Technical-pedagogical dimension in the performance of Amplified Family Health Nucleus and Primary Care

Dimensão técnico-pedagógica na atuação dos Núcleos Ampliados de Saúde da Família e da Atenção Básica

Lielma Carla Chagas da Silva¹, Maria Socorro de Araújo Dias¹, José Reginaldo Feijão Parente¹, Maristela Inês Osawa Vasconcelos¹, Maria da Conceição Coelho Brito², Franklin Delano Soares Forte³

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ABSTRACT This study aim to analyze the performance of the Amplified Family Health Nucleus and Primary Care (Nasf-AB) from the perspective of the technical-pedagogical dimension, based on the contextual levels defined by Hind, Chaves and Cypress (1992). Conducted from 2016 to 2017, this is a multiple case study, carried out in three municipalities belonging to the health macro-region of Sobral, Ceará, Brazil. Information sources were documentary data (activity planning reports and photographic records), observation of the Nasf work process, following a structured script, and six focus groups with the Family Health (eSF) and Nasf teams. There was the need to reorganize the work management of teams, in order to overcome challenges such as communication and recognition of their roles, in order to improve the operationalization of actions, with the aim of strengthening integration and making progress in the construction of resolutive and quality policies and services.


RESUMO Este estudo tem como objetivo analisar a atuação dos Núcleos Ampliados de Saúde da Família e da Atenção Básica (Nasf-AB) na perspectiva da dimensão técnico-pedagógica, a partir dos níveis contextuais definidos por Hinds, Chaves e Cypress. Desenvolvido de 2016 a 2017, trata-se de estudo de casos múltiplos, realizado em três municípios pertencentes à macrorregião de saúde de Sobral, Ceará, Brasil. Teve como fontes de informação dados documentais (relatórios de planejamento de atividades e registros fotográficos), observação do processo de trabalho do Nasf, seguindo roteiro estruturado, e seis grupos focais com as equipes de Saúde da Família (eSF) e Nasf. Foi necessário reorganizar o fluxo de trabalho dos times, para superar desafios como comunicação e reconhecimento de suas funções, visando melhorar a operacionalização das ações, com o objetivo de fortalecer a integração e avançar na construção de políticas e serviços resolutivos e de qualidade.

Introduction

The health reform contributed to reflection and criticism with the aim of overcoming the biomedical model of individual care, decontextualized from the way of living. The movement aimed to reorient the health care model in Brazil, in order to value individuals in their territories and communities, which implied an understanding of the health-disease-care process based on social determinants.

Almost three decades after the implementation of the Family Health Strategy (ESF), it is possible to identify advances in the organization of services and improvements in health indicators. However, expanding access and improving the quality and responsiveness of health actions are recognized as the main challenges.

In order to overcome the limitations of this model, some strategies were implemented, such as the Family Health Support Nucleus (NASF), established in 2008, through Ordinance GM No. 154, by the Ministry of Health. The NASF acts in functions of articulation and support to the Family Health teams (eSF) in actions in the territory and in expanding the resolution of health care, considering the reference base of matrix support as a methodological proposal for their work process, aiming at the completeness and resolution of actions.

Consisting of a multidisciplinary team, the NASF is a national policy that must work together with eSF professionals, supporting health practices. In its first two years, it already had almost 1,000 teams, rising to 4,462 in 2016. This meant expanding the supply of services in primary health care, aiming at the comprehensiveness and resolution of care in the territories and in the community, based on NASF’s support for eSF and shared practices.

In 2017, nine years after its establishment, the review of the National Health Care Policy (PNAB) brought, in its text, a redenomination of the NASF and a reinforcement of its role. Therefore, in its name, the ‘support’ function was excluded, and was now called Amplified Family Health Nucleus and Primary Care (NASF-AB), with the aim of supporting, from the point of view of health care, and of offering technical-pedagogical support to eSF.

The NASF, as a public policy, proposes to rethink, transform and support the change in health practice in the ESF, presenting, in its theoretical framework, guidelines and technological tools, such as matrix support, which refers to the technical-pedagogical dimension, which orders the construction and operationalization of its work process.

However, with PNAB 2017 and the defunding that began with Previne Brasil, there is no longer any obligation to maintain NASF teams for the transfer of federal resources, and the situation of these expanded centers remains uncertain.

Concomitantly with the implementation of the NASF, in 2008, the state of Ceará, specifically the municipality of Sobral, began its journey, being one of the first municipalities in the country to implement them. It started with six NASF teams, composed to support eight eSF distributed across the headquarters and district municipalities.

Having said that, it was noticed that there were gaps in knowledge about the NASF’s work process in view of the analysis of its praxis, guided by the concepts that underlie it, given the lack of Brazilian studies that take as their object the actions of the NASF in its technical-pedagogical dimension.

As a reference for the analysis of this study, the Contextual Analysis Technique proposed by Hinds, Chaves and Cypress was adopted, which seeks to understand the phenomenon based on contextual levels defined in four interactive layers, distinct from each other: the immediate context, the specific context, the general context and the metacontext. It is clarified that these layers differ from each other in the way they share meaning, ranging from the individual to the universal, enabling the analysis of conceptual aspects through the interpretation of results.
In this way, the study focuses on the technical-pedagogical dimension in the daily production of health policies, seeking to understand the conflicts, distances and approximations that coexist in this process. The study was guided by the following question: ‘How do eSF and eNASF understand the technical-pedagogical dimension of the NASF work process?’ Thus, the objective of this study was to analyze the performance of the NASF from the perspective of its technical-pedagogical dimension, based on the contextual levels defined by Hinds, Chaves and Cypress14.

**Methodology**

Multiple case studies make it possible to cover an indeterminate number of cases and, from them, present a unique set of conclusions from their intersections15. The research was carried out from 2016 to 2017, therefore, we chose to use the NASF terminology in this article. The state of Ceará was chosen, which had its regionalization process taking place in the 1990s. The macro-region of Sobral was selected, due to the fact that the city of Sobral is considered a regional hub for the other municipalities, also due to its highlight in the historical context of public policies in Brazil.

Therefore, the municipality of Sobral was chosen as case 1, due to its historical representativeness and because it is the macro-regional headquarters, which influenced the choice of the municipalities of Crateús (case 2) and Tianguá (case 3), which are the headquarters of regions of health and have NASF coverage of up to 70%.

Three types of evidence were chosen: documentary sources, observation of reality (work process/activities of NASF professionals) and holding a focus group. Based on dialogue with the NASF coordinators in each municipality, visits were scheduled for observation and the holding of Focus Groups (FG) with professionals from eNASF and eSF. During observation, documents were identified and accessed, such as activity reports, meeting reports and action schedules. The use of documents aimed to expand the evidence and, thus, provide specific details of the cases studied.

It took three days of observations in each municipality/case, which were guided by a guided script, composed of 16 questions that aimed to recognize elements of the NASF-AB operational guidelines: territorialization and health responsibility; production of autonomy; comprehensive care and teamwork. It is noteworthy that the script was adapted from the external evaluation instrument for the NASF-AB of the National Program for Improving Access and Quality of Primary Care (PMAQ) – 2nd Cycle, year 201516. The PMAQ was proposed with the intention of strengthening AB, aiming to expand access and improve quality, with support from the three spheres of government and users17. After the observations, the FGs were carried out, considering that they allow understanding processes of construction of reality by certain small and homogeneous social groups18.

Six FGs were carried out, two per municipality, one of them with eNASF and the other with an eSF that had that eNASF as a support reference, in order to guarantee and preserve all the information obtained by the technique. A total of 19 NASF professionals participated, including psychologists, nutritionists, social workers, physical educators, occupational therapists, physiotherapists and speech therapists; and 16 eSF professionals, including doctors, nurses, nursing technicians and community health agents. The FGs took place in a silent environment, which allowed recording, on a day and place chosen by the participants; They were audio recorded, mediated by a script and had an average duration of 62 minutes.

It is noteworthy that, for the presentation of the statements, the codes were adopted: FGeSF or FGNASF, followed by the case number. Furthermore, the transcriptions were
read by three researchers with experience in qualitative research in PHC, who discussed until they reached the categories according to the adopted framework. The researcher made records in the field diary, observations and FG, which contributed to the reflexivity of this process.

Furthermore, the research was approved by the Ethics and Research Committee of the Universidade Estadual Vale do Acardáu, with opinion nº 1,633,555/2016, according to Resolution nº 466/2012, of the National Health Council.

**Results and discussion**

Following the perspective of Hinds, Chaves and Cypress, the design of the contextual layers, as identified, is presented. The sub-themes identified, forming the contextual layers, allow an understanding of the phenomenon of the NASF’s collaborative work process as technical-pedagogical support for the eSF.

**Immediate Context: visibility of NASF as pedagogical support for the Family Health team**

In order to promote technical-pedagogical support, activities were identified such as: carrying out a Singular Therapeutic Project (PTS); planning meetings for the creation and monitoring of groups; physical activities and body practices, with the aim of promoting health and improving the quality of life of users; shared care (when two professionals collaborate and talk to each other) during home visits, as well as discussion of themes identified based on needs previously recognized by the eSF; and individual clinical care, scheduled more frequently only in the municipality of case 2.

These aspects denote how and when the pedagogical support implied by the NASF work process occurs for and with the eSF, and can contribute to the completeness and resolution of actions, improving the quality of assistance provided to users.

The NASF respond according to their guidelines, transposing what was noticeable during their implementation process, as they demonstrate a work process that aims to overcome the fragmentation of care production, contributing to the construction of a network of attention and care, in a co-responsible way, with the eSF. This NASF movement is supported by the pedagogical tool of matrix support as a concrete and everyday instrument that presupposes this degree of transformation necessary to the way in which actions and services in the ESF are organized and operated. Furthermore, it is also necessary to realign the understanding of what NASF does, in order to overcome the remnants of this historic fragmented vision of health, based on care in thematic and multidisciplinary areas.

The process of arrival of the eNASF, in case 1, was marked by the intense demand for specialized individual care and the difficulty of establishing matrix support actions. In this way, the opposite of the logic of shared construction was perceived, on which the NASF Matrix Support is dependent for the implementation of this relationship between eSF and eNASF. The eSF did not fully understand the importance and dynamics of the NASF work process, and, on the other hand, the repressed demand for the work of the NASF’s professional groups.

It was noticed in the statements that the eSF reported misunderstandings in the support provided by the eNASF, that is, of what is their responsibility within the technical-pedagogical dimension.

[..] the NASF work process is good, in some categories [professionals who make up the NASF team]. Not everyone shows greater interest in consultations, but I refer them [users] to some consultations [...], and the population likes it and asks to be referred, mainly, to the nutritionist [...]. (FGeSF 1).
What I know is what is in the ordinance, that they have to support us. What happens here is that they function like a rehabilitation clinic. They care for you right there (FGeSF 2).

As the team is multidisciplinary (NASF, right?), and we work in our community with various problems, so much so that we see them every hour. There is the psychological issue, the social worker issue, everyone will provide services to several families. So, we have the NASF as a reference point, we refer to them [...]. (FGeSF 3).

The challenges experienced regarding the implementation of policies and good practices in health, especially in Primary Health Care, find, at their root, an interference or misunderstanding about collaborative behavior. Campos and Domitti\textsuperscript{19} described matrix support in all its dimensions and its application in the ESF work process, from a perspective of co-responsibility between teams, which entails transformation in the way work is organized. This indicates the existence of difficulties and obstacles for the reorganization of health work, based on matrix support guidelines, given the dependence on a series of operational instruments necessary for managing the interprofessional work process in PHC\textsuperscript{4,21}.

From the point of view of planning and co-management, it is essential to take an investigatory look at the teams’ work processes, focusing on interactional and everyday issues that can raise new elements for interventions in this area and from the perspective of continuing education, centered on collaboration and care for subjects and their families, community and territory\textsuperscript{22,23}. This movement requires openness, availability and desire for collaboration, that is, the establishment of some degree of co-management or institutional democracy\textsuperscript{24,25}.

Regarding the understanding of the role of eNASF by eSF, there is an understanding more focused on the perspective of the clinical-care dimension. Thus, in this challenge, considering the two dimensions of the NASF work process, it has sought, little by little, to provoke reflections and enter the pedagogical dimension. Furthermore, the teams also point out the need for knowledge of their actions by the eSF.

[...] so, in relation to the team [eSF], when we arrive at the unit, it feels very orphaned by other specialties. So, they see a nutritionist there, they see the physiotherapist, of course they will want us to spend a lot of time in the clinical-assistance part, so they will refer us to a nutritionist, they will refer us. So, our work is like this all the time. Even sometimes we stay in clinical-assistance, but we always try to return to technical-pedagogical; we call, ‘let’s review, look what we did, let’s think together, what we could be doing’ [...]. (FGeNASF 1).

Our insertion is a minimal insertion. I think we don’t have as much access, and they, the Family Health Strategy professionals, also don’t have as much interest in exploring us as professionals to support their activities, pedagogical guidance, support, even when there is some if we can discuss and help ourselves. I think the interest is minimal, based on what I see here. The biggest interest is to refer them to us. (GFeNASF 2).

The NASF should not be seen as a rearguard made up of professionals to which the eSF can refer the user for just one service. More than that, they work to promote the autonomy of this team, in the understanding of interdependence\textsuperscript{4,20}, in which, based on an identified need, the team can dialogue to build collaborative practices aimed at co-management of processes and care centered on users and their families\textsuperscript{25–27}.

Thus, based on the demands and needs identified at each moment, NASF can act both to support teams in analyzing problems and collaborating on intervention proposals and directly in carrying out clinical or collective actions with users, when necessary, in an integrated and co-responsible way. Furthermore, the NASF can (and sometimes needs to) help organize the work process of the supported teams\textsuperscript{26–28}.
This first approach to the contextual layer brings, in the evolution of the actions described, what is implied in the immediacy of how and when the technical-pedagogical support of NASF’s work takes place, highlighting actions of the immediate act of technical-pedagogical support, carried out by eNASF in support of eSF, in which an invisibility of this pedagogical support is perceived.

Hinds, Chaves and Cypress\textsuperscript{14} consider immediacy to be the main characteristic of the first layer of context (Immediate Context), in which those actions relevant to the study of understanding the phenomenon are involved. They are focused on the present, identified through observation of the immediate act of what is observed, also allowing the researcher to easily predict how the phenomenon in question behaves.

**Specific Context – Territory: challenges and potential for operationalizing the NASF work process**

The search for comprehensiveness in health services must be a process under construction, with the eSF being a fertile field for promoting comprehensive care. In addition to integrality, other principles and guidelines guide the actions developed by the NASF, with repercussions on the work process of the eSF, among which is the territory\textsuperscript{8}. The territory is defined geographically, with its social, economic, cultural characteristics and its bureaucratic dimensions for services in general and health services; it is a scenario for the production of life and its (im)possibilities and the (re)construction of worlds\textsuperscript{28}.

It is clear in this layer that the territory is translated, most of the time, into the physical structural dimensions of the health units, without advancing much in what it proposes as a guideline for its work process, in an understanding of territory beyond the walls of the units.

The spaces available to eNASF professionals in case 1, in particular, have rooms shared with the eSF, when there is a need for individual assistance, which provides a system of rapprochement between eNASF and eSF for collaboration. However, for professionals, this represents a challenge, as it constitutes a complicating factor for some actions that could be more effective.

\textit{[...] one difficulty we have is actually having a space to develop more resolute behaviors, without having to exhaust the user with so much coming and going, changing rooms. (FGeNASF 1).}

\textit{[...] sometimes, when I look for them [NASF professionals], they are not in the unit. (FGeSF 1).}

The eNASF in cases 2 and 3 have an environment separate from the eSF facilities, which makes movement difficult when carrying out collaborative activities, for example, home visits. Furthermore, there is a feeling of belonging, which has a direct influence on collaborative actions, the planning and construction of health education strategies and the pedagogical support itself.

\textit{As our things are far from the CSFs that we support, it makes it a little difficult [...], but we go. Sometimes, there is no transport, so we have to change the day, schedule it for another day [...]. (FGeNASF 2).}

\textit{We provide care, we care at the rehabilitation center [...] it is far from the units [CSF] that we use as a reference for support. (FGeNASF 3).}

Another challenge involved in the context of the NASF work process is related to the understanding of what it does by the eSF and also by the users.

\textit{[...] our process as a multidisciplinary team, within the context of family health, which really is a difficulty that they do not understand. Who are those people who don’t have a defined room? Who are...}
those there who are not there for 40 hours at that health center? Who are those people who hang out in a group ‘all together’, working together in this context? (FGeNASF 1).

For a clear definition of health responsibility to occur and the possibilities for building bonds to be expanded, it is essential to use the methodology for assigning clientele to the reference team, which will maintain a longitudinal relationship with this group of users – from the understanding of the perspective of Health Surveillance, territorialization and permanent collective construction in this territory. To this end, it is essential that the insertion of professionals into the service takes place, primarily, in a horizontal, dialogic and participatory manner between the eSF and NASF teams and between teams and the community20.

The regulations relating to the organization of PHC constantly refer to the delimitation of clientele, territorial space and area of coverage, terms that refer to the demarcation of the territory of operation. This understanding takes the perspective of a living territory, with two approaches that refer both to the interaction of the population, aiming at care centered on the user and their families, their social and economic relationships, which interfere in their health-disease process, such as, also, the need to create the conditions to promote control, regulation, monitoring and organization of the territory (community), in order to intervene in the problems and health needs presented by the population29.

This reinforces the idea that work focused on the territory goes beyond the conception of space as a geographic and political-operative extension of the health system. Some of the premises for health professionals, who are part of the ESF, are knowledge of the territory and the appreciation of local practices, connecting their performance to the dynamics of community life, the identification of the health and illness process related to environmental factors, social, economic, cultural, political, among others, valuing the history of the community in an expanded conception of health28.

**General Context – NASF’s collaborative work process**

Health work permanently requires doing/redoing your practice. The complexity involved requires a multidisciplinary team working in the same field and directed towards the same objectives, based on a collaborative practice25.

In the field of science, the work category has been the subject of studies for several years. Theories defend and prove that work processes and their modes of production determine relations of power and subordination, values and behaviors of a society and the ways of coping with situations considered adverse to human well-being30.

A major challenge in the health field is the simultaneity of production of the health good/product/action and actual consumption. In this field, Mendes31 weaves some discussions and expands the analysis of the health work process to the theoretical-conceptual field of intentionality, which creates and builds new tools and strategies and enhances available resources.

The NASF is a resource for changing the practice model, in a context that still has remnants of the biomedical model of care, by reinforcing the need for articulating knowledge between health teams, improving interaction between members of teams, the development of new knowledge and the practice of new work processes6,24,25,32.

The health work process, the recognition of the subjects involved and the very definition of what constitutes teamwork consist of strategies that tend to enable more resolute and contextualized health action and with impacts on the different factors that interfere in the health-disease process6,24,25,32.

Interprofessional practices presuppose the possibility of one professional (re)constructing the practice of the other, both being
transformed for intervention in the reality in which they are inserted\textsuperscript{22,23}. Thus, the comprehensive approach to the subjects/family is facilitated by the sum of perspectives of the different professionals who make up the multi and interdisciplinary teams. In this way, a greater impact can be obtained on different factors that interfere in the health-disease balance\textsuperscript{33}.

In this sense, communication difficulties are perceived between eSF and eNASF, which may be due to a lack of knowledge of their roles, as previously explained.

\[\text{...communication exists. Little, but it exists. I run and knock on the door when, for example, a pregnant woman needs an appointment. Sometimes, not so well received, but I insist on these consultations, especially the nutritional part [...]. (FGeSF 1).}\]

\[\text{...sometimes, they give reports, go over the schedule, that sort of thing [...]. I see the NASF team there, but I don’t even know who my team is. I don’t know if I’m 1 or if I’m 2, I just know that it’s from the municipality’s NASF. (FGeSF 2).}\]

For interprofessionality to actually occur and contribute to the completeness and resolution of health care, it is important not only to facilitate communication between team members, but also to think about a work process that produces a synchronic and diachronic sharing of responsibilities for cases and necessary actions, aiming to achieve the centrality of care for users. In this sense, support from health management is important to provide conditions and promote health policies for the development of strategies that support and facilitate the work process of the NASF and eSF, aiming at collaborative teamwork\textsuperscript{25,33}.

That said, this context layer constitutes an organization of events/behaviors and associated meanings, developed over time, and may be changeable. It appears that it is still challenging to do healthcare in a collaborative way.

\textbf{Metacontext – Paradigmatic ruptures in health towards comprehensive care}

This layer of context represents the socially constructed source of knowledge, continually operating from a generally shared social perspective. It contains the source of explanation and an indirect influence on behaviors and events\textsuperscript{14}.

In Brazil, the moment of paradigmatic crisis in health is present, predominantly, in the Health Reform Movement and had its peak with the VIII National Health Conference, in 1986. In such a way, the conference was important for the movement of the Brazilian Federative Constitution, promulgated in 1988, giving rise to the Unified Health System (SUS).

In this direction, the SUS is anchored in the principles of universality, integrality and equity, regionalization and decentralization and social participation. Thus, the defense and the fight are for the reversal of the historical logic of the health care model in Brazil. The perspective of the ESF’s work in PHC is new care practices based on health promotion models\textsuperscript{1,2}. However, the implementation movement may present instability, since the precariousness of a policy is directly proportional to the discrepancy in ideological values between those who operate it\textsuperscript{34}.

The health situations in our continental country are disparate. In the face of globalization, some diseases emerge and re-emerge, causing the population to experience a plurality of health problems. Furthermore, problems of violence in the context of mental health, poverty, abusive use of legal and illicit drugs, external accidents, among others\textsuperscript{1,2} are also important.

In this paradigmatic context of new demands required from the health system organization process, based on population needs, the NASF work process is inserted with its support tools, contributing to guaranteeing the essential roles of PHC.
Moving forward from the perspective of paradigmatic rupture, it is worth highlighting that advances are still necessary in terms of work relationships, in order to make them, mainly, a collaborative practice. This is due to a few initiatives, such as the insertion and collaboration of NASF-AB with the eSF, although still incipient and reinforced by majority models of professional training that continue to be trained separately, so that, in the future, they can work together.\(^{33}\)

Given this tense dynamic, the urgent need to adapt health training is recognized, as well as to strengthen continuing education in health, as an element of human development based on pillars, such as learning not only cognitive content, but also skills and attitudes of being, doing and living collectively, based on the daily routine of health services and the demands of communities and territories.\(^{35}\)

**Final considerations**

There was a need for reorganization, aiming at a better understanding of what NASF does in terms of the pedagogical dimension, since, for those who are the recipients of support, a vision still focused on clinical care is perceived.

eNASF and eSF professionals recognize pedagogical support as an important tool in health actions. However, some difficulties are visible in its operationalization, including teamwork, considering that eSF and eNASF must operate collaboratively. Here, from the perspective of eSF professionals, it is inferred that there is a thought guided by a traditional care practice, detached from a pedagogical dimension, which is the focus of this study.

There is also a need for dialogue between the actors involved (eSF and eNASF) to build a common project, sharing knowledge and co-management of work processes and commitments, in order to implement the proposal involved in the production of subject-centered care.

Furthermore, some advances noticed by the NASF team are evident in the understanding of this support, whether in work processes, when observing nuances in the incorporation of the pedagogical dimension, or in planning, execution and evaluation actions. However, there is still a continuous need to organize the health work process, with a close eye on the implementation of comprehensive care and collaborative team work.

It is recognized as a limitation that studies like this, with a proposal to analyze the contexts that permeate professional performance in multidisciplinary teams, must be cautious, due to the various factors that can influence, such as the differences in locoregional realities, the unique forms of organization of the work process, as well as the time and activity observed during collection. Thus, there is a need for studies that can analyze in depth, as well as expand the scope of case territories for study.

Finally, it is considered that we must seek to strengthen integration between the agents involved, so that the existing distance is deconstructed, so that both, collaboratively, can, in fact, achieve what is proposed, which is the provision of services of quality, with clarity of roles and communication between peers, in a timely manner and with resolution capacity in PHC.

**Collaborators**

Silva LCC (0000-0002-2688-9309)*, Dias MSA (0000-0002-7813-547X)*, Parente JRF (0000-0002-6739-0985)*, Vasconcelos MIO (0000-0002-1937-8850)*, Brito MCC (0000-0002-3484-9876)* and Forte FDS (0000-0003-4237-0184)* contributed equally to the conception and design of the work and discussion of the results; drafting the manuscript or critically reviewing its content; approval of the final version of the manuscript.

\(^{*}\)Orcid (Open Researcher and Contributor ID).
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