

Dimensions of evaluation of residence programs in professional and multiprofessional area

Dimensões da avaliação dos programas de residência em área profissional e multiprofissional

Dimensiones de la evaluación de los programas de residencia en área profesional y multiprofesional

Daniel Kleber Santos Morijo¹ ; Rika Miyahara Kobayashi¹ ; Sérgio Henrique Simonetti¹ 

¹Instituto Dante Pazzanese de Cardiologia, São Paulo, Brazil

ABSTRACT

Objective: to assess Residency Programs in Cardiovascular Health from the perspective of ongoing residents. **Method:** observational, cross-sectional study carried out in a public cardiology hospital in São Paulo, whose collection was carried out, after approval by the Research Ethics Committee, through a questionnaire with ongoing residents, in the second half of 2021. **Results:** residents with an average age of 25.7 years old, female, white, from São Paulo and the northeast region, evaluated their satisfaction related to the dimensions of Infrastructure (74%), Didactic-pedagogical organization (91.1%), Scientific production (92%) and Satisfaction with the program (92.4%). It was verified as a point of improvement the need for investments in resting places (79.5%), socializing (70.5%), study (15.9%), and permanent education actions (27.3%) to the preceptors. **Conclusion:** the study made it possible to identify priority investments in infrastructure and the need to strengthen the pedagogical training of preceptors, fostering the improvement of programs. **Descriptors:** Internship, Nonmedical; Education, Nursing; Program Evaluation; Education, Nursing, Graduate.

RESUMO

Objetivo: realizar a autoavaliação dos Programas de Residência em Saúde Cardiovascular sob a ótica dos residentes em curso. **Método:** estudo observacional, transversal desenvolvido em hospital público cardiológico de São Paulo, cuja coleta foi realizada, após aprovação do Comitê de Ética em Pesquisa, por questionário junto aos residentes em curso, no segundo semestre de 2021. **Resultados:** residentes com idade média de 25,7 anos, mulheres, brancas, procedentes de São Paulo e região nordeste avaliaram sua satisfação relacionada às dimensões de Infraestrutura (74%), Organização didático-pedagógica (91,1%), Produção científica (92%) e Satisfação com o programa (92,4%). Verificou-se como ponto de melhoria a necessidade de investimentos em locais de repouso (79,5%), de convívio (70,5%), de estudo (15,9%), e em ações de educação permanente (27,3%) aos preceptores. **Conclusão:** o estudo possibilitou identificar prioridade de investimentos em infraestrutura e a necessidade de fortalecer a capacitação pedagógica dos preceptores fomentando o aprimoramento dos programas. **Descritores:** Internato não Médico; Educação em Enfermagem; Avaliação de Programas e Projetos de Saúde; Educação de Pós-Graduação em Enfermagem.

RESUMEN

Objetivo: realizar una autoevaluación de los Programas de Residencia en Salud Cardiovascular desde la perspectiva de los residentes en curso. **Método:** estudio observacional, transversal, desarrollado en un hospital público de cardiología de São Paulo, cuya recolección fue realizada, previa aprobación por el Comité de Ética en Investigación, a través de cuestionario con residentes en curso, en el segundo semestre de 2021. **Resultados:** residentes con edad promedio de 25,7 años, mujeres, blancas, de São Paulo y región Nordeste, evaluaron su satisfacción respecto a las dimensiones Infraestructura (74%), Organización didáctico-pedagógica (91,1%), Producción científica (92%), y Satisfacción con el programa (92,4%). Se constató como punto de mejora la necesidad de inversiones en lugares de descanso (79,5%), socialización (70,5%), estudio (15,9%) y acciones de educación permanente (27,3%) a los preceptores. **Conclusión:** el estudio permitió identificar la prioridad de inversiones en infraestructura y la necesidad de fortalecer la formación pedagógica de los preceptores, fomentando el perfeccionamiento de los programas. **Descriptorios:** Internado no Médico; Educación en Enfermería; Evaluación de Programas y Proyectos de Salud; Educación de Postgrado en Enfermería.

INTRODUCTION

Multi-professional Health Residency Programs (*Programas de Residência Multiprofissional em Saúde - PRMS*), enacted through Law No. 11,129 of 2005, encompass 15 professional categories. Employing interdisciplinarity as a strategy for fostering critical and reflective individuals and the conception of spaces for professional representation and social movements, these programs emerge to facilitate teaching-service integration, dialectics between theory and practice for the construction and reconstruction of knowledge in the Brazilian National Health System (SUS)¹⁻⁵.

The oversight of these programs falls under the National Commission for Multi-professional Health Residency (*Comissão Nacional de Residência Multiprofissional em Saúde - CNRMS*), which has invested in the evaluation of this health education, formulating guidelines for assessment, self-assessment, and institutional assessment tools^{2,3,6}.

Corresponding author: Daniel Kleber Santos Morijo. Email: danielmorijo8@gmail.com

Editor in chief: Cristiane Helena Gallasch; Associate Editor: Helena Maria Scherlowski Leal David

Throughout the study's development, a scarcity of articles on the evaluation of PRMS was observed. Existing articles focused on satisfaction with the training, characterization of the profile of graduates, the program's influence on graduates' lives, and the professional profile and insertion of graduates, each with its established criteria⁸⁻¹².

There is a noticeable need for research that evaluates residency programs through common criteria and instruments, encompassing the various social agents within PRMS. This is aligned with studies by authors to construct and validate their results evaluation model, including self-assessment indicators with structural and systemic criteria deemed necessary for the qualification of PRMS¹³.

In PRMS, self-assessment has been a strategy for obtaining information to reflect on how the program has been structured, providing opportunities for adjustments through the involvement of all actors in the process and requiring advances in standardizing its implementation⁷.

Considering the institutional historical trajectory, the locale where the study's development is proposed reveals that the institution had, among its objectives, the promotion of education for professions involved in cardiology since its establishment in 1959 for the medical field and, in the multi-professional area, initiated by nursing through the Professional Improvement Program (PAP) residency modality since 1981. Subsequently, other professions joined, including Social Work (1983), Biology (1985), Physiotherapy (1992), Physical Education (2005), Dentistry (2007), Pharmacy, and Nutrition (2014). After approximately 25 years of operation, in 2008, its first assessment of graduates was conducted^{12,14}.

In 2012, following current legislation, a partnership was formed with a higher education institution, graduating 21 students from the Cardiovascular Nursing Residency Program between 2013 and 2017¹⁴. In 2015, the institution became a proposing entity, initiating its first class of Cardiovascular Nursing Residency. In 2016, authorization was obtained for the opening of the Multi-professional Health Residency Program in Cardiovascular Health, comprising Nursing, Physiotherapy, Nutrition, and Social Work. The program expanded to include more professions and vacancies in 2017, incorporating Psychology, Pharmacy, and Dentistry^{13,14}.

After five years of training health professionals, the need for self-assessment of PRMS was identified by the different actors involved in this educational process. Therefore, the present study aimed to conduct a self-assessment of PRMS from the perspective of the current resident, as the initial part of a larger evaluative proposal involving all segments (current residents, preceptors and educators, graduates, and institutional managers).

METHOD

This was a descriptive, quantitative-qualitative exploratory study, with a cross-sectional diagnostic self-assessment approach, as part of an institutional evaluative process, conducted in a public, cardiological, state institution in the city of São Paulo, from the perspective of current residents in the ongoing programs.

The population consisted of 61 residents in the first (R1) and second (R2) years of residency in professional and multi-professional areas, covering the seven professional categories. The inclusion criteria encompassed all residents currently in the program, while those who had withdrawn, resigned, did not sign the consent form, or were on medical leave or vacation during the data collection period were excluded.

Data collection utilized Google Forms, adopting the instrument and criteria defined by the Ministry of Education for this study. The dimensions included sociodemographic data, infrastructure, didactic-pedagogical organization, scientific production, and satisfaction with the program, scored from 1 to 4, with an open field for suggestions. A score of 1 indicated surpassing expectations, while 4 indicated non-compliance with expectations/needs regarding the aspects assessed.

Descriptive statistical analysis of the mean, median, and percentage was conducted based on the data nature. For the open-ended questions, content analysis proposed by Bardin (2011)¹⁶ was employed, enabling the classification of responses, their categorization, and presentation of results.

Adhering to research ethical principles, the project obtained approval from the Research Ethics Committee of the institution where the study took place. Confidentiality and anonymity were maintained by using the letter "R" followed by a number corresponding to the respondent's order, such as R2, R6, R12, and so on.

RESULTS AND DISCUSSION

Of the total 44 (72%) responding residents, 19 (43%) were R1 and 25 (56.8%) were R2, representing the professions of nursing (21; 47.7%), physiotherapy (8; 18.1%), and psychology, pharmacy, social work, and nutrition (3;

6.8% each). Ages ranged from 23 to 32 years, with a mean age of 25.7 years. The population, predominantly female (35; 79.5%), self-declared as Caucasian/White (30; 68.18%), originated mainly from the Southeast region, particularly São Paulo (33; 74.9%), or the Northeast region. The year of graduation for resident participants varied from 2009 to 2022, with a mean of 2.6 years since graduation, and a majority graduated from private institutions (32; 72.7%).

Regarding the sociodemographic characterization, female respondents and young adults from their home state were expected, per the profile of recent graduates aimed at forming qualified professionals for the SUS. This serves the purpose of facilitating their integration into the job market, especially within the SUS^{2,3}. However, it is noteworthy that 9 (20.4%) participants came from the Northeast region. The literature justifies this migration due to regional disparities characterized by different economies established since the colonial period in each region of the country¹⁶. In the context of health residency programs, research is needed to investigate the regional dispersion of graduates from other states, to identify whether this migratory flow is driven by the specialization process or stems from an interest in better working conditions.

From the results presented, it can be observed that among the dimensions evaluated, there was achievement ranging from surpassing expectations to meeting the minimum standards. The program received favorable evaluations in all four dimensions (952; 86.5%), namely: the Infrastructure dimension (228; 74%), the Didactic-pedagogical organization dimension (521; 91.1%), the Scientific production dimension (81; 92%), and the Program satisfaction dimension (122; 92.4%).

The results of the evaluation dimensions related to infrastructure, didactic-pedagogical organization, and scientific production are presented in Tables 1 e 2.

Table 1: Distribution of frequency and percentage of responses related to the infrastructure and didactic-pedagogical organization dimensions. São Paulo, 2022.

Evaluated aspects	Exceeded expectations n(%)	Fulfilled n(%)	Fulfilled minimally n(%)	Did not fulfill n(%)	Total n(%)
Infrastructure					
Classrooms	1(2.3)	35(79.5)	7(15.9)	1(2.3)	44(100)
Rest areas	0(0.0)	3(6.8)	6(13.6)	35(79.5)	44(100)
Internet and research access	6(13.6)	20(45.5)	17(38.6)	1(2.3)	44(100)
Quantity and quality of equipment	1(2.3)	32(72.7)	11(25.0)	0(0.0)	44(100)
Study areas	1(2.3)	19(43.2)	17(38.6)	7(15.9)	44(100)
Social spaces	0(0.0)	4(9.1)	9(20.5)	31(70.5)	44(100)
Access to journals	1(2.3)	24(54.5)	14(31.8)	5(11.4)	44(100)
Total	10(3.2)	137(44.5)	81(26.3)	80(26.0)	308(100)
Didactic-pedagogical organization					
Relationship No. residents vs. preceptors	2(4.5)	23(52.3)	16(36.4)	3(6.8)	44(100)
Practice scenarios	2(4.5)	33(75)	8(18.2)	1(2.3)	44(100)
Relationship No. residents vs. professionals of the area	1(2.3)	20(45.5)	16(36.4)	7(15.9)	44(100)
Integration of teaching-service-community	2(4.5)	28(63.6)	10(22.7)	4(9.1)	44(100)
Institutional commitments to teaching and research	4(9.1)	22(50)	17(38.6)	1(2.3)	44(100)
Pedagogical political project	1(2.3)	24(54.5)	17(38.6)	2(4.5)	44(100)
Preceptor training	1(2.3)	21(47.7)	19(43.2)	3(6.8)	44(100)
Coordination with other programs	5(11.4)	19(43.2)	14(31.8)	6(13.6)	44(100)
Interdisciplinarity	2(4.5)	27(61.4)	15(34.1)	0(0.0)	44(100)
Integration of graduates	1(2.3)	20(45.5)	19(43.2)	4(9.1)	44(100)
Competence assessment	1(2.3)	24(54.5)	14(31.8)	5(11.4)	44(100)
Resident self-assessment	1(2.3)	23(52.3)	17(38.6)	3(6.8)	44(100)
Continuing education initiatives	3(6.8)	10(22.7)	19(43.2)	12(27.3)	44(100)
Total	26(4.5)	294(51.4)	201(35.1)	51(8.9)	572(100)

Table 2: Distribution of frequency and percentage of responses related to scientific production and satisfaction with the program dimensions. São Paulo, 2022.

Evaluated aspects	Exceeded expectations n(%)	Fulfilled n(%)	Fulfilled minimally n(%)	Did not fulfill n(%)	Total n(%)
Scientific production					
Encouragement of research	3(6.8)	23(52.3)	14(31.8)	4(9.1)	44(100)
Evidence-based practice	3(6.8)	22(50.0)	16(36.4)	3(6.8)	44(100)
Total	6(13.6)	45(51.1)	30(34.1)	7(8.0)	88(100)
Satisfaction with the program					
Satisfaction with the program	1(2.3)	26(59.1)	16(36.4)	1(2.3)	44(100)
Satisfaction with the reception of preceptors, tutors	3(6.8)	19(43.2)	15(34.1)	7(15.9)	44(100)
Satisfaction with the level of learning	7(15.9)	22(50.0)	13(29.5)	2(4.5)	44(100)
Subtotal	11(8.3)	67(50.8)	44(33.3)	10(7.6)	132(100)
Recommendation of the program to others	Yes. Already recommended	Yes. Continues to recommend	Do not Know	No	Total
Would recommend the program	19(43.2)	10(22.7)	11(25.0)	4(9.1)	44(100)

Concerning the infrastructure dimension, it was verified that the residents expressed dissatisfaction with the lack of rest areas (35; 79.5%), socializing (31; 70.5%), and study spaces (7; 15.9%). In terms of didactic-pedagogical organization, the need for continuing education initiatives (12; 27.3%) and a review of the ratio of residents to professionals of the area (7; 15.9%) were mentioned.

From the observations made by residents in the suggestion space, after content analysis, four categories emerged: socializing, rest, and study spaces; preceptor preparation and training; research incentives; and theoretical strengthening of the program.

Regarding the results of the dimensions evaluated, the assessment by resident students revealed dissatisfaction related to rest, socializing, and study areas, linked to infrastructure, as expressed below:

Availability of a study space that remains open until 7:00 PM, providing a space for residents' socializing and rest. (R6)

In analysis, it is important to note that these aspects raised by the resident students had already been discussed by resident representatives in meetings with the Structuring Teaching-Assistance Unit, where problems were discussed, and proposals were made, as well as in meetings of the Multi-professional Residency Committee (COREMU).

It was observed that, after the administrative/commercial hours ended at 5:00 PM, support structures such as the library, equipped with computers for study, were not operational. With the inclusion of the multi-professional team in residency programs and night shifts, existing comfort and rest spaces were allocated to the medical and nursing team, leaving no spaces for other professionals, impacting the residents' health.

Authors highlight the fatigue and exhaustion present in this population, emphasizing the need to understand the factors that contribute to this phenomenon. Turning attention to the student-worker binomial, the residents' condition, it is essential to consider living conditions, work, and study. Considering that on-the-job education, interprofessional relationships, working conditions, and rest are crucial given the workload and the particularities of the resident's private life, such as family relationships, leisure, health status, and spirituality, among others, influencing their performance during the program.

In the didactic-pedagogical organization dimension, residents cited the need for continuing education initiatives in the preparation and training of preceptors, emphasizing the need for preceptorship to involve more time for clinical discussions grounded in evidence, as indicated below.

Organization in practice settings that foster the discussion of cases and themes, strengthening evidence-based practice. (R1)

Training of preceptors. (R2)

Preceptors/tutors trained to guide residents in theoretical matters. (R9)

Considering the proposition of the PRMS for in-service training of individuals who are critical and reflective in relation to their professional practice, the preceptor emerges as an actor guiding the teaching modality based on experiential knowledge^{2,18}. The preceptor in the PRMS is the agent responsible for providing guidance, integration, and mediation, as well as the evaluation of residents, facilitating a dialogical movement between theory and professional health practice. In the literature, several challenges are described concerning the conduct of health preceptorship, involving the need for qualification in the didactic-pedagogical training of the preceptor, their relationships with institutions, and the difficulties in simultaneously conducting the preceptorship process while reconciling the clinical demands inherent in the work activities they perform in the institution¹⁸.

In this public institution, the challenges of preceptor qualification are impacted by the lack of time for preceptors with dual roles, the preceptor's life stage, their lack of financial resources, and the opportunity to qualify their pedagogical competence, considering that government selection processes prioritize preceptors from the emerging regions of the north and northeast. Higher education institutions, as institutional partners, have a significantly restricted human resource dimension, which also hinders investments in required thematic training, due to the prioritization of fulfilling the institutional mission, namely, the education of undergraduates and research.

Also in this dimension, the relationship between the number of residents and professionals in the field (7;15.9%) was justified by the restructuring phase experienced by some professional areas that impacted the development of practices, however, were reviewed and redirected after this period of changes, which are also common and real in the everyday work.

Therefore, institutionally prioritized preceptor training has been linked to clinical updates that impact safe service delivery to the user. It is worth noting that preceptorship requires, beyond clinical competence, pedagogical competence to guide the training process in the workplace. In this sense, in the selection of preceptors, when possible, consideration should be given to seeking individuals motivated to expand the knowledge that will support the professional practice and provide means to address the challenges of training for health work¹⁹.

Regarding the dimension of scientific production, it was evaluated with satisfaction in 81 responses (92%); however, we were concerned about the response related to participation in scientific events and the conduct of research.

We should be released from the field of practice to attend scientific events... we have to stretch ourselves to make up for the hours we miss to attend the event, so I end up choosing not to go to conferences because I become overwhelmed. (R11)

The release of residents for participation in scientific events related to cardiology without the need for making up the hours in the fields of practice, thereby enhancing the incentive for research. (R33)

Given these observations, a self-assessment is warranted regarding how this process has been managed throughout the programs, considering that 150 hours are allocated in the theoretical workload for updates and participation in events related to the field of study. It is essential to ascertain whether residents and preceptors are aware of this allocated time and to evaluate the need for its expansion. This consideration aligns with the prerogative of the PRMS to train qualified professionals for work within the SUS, fostering an environment conducive to the integration of knowledge²⁰.

When respondents were approached regarding suggestions for continuous improvement of the program, the need for theoretical strengthening of the program emerged. This involves the ongoing refinement of theoretical content to support more frequent clinical discussions, taking into account the richness of the practical scenarios that provide the opportunity for clinical exploration. This contributes exponentially to the formation of the professionals engaged in the process, as outlined in the following remarks.

The practical component of the program is excellent, but I believe that the theoretical aspect, depending on the subject and the preceptor/teacher delivering it, could be improved in some aspects. (R8)

Conducting meetings for the discussion of clinical cases without an evaluative purpose, active participation in multidisciplinary meetings, and multi-themed classes with active teaching methodologies. (R15)

The PRMS, as a strategy for transforming health education through interdisciplinarity, breaks with concepts that lead to the hegemony of the biomedical model and requires a reflective movement based on the performed practice¹. The outlined points should be understood as driving elements for investigation and the construction of means that make it feasible to critically analyze the preceptorship process, education, and the conduct of professional practice within the institution. In this sense, in the process of education based on practice, the importance of this dialectical and reflective movement between theory and practice is emphasized²⁰.

Considering the results and the authors' experience as student representatives and members of COREMU, it is possible to perceive the complexity of this issue, which also involves the preceptor's continuous education and issues of preceptor motivation, human resources policy, organizational culture, time, and investment required for continuous education in pedagogical training of preceptors. It should be emphasized that, beyond initiatives for this training, there is a need to follow up on the progress and inform the PRMS stakeholders, through feedback, about initiatives undertaken in response to the challenges identified and the results of interventions.

The lack of articulation between theory and practice offered by different PRMS is a recurring complaint from residents highlighted in the literature, which has also pointed out factors contributing to this dissatisfaction, such as a lack of communication, workload, and program hours²⁰.

In the dimension of program satisfaction, there was contentment in 122 (92.4%) responses and a high degree of learning and satisfaction with the acquired knowledge (42; 95.4%). Furthermore, for this phase of the course, 65.9% of respondents would recommend the program to others.

The evaluation of graduates conducted previously in this institution indicated that 53 (35%) respondents were satisfied with the infrastructure (92%), considered the content relevant (75%), and found the teaching staff committed to education (64%)^{12,14}. They also reported that the internship period was sufficient (79%), allowing the application of theory in the field (75%), and met their expectations (72%). They mentioned that the program contributed to their entry into the job market (92%) and their professional performance (94%)^{12,14}.

The current results seem to be better when compared to the first evaluation of graduates conducted in 2008¹². It should be highlighted that these initial results of the trainees' evaluation allowed for discussion and contributed to improvement proposals throughout the PRMS, through meetings with the Structuring Teaching-Assistance Teaching Unit and with COREMU. The study's limitation lies in the continuity with other proposed segments, considering the time restriction, however, the project is ongoing alongside other PRMS segments.

CONCLUSION

This study revealed that 44 resident trainees were satisfied (92.4%) and that the PRMS met their expectations/needs in the four evaluated dimensions (86.5%), namely Infrastructure (74%), didactic-pedagogical organization (91.1%), and scientific production (92.0%). In the infrastructure dimension, residents expressed dissatisfaction with the lack of rest areas (79.5%), socializing (70.5%), and study spaces (15.9%). Concerning didactic-pedagogical organization, the need for continuous education actions was mentioned (27.3%).

Considering these results, it becomes imperative to establish spaces for dialogue and support, improve communication among the different actors involved in the PRMS education process, and address the identified demands by working on weaknesses and advancing the program's potential. This approach makes continuous improvement of formative processes feasible.

REFERENCES

1. Brasil. Presidência da República, Casa Civil, Subchefia para assuntos jurídicos. Lei nº 11.129, de 30 de junho de 2005. Institui o Programa Nacional de Inclusão de Jovens-PROJOVEM; cria o Conselho Nacional da Juventude-CNJ e a Secretaria Nacional de Juventude; altera as Leis nºs 10.683, de 28 de maio de 2003, e 10.429, de 24 de abril de 2002; e dá outras providências. *Diário Oficial da União*, Brasília (DF) 01 jun 2005; Seção 1-1.
2. Mello AL, Terra MG, Nietzsche ESiqueira DF, Canabarro JL, et al. Training Of Multiprofessional Residents In Health: Limits And Contributions For Teaching-Service Integration Rev. Enfermagem do Centro-Oeste Mineiro. 2018 [cited 2023 Jan 01]; 8:e2567. DOI: <https://doi.org/10.19175/recom.v8i0.2567>.
3. Fernandes MNS, Beck CLC, Weiller TH, Coelho APF, Prestes FC, Donaduzzi DS da S. Satisfaction and dissatisfaction of multiprofessional residents in health in the perspective of professional training. Rev. Baiana enferm. 2017 [cited 2021 Nov 10]; 31(3):e18344. DOI: <http://dx.doi.org/10.18471/rbe.v31i3.18344>.
4. Mello AL, Terra, MG, Nietzsche, EA. Integration between teaching and health services in academic training for multi-professional health residents: the professors' conception. Rev. enferm. UERJ. 2019 [cited 2021 Nov 10]; 27:e25017. DOI: <http://dx.doi.org/10.12957/reuerj.2019.25017>.
5. Lago LPM, Matumoto, S, Silva SS, Mestriner SF, Mishima SM. Analysis of professional practices as a multiprofessional residency education tool. Rev. Interface. 2018 [cited 2021 Nov 10]; 22(2):1625-34. DOI: <https://doi.org/10.1590/1807-57622017.0687>.
6. Ponte N, Osmar A, Silva, MMS; Saraiva MJG; Dias MSA, Vasconcelos MIO, et al. Self-evaluation as an educational strategy in the context of multiprofessional residence program in family health and mental health Tempus Rev. Tempus. 2016 [cited 2021 Nov 8]; 10(4) 247-63. DOI: <https://doi.org/10.18569/tempus.v10i4.2363>.

7. Silva JVS, Brandão TM, Macêdo AC, Oliveira KCPN, Ribeiro MC, Santos RA. Nursing residency in psychiatry and mental health: Perspectives on training and laborfield. *Rev. Baiana enferm.* 2021 [cited 2021 Nov 8]; 35:e39080. DOI: <http://dx.doi.org/10.18471/rbe.v35.39080>.
8. Kramer J, Martins AB, Marchi RJ. Evaluation of the Residency Programs of the Federal University of Rio Grande do Sul from the residents' view. *Rev. odontol. UNESP.* 2020 [cited 2021 Nov 08]; 49:1-12. DOI: <https://doi.org/10.1590/1807-2577.00820>.
9. Germano MFM. Programas de residência multiprofissional em saúde no seridó potiguar: Perfil e percepção de egressos. Caicó (RN) Universidade Federal do Rio Grande do Norte; 2019 [cited 2021 Nov 08]. Available from: https://repositorio.ufrn.br/bitstream/123456789/28332/1/Programasresidenciamultiprofissional_Germano_2019.pdf.
10. Fagundes AV. Perfil e inserção profissional de egressos de uma residência multiprofissional de um hospital universitário de Porto Alegre. Porto Alegre (RS). Hospital de clínicas de Porto Alegre; 2019. [cited 2021 Nov 15]. Available from: <https://www.lume.ufrgs.br/bitstream/handle/10183/196963/001088931.pdf?sequence=1>.
11. Oliveira JB, Ceretta LB, Birolo IVB, Simões PW, Sônego FGF. Influence of multiprofessional residence in the professional life of graduates. *Rev. Inova saúde.* 2017 [cited 2021 Nov 08]; 6(1):122-39. Available from: <https://periodicos.unesc.net/ojs/index.php/Inovasaude/article/view/3021/3325>.
12. Calicchio LC do N, Kobayashi R, Ayoub AC, Leite MMJ. Aprimoramento profissional em enfermagem cardiovascular: avaliação na ótica dos egressos de 1981 a 2004. *Rev. Eletr. Enferm.* 2009 [cited 2021 Nov 14]; 10(1):77-86. DOI: <https://doi.org/10.5216/ree.v10i1.7683>.
13. Vasconcelos, MIO, Souza FL, Lira GV, Dias MSA, Silva GSN. Indicator-based evaluation of multi-professional residency programs in family health. *Trab. Educ. Saúde.* 2015 [cited 2021 Nov 08]; 13, (2):53-77. DOI: <https://doi.org/10.1590/1981-7746-sip00080>.
14. Shiotsu CH. Aprimoramento em enfermagem cardiovascular, modalidade residência: uma abordagem histórico social (1981-2004). São Paulo (SP). Universidade de São Paulo; 2019. 150p. DOI: <https://doi.org/10.5216/ree.v10i1.7683>.
15. Bardin L. Análise de conteúdo. 1ª Ed. São Paulo (SP): Ed. Almedina; 2011. Cap. 3, Análise; p. 123
16. Filho RS, Monte PA, Miceli M. The permanency time of immigrant as a reducing factor from the wage differences: a study for northeaster's and São Paulo natives basing in the data of the PNADs 1995 and 2005. *Rev. Abet.* 2006 [cited 15 dez 2022]; 6(1):1-25. Available from: <https://periodicos.ufpb.br/ojs/index.php/abet/article/view/15612/8922>.
17. Silveira, N. B. A residência multiprofissional em saúde sob a perspectiva de quem a vive. Santa Catarina (SC):Universidade Federal de Santa Catarina; 2019. 21p. [citado em 15 dez 2022]. Available from: https://repositorio.ufsc.br/bitstream/handle/123456789/203819/Artigo%20A%20RESIDENCIA%20MULTIPROFISSIONAL%20EM%20SA%20SA%20SA%20SOB%20A%20PERSPECTIVA%20DE%20QUEM%20A%20VIVENCIA%20-%20Nathalie%20Bare%20cc%81a%20Silveira_VF.pdf?sequence=1&isAllowed=y.
18. Paula, GB, Toassi RFC. Papel e atribuições do preceptor na formação dos profissionais da saúde em cenários de aprendizagem do Sistema Único de Saúde. *Rev. Saberes Plurais Educ. Saúde.* 2021 [cited 2022 Dec 15]; 5(2):125-42. DOI: <https://doi.org/10.54909/sp.v5i2.117940>.
19. Souza SV, Ferreira BJ. Preceptorship: perspectives and challenges in Multiprofessional Residency in Health. *Rev. ABCS Health Sci.* 2019 [cited 2022 Dez 15]; 44(1): 15-21. DOI: <https://dx.doi.org/10.7322/abcshs.v44i1.1074>.
20. Fernandes MNS, Beck CLC, Weiller TH, Coelho APF, Prestes FC, Donaduzzi DSS. Satisfaction and dissatisfaction of multiprofessional residents in health in the perspective of professional training. *Rev. Baiana enferm.* 2017 [cited 2022 dez 15]; 31(3):e18344. DOI: <https://doi.org/10.18471/rbe.v31i3.18344>.
21. Freire, P. *Pedagogia da Autonomia - Saberes Necessários à Prática Educativa.* 25ª ed. São Paulo (SP): Editora Paz e Terra; 1996. Cap.1.8 Ensinar exige reflexão crítica sobre a prática p.17.

Authors' contributions:

Conceptualization, DKSM and RMK; methodology, DKSM, RMK and Simonetti SH; software, DKSM; validation, DKSM and RMK, formal analysis, DKSM, RMK and SHS; investigation, DKSM; resources, DKSM, RMK and SHS; data curation, DKSM, RMK and SHS; manuscript writing, DKSM.; manuscript review and editing, DKSM, RMK and SHS; visualization: DKSM, RMK and SHS; supervision, RMK; project administration, RMK; financial aquisition, DKSM, RMK and SHS. All authors have read and agreed to the published version of the manuscript.