The Subjectivity in Evaluation of Resident Physicians in Medical Clinic Programs

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Abstract: The objective of this study was to understand the evaluation process of resident physicians in medical clinic programs under different points of view. Qualitative, exploratory and descriptive study, collecting date in two medical clinic residency programs. Research participants were the coordinators of the two programs, eight preceptors and 12 resident physicians, totaling 22. The data was collected through focus group and interviews, which were transcribed, analyzed, and organized for reflection through content analysis. The results are presented in two units of analysis: *the resident physicians evaluation from the different points of view among the subjects* and *subjectivity in the evaluation of values, attitudes and behaviors*. There was a disparity between the students 'and preceptors' looks regarding the evaluation of professional training, subjectivity in the evaluation, absence of clear rules and knowledge of all involved, referring to the fragility in the evaluation process.

Keywords: Evaluation. Educative evaluation. Professional training evaluation. Evaluation studies as issue. Physicians.

1 Introduction

This paper focuses on the resident physicians' evaluation in medical residency programs. Authors such as Feuerwerker (1998) and Botti & Rego (2010) have addressed the fragility of medical education in Brazil, which has been evidenced over the years, with emphasis on increasing the number of courses without the necessary quality accompanying the number of vacancies. Thus, medical residences have provided training deficiencies demonstrated during graduation at medicine courses.

Medical residence programs have their own regulations in Brazil. In 2011, decree number 7,562 (Brasil, 2011), updating Decree number 80,281, of 1977, provides the National Medical Residency Commission and the exercise of the functions of regulation, supervision and evaluation of institutions offering medical residency and medical residency programs. This was the current norm for medical residences in the country until 2013, with the creation of the More Doctors Program, under the Law number 12,871 (Brasil, 2013). The current legislation was amended, with an impact on training through medical residencies, since it established the purpose of training human resources in the area for the Brazilian Unified Health System.

The medical residency is a modality of post-graduation education for physicians, characterized as in-service training, the operation of which is the responsibility of health institutions, whether university or not, under the guidance of a preceptor, defined as a medical professional trained. This training is coordinated by the National Medical Residency Commission, accredited body for national medical residency programs (Ribeiro, 2011).

Moreover, Ribeiro (2011) reports that there are 3,500 accredited medical residency programs in the country, offering 28,500 vacancies as a whole, most of them by public institutions. Chaves,

Borges, Guimarães, & Cavalcanti (2013) evaluated 362 educational institutions with a residence offer and said that in 2011, 7,931 places were offered, predominantly in the southeastern (42.8%), followed by the northeastern (16.4%) and the southern region (15 %). Four specialties concentrated more than 57% of the positions: Medical Clinic, Pediatrics, General Surgery and Gynecology/Obstetrics.

The teaching in medical residences is characterized by theoretical-practical teaching, with a workload of 60 hours per week. Feuerwerker (1998) agrees with the statement that says the process of combining theoretical knowledge acquired with clinical experience promotes medical practice success. The author adds that only experience gained through practice may complete the physician training, since clinical experience takes place by the professional ownership following patients, not just the disease itself.

For the medical residency programs evaluative process, the concept of evaluation proposed by Zeferino & Passeri (2007) was adopted, which mentions three moments: before teaching, establishing a prior knowledge diagnosis; during teaching, called formative, aiming to give feedback to the student about the teaching process, which can be proactive or reactive; and, finally, after teaching, called summative, evaluating the progression of the student along the stages.

Furthermore, as example of evaluation tools in medical residency programs, Williams, Verhulst, Mellinger, & Dunnington (2015), studied the application of an instrument with the purpose of developing performance evaluation, called Operative Performance Rating (OPR). Santos & Salles (2015) constructed and validated an instrument to measure the acquisition of technical skills in performing operations, increasing difficulty degrees, to be used in general medical residency. Goldflam, Bod, Della-Giustina, & Tsyrulnik (2015), disclosed a strategy adopted by emergency medical residency program comparing the residents' self-assessments with the residency program evaluation milestones.

In addition, the study by Iblher, Zupanic, & Ostermann (2015) developed and validated a Resident Physician Assessment Form called Questionnaire D-RECT German (Dutch Residency Educational Climate Test). Other study by Khan, Siddiqui, Thotakura, Hasan, Luni, & Sodeman (2015) examined the experience of using scores of evaluation programs, such as the In-Trainning Examination (ITE), as an indicator of performance in the American Board of Internal Medicine (ABIM) evaluation process. Mainthia, Tarpley, Davidson, & Tarpley (2014) in a general surgery residency program, compared the association between resident performance and compatibility with rewards as the best resident investigator, best educator, and best overall resident.

In Brazil, the residency programs must periodically evaluate the resident, at least every quarter, either by oral or written test, practice, or scale of attitudes and have a monograph to complete the course. Thus, in this research, the central guiding question was: how is the evaluation of the resident physician in two residency programs in medical clinic?

In this way, identifying how professionals are evaluated, whether only technically or from the point of view of integral care and ethical principles, may contribute to their formative process. Thus, the objective of the study was to understand the evaluation process of resident physicians in medical clinic programs under different points of view.

2 Methodology

The study adopts a qualitative approach, with an exploratory and descriptive model, developed in Cascavel, Paraná, Brazil, in two health institutions, one public, henceforth denominated institution A and a private teaching hospital, denominated institution B. The field research institutions integrate

the network of hospital care in this municipality and the residency programs are linked to the medical courses of both institutions.

The medical residency program in institution A is characterized by a two-year-duration, in a special workload of sixty hours per week, distributed in forty-eight weeks per year, totaling a minimum annual workload of 2,880 hours of activities, and maximum of 3,200 hours. This program offers six vacancies per year, from a total amount of 12 vacancies. The course was approved by the National Board of Medical Residency in 2003, under the approval number 103/2003 and started its first classes in 2004. Since the beginning, 37 medical specialists have been trained (Coreme HUOP, 2016).

Moreover, the medical residency program in institution B is characterized by a two-year-duration, offering two vacancies per year, from a total amount of four vacancies. The program was approved by the National Medical Residency Commission in 2012, under the approval number 223/2012 and began its first classes in 2012, having trained two medical specialists so far. The course recredentials were obtained in 2015, under the number 692/2015 (Coreme São Lucas - FAG, 2016).

The research participants were the coordinators of the two training programs, the preceptors, being five in A and three in B, totaling eight preceptors. As for residents, in institution A, eight participated in the research and in institution B, three participated, being 11 residents, totaling 21 individuals.

Participants in the focus group activity and/or interviews were identified in order to ensure their anonymity, according to the following abbreviations: interview with coordinator A (ICA), focal group with preceptors A (FGPA), focal group with residents A (FGRA), and so on for all other participants.

For the data collection with the coordinators a semi-structured interview was carried out, considering a script adaptation from Botti (2009) and Castells (2014), which is characterized by having central questions to start the discussion and allow the addition of new questions as the interview develops. The data were collected by the main researcher supported by two assistants, without a direct relation with the services, among October, 2016 and March, 2017.

Four focal groups (two residents, one in each course and two preceptors, also one in each course) were performed to data collection, with preceptors and resident students. Both activities with the focus groups and the interviews with the coordinators were recorded supported by simultaneous text annotations. The interviews were transcribed and analyzed, compared to the text of the simultaneous annotations and then organized for analysis through content analysis (Bardin, 2011, p. 50). This author suggests working on the speech meaning, taking into account the meanings (content), form and distribution of these contents (formal indexes and co-occurrence analysis). The main researcher developed the manual data coding, using word-based spreadsheets, double conferencing by an assistant researcher and evaluation of the researcher's supervisor, to ensure rigor to the process.

Considering the readings, reflections and analysis of the data, they were grouped in two units. Themes were produced by the convergences and/or divergences in the testimonies and based on the sense cores emerged from the data. Thus, the results were presented in two thematic units: *the resident physicians evaluation from the different points of view among the subjects* and *subjectivity in the evaluation of values, attitudes and behaviors*. In this paper we present just the results from unit two.

The research was approved by the Human Research Ethics Committee of Faculdades Pequeno Príncipe, and the research follows the ethical precepts of resolution 466/12-CNS. The process was registered under the number 56350616,9,0000,5580 and approved under the number 1,677,860.

3 Results

Subjectivity in the evaluation of values, attitudes and behaviors

Participants define the evaluation as subjective, regarding the acquisition of knowledge, values, attitudes, behaviors, interpersonal relationship and/with patients, attendance, and quality in medical actions: *Evaluation that is considered subjective, in a one-year period, four of them subjective and one theoretical (FGRA). There are objective and subjective evaluations, for me, it is a little "obscure" what is evaluated. I know it exists, but I don't know exactly how it is done. [...] They don't tell us what we need to improve or what we need to evolve. So, by the end, if we don't get an ear jerk, it's because everything is right (FGRB).*

Subjectivity is also presented in the preceptors 'speech, corroborating the residents' perception that the evaluation is not clear, with an instrument known by all of them, but by the relation established in the teaching-learning routine: *Evaluation coming from all preceptors, we evaluate punctuality, commitment, knowledge, resolution, posture ... But each one scores the way he/she thinks is the most appropriate, but we don't have an instrument (FGPA). There is no objective evaluation [...] The evaluation is in the day by day, it is in the discussion of cases [...] subjectively. [...] I think we don't evaluate the resident. There is no script, no script like in other services. I have been for four years and have never done an evaluation, nor a question of a test, nor do I know if they do test or monography. [...] I think the coordinator applies a test (FGPB).*

In contrast, one program's coordinator believes the evaluation is clear, well defined, and it is known by all of them, mentioning what is expected to be evaluated, the grade assigned and the proportion of the subjective score in relation to the objective one: *All the preceptors who were in contact with the residents give a subjective score. [...] We also make a mandatory annual theoretical assessment, a multiple-choice test [...] is added to the other four subjective ones (ICA).*

For the other program, it is evident that there is no defined criterion for subjective evaluation, as the participants also stated: *I have nothing formalized about this evaluation, it is a subjective evaluation, there is nothing written about the questions that are evaluated, it is not available to the residents themselves. But in this subjectivity, I evaluate the attendance of the residents, their presence and their arrival times, and beyond the day by day and their theoretical knowledge (ICB).*

In relation to the specific skills acquisition, the resident also thinks to be evaluated subjectively: *So, it is very subjective how I think I am evaluated. You end up having the confidence of the bosses to perform certain activities that you haven't had before, it is perceived that in a certain way we have autonomy, it is how we know we are progressing, from the technical point of view (FGRB).*

The evaluation of values and attitudes also emerges as subjective in the speech of the preceptors and coordinator of one program*: I think that the field of subjectivity emerges again. [...] Total Subjectivity (FGPB). There is nothing organized [...] the ethical concept is evaluated in a subjective way (ICB).*

Also, regarding the evaluation of behaviors and attitudes, subjectivity is present in the focal groups of all subjects, despite the residents not to be aware of evaluation process of these attributes: *We believe so, but we don't know how. [...] We are never told whether what we do is right or wrong. [...] We have had negative feedback from evaluation and behavior, but not from an individual level. [...] They were placed in the following way: "I am not visibly present for you, but I listen to things in the corridors, I have contacts, even the academic ones", that is, are the academics who evaluate us? [...] If for preceptory we are good at something, we don't know. [...] They tell us that we are bad for this or that. You're bad because you're bad. They tell us that we are irresponsible, without commitment, without interest. [...] My impression is the following, if you do your duty, and do the test well, comply*

with the monography, you will be approved, but you will not know what your evolution was during those two years (FGRA). They are evaluated informally, we don't have a checklist, but assiduity, punctuality, doctor-patient relationship is addressed [...] The respect part with preceptory, since we have a hierarchy to be followed [...] I think it is evaluated, but I don't know if there is a preceptory meeting to evaluate us about this issue of posture and commitment issue (FGRB).

Regarding the interrelationship between knowledge and technical ability versus behaviors and attitudes, the evaluation was again subjective, without clear criteria for residents, preceptors and coordinators: *I think even more than behavior, what counts is your relationship with the preceptors [...] but if you are not so close to your preceptor, you will get a worse grade. My behavior and my work will not make my grade, what will do that is my relationship with the preceptor, if there is empathy between the resident and the preceptor, the grade will be good (FGRA). I believe that if someone sins in one of these aspects, at the end a medium score could be given. By the contrary, if the resident is very good in practice but not at the relationship with the preceptor he/she ends up having a very large standard deviation than a more homogeneous person (FGRB). I think it's more feasible for you to have less knowledge and more posture (FGPA). Most importantly, it is not technical skill, but a moral skill, respect and care for patients (FGPB). This I evaluate well and take into consideration in the subjective score (ICB).*

In the testimonies, there is a dependence relationship on what the preceptor considers important in the teaching-learning process, the question of empathy, closeness, and relationship, which are important for a good teacher-student relationship. On the other hand, this behavior should not prevail as an imposition or power relation from one to another, in this case from the preceptor to the resident.

4 Discussion

Regarding the subjectivity of the evaluation as the acquisition of knowledge, values, attitudes, behaviors, interpersonal relationship and/with patients, assiduity, quality in medical actions, are evidenced in this study. Contrarily, Venturelli (2015, p. 45) focuses on the role of the mentor/supervisor/preceptor, the necessity to "lead the student to face a set of important concepts, ideas and techniques that provoke significant contradictions and concerns to unfold their creativity, flexibility, and metacognitive reflection."

Moreover, to make this happen, clear ways of evaluation are needed, such as: problem-based learning (PBL), clinical teaching simulation, evaluation tools, portfolios, a structured clinical practice assessment known as the OSCE (Objective Structured Clinical Examination), 360° that was born in the business world with the purpose of giving the employee the necessary feedback and stimulating to improve his/her performance, behavior or both, and give management the information needed to make decisions in the future (Venturelli, 2015, p. 43).

The absence of evaluation tools was corroborated in the focus groups with preceptors. Contrary to the studied reality, the adoption of clear and accurate assessment strategies should include the use of specific methods to obtain information, considering its attributes, such as: validity, reliability, feasibility, equivalence, acceptability, educational impact and effect catalytic activity, according to Troncon (2016).

In addition, there is a need for an evaluation program in which its definition must be made explicit and a transparent description of the philosophy, strategy, procedures and methods employed, as well as the way the data are analyzed and the decisions are taken. This information need to be accessible to all participants in the teaching-learning processes: students, professors, coordinators and administrative staff (Troncon, 2016).

Although the coordination of one of the programs believes that the evaluation is clear, well-defined and well-known to all, these beliefs were not found in the testimonies of preceptors and residents. In relation to the evaluation criteria access by the participants, Troncon (2016) mentions that it is usual in the medical students' evaluation, as the predominant model, the evaluation of learning, when it should be for learning. As revealed by our study, rather than increasing the frequency students receive feedback, their quality and effectiveness need to be improved, which is not happening in the evaluated programs, since only the coordination of one service perceives it as known for all participants in the process.

Regarding the skills acquisition supported by preceptors, both preceptors and residents reported the difficulty of evaluation, because the residents do not perceive what they are being evaluated and the preceptors mention to apply a daily evaluation, without specifying what it consists of. On the contrary, in the study of Sant'Ana & Pereira (2016), about the preceptor supervision, they found the preceptor was considered as fundamental to the teaching-learning process and being a preceptor means transmitting knowledge and being responsible for vocational training. They concluded that, from the perspective of medical doctors, the preceptory contributed to the training of future professionals. The poorly structured and poorly performed preceptory can cause a reduction in learning and, consequently, great harm to the practical, human and ethical training of future health professionals.

On the other hand, when preceptors affirm that they evaluate daily activities, Castells, Campos & Romano (2016) support this statement, saying that preceptorship is a set of skills to be learned, and that clinical professors learned these skills by trial and error. The study, based on the reality of day-to-day teaching, integrates and synthesizes valuable experiences for students and preceptors, sharing knowledge with others.

Residents suppose preceptors know about the students' capacity to perform skilled technical and scientific activities, as they do not receive feedback on their practices. About this situation, Sordi, Lopes, Domingues, & Cyrino (2015, p.732), introduce the evaluation theme by saying that "we live in evaluation-oriented times, which has often been confused with merely measuring the detached results of the processes that originated them, as well as the factors interfering over them".

Reflecting on the evaluative practice found in our research is necessary, since the results pointed out the most modern and responsible evaluation proposals are followed, with evaluation along the process and not only at the end. Thus, a reflection and discussion about the intentionality in the evaluating process may be required, as well as the purposes and the negotiations among individuals in order to promote learning (Sordi, Lopes, Domingues, & Cyrino, 2015).

Taking into account behaviors and attitudes, residents say they are evaluated by blinded eyes, that is, there is no evaluation of the preceptor, with a feedback on improvements, but the evaluation is made based on information provided by third parties, including the unit staff, other medical students and other professionals that do not integrate the preceptory. Contrarily, Pricinote & Pereira (2016) affirm the importance of giving feedback to the evaluated subject, which is defined as the response given to the evaluated and the expected performances, to reflect on the process and then transform the practice.

As the residents of this study say, the evaluation resembles as described in the study by Oliveira, Melo, Rouiller, Ferreira, Carneiro, & Püschel (2015), reflecting the evaluation in undergraduation courses has been made in a limited way, using summative strategies/procedures, applied at the end of a teaching period, referring to the maintenance of an old and persistent evaluation culture, which prioritizes the use of written tests.

Another aspect mentioned by residents considers the relationships. In this context, the domination of the assessor is revealed on the evaluated ones. In the health learning process, focusing on care, the ethics of care is expressed as a voice for reason, emotion and part of the human

condition, since we are relational and interdependent. Thus, the ethics of care is grounded in relationships, the importance of having a voice, under an inductive, therefore, psychological logic (Mayernyik, & Oliveira, 2016). Thus, contrary to what was found in this study, relating the superiority and dependence of the evaluated subjects to the assessor is not possible, and even less, to be at the mercy of the preceptor relationship to obtain a good evaluation.

The preceptors' statements indicate a tendency to consider ethical and relational skills more important than technical-scientific ones. In this regard, Mayernyik & Oliveira (2016) report there are conscious efforts in the medical area to develop empathic abilities, which are valuable for physicians and patients in an increasingly fragmented and technological world of modern medicine. However, attention is drawn to the necessary balance in this practice, since empathic and relational skills, as well as technical-scientific ones, should be intrinsic, without one aspect standing out from another.

5 Final Considerations

The reality about the evaluation in residency programs in medical clinics was worrisome. Discussions about evaluation changes are required, as in other countries, with the adoption of clear criteria for all parts involved.

Thus, the medical evaluation during the training process in the residency programs studied is performed only after a training period, the summative process, selecting the resident to the next stage, as determined by the regulations. Moreover, subjective assessment is not clear, mainly due to the lack of evaluation tools known and adopted by all subjects.

Carrying out more studies was perceived as necessary, in order to cover the national reality and to highlight if this is a recurring problem in this scenario, including other methodologies than qualitative, to outstand the concern and allow reflection, promoting training and evaluation changes for the residency programs.

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