expressed in its objectives.

Like all the others, program F displayed potential for collaboration. In this sense, it emphasized interdisciplinary education and practice as a model for disease prevention and

health promotion and recovery as a measure for reducing the incidence of chronic diseases and improving the quality of care provided to chronic patients.

Question 3 (*Do the aims and objectives contribute to improving the quality of care?*) helped to identify whether residency programs included collaboration as one of their educational objectives. The PPPs of all the programs presented elements whose purpose was to improve the quality of care in practical scenarios; however, only program E mentioned collaboration as a purpose in order to improve quality of care. To this end, it placed residents in multiprofessional teams to develop regional health actions and proposed articulation with health policies and pacts with local administrators so that the educational activities could meet the population's health needs.

Regarding question 4 (*Are aims and objectives compatible?*), it was observed that four programs had PPPs with aims and objectives compatible with the model of multiprofessional education. However, they did not make clear reference to interprofessionalism as an educational element, even though the aims and objectives were similar to some of the premises of IPE.

Question 5 (*How is IPE built into the program?*) identified how IPE elements were built into the residency programs. Programs A and B were based on meaningful learning and adopted PBL and problem-solving as teaching methods in the form of small group learning. Program C adopted a model of competency-based professional education and a curriculum organized in the form of an "integrative web". This consists of general modules and those specific to the training of each professional area. Program D organized its curriculum in cross-sectional disciplines: those that comprise a general education in collective health, and those specific to each professional area. Even though the PPP mentioned the term "interprofessional", the curriculum and teaching activities did not guarantee integrative learning.

Only program E mentioned IPE in the context of residency and educational organization, adopting a curriculum based on an integrative matrix, allowing for integrative and interprofessional learning. Its curriculum was organized according to three axes (a transverse for the residency program in health care, a transverse axis for the collective health program, and the last one specific to each professional field). Each axis was organized by module to provide professional education that develops general, specific and collaborative competencies.

In turn, program F adopted a set of activities organized around two axes. The first consisted of a transverse axis of integrated theoretical and practical activities, called "common module", and the second was specific to each professional area, called "specific module".

Question 6 (*Is the program informed by a theoretical rationale?*) helped identify the theoretical framework adopted by each program. This information was essential to understand the concept of education adopted by the programs and how it was organized.

Programs A and B adopted meaningful learning as their theoretical framework and andragogy, PBL and problem-solving as their teaching methods. Program C adopted the same methods, but also integrated critical education into its theoretical framework. Program D did not inform its PPP or theoretical

rationale. Program E was the only one to clearly adopt IPE as its theoretical framework, via interdisciplinarity and indissociability of teaching and care, seeking integration with the community. It mentioned professional practice as the guiding axis of its PPP and teaching methodologies. Furthermore, it declared that the pedagogical plan must be flexible, constantly assessed so that it can be rebuilt and discussed according to the outcomes. Program F did not make explicit reference to its theoretical framework. However, it indicated that its specialized education is based on care provision, with an emphasis on basic care and interdisciplinary activities. Thus, to this purpose, it adopted problem-solving as its learning methodology.

Question 7 (*is the program evidence-based?*) intended to check if the program establishes that the practices adopted by residents must be evidenced-based, as this is an element of IPE. Programs A and B adopted competency-based evaluation and established that the decisions inherent to professional practice, in the context of education, work, and management, must be based on scientific evidence. Program C declared only that residents must be familiar with evidenced-based medicine, but it did not describe teaching strategies related to this competency. Programs D, E and F made no mention of evidence-based practice in their PPPs.

The eighth question (*Is the program informed by interprofessional values?*) allowed to recognize if the programs adopted interprofessional values. Only program E displayed interprofessional values with an IPE-based theoretical framework. The others presented values similar to those of IPE, however, they did not make mention to them in their PPPs. There was also no mention of collaborative practice, an essential aim in IPE.

Question 9 (*Does comparative learning complement common learning?*) was used to identify whether both forms of learning form a common whole. This was the case in all programs, except B, which only made use of common learning.

The purpose of question 10 (*Are learning methods interactive?*) was to identify whether the program used interactive learning methods, an essential element to guarantee the effectiveness of IPE. Programs A, B, and C adopted teaching methodologies that favored interactive learning, such as problem-solving and PBL. These are active teaching and learning methodologies, essentially characterized by interaction between knowledge and relations. This was also the case for program F, which adopted problem-solving as its teaching and learning methodology. Program D did not adopt interactive learning methods, describing only traditional teaching methods in its PPP, such as lectures, seminars, exams, and practical laboratory classes, methods that do not guarantee interaction. Program E did not describe the teaching methods used in each of the modules that compose the curricular axes composing the integrative matrix. Thus, the analysis of the PPP content was compromised.

Regarding questions 11 (*Is small group learning included?*) and 12 (*Will numbers from the participant professions be reasonably balanced?*), it was read through the PPPs to investigate whether learning occurred in small groups, which allows for the element essential to IPE – interaction – and analyze the composition of the participant professions. The latter provided information of great relevance to verify if the professional

categories represented in the student groups were balanced. The expectation is that groups be uniform and that no given professional category predominate over others, allowing for optimal learning through IPE.

Program A adopted small-group learning and the number of residents per team ranged from 5 to 6 professionals. However, not all professional categories were represented in the small learning and professional practice groups. Program B also adopted small-group learning, however, the document did not specify the number of members and professional categories that composed the groups, although the number of positions per professional category was balanced in this residency program. Program C and D did not declare whether learning occurred in small groups and did not describe the composition of professional practice groups working in health services. Nonetheless, the number of positions per category was uniform, which in a certain way helps to avoid the predominance of any professional category. Programs E and F did not describe whether small-group learning was employed.

Question 13 (*Are all professions represented in planning and teaching?*) aimed to investigate whether the needs of all professional categories would be met in the curricular plan. It was found that all of the programs mentioned the professional categories present in their work environment, except for B, which only mentioned the categories involved in the teams.

The purpose of question 14 (*Are users and carers involved?*) was to identify whether the programs involved users and family members in the residency teaching process, recognizing them as collaborators in the process, an expected action of settings that adopt IPE. All of the PPPs of the analyzed programs considered it important for residents to develop competencies related to establishing relationships with service users, their families and the community. Residency education takes place through practical work and residents are immersed in practical contexts, carrying out care, education and management actions. Such involvement is inherent to the education process.

Questions 15 (*Will the interprofessional learning be assessed?*) and 16 (*Will it count towards qualification?*) provide elements that reveal the importance given to evaluation and IPE within the context of multiprofessional residency. The programs adopted different strategies for assessing residents, but only E explicitly mentioned competency-based evaluation. Evaluation took place every semester with a specific instrument used to evaluate common and specific skills, as well as those intrinsic to collaborative practice, in line with the premises of IPE.

Questions 17 (*How will the program be evaluated?*) and 18 (*Will findings be evaluated?*) recognize the importance of institutional evaluation and encourage institutions to share their experiences with IPE. Furthermore, these questions indicate the importance of flexibility in educational planning so as to improve outcomes by constructing and reconstructing these scenarios. Programs A, B and C had specific institutional evaluation instruments to be used by residents. However, they did not mention the other individuals involved in the context of professional practice, such as tutors and preceptors. Furthermore, the PPPs did mention whether the findings of such evaluations would be disclosed. Program D did not mention

the evaluation of the residency program or of the results of such an evaluation. Program E, in turn, had a self-evaluation system within the scope of its Multiprofessional Residency Commission. Moreover, its PPP mentioned annual internal seminars conducted to assess the program, with the participation of all those involved (residents, preceptors and tutors), and representatives from the Teaching-Service Integration Network and the Municipal Health Council of the municipality where the program operates. Program E's PPP did not detail how the findings would be evaluated, but it did emphasize that institutional evaluation is an ongoing process.

Program F foresees program evaluation by residents through specific institutional evaluation forms, conducted every semester. It also stated that the program is assessed by the supervisors, tutors and teachers that compose the program commission, according to the agreements, and aims and objectives as stated. Similarly to program E, program F's PPP did not provide any directives on the evaluation of learning outcomes.

## DISCUSSION

In the present study, document analysis was used to verify if the chosen MPRH programs were interprofessional and if their educational aims were directed at collaborative practice. The results demonstrated heterogeneity among the six programs, revealing a range of possibilities related to pedagogical and didactical organization, pedagogical matrixes and evaluation systems.

Only program E expressed using IPE for collaborative practice in its educational objectives, in addition to the development of common, specific (complementary) and collaborative skills. It emphasized values such as communication and comprehensiveness, in compliance with the competency model developed by Barr<sup>(11)</sup> and WHO guidelines<sup>(3,12)</sup>. The other programs mentioned education for working in interprofessional teams, the sharing of knowledge and values such as comprehensiveness of healthcare actions at all levels of care.

All of the analyzed PPPs were in accordance with the Interministerial Ordinance on multiprofessional residency in health<sup>(13)</sup> and the document published by the Ministry of Health on the topic<sup>(6)</sup>. These documents emphasize that MPRH programs must adopt comprehensiveness and integration between knowledge and practice as their guiding axis in order to develop shared competencies for teamwork. This aims at transforming the education process for future health workers and healthcare managers.

Similar results were found in a document analysis conducted by Santos<sup>(14)</sup> with PPPs of MPRH programs of the University of Bahia and Fiocruz, which also adopted comprehensiveness of care as their structural axis. The same was observed when analyzing the MPRH of the Federal University of Mato Grosso do Sul, which restructured its PPP and established partnerships with health services to improve the quality of care and comprehensiveness of health actions<sup>(15)</sup>.

Collaborative interprofessional practice involves communication and negotiation, valuing the knowledge and contributions of all professionals involved in the care of users and their families, social groups, and collectivities. It promotes

improvements in professional practice and the population's health outcomes. To this end, a culture of collaboration must be created<sup>(18-19)</sup>.

Interprofessional and uniprofessional education are complementary and both are fundamental to the development of knowledge, skills and collaborative attitudes. Multiprofessional education is also important, as it provides professional groups with learning opportunities that allow them to identify situations preventing them from advancing towards IPE. Therefore, it is part of the trajectory of IPE teaching and learning.

A balance between uni-, multi-, and interprofessional education is fundamental to meet the needs and educational aims of a MPRH program. Such a balance can be observed in the available learning resources, the physical space of classrooms, the proportion of tutors per groups of students, and in the content, frequency of meetings, group composition, and results of evaluation processes<sup>(4,20)</sup>.

The analyzed PPPs presented a diversity of terms related to the prefixes "multi" and "inter" and the adjectives "professional" and "disciplinary". None of the projects presented a definition of such terms and conceptions, hindering the analysis of which conception was adopted. Only program E mentioned the terms most frequently used in IPE literature, which was expected, as it was the only one that clearly declared adopting IPE as its structural axis.

Several studies mention the difficulty of establishing concepts related to IPE and collaborative interprofessional practice and thus attempt to construct concepts that can contribute to the advancement of these area's fields of study<sup>(4-5,16-17,19-23)</sup>. All of the analyzed programs presented educational objectives that aimed to improve the quality of health services and assistance, promoting positive impacts on practical settings. However, they adopted a diversified menu of possibilities for reaching this objective.

Program E clearly expressed collaboration as a skill for improving provision of care, through the practice of residents in their teams. To this end, they promote articulations with health policies and agreements with local administrators so that residents can develop practices capable of meeting the health needs of the population, in accordance with the principles of Brazil's Unified Health System (SUS), which are in line with the recommendations of several studies on IPE and collaborative interprofessional practice as a competence for improving the quality of care<sup>(4-5,16-17,19,21-24)</sup>.

The use of active methodologies, especially PBL, is strongly indicated for programs that adopt IPE, both in the setting of undergraduate and graduate education and in health services<sup>(4,20,25-26)</sup>. At the basis of IPE is andragogy, a science related to adult teaching and learning, which values the personal experience of students and their own knowledge and skills related to their professional fields<sup>(4,20)</sup>.

Santos<sup>(14)</sup> conducted a document analysis and also identified the use of active methodology, such as problem-solving. Oliveira<sup>(27)</sup> also identified the use of this method and difficulties in its implementation in a MPRH program. Avellar<sup>(28)</sup> also verified the use of problem-solving methodology when analyzing the PPP of the Multiprofessional Residency in

Oncology in the National Oncology Institute (INCA). These results indicate the use of these methodologies in the context of MRHP, in compliance with Ordinance 1077 of November 12, 2009, which recommends that these programs adopt pedagogical approaches that consider subjects as participants in the teaching and learning process<sup>(13)</sup>.

Regarding the pedagogical concepts and theories adopted the presence of social constructivism, a mark of critical education and meaningful learning theories, was identified. Even with explicit mention of IPE as a central theoretical construct, program E did not express the pedagogical theories behind its IPE proposal. The other PPPs also made no mention of their theoretical rationale. Regarding the theoretical rationale behind the two programs submitted to critical analysis by Santos<sup>(14)</sup>, the PPPs converged in the adoption of problem-solving, constructivism and competence-based education.

The curricular theme is extremely relevant. In the educational context of IPE, curricular design is a fundamental element for delivering IPE<sup>(4,20,25)</sup>. The analysis allowed to identify that most of the programs adopted an integrative curriculum, organized in modules structured around axes common to all professional categories and specific modules, with different designs, also based on competencies, a finding identified in other studies<sup>(14,27-28)</sup>. Only program E adopted a curriculum based on an integrative matrix that allowed for interprofessional integrative learning, containing transverse axes in education in health and collective health and a specific axis for each professional category. Each of these axes consisted of modules that encompassed educational actions aimed at developing common, specific and collaborative competencies.

Integrated curricula are suitable for IPE and must seek to strike a balance between uni-, multi- and interprofessional learning. To this end, the curriculum must take into consideration the focus points of IPE, and the competency-based model, content, educational objectives, pedagogical approaches, and forms of evaluation<sup>(4,20,25)</sup>.

Mota and Pacheco<sup>(29)</sup> reported the experience of constructing an integrated curriculum between the Medical Residency in Geriatrics and the Multiprofessional Residency in Older Adult Health programs in the State University of Rio de Janeiro. Workshops were conducted with the coordinators, tutors and preceptors to define educational aims, common and specific competencies, activity organization, and forms of evaluation and selection. Decisions were made with basis on IPE as their structural axis for collaborative practice. This pioneer initiative is a step forward in the context of health residencies in Brazil.

The PPPs analyzed in the present study provided for competency-based formative and summative evaluations or only formative evaluations. One of the programs only carried out traditional competency-based summative evaluations through the use of tests. Barr and Low<sup>(25)</sup> recommend that formative evaluation be used primarily in the initial phases of IPE, and summative evaluation at the end of the process. They emphasize that students value summative evaluations, as they perceive their efforts being recognized.

Institutional evaluation is fundamental for planning and correcting mistakes in order to improve educational contexts. The

present analysis identified a number of different formats of institutional evaluation by all those involved (residents, preceptors, tutors, and coordination staff) with the use instruments specific to each setting. Furthermore, these evaluations occurred with different frequencies. In the study by Santos<sup>(14)</sup> the PPPs also presented a solid practice of institutional evaluation.

## FINAL CONSIDERATIONS

The document analysis of the PPPs of MPRH programs offered in the state of São Paulo revealed a heterogeneous scenario regarding curricula, didactical and pedagogical organization, educational objectives, pedagogical matrices, and evaluation systems employed.

Not all of the analyzed PPPs presented enough elements for an in-depth analysis of their educational scenario. Most of the documentation was quite complex, however, some projects did not contain sufficient information. The set of questions used proved to be suitable for assessing IPE in the different educational settings and identifying those that were highly favorable to IPE. They also identified didactical, pedagogical, political and organizational elements of the MPRH programs.

Nonetheless, document analysis only provides information on the planned curriculum, as the investigation of other types of curricula, such as the “occult” or “live” curriculum requires other research strategies.

It is important that PPPs be consistent, as they provide the guiding elements for education and their construction expresses the social commitment of teaching institutions with education in health. Despite the minimum criteria developed by the Brazilian National Commission for Multiprofessional Residency for developing such projects, the commitment of the institution involved in developing, assessing and presenting its curricular proposal is important.

The analysis identified one of the programs as delivering a highly favorable scenario for IPE, as it clearly expressed its adoption as an education strategy, among other elements.

Research on IPE in the Brazilian context is still recent, and therefore, this study was exploratory and descriptive in nature. By analyzing the planned curricula of MPRH programs, it provided the first elements for future research and debates on the topic in the country, presenting a panorama of the educational scenario in MPRH, in addition to their limitations and potential for IPE.

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