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Innovation in medical education: matrix support in residency programs

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This study is focused on the application of the Paideia Matrix Support activities in in the Brazilian National Healthy System's medical residency programs. A mixed methods participatory research was conducted in a municipality outside the capital of the state of São Paulo, Brazil, using the following strategies: exploratory questionnaire, participant observation and focus groups applied to "matrix inducers" (preceptors and interns) and "matrix appliers" (health center local teams). The data was systemized via triangulation of its content and analyzed through Paideia's Method theoretical and methodological framework. The participants acknowledgedthe innovative nature of such practice, resulting in an improvement of pedagogical and healthcare praxis.

Keywords: Matrix support. Paideia methodology. Educational models. Intership and residency. Health system.

Matrix Support Praxis and Pedagogical Praxis

The Paideia methodology proposes to approach the political, managerial, clinical, pedagogical, and collective health dimensions. Its first applications in the SUS

(Brazil's National Healthcare System) occurred in the 1990s in the city of Campinas, state of São Paulo[1].

The Paideia conception is committed to expanding people's capacity for dealing with power, knowledge, and the circulation of affections, at the same time that they perform their daily tasks.

Matrix Support is one of the applications of this conception and it can be used in the co-management of the clinic as a way of operating the interprofessional relations among a group of specialists from a certain nucleus that supports specialists from another knowledge nucleus (reference team). In addition, this strategy has also been used as a pedagogical resource for health education[2-6]. Matrix Support has an assistance dimension and a technical-pedagogical one.

Many authors discuss the hegemony of the biomedical model in the education of health professionals, especially physicians, and the need of changes in conceptions of the health-disease process, aiming at the provision of comprehensive care. Several studies have approached the utilization of the Paideia Support as a pedagogical framework to structure educational processes that aim to contribute to the co-construction of the health professionals' autonomy to deal with daily work situations[7].

Matrix Support has been developed and employed as a way to operate in network or in complex systems, using the logic of co-management and support for interprofessional relations. Therefore, it replaces traditional relations, characterized by bureaucracy, hierarchy and power inequality[1,8-11].

Thus, it has a pedagogical dimension that broadens the understanding of the health-disease-intervention process[3,4]. Campos[10] argues that health work is the exercise of a praxis, as it happens by means of a relationship among subjects connected with an analysis of the singularity of the context. *Every praxis is an activity of transformation of given circumstances that leads us to form new ideas, which, in turn, help us to create new circumstances*[4:933].

Characterization of the Scenario

This study's scenario is a local healthcare system subordinated to the largest health district of the city, where 286,437 inhabitants live[12]. The study focuses on the relation between the hospital and primary care units of this territory.

The hospital is a municipal autarky that was founded in 1974. It has been gaining ground as the main access to urgencies and emergencies in the local healthcare system, and it is a reference hospital for diagnostic and therapeutic support services in the respective metropolitan region.

In 2004, the Ministries of Health and Education recognized it as a Teaching Hospital. It offers qualification and specialization in the Residency modality in fourteen programs in the areas of medicine, and the activities of research and teaching are considered priorities within its institutional mission.

Its main articulation in the care network is with the above-mentioned health district, which has sixteen *Unidades Básicas de Saúde* (UBS – Primary Care Units). This articulation is expressed in several ways, which range from the joint planning of care actions and workers' qualification, to the implementation of programs, flows and protocols. The performance of care provision pacts and the relations with the other services are mediated by this partnership.

Recognizing the inseparability among care production, workers' education, knowledge production and management, all the developed projects aim to incorporate care into the view of a networked healthcare system. This movement is based on initiatives and policies of the Ministries of Health and Education, which have been emphasizing that the education of human resources to the SUS must include, as a field of teaching practices, all the health services that compose it.

Matrix Support in the hospital's medical residency programs

In this context, in 2006, a process of diversification of the residents' fields of practice was started in the hospital, with the objectives of: broadening their understanding of the public health system, identifying the healthcare resources that

are available, recognizing the health needs of the population, and including residents as health professionals in the networked care.

The first arrangement derives from the recognition that the medical specialist should not be educated exclusively inside the hospital environment. Thus, the residency programs included a new module with activities at Primary Care Units. The following medical residency programs participated in this module: pediatrics, medical clinic and general surgery.

A second arrangement started in 2009, when a new educational strategy – Matrix Support – was adopted. It has enabled the inclusion of residency programs in orthopedics, urology, plastic surgery, vascular surgery and coloproctology.

The strategy was organized so that professionals from the Primary Care Units and the teams that provided matrix support training jointly evaluated referrals to the specialties, presented and discussed theoretical questions that had been previously agreed on, discussed clinical cases, and jointly assisted patients who had been previously selected by the teams.

This organization aims to reduce the distance among professionals from the perspective of multiprofessional and interdisciplinary work, expanding the integration among services and the qualification of assistance in the care network. The activities occur at the Primary Care Units of the above-mentioned district and at the hospital's outpatient specialty clinic.

The initial idea and its conception, planning and operationalization were constructed, monitored and evaluated in partnership with the district, and a managing group was constituted to accomplish it. This process was supported by the hospital's board of directors. As for the health district, the project was prioritized as a structuring and strategic agenda for the qualification of care, and the Primary Care Units organized themselves to incorporate this new model.

Methodological Path

The investigation of the Matrix Support that the hospital's medical residency programs perform in the health district was included in a multicenter research proposal with the same object of study. The proposal was approved by a Research Ethics Committee.

This study aimed to reflect on the specificity of the Matrix Support praxis and pedagogical praxis, which articulate preceptors of the medical residency programs, medical residents and teams from Primary Care Units. The intention was to understand the meanings of the events that composed the dynamics of this program, in order to understand, analyze and improve it.

The methodological procedures that were used, aligned with those of the original research, are in the field of participatory mixed methods studies[13]. For the production of the empirical material, the following strategies were used: quantitative exploratory study; historical-structural analysis of official documents; participant observation; and focus groups. The interpretation and analysis of the findings were carried out through data triangulation[14,15] in light of the Paideia Method[11].

Quantitative exploratory study

The fieldwork started with an exploratory study to identify the institutional context of the hospital and of the district, and to learn about the functioning of Matrix Support. An instrument with open questions was administered to the preceptors and residents of the programs involved, and the data were systematized in a synthesis table that used the elements that compose the aim of the study as conceptual elements.

Historical-structural analysis

The official documents for the historical-structural analysis of the Matrix Support activity of the residency programs were obtained from the official institutional websites of the hospital and district. These data helped in the selection of the sample

for the qualitative investigation and in the construction of the institutional context. It was during this construction that we noticed the scarce record of its history. The few documents that exist approach the initial configuration articulated with the hospital's medical residency programs, its fields of practices in primary care, and the decision to adopt the strategy of co-management with the health district in which it is territorially included.

Thus, we identified the need to expand the sources for the historical-structural analysis, and this resulted in the conduction of a focus group with key informants. This choice derived from the importance given to the interaction among the subjects of this process[14], as the creation of this program was dispersed among many actors and none of them would know the complete process[16].

Based on this material and aiming to continue and enhance this interactive process, we produced a narrative that emphasized the constructions and meanings that the subjects attributed to the study's object. Afterwards, this narrative was submitted to the same group of key informants in order to validate the data and produce intervention effects with the inclusion of details or alterations.

In this study, the narrative was adopted as a participatory resource for the construction of consensus and validation[17]. According to Onocko-Campos[18], the narrative constructed by the researcher is an interpretive resource that enables to attribute meanings to the produced material. It is a constructivist approach whose intention is not only to understand, but also to transform, propose alternatives and search for solutions[18,19].

Orofino and Oliveira[20] argue that narratives can be understood as a way that human beings have of telling their stories and gradually organize an understanding of their own existence and of the world that surrounds them. According to these authors, Paul Ricoeur[21] views the narrative as an invention of synthesis, in which objectives, causes, fortuitous events and possibilities are temporally unified in a total and complete action. Thus, Ricoeur attributes to the narrative the singular meanings of events.

In the qualitative stage of the study, the following strategies were employed: Focus Groups, Participant Observation and the open questions of the questionnaires.

Participant Observation

This strategy aimed to obtain data from the daily practices of the Matrix Support meetings in order to subsequently triangulate them with the discourses of the focus group participants and the open questions.

To carry out the Participant Observation, an intentional sample[22] was defined based on the six residency programs involved in Matrix Support. Four of them were chosen according to the criterion of diversity of practices: Urology, Vascular Surgery, Coloproctology and Plastic Surgery.

Three meetings of each program were observed at a Primary Care Unit during two months in the second semester of 2015. In addition, one meeting was held at the hospital's outpatient specialty clinic. To perform the observations, the researchers used the conceptual maps and categories chosen for the investigation and focused their attention on unforeseen events. The observations were registered on a field diary, which was the main material used for the analysis.

Aiming to access the perception and discourse of the subjects directly involved in the Matrix Support meetings regarding their practices, the strategy of Focus Groups was utilized.

Focus Group

A focus group was carried out with the district's institutional supporters, preceptors, residents and the team that received training. All the individuals who participated in the Matrix Support meetings that were observed were invited. The material was audio-recorded and transcribed, and it was subsequently systematized and analyzed according to content nuclei.

Results and Analysis

With the purpose of systematizing the collected data and constructing their analysis, a synthesis table was developed, containing the findings obtained with the research strategies: Participant Observation, Focus Group and Open Questions of the Questionnaire.

The material obtained through this systematization was processed according to the following analytical categories: support praxis; pedagogical praxis; relations among the subjects involved in the process; relations with users; evaluation of the process; results of support; institutional limits; and inter-sectoral role.

What we will present here results from the triangulation of this content, using the Paideia theoretical and methodological conception[11]. The fulcrum of this analysis, in consonance with the study's proposal, uses the concept of co-management, which advocates the reform of health organizations based on the deliberate establishment of dialogic relations characterized by the sharing of knowledge, power and affections.

Recognizing that some of the categories were subsumed, we decided to integrate them into two items, identifying the complementariness between them: Matrix Support praxis and pedagogical praxis.

About the Matrix Support Praxis

The Matrix Support activity is considered a priority by the hospital and the health district. They recognize, in this activity, an opportunity to qualify the professionals' education through the Medical Residency Programs that are involved. At the same time, Matrix Support qualifies the care that is provided and strengthens the connection in the city's healthcare network, especially with the district's primary care units.

The Matrix Support that is currently developed involves the professionals who work at the Primary Care Units, the preceptors and residents of the medical specialties in periodical and regular meetings, which are usually held once every fifteen days. The

meetings last approximately two hours and take place during three months every semester.

The meetings' agendas are established by medical specialty, that is, the meetings approach elements and aspects related to one single specialty at a time, involving the team of residents and preceptors of the corresponding medical residency program.

As for the Primary Care Units, the Matrix Support activity can involve the team of one single unit or teams of other units. Concerning the professionals of each unit, participation is defined mainly by their respective coordinators, and this set of professionals is considered a reference team.

> Within this logic, the reference team is composed of distinct specialists and professionals responsible for intervening in the same object – a health problem –, who aim to achieve common goals and who must perform a set of tasks, even though they have diverse intervention modes[23]. (p. 400)

In this category of analysis, the focus will be on organizational arrangements and on the relations that are established among teams, and we will investigate the possibilities of performing an extended clinic, a dialogic integration among distinct specialties and professions, and the articulation of healthcare networks.

One of the configuration axes of the Paideia Method[11] is the democratic and participant management, which is fulfilled by means of the construction of a Co-Management system: "The existence of these spaces is a sign of democracy. Democracy is, therefore, a possibility of exercising Power: having access to information, participating in discussions and in decision-making. Democracy is, at the same time, a construction and an institution"[11] (p. 41).

In the findings, there are different perceptions regarding the planning and decision-making concerning meetings and the exercise of support. The activity is planned by the hospital's *Núcleo de Ensino e Pesquisa* (NEP – Teaching and Research Nucleus) and by the District's Coordination, with the participation of the coordinators of the Primary Care Units. This practice has been advancing towards the co-

management of the process, as it guarantees a space for the collective construction of analysis and deliberation regarding the activity. However, it does not include the teams that receive Matrix Support training.

As for the venue of the meetings, they can happen both at the Primary Care Units and at the hospital's outpatient clinic. In this dynamics, it was possible to identify innovations in the process, as it has enabled the emergence of modes of support that had not been foreseen, like the patient's and the Unit team's visit to the hospital's outpatient clinic.

We found that one of the first actions of Matrix Support is the evaluation performed by the teams (the team that provides the Matrix Support training and the team or teams that receive training) of the pent-up demand for medical referrals from the Primary Care Units to the outpatient specialty clinic (patients still waiting for appointment scheduling).

Thus, the analysis of the pent-up demand can be interpreted as a device with two main intentions: one is to serve as a criterion for the choice of the specialty that will be the focus of Matrix Support, and the elected is the one with the highest pent-up demand. The other intention would be to increase the solving rate of Matrix Support, which would enhance the qualification of the care that is provided at the Primary Care Units and might reduce the pent-up demand.

In the focus group, the participants reveal that they ignore the logic used for the choice of the Primary Care Units, the specialty and the professionals that will participate in the Matrix Support activity. Due to this, the team that receives training has two questionings: whether the criterion used for the professionals' participation is adequate (pent-up demand for specialists), and whether Matrix Support has been meeting the real qualification needs of the professionals from the reference teams, aiming to qualify the care that is provided.

Another question that emerged in the focus group regards the intentionality of Matrix Support. Although the participants recognize the importance and validity of this process, they wonder if it intends to supply the specialists that are needed to meet the demand generated by the Primary Care Units.

> "Well... I think these meetings are very good, obviously. Having a specialist with whom we can learn is great. I have only one criticism about something that bothers me: these Matrix Support activities... there's a very high pent-up demand, so...I have the feeling that the thing was done because the service isn't good. [...] I get the feeling that it's a public policy that was made to roughly meet unexpected demands and deficiencies of the healthcare system [...] If there weren't this pent-up demand to refer patients to the specialties, perhaps it wouldn't exist..." (Focus Group)

In the answers to the open questions, the subjects mention the need of a previous agreement with the teams, which strengthens their participation in the deliberation process. In the Participant Observation, the researchers noticed that the previous agreement, the one established between the hospital and the district, is implicit and accepted by the participants.

Based on the assumption that, in every health work, there is an encounter among subjects with important differences concerning desires, interests, knowledge and coefficient of power, Campos[11] argues that a participatory management system depends on an extended construction and on the potency for establishing consensuses and implementing projects by the whole set of people of a collective, by all the members of a work team, and not only by their leaders.

According to the Circle Method, strengthening the subject and democratizing the institutions are the two main paths to reformulate and overcome the hegemonic managerial rationality[11]. Thus, it is necessary to reform the organizations' structures and mode of functioning. It is imperative to reconstruct people's way of thinking and acting, but norms and structures must also be reformed[11].

In the Participant Observation, we found that the Primary Care Units organize themselves for Matrix Support and that the teams have previous knowledge about the activity. Usually, the preceptor coordinates the meeting and is replaced by the Unit's coordinator or by the district's institutional supporter when they are present. We also found that, when Matrix Support is taking place, the meeting occurs in a friendly

atmosphere; the participants are willing to help and to cooperate with one another. The professionals reach a consensus in relation to the activities in a democratic way, configuring a participatory space in which doubts are solved and awareness is raised towards significant themes. We noticed that a chain of actions occurs after the meetings. This perception was manifested in the focus group of key informants, as described in the context.

The dynamics is characterized by the exchange of knowledge and experiences among participants, mainly among medical specialists (specialist-generalist, generalist-generalist). The participants recognize and respect their role in the system. The discussions follow the logic of the traditional clinic, which is based on the discussion of cases.

This corroborates Campos' and Domiti's[23] ideas, when they state that Matrix Support aims to construct and activate a space for the communication and sharing of knowledge among reference professionals and supporters, building paths towards an integrated system that is able to meet the demand.

The predominance of the traditional clinic can be explained by the process in which the cases to be discussed are chosen. Its origin derives from the pent-up demand of medical referrals from the Primary Care Units to the specialties.

The formation of the teams that receive Matrix Support training also contribute to this scenario, as the participant professionals are not necessarily related to the patients whose cases were chosen for the meeting. Thus, the chosen cases are decontextualized from the process of care and focus on the problem that was not solved at the Primary Care Unit.

Another observation is that there is some asymmetry in the relation, as the specialist's knowledge prevails. This centrality of the Clinic is expressed by the manifestations of professionals who frequently employ clinical reasoning. The patient is, indeed, present, but there is no focus on the construction of the autonomy of the person who receives care.

Regarding these aspects, one hypothesis is the presence of the biomedical model that prevails in medicine and in health in general, characterized by an

increasing division of work, which hinders the integration of the process of providing healthcare for people. The majority of the health specialties and professions deal with a restricted framework about the health-disease process. Those affiliated to the biomedical rationality predominate – a rationality that is centered on the biological and curative dimensions. This makes them think and act according to this perspective, viewing the patient as the object of knowledge and practice[9,23].

Although, as successive meetings take place, the presence of non-medical professionals from the Primary Care Units gradually decreases – a fact that was observed in the Participant Observation –, the importance of the participation of the entire team in Matrix Support is recognized, justified by the understanding that the entire team is responsible for meeting users' needs. This favors the qualification of the care that is provided, knowledge exchange and co-accountability. In the Focus Group, the professionals who receive Matrix Support training mention that they are motivated and recognize the value of using this activity.

Concerning the evaluation of the meetings, this is not a frequent practice, although, at the end of the activity, the content and format of the subsequent meeting are decided by the participants. In the Participant Observation, it was mentioned that, when the evaluation was performed, there was no standards, and it depended on the actor who motivated it. In the Focus Group, the general evaluation was that the Matrix Support process is really productive and interesting, even though they mentioned that there is a distance between what the trainers offer and what the trained teams need. Thus, they suggest systematic evaluations at the end of each meeting and periodically, in general. This position is consonant with the Group of key informants, when they say that evaluation has gradually lost ground and importance in the process of planning the activity.

About the Pedagogical Praxis

In this study, we investigated the utilization of Matrix Support as a pedagogical strategy of medical residency programs of a large, public, general hospital for the education of specialists.

According to the Group of key informants, the proposal aimed to enable the resident to have contact with the public health services of a specific health territory in order to foster a broad understanding of the SUS and of the complementariness of the work of different specialists, both from the hospital area and from Primary Care. Matrix Support, in this program, would enable the resident to recognize the value and importance of work shared among teams with different kinds of knowledge and levels of care, and to experience a type of healthcare that uses a broad conception of the health-disease process.

Castro[24] highlights one of the findings of an integrative review about Matrix Support: in addition to the provision of shared care, this strategy functions as a form of education, as professionals with distinct educational backgrounds expand the communication among them when they conduct cases in a shared way.

In this study, the residents appear in different ways. In the Participant Observation, they played many roles. Generally speaking, the leading role is played by the preceptor, who conducts the meeting and offers them opportunities to speak. We did not observe, in the residents, the posture of the individual who learns, who explores new possibilities of professional relationship and construction of care. When the residents speak, they do so from the place of the specialist, similarly to the preceptor's behavior. We observed that they focus more on the technical aspects of assistance, like protocols and flows, and less on aspects of the healthcare system, in their education process.

However, when the residents expressed themselves through the open questions of the questionnaire, they registered that Matrix Support is valuable for their education. They highlight that there is a joint learning of the professionals involved and that they develop capacities as they present the themes. Furthermore, they mention that the exchange of experiences with the professionals of the Primary Care Units enabled them to better understand the role of Primary Care in the care network

of the SUS, as well as the articulation of the local-regional care network, as it clearly defines the roles of these levels of care and of the specialists, both of Primary Care and of Hospital Care, together with the criteria that support them.

In addition, the residents mentioned, in the open questions, the lack of qualification of the Matrix Support trainers to play their role adequately in the didactic orientation of the residents and of the trained team.

The residents' participation, as well as the preceptors', is cordial, and they listen carefully to the issues raised by the professionals of the trained team. The process is an exchange of knowledge, but it occurs in a remarkably asymmetric way, as the hospital specialist's technical knowledge prevails. It is a relationship developed with the consent of the trained team. And, according to our perception, it is on this technical knowledge that the preceptors greatly rely to constitute their identity in this activity.

Many devices are used in the Matrix Support meetings. All the well-known, traditional devices were observed, such as the discussion of clinical cases, joint assistance, discussion of protocols, of the line of referred patients and of patients who are waiting to schedule an appointment in the specialty (pent-up demand of the Primary Care Units), as well as theoretical contributions about the most relevant diseases for Primary Care.

According to Campos and Domitti[23]:

> Matrix support always implies the construction of an integrated therapeutic project; however, the articulation between the reference team and the supporters can be developed in three fundamental levels:
> a) assistances and interventions performed jointly by the matrix specialist and some professionals of the reference team;
> b) in situations that demand specific attention to the supporter's knowledge nucleus, he/she can program to him/herself a series of assistances or specialized interventions, remaining in contact with the reference team, which would not abandon the case. On the contrary, it would try to redefine a pattern of follow-up that would be complementary to and compatible with

> the care offered by the supporter directly to the patient, or to the family, or to the community;
>
> c) in addition, it is possible that the support is restricted to a exchange of knowledge and instructions between the team and the supporter; dialogs about changes in the evaluation of the case and even reorientation of conducts that used to be adopted; however, the case would remain under the responsibility of the reference team[23]. (p. 401)

One innovation was the utilization of the strategy of simulation through the discussion of fictitious patients. In the presence of the user, assistance was provided jointly. Another innovation was the fact that some meetings were held at the hospital's outpatient specialty clinic, and the team did not assist only patients from this level of care, but also patients coming from Primary Care, selected by the Units' teams.

A total of 9 (nine) users were present in 7 (seven) of the meetings. The importance of Matrix Support to qualify the care that is provided for the user is valued, as the referrals improved, the access to the specialties became easier, and comprehensive care was provided. Thus, the user is recognized as the center of the assistance, but he/she does not have an effective participation in the construction of his/her therapeutic project.

Another dimension that was identified was the recognition, by the Primary Care teams, that this program effectively offers new knowledge and, with this, a real qualification of assistance has occurred. The protocols and clinical guidelines that were presented included the main criteria to diagnose the discussed diseases, the adequate subsidiary tests to be requested, and the criteria to refer the patient to the specialist. There was no modification to the clinical guidelines that were presented; rather, there were explanations about the role of the primary care and hospital teams.

In some of the assistances, neither the users' voice as co-authors of their care nor the historical-cultural dimensions of their life exist. Their desires and choices are not considered. Neither the Matrix Support trainers nor the supported teams included these aspects. Care is discussed and planned by the professionals according to the logic of the best evidences dictated by specialized medical knowledge.

Final Remarks

Considering that the central objective of this study is to analyze the incorporation of co-management strategies – Matrix Support – and their repercussions on the management and healthcare practices in the SUS, the field was the Matrix Support of the Medical Residency Programs developed in the public health system.

Based on the analysis of the collected data, we highlight some aspects that we consider relevant because they produce reflections on the process and because of their potential for triggering changes in the Matrix Support that is jointly developed by the hospital and the health district where it is located.

Concerning the issue of Co-management, it is important to mention that the advance we observed is the inclusion of the district's institutional supporters and units' coordinators in the planning of the activity; however, the limit is the non-inclusion of the trained teams in this process. The reflex of this movement is the teams' manifestation that they desire to have greater participation.

Therefore, it is a process under construction. The advance is recognized, but there is also the challenge of including the teams in the spaces of analysis and deliberation. It has become clear that the subjects' reality and their practices should also be included.

Regarding the current modelling of the meetings, which is based on the pent-up demand for medical specialties and composes groups with representatives of different health units, the conclusion is that this design favors the exercise of a traditional clinic, as it remains centered on medical work and clinical reasoning. There is a focus on the user's pathological process of getting ill. The generalist, in the space of Matrix Support, frequently maintains the logic of the biomedical model. In some situations, this horizon is enlarged and incorporates elements from the extended clinic, meeting the expectation of the contribution of Matrix Support in this sense.

We observed that there is the recognition that this strategy has qualified assistance; however, it is a learning process that is centered on the role of the hospital

specialist, and a Traditional Clinic that views disease as the central object of care, along with its biological determinants, in predominantly prescriptive approaches. What attracted our attention was that the subjective and socio-cultural dimensions of living and getting ill are not included.

A valuable element was the identification of the production of innovations, such as the utilization of two new tools/devices in the operationalization of Matrix Support: the use of simulation, through the construction of fictitious cases with pathologies that are frequent in the specialty; and the patient's visit to the outpatient specialty clinic, so that the trained team could participate in the assistance.

Furthermore, this study triggered reflections on the Matrix Support practice and promoted the proposal of changes and recommendations in the organization of this activity.

The central recommendation is the return of the systematic evaluation of the process, including the training and trained teams, to provide feedback for the collective construction of Matrix Support and of networked care.

Another relevant issue is the possibility of revising the resident's inclusion in the process as a whole, so that Matrix Support is used to potentialize reflection on pedagogical practice, functioning as a device that qualifies education.

Beyond knowledge production, this study was determinant in the proposal of immediate adjustments in the organization and planning of the subsequent Matrix Support activities, taking into account the recommendations listed above.

Generally speaking, the different actors attributed positive meanings to Matrix Support at different moments, ranging from the improvement in relationships and the movement of integration between teams and services, to the effective qualification of care and education.

Collaborators

All the authors participated actively in the discussion of the results, in the revision and in the approval of the final version of the article.

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