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360 degree assessment in Family Medicine Residency: perception of citizen-users and preceptors

Avaliação 360 graus na Residência Médica de Família e Comunidade: percepção de cidadãos-usuários e preceptores

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ABSTRACT

Introduction: In the context of Family Medicine Residency (FMR), assessment tools aimed at improving resident physician training should be (re) constructed in the daily routine of healthcare services. The 360-degree or multi-source assessment stands out as it involves the participation of team professionals, patients, and the resident physician, guided by the preceptor.

Objective: To analyze the 360-degree assessment in FMR from the perspective of citizen-users and preceptors.

Method: A qualitative approach study (case study), approved by a Research Ethics Committee. It was conducted in Primary Health Care (PHC) Units in two municipalities of Rio Grande do Sul, where the residents worked. The sample was intentional. Semi-structured individual interviews, recorded and transcribed, were conducted with citizen-users treated by the residents and with the two medical preceptors. The sample size for citizen-users was defined based on the theoretical saturation criteria combined with the analysis of the density of the textual material produced. Contextual data from participants were analyzed using descriptive statistics. Qualitative data were analyzed using content analysis.

Results: The study included 17 citizen-users and two preceptors. The 360-degree assessment was recognized as an evaluation tool that fosters and values popular protagonism. Citizen-users perceived that by participating in the resident's evaluation, changes in the resident physician's conduct could occur. In this participatory process, they felt privileged and as contributors to the resident physician's work. Preceptors recognized that the participation of users and the team in the resident's evaluation process contributes to the assessment and strengthens the relationship between the team, residents, and users, as well as interprofessional work in PHC. Challenges were observed in conducting the resident's assessment by team professionals due to the work routine and in the management of the feedback process by preceptors. An adequate environment and strong bonds between preceptors and residents were considered facilitators of feedback.

Conclusion: The 360-degree assessment proved to be an effective educational evaluation strategy in training the healthcare workforce. It provides an opportunity for resident physicians to develop, recognize their mistakes, and become closer to both users and the healthcare team. Further research is recommended, including the perceptions of residents, healthcare teams, and managers.

Keywords: Educational Assessment; Patient Outcome Assessment; Internship and Residency; Family Practice; Primary Health Care.

RESUMO

Introdução: *No contexto da Residência de Medicina de Família e Comunidade (RMFC), ferramentas de avaliação que busquem a qualificação da formação do médico residente devem ser (re)construídas no cotidiano dos serviços de saúde. Avaliação 360 graus ou multifonte destaca-se por envolver a participação de profissionais da equipe, de pacientes e do próprio residente, guiada pelo preceptor.*

Objetivo: *Analisar a avaliação 360 graus na RMFC, na percepção de cidadãos usuários e preceptores.*

Método: *Estudo de abordagem qualitativa (estudo de caso), aprovado por Comitê de Ética em Pesquisa. Foi realizado em Unidades de Atenção Primária à Saúde (APS) de dois municípios do Rio Grande do Sul, onde os residentes atuavam. A amostra foi intencional. Realizaram-se entrevistas individuais semiestruturadas com os cidadãos usuários atendidos pelos residentes e com os dois médicos preceptores. Essas entrevistas foram posteriormente gravadas e transcritas. Definiu-se o tamanho da amostra para os cidadãos usuários pelo critério da saturação teórica aliado à análise da densidade do material textual produzido. Analisaram-se os dados de contexto dos participantes pela estatística descritiva. Os dados qualitativos foram analisados pela análise de conteúdo.*

Resultado: *Participaram do estudo 17 cidadãos usuários e dois preceptores. A avaliação 360 graus foi reconhecida como ferramenta avaliativa que fomenta e valoriza o protagonismo popular. Os cidadãos usuários perceberam que, ao fazerem parte da avaliação do residente, mudanças na conduta do médico residente podem acontecer. Nesse processo participativo, sentem-se privilegiados ao contribuírem para o trabalho do médico residente. Os preceptores reconheceram que a participação dos usuários e da equipe no processo avaliativo do residente contribui para a avaliação e fortalece a relação entre equipe-residente-usuários e o trabalho interprofissional na APS. Desafios foram percebidos na realização da avaliação do residente pelos profissionais da equipe, pela rotina de trabalho na APS e na condução do momento do feedback pelos preceptores. Ambiente adequado e relações de vínculo entre preceptor-residente foram considerados facilitadores do feedback.*

Conclusão: *A avaliação 360 graus apresentou-se como estratégia efetiva de avaliação educacional na formação da força de trabalho em saúde. Traz a oportunidade para o médico residente evoluir, perceber seus erros e se aproximar dos usuários e da equipe. Novas pesquisas são recomendadas, incluindo a percepção dos residentes, da equipe e dos gestores.*

Palavras-chave: *Avaliação Educacional; Avaliação de Resultados da Assistência ao Paciente; Internato e Residência; Medicina de Família e Comunidade; Atenção Primária à Saúde.*

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INTRODUCTION

Primary Health Care (PHC) is characterized by a set of comprehensive health practices, which aim to respond to the individual and collective needs of the population[1]. The gateway to the Unified Health System (SUS, *Sistema Único de Saúde*)[2], PHC has the potential to meet 80% to 90% of the health needs of an individual in their life pathway[3]. The medical professional who works in PHC must know how to use scientific evidence in their work process, being able to focus care on the needs of people-families-community, considering the diversities related to sex, gender, age, race, religion, culture, social class, and health problems or conditions. For this purpose, it is expected that they work in collaboration with other professionals in health care actions[4-7], which requires, throughout their training, the development of collaborative competencies for teamwork[8] – interprofessional communication, knowledge of the dynamics of team work, leadership, recognition of professional roles, problem solving, and patient-family-community-centered care[9, 10].

The Family and Community Medicine Residency (FCMR) is an in-service education proposal that, over two years, aims to qualify medical professionals to acquire skills to be problem-solving in practice scenarios, contemplating the attributes of PHC[11,12].

Resident assessment tools should be (re)constructed in the daily routine of health services. In the educational process, the purpose of evaluation is to progress with learning[13], by observing the development of the student's competencies in the face of the challenges of practice[14,15]. The intention is an evaluation that is concomitantly summative – approving or disapproving – and formative – providing feedback to residents about their potentialities, gaps and plans for improvements[16,17], guiding the improvement of the didactic resources of preceptors and residency programs[18-20].

The 360-degree or multi-source evaluation stands out for involving the participation of team professionals, patients and the residents themselves, guided by the preceptor. It assists the preceptor in the development of the resident's interpersonal and communication skills with the team and users[21], stimulating critical-reflective thinking, self-criticism, ethical values, professionalism and team management[21-24].

The formative component of this evaluation consists of the opinion, return, or feedback to the resident, individual and confidential, between preceptor-resident. After the communication, the residents themselves reflect on each highlighted point, with the support and facilitation of the preceptor[23,24]. The Family Health team, in which the resident is inserted and interacts in its practices, establishes itself as a powerful evaluator of the process[11,24,25].

Experiences with 360-degree evaluation have been reported in the United States in Pediatrics[26], Anesthesiology[27], Internal Medicine[28], Surgery[29] and Radiology[30], especially after the Accreditation Council for Graduate Medical Education instituted it in 2000 as one of the necessary tools for resident physician evaluation[21]. It has also been described in Denmark[31], the United Kingdom[32,33] and India[34].

In Brazil, the use of 360-degree evaluation has enabled the development of the competencies required of residents, in line with the proposal of the competency-based curriculum[35] and that established by the National Commission for Medical Residency[36,37,38]. Evaluation by the team and self-evaluation are used within the context of PHC[39], but patients do not always participate. In the medium and high complexity care of the SUS, there are reports of 360-degree evaluation in the Residency Programs of Internal Medicine, Cardiology[40] and Gynecology and Obstetrics[41], mixed with technical criteria such as anamnesis and physical examination, and in the Anesthesiology Residency, but without mention of user evaluation or self-evaluation[42].

Considering the gaps and challenges related to the application of the 360-degree evaluation and its effects on training and the exercise of the profession[19], this study aimed to analyze the 360-degree evaluation in the FCMR Program in Rio Grande do Sul. It brings the perception of citizen-users and preceptors, identifying the strengths, challenges and perspectives of this evaluation in the training of resident physicians.

METHOD

This is a qualitative study of the case study type, carried out in PHC Units in two municipalities of Rio Grande do Sul, in the context of a FCMR. The research followed the Consolidated Criteria for Reporting Qualitative Research (COREQ)[43] checklist and was approved by the Research Ethics Committee (CAAE 66054622.6.0000.5347/Opinion N. 5.875.955).

The sample was intentional. The two PHC physicians who are Residency preceptors and the citizens who are PHC users were invited to participate in the study, who would have been treated by the resident physicians during the research period and participated in its evaluation. Users under 18 years of age and who did not have the cognitive-emotional and linguistic conditions to participate in the interview were excluded. The final sample size, for the users, was defined by the criterion of theoretical saturation[44], together with the analysis of the density of the textual material produced by the research.

Data collection took place in 2023, through semi-structured individual interviews[45] with citizen users and preceptors. The interview with the preceptors was conducted at the end of the resident physician's evaluation cycles. With the citizen users, the interview was conducted on the same day

as the invitation to participate in the study, after the meeting between the user and the resident physician.

The interviews were carried out in person, in a reserved room of the PHC Units and conducted by a single researcher trained for qualitative research. They lasted an average of 33 minutes.

The interviews, after transcription, were returned to the preceptors, so that they could confirm/complement the presented ideas. Due to the difficulty of meeting with the citizen users, the transcript was not returned to these participants. Each interview was coded by the initial letter of the participants' category, followed by sequential numbers (C1 to C17/P1 and P2), with the intention of preserving the anonymity of the research participants.

The participants' context data were analyzed using descriptive statistics. The qualitative data produced were interpreted by content analysis[46], in the light of three elements present in the concept of the quadrilateral of education for the health area – social control, health care and teaching[47].

RESULTS AND DISCUSSION

A total of 17 citizen users and two preceptors participated in this research (Table 1).

Chart 1 shows the results of the analysis process by categories, which are described below.

Population's participation in the training of resident physicians

The citizen users participating in this study perceived that, when being part of the evaluation of the resident physician, changes in the care practices of this professional can occur. Understanding the process as participatory, they felt privileged and contributing to the work of the resident physician.

> *[...] I feel, in the first place, very privileged. Because we, as patients, can analyze their [resident doctors'] work? [...] I think I'm contributing. (C7)*

Table 1. Context information from research participants.

CITIZEN USERS	n
SEX	
Male	13
Female	4
AGE	
20 to 39 years old	2
40 to 60 years old	7
>60 years old	8
TIME ACCESSING THE HEALTH UNIT	
Up to 3 years	6
From 4 to 10 years	6
More than 10 years	5
TOTAL	**17**
PRECEPTORS	**n**
SEX	
Male	1
Female	1
AGE	
20 to 39 years old	2
TIME SINCE GRADUATION	
7 years	1
12 years	1
POSTGRADUATE STUDIES	
Family Medicine Residency	2
TIME OF POSTGRADUATE TRAINING	
2 and a half years	1
9 years	1
LENGTH OF PROFESSIONAL EXPERIENCE IN THE SUS	
7 years	1
11 years	1
TOTAL	**2**

Source: Prepared by the authors.

Chart 1. Category analysis process

CATEGORIES	STRUCTURAL DESCRIPTION OF THE CATEGORIES
Element: SOCIAL CONTROL Population's participation in the training of resident physicians	It brings the perception/feelings of citizen users and preceptors about the population's participation in the training of resident physicians.
Element: HEALTH CARE The team in the training and evaluation of resident physicians: an interprofessional construction	It presents the perception of preceptors about the strengths and challenges of the health team participation in the evaluation of the resident physician.
Element: TEACHING Learning to learn: 360-degree evaluation as part of the teaching and learning process of the resident physician	It presents the perception of citizen users and preceptors about the teaching-learning of the resident physician/ feedback and the relationship of the resident physician with the preceptor.

Source: Prepared by the authors.

For the preceptors, the possibility of having the user's view in the evaluation of the resident physician was valued, being recognized as essential in PHC and in the qualification of the preceptor's evaluation.

> *[...] I can have the user's viewpoint, which for us, in primary care, is what matters most. (P1)*

> *[...] The user is the one who will bring me what they understood about the care of the resident [doctor], I may have understood it very well because I have a format, a personality, but if the user did not understand, we did not achieve the result. [...] I, as an evaluator, need to improve myself [...]. (P2)*

In the reports of the preceptors who accompany the resident physician, it was observed the potential to redirect an educational model in which the teacher/educator is the only guide and source of data for their apprentice and learning[48]. Seeking the user's perception brought the intentionality of distancing oneself from this teacher-centered reality. If theory cannot distance itself from praxis[49] and the latter culminates in benefits for the patient, there is nothing more appropriate than for the user-patient to also be part of this training[50-53]. And the preceptor assumes the role of mediator-facilitator and also of learner, instead of holder of reason or arguments of authority[54].

During residency, the student professional is encouraged to achieve, upon their return to the collectivity, a set of competencies through the mobilization of knowledge-skills-attitudes. Among these competencies, the specific[8] competencies stand out, to deal with challenges/situations in the field of prevention, investigation, diagnosis, treatment or palliative, and the integrative competencies (ethical, interpersonal and collaborative for teamwork)[4,8,9,10,21], to give meaning and completeness to the former[54]. The beacon for the development of these competencies can be sought directly in the field in which they work[5,6,55], that is, in the spaces of interaction with the team and, especially, with the users.

The citizen user C7 brings, in the statement below, a sense of collectivity and representativeness that each user exercises when evaluating the resident physician.

> *[...] Being able to evaluate the doctor, I feel like I represent many people. (C7)*

The report is in line with what is recommended by the National Policy for Popular Education in Health (PNEPS, *Política Nacional de Educação Popular em Saúde*)[56], when it refers to the shared construction of knowledge and the dialogue between popular knowledge and individual and collective production of knowledge in health promotion-protection-recovery actions.

In the report below by C15, it is identified that participating in the evaluations of a resident physician can promote changes in the way they would expect to receive care.

> *There are a lot of things you want to change and you don't know who you're going to talk to. But there are these evaluations in which we will say what we are feeling. (C15)*

Mendes[57] emphasizes, in harmony with the feeling of change reported by C15, that there may be a mismatch between the supply of health and the demand of the population. Together with this challenge, is the difficulty of the Health Councils acting as instruments of public control, due to the absence of a culture of participation and imposition of proposals by managers – manipulation of meetings or contempt of decisions deliberated in the collegiate[57,58]. This is a judgment of managers that can be attributed to the understanding of a lack of technical knowledge by the counselors about health, legislation and administration[59,60] and lack of resolution, generating disinterest[59].

The guarantee of user participation in the evaluation can act as a stimulus for other spaces of participation, such as those of social control.

Mentioned in Law n. 8.080[61] and described in Law n. 8.142[62], social control is part of the quadrilateral of education[47] and is a right not only of each citizen, but of all Brazilians, which was recalled by C7. Being able to participate in the training of resident physicians becomes an expansion of this popular right. The autonomous and authentic voice of citizens is fundamental in the education of all health professionals[63].

C17 reports, in the statement below, a negative experience of medical care and emphasizes the importance they perceive in "being able to talk" about the resident physician and in the evaluation that allows their participation.

> *[...] That marked me and to this day I remember the words of that doctor [...], but as I had no one to talk to, that was it. I think it's very important for us to be able to talk about the doctor who is treating us, the evaluation is very important [...]. (C17)*

By giving voice to the citizen, the 360-degree evaluation presents itself as a device for popular participation in the education of health professionals. Likewise, it stimulates the user's engagement in their own care and patient-centered care, a collaborative competence recognized for the qualification of patient safety[7,9,10].

The availability to learn from others in the learning process is evidenced in this evaluation, as it enables listening to the user about their care process, mobilizing spaces for discussions and exchanges, for self-reflection and the

understanding that successes, doubts and uncertainties of residents and preceptors are expected in training, with practice as a guide[64]. The resident's error or difficulty also has great potential to teach[65], since, for the learning culture, the error needs to be expected and requires accountability without generating guilt or affecting the student's confidence[66].

Citizen users understand that by evaluating the resident physician and being able to bring positive aspects of the care and even praise for the work done, they stimulate both trust between patient-physicians and physicians to want to increasingly improve.

> *[...] when they [resident doctors] work well, they deserve praise [...] patients have to have confidence in the doctor, they have to see if they work well or not. If they pay attention [...] imagine receiving a compliment! [...] You will try to improve more and more. (C6)*

> *[...] I think they [resident doctor], knowing that we felt good the way they treated us, is good, right? To feel evaluated well. Feeling feedback that the patient liked their care. (C14)*

Praise should not be the expectation in the 360-degree evaluation, but the resident in training, as a student, can seek these positive or negative reinforcers as a behavior-shaping stimulus in their own interaction with the user[67].

In the 360-degree evaluation, the user shows the preceptor aspects that only they felt. It is necessary to consider, however, that the users' evaluation of the resident, mediated by the preceptor, needs to be analyzed before being shared with the resident, preventing the evaluation being used as the user's opinion survey about the service. The fear of an evaluation negatively interfering with the access to health or care by that professional should be weighed by the preceptor, as well as the comparison with moments when the population lacked professionals or qualified professionals in PHC, magnifying care considered simple to the resident and the daily routine of the services[68].

The preceptor must, therefore, know the characteristics of the population participating in the evaluation, which includes aspects of local history and culture, age, gender, social class, psychological aspects, among others. In addition, the history of the population's relationship with the SUS services offered by the municipality should be considered, which can generate low expectations with the service or in the improvement of the service[69]. On the other hand, the very culture created over time by the 360-degree evaluation can change this reference at the time of the evaluation. In the short term, the preceptor's prior explanation of the evaluation and the intended objective, and the guarantee of the confidentiality of this participation/comments, can contribute to qualify the evaluation[63].

It is worth noting that all citizen users who participated in the study reported well-being and satisfaction for evaluating the resident physician and the feeling of comfort for being sincere in the evaluation. None of the citizens interviewed showed or reported concern, fear or harm when evaluating the resident physician. They believe that all health professionals should be evaluated. They expressed the perception that patients help in medical training and practice. Another result that deserves to be highlighted in this category was that no citizen made negative comments about the resident physician, which deserves a complementary analysis in future studies.

The team in the training and evaluation of resident physicians: an interprofessional construction

The second category deals with the health care component of the health quadrilateral[47], addressing the 360-degree evaluation and its relationship with the team in health practices. In this category, a limitation is assumed, which is the absence of other professionals' perception in the team and in the service management, and this result is constructed by the preceptors' perception.

The preceptors recognize that the participation of the team's professionals in the evaluation process of the resident physician contributes to the 360-degree evaluation and strengthened the relationship of care partnership between the team and the resident physician in the daily training and interprofessional work in PHC.

> *[...] The nurse has always participated [in the evaluation] and I see that this is very important, especially the nurse who works directly with the resident [doctor] [...]. The nurse has always participated and the community agent has always participated. [...] We need to complement and complete each other. And we can't do completely different and separate things, without harmony. (P2)*

Interprofessional-collaborative teamwork is increasingly being valued as an important competence to be developed in the training of the health workforce[4,70]. The resident physician, when experiencing their training practices with multiprofessional teams, interacting and learning from them, goes through an experience of interprofessional education (IPE).

Interprofessional education occurs when two or more professions learn from and about each one, valuing their professional roles to improve communication and collaboration among the team and the quality of health care[7,71].

When such experiences occur in the teamwork setting, such as in residency, interprofessional education can broaden the understanding of health disparities and promote the

development of professional identities that have a shared sense of social responsibility[4,7,57].

The presence of resident physicians who work collaboratively, seeking interaction with other professions, was highlighted by P1 and shows a difference between professionals who have already worked in teams without interaction and with a work posture isolated by professional nucleus.

> *[...] The teams are grateful to have doctors who, as they say, do it together, call the health agent, call everyone to participate. And what they [the team] tell us from previous experience was a much more vertical relationship, much more the doctor as someone who was going to do their job punctually and left, they didn't have this matter of bonding with the team, of working together. (P1)*

The preceptors reported the representation of the team in the 360-degree evaluation, even though not all professionals participated, who could have contributed to complement the evaluation with a different viewpoint.

> *[...] Someone [from the team] always participated! [...] At no time, anyone did not want to participate. There were negatives. Not direct denials, but justifications. I chose not to insist [...] other health professionals would have complemented with a different point of view and did not want to participate or could not participate, there was no dialogue. (P2)*

The preceptor understands that the 360-degree evaluation, with the participation of the team in relation to the work of the resident physician in PHC, "stimulates the resident's communication with the team, making them more communicative and receptive to comments and even criticism from the team" (P2), even at times that are not necessarily a formal evaluation.

Another result that stood out in this study included the challenges observed by the preceptors regarding the moment to carry out the 360-degree evaluation with the users and professionals of the team, due to the intense work routine of each profession in PHC.

> *[...] I think the 360-degree evaluation is perfect in terms of evaluation but applying it ends up being very difficult in our routine. [...] I personally can't spend the shift, for example, interviewing users, because as I am the medical professional of the same Unit, when they enter the office with me they want to have a consultation. [...]. And then we end up passing this assignment on to another team member who also has their tasks, who also can't spend that shift calling patients or colleagues, so I have difficulty applying it because our routine is difficult. [...] The details of the routine end up making it very difficult. (P1)*

One of the preceptors used, as a strategy to improve the participation of team professionals, the referral of the evaluation questions by the Google Forms, always providing explanations and making themselves available for doubts or misinterpretations.

> *[...] I sent Google Forms to some people on the team and made myself available for any questions. I asked if they received the Forms, if they had any difficulties, if they were able to fill it out, in short, I tried to solve the doubts as the worker asked me. [...] before I sent the Google Forms, I asked people, I explained what the evaluation was, the objectives [...]. There was always a verbal introduction. I think this is important, because in writing, you can't feel something sometimes or you may not have the best perception. (P2)*

The preceptor's difficulty in dividing the time between care and dedication to the quality training of the resident is reinforced by the literature[72,73], emphasizing that the tension between education *versus* service shapes the dedication to medical residency, which can harm educational quality. The feedback to the resident needs an adequate environment, sufficient time and without interruptions, as presented below by P1. These are aspects that confirm how the active participation of management in the care agenda has the potential to positively affect teaching and future interactions with users, expanding the concept of the quadrilateral to the residency[47].

Sometimes, the preceptors have noticed situations in which the interpersonal relationships between team professionals and resident physicians end up positively or negatively affecting the evaluation.

> *[...] As we spend a lot of time together in the Unit, we end up having this relationship within the team. I have a health agent who likes that resident more, there is an attending who likes the other more, and usually ends up having a very personal nature: "I'm going there to help with their evaluation", or even the opposite: "I had a little problem with them, then I'm going there anonymously to put it in the evaluation", to try to somehow harm them. (P1)*

It is a finding that expresses the relationship between personal life, affinities and ties at work – established or not – with the ability to evaluate the resident, which should arouse the preceptor's attention, as an educator, since the educational process goes beyond the professional sphere, reaches the human relationships and the quality of life of the actors[47].

Learning to learn: 360-degree evaluation as part of the teaching and learning process of the resident physician

The third category presents the element of quadrilateral teaching[47], bringing evaluation as part of the resident's teaching and learning process[15,18,48]. The final part of the 360-degree evaluation consists of listening to the resident's self-evaluation in two moments – before and after the evaluations of the citizen users and the team[74]. It is centered on the learning of social and interprofessional skills[7-10], and on the resident's receptive capacity[75].

Citizen users and preceptors see in the 360-degree evaluation an opportunity for the resident physician to develop, notice errors and get closer to users and the team.

> *[...] It's like recycling. They [the doctor] need to be evaluated, otherwise it becomes a very routine thing, it seems that it doesn't evolve [...]. (C12)*

> *[...] No one is perfect. To err is human, but to persist in error is no longer the same thing. (C16)*

> *The evaluation will force an interest that this resident [doctor] did not have. They saw themselves in a distance from the user, from the team and will have to reduce this distance because of the evaluation. (P2)*

Luckesi[13] reinforces the perception of citizen users and preceptors by valuing evaluation as a qualifier of the educational process. The resident physician is evaluated by the preceptor for their performance, considering the summative and formative components[17], and may express didactic weaknesses and in the pedagogical projects of the programs[16,19,20,48].

The potential for change in the student is expressed by formative assessment[74], through the feedback[22,24,29-31]. This evaluation feedback by the preceptor should consider the performance of this student, comparing it with the intended performance and seeking to reinforce or change behaviors[75].

For the preceptors, the evaluation response by the feedback becomes more effective as they get to know and establish bonding relationships with the resident physician, who develops availability and interest in listening and discussing about the evaluation received. It is the "disagree in harmony" and with respect to the preceptor.

> *[...] Precisely because we have this bond, the resident [doctors] seem to me to be very willing to listen, to disagree with some opinion or evaluation given. (P1)*

> *[...] In the first evaluations of the resident [doctor] that I had not yet understood their personality and how they were going to receive some information, so I put it in and saw that an effect emerged that might not be interesting for their learning. Then I changed the approach. [...] this resident [doctor] respects my opinion, they understand what I brought [...] disagree in harmony, how important this is [...]. (P2)*

To be constructive, the moment of the feedback in the 360-degree evaluation, it must bring the preceptor's expectation based on the resident's potential at that moment. For this purpose, an alliance must be established between preceptor-resident with the commitment to understand the teaching-learning objectives, the potentialities and the culture of this resident. Based on this relationship, an action plan is created by mutual agreement, sealing the commitment to learning[20,75-77]. The feedback should focus on the behavior and task performed by the resident physician, preferably containing suggestions on how to improve or outlining relevant and simple objectives to be achieved[75,76].

P1 emphasizes, in the statement below, that the silent and reserved environment of feedback, without external interruptions, is a facilitator of the 360-degree evaluation.

> *We end up, at the Health Unit, being able to use the office environment, this helps us a lot. I know that I have acoustic insulation, that no one will come and go, so we are very comfortable and I don't notice any difficulty. (P1)*

It is an environment that provides opportunities for discussion between the resident physician and the preceptor, preventing defensive, disinterested behaviors or embarrassment on the part of the resident[20,76].

It should be noted that the conduction of the feedback is marked by challenges, since it can bring criticism to the resident's work. The moment requires the preceptor to decide on the priority of the information to be shared, avoiding excesses or overloads and stimulating self-reflection-self-criticism, to learn how to learn, so that the resident is interested/willing to be part of the team and to work with the team and users.

> *[...] I had experiences of having a fragile reaction [with the resident physician], having to insist and ask again, [...] very exaggerated reactions of going back to that score after the evaluation was over, going back to that doubt, asking [...]. Precisely for this reason, this evaluation is very important, because as I do this several times, I teach this resident that they cannot be so susceptible to criticism [...] because they will be criticized at various times at work [...] self-reflection and self-criticism, there is a lot at this point, the view that I don't stop learning when the residency ends [...]. I'm going to be in a different place, I'm going to be in a different team, new information will come, different users, with different cultures, so [...], I have to learn how to learn. [...] that they [resident doctor] leave with this interest and with an interest in evaluating themselves. (P2)*

In the preceptor's statement, the need for continuous learning and adaptation to new professional contexts is highlighted, which need to be stimulated in the resident's education by promoting self-criticism and reflective posture in residents[20,76]. The result is in line with the view of a new educator-student relationship, where the student assumes a more active role in their own development, building the habit of adapting to judgments, both in the care of users and in the relationship with the team[78]. And the preceptor must support, mediate between theory and practice and help the student to build their own trajectory[79]. The 360-degree evaluation thus contributes to teaching that prepares students for receptivity to criticism and emotional self-management, stimulating feelings of empathy, altruism and solidarity[65,74].

In this evaluation, the observations are from sources that the preceptor trusts will be added to their own[76]. Preceptors perceived in the 360-degree evaluation its collaborative potential, constituted by the view of different actors on the practice of the resident physician.

> *For me, this is the biggest advantage of the 360-degree evaluation, I give this feedback to the resident [doctor]. [...] It gives me a lot of security, I'm not the one judging, I am in no way determining that it's right. [...] It takes a little weight off our personal assessment and judgment. (P1)*

In this category, the absence of direct perception of resident physicians about their teaching and learning process based on 360-degree evaluation is assumed as a limitation, which can be explored in future studies.

FINAL CONSIDERATIONS

The findings of this research showed that the 360-degree evaluation applied to the context of the FCMR, in the PHC scenario, enabled the insertion/valorization of social control in professional training and mobilized the idea of popular participation in the SUS. The self-evaluation, preceded by the preceptor's feedback, stimulated the resident's self-criticism, autonomy with responsibility, and reflective posture.

The preceptors pointed out challenges related to the moment of evaluating the resident physician with the team professionals, due to the work routine of each profession in PHC and in the conduct of feedback.

The study did not intend to show the 360-degree evaluation as a single possibility of educational evaluation, but rather to bring it to the discussion in the context of the training of the health workforce, understanding its potentialities and challenges. It highlights the potential of participatory and collaborative evaluation processes, based on the culture of learning and confirms the 360-degree evaluation as an effective evaluation strategy in the FCMR. Further research is recommended involving the perception of residents, team professionals and managers about the effects of 360-degree evaluation on health education and work.

AUTHORS' CONTRIBUTIONS

Mauro Sérgio Furtado de Souza: study conception and design; collection, analysis and interpretation of data; writing of the manuscript or critical review of important intellectual content; obtaining, analyzing and interpreting data; effective participation in the research orientation; intellectual participation in propaedeutic and/or therapeutic conduct of studied cases; critical review of the literature; final approval of the final version of the manuscript.

Ramona Fernanda Ceriotti Toassi: study conception and design; analysis and interpretation of data; writing of the manuscript or critical review of important intellectual content; obtaining, analyzing and interpreting data; effective participation in the research orientation; intellectual participation in propaedeutic and/or therapeutic conduct of studied cases; critical review of the literature; final approval of the final version of the manuscript.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

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DATA AVAILABILITY STATEMENT

Research data are only available upon request.

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