

Capacity-building of Preceptors in Health Residency Programs in Brazil: Integrative Review of the Literature

Capacitação de Preceptores dos Programas de Residência em Saúde no Brasil: Revisão Integrativa da Literatura
Formación de Preceptores para Programas de Residência Sanitária em Brasil: Revisión Bibliográfica Integradora

RESUMO

Objetivo: Caracterizar a capacitação de preceptores dos programas de residência em saúde no Brasil e suas estratégias de intervenção. **Método:** A revisão integrativa sob referencial de Galvão visou responder quais as necessidades e estratégias adotadas para capacitação da preceptoría, nas fontes da PubMed, LILACS, Scielo, Educ@ e CAPES, entre 2019–2024, utilizando estratégia PEO e descritores preceptoría, educação continuada, capacitação profissional e internato e residência. **Resultados:** Foram encontrados 7 estudos em português, do tipo relato de experiência (3), estudo de caso (2), estudo qualitativo (1) e metodológico (1). As necessidades de capacitação de integração ensino-serviço, gestão de pessoas, formação pedagógica, projeto pedagógico institucionalizado, práticas baseadas em evidências e educação permanente foram trabalhadas estrategicamente em cursos, curso à distância, análise institucional, grupos focais, oficinas e fóruns. **Conclusão:** Evidenciou-se a necessidade de educação permanente para fortalecer a atuação do preceptor, promovendo formação pedagógica, atualização técnico-científica, ética e institucional focando na integração ensino-serviço.

DESCRIPTORES: Preceptoría; Internato e residência; Capacitação profissional; Capacitação em serviço; Educação continuada.

ABSTRACT

Objective: To characterize the training of preceptors in health residency programs in Brazil and their intervention strategies. **Method:** The integrative review based on Galvão's framework aimed to identify the needs and strategies adopted for training preceptors, using sources from PubMed, LILACS, Scielo, Educ@, and CAPES between 2019 and 2024, using the PEO strategy and the descriptors preceptorship, continuing education, professional training, internship, and residency. **Results:** Seven studies in Portuguese were found, including experience reports (3), case studies (2), qualitative studies (1), and methodological studies (1). The training needs for teaching-service integration, people management, pedagogical training, institutionalized pedagogical projects, evidence-based practices, and continuing education were strategically addressed in courses, distance learning courses, institutional analysis, focus groups, workshops, and forums. **Conclusion:** The need for continuing education to strengthen the role of the preceptor was evident, promoting pedagogical training, technical-scientific, ethical, and institutional updating, focusing on teaching-service integration.

DESCRIPTORS: Preceptorship; Internship and residency; Professional training; In-service training; Education, continuing.

RESUMEN

Objetivo: Caracterizar la capacitación de los preceptores de los programas de residencia en salud en Brasil y sus estrategias de intervención. **Método:** La revisión integrativa basada en el marco de referencia de Galvão tuvo como objetivo responder a las necesidades y estrategias adoptadas para la capacitación de los preceptores, en las fuentes PubMed, LILACS, Scielo, Educ@ y CAPES, entre 2019 y 2024, utilizando la estrategia PEO y los descriptores preceptoría, educación continua, capacitación profesional e internato y residencia. **Resultados:** Se encontraron 7 estudios en portugués, del tipo relato de experiencia (3), estudio de caso (2), estudio cualitativo (1) y metodológico (1). Las necesidades de capacitación en integración

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ensinanza-servicio, gestión de personas, formación pedagógica, proyecto pedagógico institucionalizado, prácticas basadas en la evidencia y educación permanente se trabajaron estratégicamente en cursos, cursos a distancia, análisis institucional, grupos focales, talleres y foros. **Conclusión:** Se evidenció la necesidad de una educación permanente para fortalecer la actuación del preceptor, promoviendo la formación pedagógica, la actualización técnico-científica, ética e institucional, centrándose en la integración enseñanza-servicio.

DESCRIPTORES: Preceptoría; Internado y residencia; Capacitación profesional; Capacitación en servicio; Educación continua.

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INTRODUCTION

The first Nursing Residency program, modeled after the Brazilian Medical Residency program, was created in 1961 at the Morumbi Children's Hospital, affiliated with the Brazilian Legion of Assistance, with the aim of improving the skills of nurses in the specialty of Pediatric Nursing. ⁽¹⁾ And in 1976, the Rio Grande do Sul State Health Department initiated the first Community Medicine Residency program in São José do Murialdo, which, in 1978, became a multi-professional residency program, pioneering this type of specialization in Brazil and drawing attention to the need for such studies in the Southern region. ⁽²⁾

Analysis by graduates and other participants involved in the development of Residency Programs has highlighted the relevance of these programs for the training of healthcare professionals. ⁽³⁻⁴⁾

After almost twenty years since its standardization in 2005, the challenges

to improve it are a reality. It is necessary to reassess educational planning to encompass diversity and inclusion, invest in the continuing education of preceptors, including aspects of interpersonal relationships with residents, aiming to establish better reception, connection, and share more meaningful experiences. The importance of coherence between pedagogical aspects, teaching methods employed, and the content transmitted in the classroom with practice is highlighted, keeping them updated and evidence-based in order to improve the program. ⁽⁴⁻⁵⁾

Studies indicate that in current Medical Residency Programs, the trend is to adopt competency-based training, which will gradually consolidate as the new training model on a global scale. ⁽⁵⁾

Competency-based training involves a shift from conventional patterns, guiding the training process with a focus on the competencies needed at each stage of training. The importance of preceptors in this process is highlight-

ed, as well as the formalization and structuring of evaluation procedures, along with the introduction of continuous formative assessment and feedback ⁽⁶⁾.

Therefore, it is necessary to understand the level of training of preceptors and, when this does not exist, to intervene so that it does, investing assertively in the training of preceptors and residents in health programs in the country.

The present study aims to characterize the training of preceptors in health residency programs in Brazil, and the intervention strategies employed.

METHOD

This is an integrative literature review, based on Galvão's framework, which proposes 6 distinct stages for its implementation. ⁽⁷⁾

In the first stage, the theme of "Training of Preceptors in Health Residency in Brazil" and the research question

“What are the training needs of preceptors in health residency programs in Brazil, and what measures/strategies have been taken or proposed by the institution/authors?” were defined.

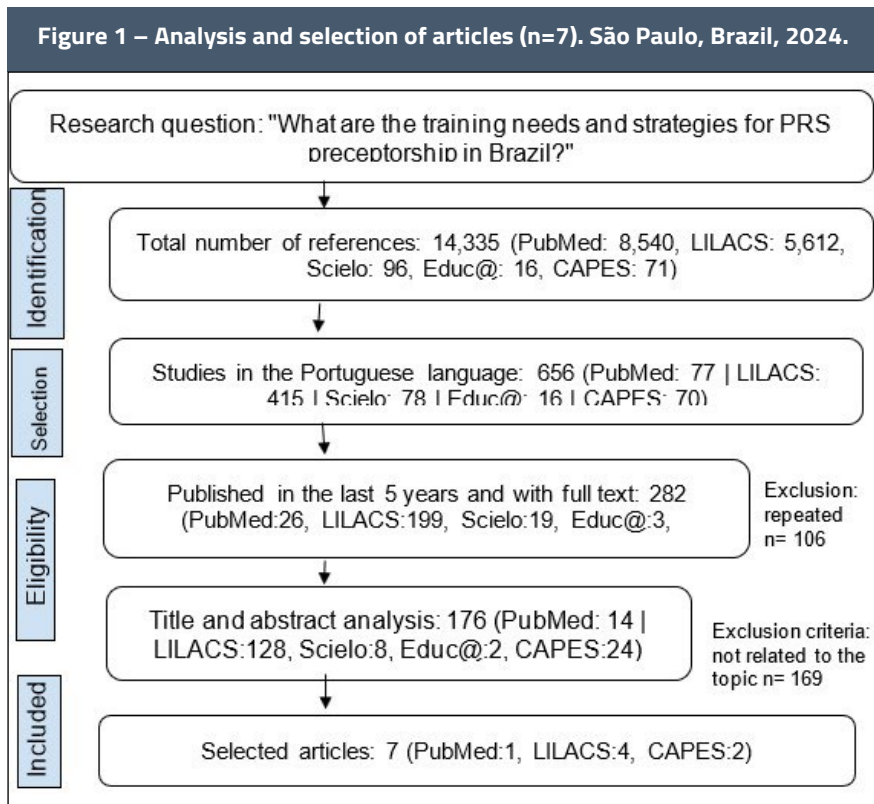
In the second stage, it was established the inclusion criteria for the study research written in Portuguese, with full text, carried out between 2019 and 2024. Repeated studies and literature reviews were excluded.

The definition of the information to be extracted on the characterization of the literature and the need for training, strategies and results of this training strategy to be extracted from the studies, was carried out in the third stage.

The subsequent stages of evaluation of the studies included in the integrative review, interpretation of the results and presentation of the review/synthesis of knowledge⁽⁷⁾ foram realizadas conforme descrições a seguir.

The literature search was conducted in the PubMed (US National Library of Medicine), BVS - LILACS (Virtual Health Library - Latin American and Caribbean Literature in Health Sciences), Scielo (Scientific Electronic Library Online), Educ@, and CAPES databases, between the years 2019 and 2024, in August 2024. The Health Sciences Descriptors (DeCS/MeSH) used were Professional Training, In-Service Training, Continuing Education, Internship and Residency, and Preceptorship, cross-referenced using the Boolean operator "AND".

14,335 articles were identified, of which 656 were written in Portuguese, 283 were written in the last 5 years, 282 had full text, and 106 were repeated in one or more databases. For the evaluation of the 176 included studies, the titles and abstracts were read by two independent researchers, and 169 were excluded for not being related to the topic. Seven studies were selected to compose the present study, as shown in Figure 1 below.



Source: Authors.

To systematize data extraction and synthesize results, a table was created with data on author and title, objective, type of study, number of participants, graduates, type of program and professional areas involved, the need for preceptor training, training strategies, and results of the training strategy, presented in the results.

RESULTS

Seven articles were found between 2019 and 2024, written in Portuguese, whose study type was experience report (3), case study (2), focus group research (1) and methodological research for validation of a hybrid course (1), pointing to the need for advances in the level of evidence in research related to this area of knowledge.

The participating programs were uniprofessional (4) and multiprofessional (3). Among the multiprofessional programs, they involved the areas of nursing

(5), pharmacy (4), psychology, nutrition and social work (3), dentistry and physical education (2), and medicine, occupational therapy, speech therapy and physiotherapy (1).

The studies belonged to the Southeast (57.1%), Northeast (28.6%) and South (14.3%) regions of Brazil.

The objectives of the studies presented were to carry out a situational diagnosis for the training of preceptors, identify challenges and potentialities, competencies for the practice of preceptorship and institutional support aimed at continuing education.

Regarding the number of participants and graduates, it can be seen that in two studies there was a percentage greater than 85% of graduates, three studies showed 50% or less of graduates, while in two others, the number of graduates was not described.

The initial training needs identified for preceptors in health residency programs in Brazil were the lack of pedagogical training, and a deficiency in the content

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and techniques to be taught by preceptors. The proposals or measures taken by the institution/authors involved conduct-

ing distance learning courses, face-to-face courses, using self-assessment folders on their pedagogical practice, and using ac-

tive methodologies in pursuit of training these professionals, as presented in Table 1.

Table 1 - Distribution of publications on training preceptors in health residency programs, according to Author and Title, Type of study, Type of program, Professional area involved and Need for preceptor training. São Paulo, 2024.

Author and title	Objective	Type of study, number of participants; graduates	Type of program / location / Professional areas	Preceptorship training needs
1. Rodrigues EMS, Silva KKD ⁽⁸⁾ .	Present the experience of reflecting on and constructing a training proposal for preceptors in multiprofessional health residency programs.	Experience report. (24; 33,3%.)	PRM – CE. Nur, Pha, Phy, Nu, Psy, SW.	Management and continuing education. Decision-making, communication, leadership.
2. Romani JR, Mourão LC, AlmeidaACV ⁽⁹⁾ .	Report the steps in creating a self-assessment folder to empower nurses in pedagogical practice.	Experience report (8-10; not available)	Nursing Residency.	Poorly collaborative pedagogical practice, insecurity and fear, difficulties in theoretical-practical correlation, and relationship issues.
3. Vallerini APLG ⁽¹⁰⁾ .	Develop strategies for improving preceptorship skills among obstetric nurses.	Case study (18; 100%)	Program. Improvement Mod. Residency – MG. Enf. PRM – RJ.	Best practices in evidence-based care and management for teaching-service integration.
4. Carvalho MAP, Gutierrez AC ⁽¹¹⁾ .	Identify and analyze the challenges and potential of the preceptor training process.	Experience report. (44; not available)	PE, Pha, Nur, Nu, Den, Psy, SW.	Qualify preceptors from the beginning, with pedagogical training for health network workers.
5. Fernandes GCA ⁽¹²⁾ .	Analyze institutional support for preceptors, with a view to continuing education.	Qualitative - focus group. (5; 31.25%)	Pharmacy Residency – MG.	Train preceptors on the PP (Pedagogical Project) of the residency program in which they work.
6. Rodrigues CDS, Witt RR ⁽¹³⁾ .	Understand how competencies for preceptorship practice are structured in multiprofessional health residency programs.	Case study. (26; 50%)	PRM – RS. PE,Nur, Pha, SpT, Nu, Den, Psy, SW, TO	Preparation and institutionalization for the training of preceptors.
7. Figueirêdo IA, et al ⁽¹⁴⁾ .	Develop and validate an online course on Mini-CEX for preceptors in mastology residency programs.	Methodological research (16; 87.5%)	Medical Residency – PE.	Continuous training process for preceptors.

Caption: PRM - Multiprofessional Residency Program; Professional Areas – Physical Education (PE), Nursing (Nur), Pharmacy (Pha), Physiotherapy (Phy), Speech Therapy (SpT), Medicine (Me),

Nutrition (Nu), Dentistry (Den), Psychology (Psy), Social Work (SW), Occupational Therapy (OT).

Source: Authors

Table 2 shows the content, strategies used, and results of the training conducted

Table 2 - Distribution of publications according to the content, strategies, and results of the training conducted. São Paulo, 2024.

	Topics covered	Training strategies	Results of the training strategy
1.	Health residencies in the SUS (Brazilian Public Health System), Pedagogical resources; Preceptorship in Health; Development of intervention projects in preceptorship. Conclusion: digital panels of the curricular matrix, interpersonal relationships and optimization of time in teaching and service.	Flipped classroom, expository discussions and forums via Canvas platform.	Changes in teaching practice such as the reformulation of evaluation methods, alignment with the Political-Pedagogical Project, and the valorization of theoretical studies, in addition to the need for monthly meetings for discussion and shared decisions
2.	Folder with 20 questions, aiming to stimulate reflection on educational practice, training and capacity building of nurses in their daily lives.	Institutional analysis in the style of institutional socio-clinical studies.	Analysis of the difficulties in carrying out and recognizing the pedagogical practice performed by preceptor nurses.
3.	Topics related to women's health policies, techno-scientific knowledge, procedures performed by nurses.	Workshops; active teaching methodologies in health.	Proposta de intervenção para qualificar a preceptoria; Reconhecimento unânime, pelos enfermeiros obstétricos, de seu papel formador e articulador entre teoria, prática e conhecimento científico na assistência.

4.	Innovation Laboratory in Primary Health Care, articulation with residency, regulatory framework, preceptor competency profile, welcoming strategies, case discussions and visit to the SMS (Municipal Health Secretariat) network of Rio de Janeiro.	Introductory training course (pedagogical, technical and ethical/attitudinal dimension).	Expanding the possibilities of interinstitutional articulation, aligned with the municipal management project to strengthen training as a strategy for qualifying primary health care.
5.	Preceptors' perception of the exercise of preceptorship activity, Continuing Education in Health and institutional support.	Focus groups	Need for pedagogical training of preceptors, time organization, strengthening the articulation between the actors of the residency program, consolidation of interprofessional work, and creating spaces for Continuing Education.
6.	Professional competencies for preceptorship.	Observation and individual interviews (personalized script according to the context experienced by the preceptor).	Mutual support, sharing of preceptorship experiences; Identification of three central resources: personal aspects, institutional aspects, and academic-professional trajectories, strengthening competencies, guiding practices, and supporting health training policies.
7.	Mini-CEX: Instrument, Characteristics and Advantages; Indication, Feedback: importance.	Training course in the distance learning modality.	The distance learning course favors enrollment through accessibility and by strengthening knowledge on the subject, in addition to encouraging preceptors to use the educational assessment tool.

Source: Authors

The prevalent topics were: health residencies in the SUS (Brazilian Public Health System), pedagogical resources, health preceptorships, educational practice, education, training, procedures, regulatory framework, strategies for building a welcoming environment for residents, continuing health education and institutional support, professional competencies for preceptorship, and the use of the Mini-CEX as an assessment tool.

The strategies used for the proposed training were: flipped classroom, discussion, platform forum, conducting workshops, offering face-to-face courses, distance learning courses, and focus groups.

Regarding the training results, the studies showed the need for pedagogical training for preceptors and for organizing the time of these professionals, enabling closer relationships between the actors who make up the residency program and consolidating interprofessional work.

One of the studies identified three important groups: personal, institutional, and programmatic characteristics; academic and professional trajectory; interactions during residency; and collaboration within the multidisciplinary team.

It also identified the need to create moments and spaces for Continuing Education in Health (CEH), through which it is possible to consolidate interprofessional work. The reflections echoed the importance of mutual support and the strengthened construction based on the sharing of experiences.

DISCUSSION

Among the 7 articles described in Portuguese, the type of study, prevalent case reports, points to a need for advances in research, considering the Oxford level 4 evidence classification⁽¹⁵⁾

The predominance of Nursing in the Primary Health Care Programs (PRS) and in the Southeast, Northeast, and South regions can be historically explained, considering that the programs were initiated in the Southeast region.⁽¹⁾

Regarding the number of participants and graduates, it can be seen that there is dropout throughout the training programs, with only two studies showing a completion rate higher than 85%, demonstrating the need for an institutional policy of continuing education. In this sense, health institutions play an important

role in offering favorable conditions for professional development, and it is essential that these elements be integrated into training policies in the health field.⁽¹³⁾

Preceptors play a crucial role in providing adequate training and facilitating the resolution of identified teaching needs. To fulfill this function effectively, preceptors must possess a high level of theoretical, didactic, and political expertise. The role of the preceptor transcends the simple transmission of professional skills and techniques, also encompassing aspects of humanization, ethics, and influencing the formation of the values of the residents under their guidance.⁽¹⁶⁾

Clarifying these constituent elements of competency structuring helps preceptors explore the conditions for their development in their professional practice, as well as healthcare institutions, and allows them to be incorporated into health training policies.⁽¹³⁾

Through continuous training of preceptors, it is possible to improve their healthcare practices, which, in turn, leads to the training of professionals capable of acting in a humanized manner, with greater dedication to care, empathy, and adopting an

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ethical, reflective, decisive, and effective approach.⁽¹⁶⁾ Clarifying these components that form the basis of competency structuring is fundamental, as it allows preceptors to use them in their professional practice.

Regarding the training needs of preceptors in health residency programs in Brazil, the lack of pedagogical training and the lack of knowledge about the content and techniques to be taught by preceptors were observed. The proposals or measures taken by the institution/authors involved conducting distance learning courses, face-to-face courses, using self-assessment folders on their pedagogical practice, and using active methodologies in pursuit of training these professionals.

A study conducted with 300 medical preceptors indicates that 91% of preceptors report that preceptorship integrates the resident into their team; however, it has been an unpaid task (75.34%), with a lack of pedagogical training (72%) to perform this function.⁽¹⁷⁾

However, the pursuit of pedagogical

improvement transcends the mere application of methods, adopting a critical, ethical, and socially engaged approach, aligned with the demands of the health system. Although studies addressing training strategies on this topic in the country are still scarce, the point of convergence in professional practice has been the need to adopt active methodologies in the professional training of preceptors in Health Residency Programs.

CONCLUSION

The need for interventions aimed at training preceptors in health residency programs became evident, with a limitation observed in research exploring effective strategies to provide such training. The most frequently mentioned strategies to address these challenges include the use of focus groups, active methodologies, varied resources, and online classes/courses. The competencies to be developed are recognized as mastery of the content and techniques to be taught, communication skills, decision-making abili-

ty, people management and administration, leadership, and pedagogical performance based on training and continuing education.

It is important to note that these professionals were often not trained to be preceptors, and that the educational process of preceptorship occurs concurrently with the main function of assisting the user of the health service assumed by these health professionals. This leads to an overload of activities without due appreciation or adequate working conditions in their daily work. It is also necessary to consider the need for human resources policies that value preceptorship and institutional support to enable the continuing education of these professionals.

Further studies will be needed to investigate, in more detail, the factors that may influence the training of preceptors, as well as training strategies that show effective results, with the aim of promoting the continuous training of these professionals in residency programs.

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