Scoping Review

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☑ 35 years of SUS: Nursing in the defense of health as a right

Interprofessionality in Multiprofessional Residencies in Primary Health Care in Brazil: a scoping review

Interprofissionalidade em Residências Multiprofissionais na Atenção Primária à Saúde no Brasil: uma revisão de escopo

La Interprofesionalidad en Residencias Multiprofesionales en la Atención Primaria de Salud en Brasil: una revisión de alcance

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ABSTRACT

Objective: To analyze the literature on Interprofessional Education in Multiprofessional Health Residencies in the context of Primary Health Care in Brazil.

Method: Searches were conducted between September 2023 and January 2024 in the following libraries and databases: Medline/Pubmed; Cochrane Library; Scopus; Embase; Web of Science; SciELO; Lilacs and BDENF via the Virtual Health Library; CAPES Catalog of Theses and Dissertations; Digital Library of Theses and Dissertations; and Google Scholar. The selection was carried out by two researchers independently, using the Rayyan® software. For data analysis, thematic content analysis was used, with the aid of the IRAMUTEQ® software in the results processing phase.

Results: A total of 3,407 texts were identified, of which 1,558 were duplicates,1,791 were excluded after reading the title and abstracts, and 52 excluded after full-text reading. Six texts were included in the review. The processing resulted in six classes: setting; developed competencies; obstacles; professional relationships; work processes; and outcomes.

Conclusion: The study indicates that Interprofessional Education in Multiprofessional Residencies, joint daily activities among team members, drives changes in training and improves work quality in Primary Health Care, indicating advances, challenges, and paths to strengthen collaborative practices.

Descriptors: Primary Health Care; Family Health Strategy; Interprofessional Education.

RESUMO

Objetivo: Analisar a literatura sobre a Educação Interprofissional em Residências Multiprofissionais em Saúde no contexto da Atenção Primária à Saúde no Brasil.

Método: Realizou-se buscas entre setembro de 2023 e janeiro de 2024, nas bibliotecas e bases de dados: Medline/Pubmed; *Cochrane Library; Scopus; Embase; Web of Science*; SciELO; Lilacs e BDENF via Biblioteca Virtual em Saúde; Catálogo de Teses e Dissertações CAPES; Biblioteca Digital de Teses e Dissertações; e, Google Acadêmico. A seleção ocorreu por duas pesquisadoras de forma independente, utilizando o software Rayyan®. Para a análise dos dados, utilizou-se análise de conteúdo temática, com auxílio do software IRAMUTEQ® na fase de tratamento dos resultados obtidos.

Resultados: Foram identificados 3.407 textos, com 1.558 duplicados, 1.791 excluídos após a leitura de título e resumos e 52 após a leitura completa. Foram incluídos seis textos na revisão. O processamento resultou em seis classes: cenário; competências trabalhadas; obstáculos; relacionamentos entre os profissionais; processos de trabalho; e, resultados.

Conclusão: O estudo aponta que a Educação Interprofissional em Residências Multiprofissionais, por meio das atividades conjuntas entre a equipe no cotidiano, impulsiona mudanças na formação e na qualificação do trabalho na Atenção Primária à Saúde, indicando avanços, desafios e caminhos para consolidar as práticas colaborativas.

Descritores: Atenção Primária à Saúde; Estratégia Saúde da Família; Educação Interprofissional.

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RESUMEN

Objetivo: Analizar la literatura sobre Educación Interprofesional en Residencias Multiprofesionales de Salud en el contexto de la Atención Primaria de Salud en Brasil.
Método: Se realizaron búsquedas entre septiembre de 2023 y enero de 2024, en bibliotecas y bases de datos: Medline/Pubmed; Biblioteca Cochrane; Scopus; Base; Web de la Ciencia; SciELO; Lilas y BDENF vía Biblioteca Virtual de Salud; Catálogo de Tesis y Disertaciones de CAPES; Biblioteca Digital de Tesis y Disertaciones; y, Google Académico. La selección fue realizada por dos investigadores de forma independiente, utilizando el software Rayyan®. Para el análisis de los datos se utilizó el análisis de contenido temático, con la ayuda del software IRAMUTEQ® en la fase de procesamiento de los resultados obtenidos.
Resultados: Se identificaron 3.407 textos, con 1.558 duplicados, 1.791 excluidos después de la lectura del título y resúmenes y 52 después de la lectura completa. Se incluyeron seis textos en la revisión. El procesamiento dio como resultado seis clases: escenario; habilidades trabajadas; obstáculos; relaciones entre profesionales; procesos de trabajo; y, resultados.
Conclusión: El estudio indica que la Educación Interprofesional en Residencias Multiprofesionales, por medio de actividades conjuntas entre el equipo en el cotidiano, impulsa cambios en la formación y cualificación del trabajo en la Atención Primaria de Salud, indicando avances, desafíos y caminos para consolidar prácticas colaborativas.
Descriptores: Atención Primaria en Salud; Estrategia de Salud de la Familia; Educación Interprofesional.

INTRODUCTION

Primary Health Care (PHC), considered the main point of entry for users into health services, enables the provision of comprehensive care and the articulation of knowledge between healthcare professionals and users, making care more effective and equitable, also playing a fundamental role in the implementation of public policies due to its scope and operation in the territory[1,2]. Its organization is established through the National Primary Care Policy (*Política Nacional de Atenção Básica* - PNAB), instituted in Brazil in 2006 and later edited in 2011 and 2017[3]. The Family Health Strategy (FHS) is the main strategy for the expansion and consolidation of PHC in the country[4].

Aiming to transform and adapt the training of healthcare professionals to perform their functions in the Unified Health System (*Sistema Único de Saúde* - SUS), Permanent Health Education (PHE) has been developed in the country, defined as learning in the daily work routine, considering the interests of those involved and the consequent transformation of practices[5]. Thus, the Ministry of Health (MH) established the National Policy for Permanent Health Education (*Política Nacional de Educação Permanente em Saúde* - PNEPS) in 2004 and reformulated it in 2007, defining new paths for the implementation of PHE actions, prioritizing the needs of the local territory[6].

Aligned with the PNEPS, the Multiprofessional Health Residencies (MHR), created by Law No.11,129, of June 30, 2005, are aimed at in-service education[7] designed to qualify professional training for the SUS[8]. In-service education is the main characteristic of the MHR, which have 80% of their total workload developed in the practice and 20% in the form of theoretical educational strategies [7].

In addition to considering the needs and particularities of the territory during the organization of programs, the MHR become an important tool for the construction of significant knowledge, due to their transformative, innovative and reflective potential, through in-service experience, which is based and reflected in the spaces of preceptorship, supervision and theoretical learning spaces. This approach fosters practical experimentation, discussion, reflection, and problem-solving within the practice settings, guiding the training of health professionals for the SUS [8, 9].

It is important to consider that Interprofessional Education (IPE) has also been promoted in Brazil. Defined as the joint and interactive learning of two or more professions with the aim of improving care through collaborative practice[10]. IPE has been incorporated into health education policies as a priority approach, due to the strategic potential to strengthen the SUS[11].

Interprofessionality can be understood as the combination of different types of knowledge, represented by different categories of health professionals, through joint execution of tasks or delegation of these to other professionals in a collaborative manner[12]. It has been responsible for achieving comprehensive care, translated into the way health services and practices are organized, influencing work processes to better meet the health needs of the population[13].

The PHC is considered a highly favorable setting for IPE as it advocates multiprofessional teamwork, aiming at comprehensive care[14], reinforced by the MHR, which, through the political-pedagogical project, allow mutual and integrated learning among the various professional categories that involved. Furthermore, with the creation of the Family Health Multiprofessional Residency (FHMR), the scope of professions in the practice setting has expanded, strengthening teamwork through professional collaboration and enhancing user care[8,15].

Despite advances in the implementation of the FHS and MHR in PHC in Brazil[8,13], there are still significant gaps in the understanding of IPE practices in FHMR. It is necessary to develop a solid knowledge base regarding the effectiveness and impacts of these practices on the training of resident professionals working in the context of PHC and on the quality of health care provided by multiprofessional teams to users.

In this sense, it is crucial to systematically map and analyze the IPE practices adopted in the MHR, identifying both the barriers and facilitators for their effective implementation that help to support public policies and strategies that can improve interprofessional training and practice, contributing to more integrated and effective health care in the SUS. Based on the guiding question "How does Interprofessional Education in Multiprofessional Residency in Family Health occur in Brazil?", the objective of this study is to analyze the literature on IPE in MHR in the context of PHC in Brazil, identifying its practices and the factors that influence its development.

METHOD

This is a scoping review of the literature. The PRISMA Extension for Scoping Reviews (PRISMA-ScR) checklist[16], was used, whose review protocol was registered in the Open Science Framework (OSF) (DOI 10.17605/OSF.IO/9TSGF). The guiding question was developed using the PCC acronym, where P=Population (residents), C=Concept (Interprofessional Education) and C=Context (PHC)[17].

The inclusion criteria for material selection were: 1) studies derived from research (original articles, dissertations and theses) and experience reports; 2) published from 2005 onwards, the year the MHR was created by the Ministries of Health and Education and Culture[7]; 3) published in Portuguese, English or Spanish; 4) available as a full text in one of the databases used, considering availability through the researcher's institutional network access; 5) addressing PHC in Brazil. The following exclusion criteria were defined: duplicate works; editorials, opinion articles, review articles, documents and abstracts of conferences; and works that did not address the subject of the study.

The search was conducted in the following libraries and databases: National Library of Medicine (Medline)/ Pubmed; Cochrane Library; Scopus; Embase; Web of Science; Scientific Electronic Library Online (SciELO); Latin American and Caribbean Literature in Health Sciences (Lilacs) and Nursing Database (BDENF) via the Virtual Health Library (BVS/VHL); CAPES Catalog of Theses and Dissertations; Digital Library of Theses and Dissertations (BGTD) and Google Scholar.

The Health Sciences Descriptors used were: Interprofessional Education; Permanent Education; Primary Health Care; Family Health Strategy; Interprofessional Relations; and Patient Care Team. Search strings were developed and adapted for each library and database using the Boolean operators AND and OR, and they are available in the review protocol registered on OSF.

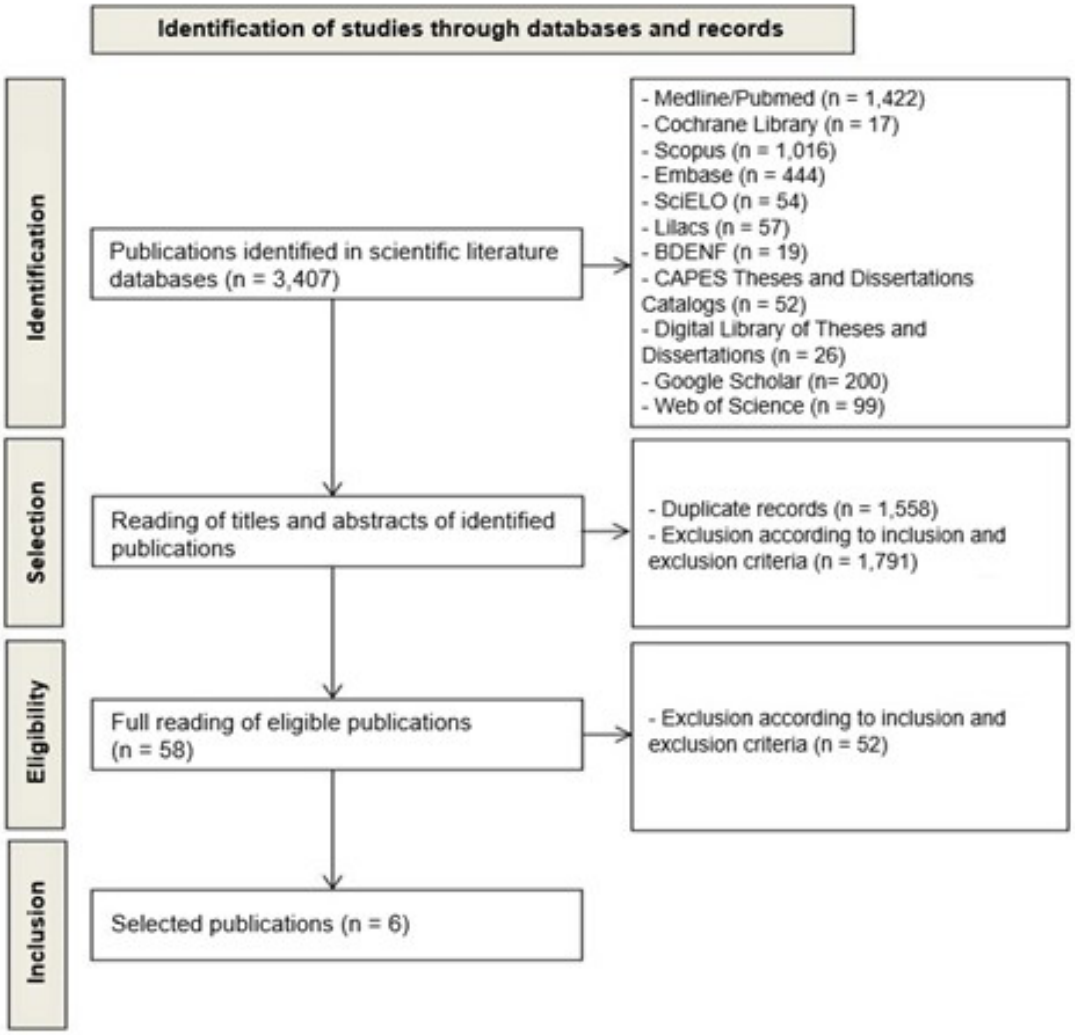
Text selection was carried out independently (blind) by two trained and calibrated researchers under the supervision of a third researcher, using the Rayyan® application (www.rayyan.ai), facilitating the identification and exclusion of duplicate texts and resolving selection conflicts between the reviewers. Calibration prior to selection was performed using the first ten texts on the identification list to ensure conceptual and methodological alignment, which were included in the study sample.

Document selection was conducted in two stages. In the first stage, after removing duplicates, titles and abstracts were read to assess whether they met the inclusion criteria. Articles classified in this stage were then read in full, and the selection criteria were reapplied. The details of the selection are presented in Figure 1.

After selecting the texts, the following characteristics were identified: title; study region; journal of publication; author; year of publication; place of publication; objective; methodology; and main results (Chart 1). This data was tabulated in Excel® software, allowing for descriptive analysis.

To analyze the content of the texts, Thematic Content Analysis[18], was performed, covering its three phases: pre-analysis; material exploration; and treatment of the results with data interpretation. In the pre-analysis, a skim reading of the six texts included was performed. The objectives were defined and the *corpus* organized into text files in LibreOffice Writer® software Version: 6.3.2.2 (x64), one file for each study. In the second phase, corresponding to the material exploration, three previously established recording units were defined: factors

Figure 1. Flowchart of text selection for the scoping review.



Source: Developed by the authors, adapted from PRISMA-ScR[16].

that promote IPE; factors that hinder IPE; and IPE results in PHC. From these units, we extracted the relevant excerpts from the texts and grouped into categories, generating a new *corpus*.

In the third phase, related to the treatment of the results obtained, the researchers interpreted the data after lexicographical processing of the *corpus* using the software *Interface de R pour Analyses Multidimensionnelles de Textes et de Questionnaires* (IRAMUTEQ®), version 0.7. The *corpus* was converted to UTF-8 format and then the utilization parameters were verified, considered satisfactory when higher than 75%[19]. Subsequently, the Descending Hierarchical Classification (DHC) was obtained, which groups the Text Segments (TS) into word classes, according to the Rainert method[20]. This technique allows for understanding the structure and distribution of different word groups within the *corpus*. The results were presented in the form of a dendrogram, which illustrates the division of the *corpus* into word classes organized according to the recording units.

As this is a literature review based on publicly available documents, there was no need for submission to or approval by a Research Ethics Committee.

RESULTS

The search resulted in the identification of 3,407 texts, of which 1,558 were excluded due to duplication. Of the remaining 1,849 texts,1,791 were excluded after reading the title and abstracts and 52 were excluded after reading the full text, as they did not meet the selection criteria defined in the methodology, leaving six texts, which were included in the review.

The *corpus* of this study was created on the analysis of the six selected documents (five scientific articles and one master's dissertation) organized in a record unit. The analysis of the characteristics of the six texts shows that all were published from 2018 onwards and used qualitative methodology, with five research articles and one experience report. Most of the studies focused on understanding collaborative practice within the context of PHC (n=3), were conducted in the South and Southeast regions (n=4), and were available in the Lilacs database (n=3) (Chart 1).

Considering the guiding question "How does Interprofessional Education occur in Multiprofessional Residencies in Family Health in Brazil?", the results of this research show that IPE has been configured, as a dynamic process, influenced by different factors that emerged from data analysis. The investigation revealed six main classes that structure the understanding of this phenomenon.

The DHC was formed by 18 command lines, highlighted by 131 text segments, of which 107 were utilized (81.7%). A total of 4,697 word occurrences, 825 different forms and 505 hapaxes, that is, words that appeared only once, were recorded. The unit consisted of a single *corpus* that was divided into two subcorpus, generating two categories. One category generated classes I (14%), III (15.9%) and IV (20.6%), with classes IV and III being the most closely related in discourse. The second category generated classes V (17.6%), II (16.8%) and VI (14.9%), with classes V and II having the most similar discourse (Figure 2).

The presentation of the results, following the order of class division shown in the dendrogram, is based on the most frequently highlighted words during the analysis. It begins with Class VI, which shows how IPE in the FHMR occurs in the context of PHC, where residents experience collaborative practices in the daily routine of services. Next, Class II deals with the development of interprofessional competencies and stands out as a central aspect of this process, while Class V addresses the structural challenges and barriers that hinder its full implementation. The relationship between professionals involved in IPE and their collaborative work is the most significant axis of the study, represented in Class IV, although organizational and institutional obstacles addressed in Class III impact the effectiveness of interprofessionality in the routine of Basic Health Units (BHU). Finally, Class I focuses on the outcomes achieved through interprofessional practice, reinforcing the potential of IPE to transform work dynamics and strengthen resident training.

Thus, classes VI and II refer to the factors that promote IPE, classes V and IV reflect the factors that hinder IPE, while class III represents the outcomes obtained through IPE in PHC.

Chart 1. Characterization of the texts included in this scoping review.

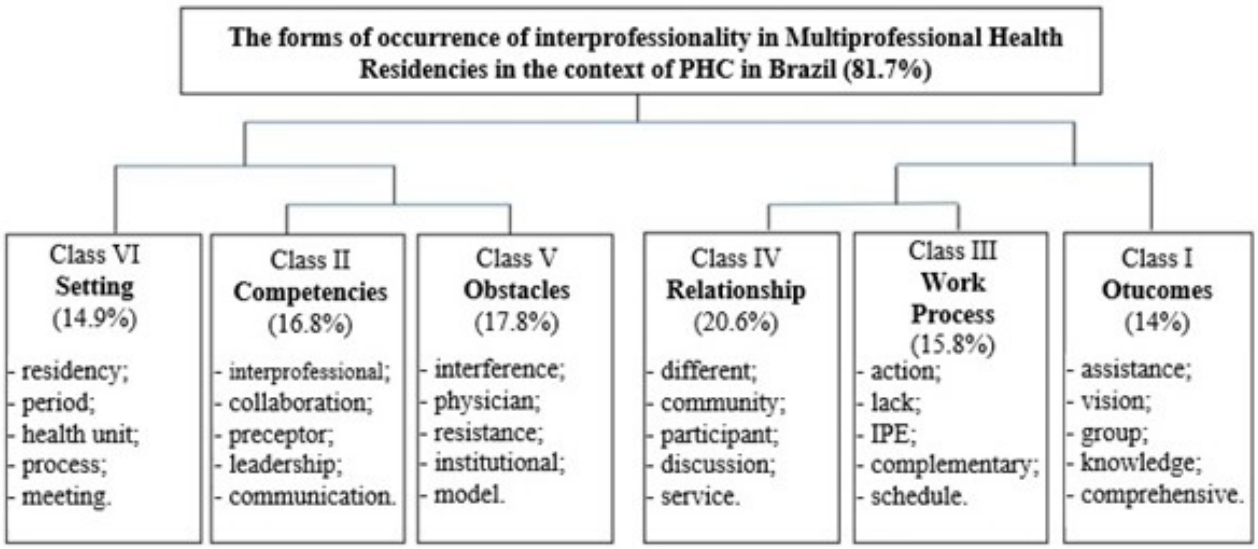
Code	Author/ publication year	Journal/ library or database	Objective	Methodology	Main Results	Study region
A1	Costa *et al.*, 2018[21]	UFRN Dissertation / BDTD	To discuss the strengths and limitations of the Family Health Strategy (FHS) as a space for implementing IPE, based on residents' perceptions.	Qualitative research (action research)	Shared and collective care with residents in FHS brought health professionals closer together, ensuring knowledge sharing and skill enhancement.	South
A2	Moreira *et al.*, 2021[22]	Revista APS / Lilacs - VHL	To describe the experience of remote workshops conducted by tutors.	Experience report	The remote teaching experience strengthened and encouraged the autonomy of students and residents, interprofessional education, and collaborative interprofessional health practices.	North
A3	Araújo *et al.*, 2021[15]	Rev. Latinoamericana de enfermagem / Lilacs - VHL	To understand the experiences during the residency that may contribute to the development of Interprofessional Education and/or Collaborative Practice.	Qualitative research	The multiprofessional approach was evident in residents' practice, fostering an approximation to interprofessional work.	Southeast
A4	Beraldi *et al.*, 2021[23]	Revista de Saúde Coletiva / Scielo	To understand the effects of a PHC qualification process on the health care work process.	Qualitative research (case study)	Prioritization of bureaucratic processes to the detriment of care, due to the high physical and mental exhaustion of professionals.	South

Chart 1. Cont.

Code	Author/ publication year	Journal/ library or database	Objective	Methodology	Main Results	Study region
A5	Arruda *et al.*, 2018[24]	Interface - Comunicação, Saúde, Educação / Web of Science	To analyze interprofessional collaboration (IPC) in a Family Health multiprofessional residency program.	Qualitative research (analytical study of multiple cases)	Strengthening of all IPC indicators was observed. The FHMR is an innovative project; however, its dynamics of interprofessional education through work need to be better systematized to ensure active IPC.	Northeast
A6	Lago *et al.*, 2022[25]	Revista da Escola de Enfermagem da USP / Lilacs - VHL	To analyze resistance to interprofessional collaboration in the professional practices of residents in primary health care.	Qualitative research (intervention research)	The collective analysis questioned the training of health professionals, revisiting the perspective of comprehensive care guided by users' needs.	Southeast

Source: Developed by the authors.

Figure 2. Dendrogram showing the Descending Hierarchical Classification obtained from the text analysis, showing the forms of occurrence of interprofessionality in Multiprofessional Health Residencies in the context of PHC in Brazil.



Source: Developed by the authors.

Class VI: Setting

Comprising 14.9% of the words, class VI presents the scenario in which IPE is achieved in PHC and how it unfolds in the daily lives of residents. The main defining words of the class were: residency; period; health unit; process; and meeting.

The most prominent word (most frequent) in this class was "residency", which sheds light on the changes in professional training, with the health unit as the field of activity, another word present in this class. The fragment of text A4 exemplifies this view: "driven by the existence of the residency in the health unit, which contributed strongly to the reflections regarding the work process, highlighting the power of bringing education and service closer together"[23].

The words "period" and "process" refer to the duration of the residency and the training process of each residency cycle, so that the activities are worked on by the residents. As evidenced in text A5, "it was perceived that the period of residency and the activities proposed for each cycle of the training process also greatly influenced the adoption of shared objectives"[24]. Considering that the activities of each cycle require a start and end period, residents face difficulties in sharing with each other the objectives achieved during the training process, impacting the evolution of collective and integrated goals within teamwork[24].

Finally, the word "meeting" was associated with team meeting, according to text A5 "team meetings are important spaces for connectivity"[24], being a protected place for discussion and knowledge exchange that involves all residents and other professionals assigned to the FHS, which was the means chosen to implement PHC.

Class II: Competencies

The formation of class II represents the development of collaborative competencies in the context of residency, representing 16.8% of the discourse. The most representative words for this class were: interprofessional; collaboration; preceptor; leadership; and communication. They translate the aspects involved in competency development.

In this class, the term "interprofessional" appears alongside the term "collaboration", representing the activities carried out jointly, with emphasis on the role played by the preceptor as an agent responsible for guiding residents in this collaborative practice. The term "preceptor" represents the figure of a professional linked to the field of activity in PHC, important during the training process of residents for competency development as well as for interprofessional work. This view is found in text A5: "for this interaction to be characterized as interprofessional, it is necessary that a collaborative work dynamic mediated by preceptors generates shared learning, changes in practices and the development of common competencies"[24].

Among the necessary competencies for the development of collaborative practice are the words "communication" and "leadership", present in text A2, "the participants identified communication, teamwork, person-centered approach and collaborative leadership as the main interprofessional competencies"[22]. Developing these competencies is necessary for achieving effective interprofessional training.

Class V: Obstacles

Class V accounts for 17.8% of the discourse and ranks second in terms of relevance of words, close to class II. It conveys the idea of current difficulties faced in the daily routine of services to implement IPE. The words that define this class are interference; physician; resistance; institutional; and model.

Presenting a connection in meaning, the words "interference" and "resistance" are connected in the excerpt from text A6, which highlights that "organizational and ideological implications have caused resistance to a more integrated work model; collaborating with others does not depend solely on an effort to better understand the user, it is a process of human relationships"[25], and demonstrate the negative impacts on IPE and the consequent reduction in the effectiveness of care.

The existence of teaching practices and work processes still rooted in the hospital-centered and physician-centered model make it difficult to implement the changes proposed by IPE. As described in text A6, "the naturalization of the practice of passing the case to different specialists and the logic of physician-centered care highlights internal conflicts regarding shared responsibility for user care"[25].

Also in this class, the word "institutional" represents management, as used in text A6: "some teams tried to establish an integrated schedule for shared care between multiprofessional residents and physicians, but unfortunately the institutional dynamics maintained individual scheduling and fragmented care"[25]. This suggests the persistence of hierarchical leadership models still in place.

Class IV: Relationship

Demonstrating the relationship among professionals involved in the health promotion process for collaborative practice, class IV is the most significant, with 20.6% of the words. The words that give meaning to this class are: different; community; participant; discussion; and, service.

The word "different" refers to the multiple knowledge, represented by the variety of professions that exist in the FHMR and the broader context of PHC. This idea was made clear in text A3, which highlighted that "learning from colleagues with different professional training allowed the acquisition of knowledge that enabled approaches and guidance more aligned with the reality of users, families and the community"[15].

Interconnected by meaning, the words "community" and "participant" refer to professionals and patients who are fully involved in a harmonious relationship, inserted in a setting (represented by the word "service") that facilitates learning and the resolution of diverse and often complex demands. The excerpt that best exemplifies this meaning is in A3: "participants pointed out that working with professionals from other services with different equipment in the health care network resulted in a closer relationship with the community and its real social and health needs through collective activities"[15].

In the presence of different professions and knowledge, interconnected by the community and professionals, the word "discussion" appeared as a point for exchange and learning. As reported in text A3, the "participants' interactions with different professions occurred mainly through case discussions, which served

as spaces where we could identify points of convergence among the various professional practices and align them to develop a shared care plan"[15].

Class III: Work Process

With 15.9% of the discourse, this class is close to Class IV (Obstacles), presenting the factors that interfere in the relationship between the actors involved in PHC, building the work process, with impacts on the effectiveness of interprofessionality in the daily practice of Basic Health Units (BHU), even with the positive results that collaborative practices have produced. The words that represent this class are: action; lack; EIP; complementary; and, schedule.

Starting the analysis, the word "action" represents the initiatives generated in the field of practice to expand the care offered to the population, with healthcare education activities. To develop an action, several actors are involved, leading to a sharing of ideas that can improve the quality of care, as well as generate learning for the professionals involved. As described in text A1, "my perception of the shared actions is that it was they and the daily coexistence that completed my training and made me a more complete professional"[21].

However, for it to be beneficial for both professionals and the community, the involvement of all actors is necessary. These factors can be seen in the fragments of text A1: "the lack of commitment and interaction in an action can harm the final product"[21] and "a negative point was the lack of adherence by the team to the action, understanding that the action was of utmost importance"). The word "lack" reflects the absence of essential factors, both related to resources and issues inherent to professionals. As described in the texts, "the fragility of management support regarding infrastructure, lack of supplies"[21] (A1), "work overload and emotional exhaustion mainly attributed to meeting deadlines, mandatory tasks and the lack of meaning in the workers' reality"[23] (A4) and "the lack of qualification of professionals"[24] (A5) are present.

Still regarding the challenges faced, the word "schedule" appears indicating the difficulties experienced in the daily work to bring professionals together and provide opportunities for joint work. Text A1 highlights that "the narrators pointed out possible developments of IPE as a challenge for mutual action due to the professionals' schedule"[21]. In contrast, the word "complementary" related to the term "IPE" translates the need to aggregate. According to text A1, "IPE complements the professional's training during their actions with shared learning among them and the exchange of skills"[21].

Class I: Outcomes

Represented by 14% of the words, class I presents the results obtained from interprofessional action. The words that were most relevant to this class were: assistance; vision; group; knowledge; and comprehensive.

The word "assistance" refers to the professionals' action, and in the texts explored, it was better developed through IPE. As described in text A1, "problem-solving is much more effective and patient care becomes comprehensive with IPE"[21].

The words "vision" and "comprehensive" complement each other in the sense of representing the expansion of the care provided and the broader concept of health advocated by the SUS. Text A5 describes this thought when it reports that "the context of IPE in the speech of some residents seems to favor a more comprehensive view of patients"[24].

Regarding the use of the word "group", it refers to its literal meaning that is, to the existence of a group of people intentionally brought together with a shared goal. In this understanding, text A3 states that "through group activities that allowed the articulation of practical and popular knowledge to solve collective needs and not just individual needs"[15].

The last word in this class is "knowledge", used in text A1 to illustrate its importance for professional practice, as knowledge, the assimilation of interpreted information and its understanding refer to the idea of mutual learning and the acquisition of experiences: "residents consider that IPE promotes knowledge among professions and attribute to knowledge a comprehensive view of care" [21].

DISCUSSION

This literature mapping shows that IPE, exercised through the FHMR, has been promoting changes in the work process and in the interpersonal relationships within teams, as well as transformations in the setting, which needs to offer the necessary support to the new form of professional practice, the collaborative practice. It was also verified the development of collaborative competencies driven by the performance of the professional preceptor and the obstacles that still permeate the implementation of IPE in the PHC, due to the cultural factors still present in the training process of the professionals and, consequently, in their practice model.

The compilation of the analyzed texts presents the single aspects of IPE for the professional training of the residents and the influence exerted by it in the territory where the FHMR is inserted. In this sense, the setting mentioned here involves both the FHMR, represented by the determinations present in the pedagogical project, and the BHU, encompassing the various professionals working there and a territory full of peculiarities, with a view to complying with the principles and guidelines of the SUS.

The purpose of creating the FHMR was to reorient the already trained professional through their insertion in the field of practice, covering the gap left by their education during undergraduate studies[26]. With this purpose, it allows the resident a period of action and reflection on the demands of public health policy and the population, becoming co-responsible for solving the problems experienced in that context[27].

The team meeting is a scenario in which IPE is widely disseminated. They become a means of consolidating interprofessional practice. Although they are incipient in the services, the discussion of cases and the organization of the work process, it is important to value these spaces and protect the schedules so that they happen. They are considered facilitators for the implementation of interventions through health education in the BHU[24, 28].

Through the collaborative competencies worked on in IPE, the resident becomes capable of developing interprofessionality, which has driven changes in user assistance, considering the comprehensiveness of care. IPE aims to develop three types of professional competencies: common competencies; complementary competencies; and collaborative competencies[29]. In this sense, for collaborative practice to occur, the following areas of collaborative competencies are addressed on in IPE: team communication; care/services focused on relationships; clarification and negotiation of roles; team functioning; processing differences and disagreements within the team; and collaborative leadership[30]. In the texts analyzed, team communication and collaborative leadership were the most highlighted competencies.

Communication among all involved in the care process is essential for the development of teamwork[22,31]. The goal of communication among teams should be the user, maintaining patient-centered care. Weaknesses in this process may arise due to the use of electronic medical records and the use of informal communication tools, as communication technologies for example, which do not allow open dialogue between professionals with the necessary exchanges to enrich practice, making them mere transmitters of information[32].

Collaborative leadership can be understood as shared leadership, as well as the presence of other professionals who become references within the team, promoting the growth of team members[32,33]. For interprofessional collaboration to be successful, it is necessary the commitment of the entire team, and in this sense, those who are in leadership roles are required to have specific skills for collaborative practice, so that they can motivate professionals towards shared objectives, promote communication and build trust and relationships with other professionals[34].

The preceptor, in particular, was highlighted in the studies as the professional capable of guiding residents towards collaborative practice. The preceptor's role is defined by current legislation as the professional who directly supervises the practical activities conducted in the field of practice[35], and assumes the role of guiding residents towards the development of these domains, considering the role an act that involves learning, teaching and doing, making the practice meaningful[8].

Although IPE in the FHMR is powerful in training professionals, it has encountered some obstacles to its implementation, mainly related to the educational and cultural standards still present today, considering the uniprofessional training and the care models that were predominant before the creation of SUS[25], as well as factors inherent to working conditions[21, 23].

Although work in PHC refers to the idea of a multiprofessional team, transforming this setting into an interprofessional practice is still a great challenge, requiring collaborative teaching and openness of professionals to learn from the collective[8]. It is necessary to reflect on the fact that the configuration of a multiprofessional team based on the work of different professional categories that work in the same work environment often happens at the same time, although in practice the work is carried out independently. On the other hand, interprofessionality implies joint work, with active communication during the construction process for integrated and collaborative care. This requires an effort throughout the work process to break through the obstacles of simply grouping different areas by overcoming disciplinary hierarchical barriers, promoting interaction between knowledge and responsibility in health care. Among these barriers, stand out the lack of knowledge on the subject, difficulty in understanding role clarity, lack of distinction between multiprofessionality and interprofessionality, and traditional training models guided by medical hegemony, and competitiveness between professions, corroborating the findings of this research[15].

Aiming to change this logic, the pedagogy adopted by the FHMR incorporates PHE actions into the daily practice of services, increasing the potential for intervention and the construction of transformative practices in PHC through the FHS. Furthermore, the FHMR has proven to be powerful in encouraging teamwork and directing the necessary changes in the work process, with the SUS being a privileged workspace for its incorporation[23,36]. The recognition of the need to train professionals capable of collaboration and teamwork, based on IPE, is still very recent, inconsistent with the uniprofessional training model still existing in Brazil. Therefore, professionals with a longer training period need even more PHE actions aimed at interprofessionality in the context of PHC[28].

The FHMR favors the development of IPE by promoting the presence of different professional categories in the field of practice and stimulating their interaction with other professionals in the service. Among the factors that influence IPE, issues related to professionals are at the micro level[37], representing interpersonal relationships, necessary for the development of collaborative competencies. The FHMR, as a modality of interprofessional training, enables interaction between the various knowledge represented by residents, professionals from the services, users and their families, with an organizational structure based on the logic of teamwork and network[32].

However, for PIF to be effective, there must be an investment in the work process, encouraging all active professionals to contribute and engage with the theme of interprofessionality, including management, which is responsible for enabling the existence of spaces for exchange and learning.

The introduction of the FHMR contributed to the general work process in the field of practice and, regarding the training of residents, it has been preparing professionals to work in the SUS, with user relationship skills. The SUS represents a teaching/learning space, capable of qualifying professionals and transforming the healthcare system by providing actors with the opportunity to reflect on the needs experienced in the setting in which they are inserted, and the focus of actions should be the needs of the population and the development of comprehensive care[38].

Studies show that residency enhances workers' qualifications through strengthening PHE, as well as promotes improvements in the work process, boosts the role of the SUS trainer and fosters knowledge exchange among the professionals involved[8,32,38]. With the development of IPE in the FHMR, it is possible to observe gains from qualified and comprehensive care that involves diverse knowledge. The potential to generate collaborative practice comes from IPE, which involves students, workers, users and family members in health care, improving the results obtained in this new reorganization in response to the growing complex health needs, along with the demand for comprehensive care[4,15].

Regarding the results obtained with IPE, a compilation of 50 years of research on IPE and the collaborative

practice from WHO mentions the effectiveness of the care provided to users and their relationship with professionals, as well as the improvement in the work environment[12]. Later, a study encompassing IPE initiatives in various countries worldwide revealed a growing expectation of countries regarding its development, as a strategy to qualify services[39].

In Brazil, throughout the construction and consolidation of the SUS, the expanded concept of health was applied, and its actions were expanded, as in other countries, aiming to guarantee the comprehensiveness of health care through the integration and articulation of diverse knowledge and practices, from different professional categories, capable of producing common interventions, in a collaborative manner[25]. In this sense, groups are understood as facilitators for IPE teaching, being powerful in generating knowledge through the exchange of knowledge and experiences[24].

Thus, after analyzing the texts, health promotion activities stand out, such as health education groups and actions with the community, which allow the exchange of knowledge between professionals and users. Regarding obstacles, resistance is noted by professionals trained according to the biomedical model and from managers with vertical and bureaucratic practices, which still resonate in the work process. However, there is a transformation in care, through the expanded vision of professionals who begin to consider the patient in a comprehensive manner, as a result of the insertion of IPE in the FHMR.

The process of developing the FHMR in the SUS and promoting IPE in the daily routine of PHC is gradual and must be consolidated with the next generations of professionals trained by and for this system. The SUS, as the largest health practice field in the country, offers a privileged environment for interprofessional training, as it provides diverse experiences, encourages teamwork and strengthens comprehensive care. The expectation is that the findings of this study will allow discussions to advance towards a truly collaborative teaching and care model, contributing to the qualification of professionals and to the implementation of SUS principles, supported by the training process in FHMR.

A limitation of this study is the scarcity of texts that met the selection criteria, given the scope of the topic, which also made conducting the research challenging. As contributions, it is considered that the discussion raised from the identification of the activities that residents perform together with other professionals assigned to the practice fields, and which emerge as factors that promote IPE in the FHMR in PHC, could enhance the development of IPE in this and other contexts. It is also observed that the research mapped the difficulties found in implementing IPE in PHC, such as management practices and the stigma of the uniprofessional, physician/centered training models still present in the country, barriers that need to be overcome so that the training of new health professionals truly prepares them for the system's need.

CONCLUSION

This study emphasizes that the development of Interprofessional Education in the Family Health Multiprofessional Residency is favored by activities carried out collaboratively between residents and other professionals in the service in the daily routine of the multiprofessional team. As examples of challenging factors, the existence of a doctor-centered and hospital-centered culture as well as management practices and the current established work process, were highlighted. As outcomes of Interprofessional Education in the Family Health Multiprofessional Residency, an improvement in the care provided was observed through a comprehensive view of the patient, the expansion of the professionals' knowledge and the exchange of knowledge facilitated through the creation of groups.

Although IPE has been gaining prominence in discussions about advancements in patient care since 2010, this review revealed that the body of research is still incipient, predominantly concentrated in studies conducted in the South and Southeast regions since 2018. The Multiprofessional Residency in Family Health, as a promoter of Permanent Health Education, favors the change to the current care model in the country, training professionals to work in compliance with the principles and guidelines of Primary Health Care, with a view to collaborative care, more assertive to the needs of users and, consequently, contributing to a stronger Unified Health System (SUS) as a public policy. However, there is still a need for further studies on the subject and investments in the dissemination of this knowledge through Permanent Education in Health actions,

considering that there are professionals working in the fields of practice with uniprofessional training and the rigidity of management practices that hinder the implementation of Interprofessional Education in Family Health Multiprofessional Residency.

The findings of this review indicate that Interprofessional Education, when incorporated into Family Health Multiprofessional Residency, enhances collaborative practices, expands the comprehensiveness of care, and redefines training and work processes. Its implementation, however, is challenged by structures still centered on hierarchical models and inflexible management practices. The analysis reveals that Permanent Health Education plays a strategic role in this scenario, by promoting the articulation between training, service, and management, driving the transformation of care methods and strengthening the Unified Health System (SUS) as a public policy. Nevertheless, scientific production on the subject is incipient and regionally concentrated, highlighting the need for greater investment in research, professor training, and institutionalization of Interprofessional Education as a permanent policy.

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