

Children's Health in Brazil: orienting basic network to Primary Health Care

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Abstract *This is an integrative literature review that analyzed the scientific knowledge produced on the orientation of Brazilian basic care services to primary health care focusing on child health. Searches were carried out in SciELO, Lilacs and Medline databases using descriptors “primary health care”, “family health program”, “child health” and “evaluation of health services”. Studies published in Portuguese, English and Spanish between 2000 and 2013 were selected. A total of 32 studies were chosen and characterized in relation to the features of primary health care, region of the country, type of study and authors’ practice area. A thematic review of studies was conducted and resulted in two categories: child care in the context of Brazilian primary health care and primary health care features: limitations to child care. It can be understood that Brazilian primary health care services are heterogeneous regarding the presence and scope of essential child care characteristics. There is a lack of structural and process changes in the services to substantially plan child care actions in basic care.*

Key words *Primary Health Care, Child health, Evaluation of health services*

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Introduction

Primary Health Care (PHC) in the most comprehensive and contemporary design can be understood as a health care system reorganization strategy. From this understanding, PHC plays a unique role with the potential to reorder health system's resources to meet the demands of the population, a condition that involves considering it as coordinating part of a Health Care Network (RAS)¹.

In this context, worth highlighting are important legal tools such as Decree N° 2488 of 2011, approving the National Primary Health Care Policy, setting the organization of RAS as a strategy for comprehensive care and geared to the health needs of the population².

With regard to child health, in 2015, the Ministry of Health established the National Comprehensive Child Health Care Policy (PNAISC) through Ordinance N° 1130³, which clearly and objectively summarizes the lines of actions of comprehensive child health care. The document points out strategies and devices for the articulation of activities and health services to facilitate their implementation by state / municipal management and health professionals.

From this perspective, the PNAISC is organized from health care networks and its strategic lines, in which PHC is recognized as a coordinator of child care and central point of this process. The strategic lines that stand out are: breastfeeding and healthy complementary nutrition; promoting and monitoring comprehensive growth and development; care for children with infancy-prevalent illnesses and chronic diseases; health care for children with disabilities or in specific and vulnerable situations; surveillance and prevention of child, fetal and maternal death³.

In order to meet PNAISC strategic priorities with better results, effectiveness and higher quality, PHC should be based on the so-called ordering or essential attributes of PHC, and they are: first contact access, longitudinality, comprehensiveness, coordination, and derivative attributes: family counseling, community orientation and cultural competence⁴.

Theoretical framework of this study, Starfield⁴ states that a basic service can only be considered a primary health care provider – that is, primary health care-oriented – when carrying PHC ordering attributes. It is noteworthy that quality PHC will only be achieved when its seven attributes are being operationalized in their entirety¹.

Studies^{5,6} show consistent evidence for the association between greater PHC orientation and increasing effectiveness of health systems. In line with this reality and within child health, PHC-oriented services could reduce hospital admissions due to primary health care-sensitive conditions (CSAP), contributing to the reduction of child health's hospitalization rate, something that is not observed in the Brazilian context, whose main causes of pediatric hospital admissions are due to PHC-sensitive conditions, such as respiratory problems and gastroenteritis⁷.

Given the above and Brazil's implementation of the Family Health Strategy (ESF) as a health care model, which has been undergoing significant expansion, achieving a total population coverage of 56.2% in 2013, with a total of 34,715 deployed teams according to the National Health Survey⁸, there is a need to analyze, with regard to child health, the orientation of basic care services to primary health care. This study aimed to analyze the scientific knowledge produced on the reorientation of Brazilian basic care services to Primary Health Care, focusing on child health.

Methodology

This is an integrative literature review conducted through the following steps: 1) Establishment of the research question; 2) Sampling or literature search, at which time inclusion and exclusion criteria, databases and selection method were fixed; 3) Categorization of studies, stage in which studies information were organized for the creation of a database; 4) Evaluation of studies included in the review, when data review was performed; 5) Interpretation of outcomes; 6) Synthesis of knowledge, which included the preparation of this document, detailing the review⁹.

Therefore, the study started from the construction of the following research question: "What is the scientific knowledge produced on the orientation of Brazilian basic care services to primary health care, focusing on child health?"

Literature search and selection of papers were conducted in April and May 2013 in the following databases: Latin American and Caribbean Health Sciences (Lilacs), Scientific Electronic Library Online (SciELO) and Medical Literature Analysis and Retrieval System Online (Medline), using a combination of controlled descriptors, terms contained in the structured vocabulary of *Health Sciences Descriptors* (DeCS). Descriptors were: *primary health care, family health program,*

child health and evaluation of health services. The term *child health* was individually cross-checked with each of the other terms, using the advanced search form to and using the Boolean operator *AND* to ensure the inclusion of all the papers on the subject.

Studies conducted in Brazil addressing issues relevant to the orientation of basic network services to PHC, focusing on children, in English, Spanish and Portuguese, published from January 2000 to April 2013, whose full papers or abstracts were available and indexed in the databases mentioned above were collected. Studies focused on types of care other than PHC, addressing mother and child care and non-scientific papers publications were excluded.

The databases search process was performed independently by two researchers who made the initial selection by titles and abstracts obtained from the search. At the end of this process, they gathered to present their outcomes and solve discrepancies regarding the selection of studies, defining studies to be included in the review.

After reading and selection, data were categorized directly in the tool adapted¹⁰ specifically for this purpose, which included title, authors and their practice area, year of publication, study mode and type, research objectives, conclusions, databases and descriptors used. Following registration, data were systematically reviewed in relation to their relevance to the subject, that is, evaluated and, in the next step, interpreted and discussed through thematic review¹¹.

The thematic review was conducted in three steps, namely: pre-analysis; material exploration; processing outcomes and interpretation. The pre-analysis established the first contact with the material, enabling the identification of keywords. The material was then explored through clippings of representative parts of papers included in the review. Finally, data were aggregated and interpreted by topic¹¹. The last step of the review was the preparation of this document, highlighting the main outcomes of the analyzed articles.

Outcomes

One hundred forty-nine, non-duplicated papers were identified in the search, of which 115 did not meet the inclusion criteria, resulting in 34 papers for initial review. Two other studies were excluded after reading their full text, result-

ing in 32 papers making up the corpus of analysis of this review. The whole process of retrieving papers was performed as described in Figure 1.

The main reason for the exclusion of papers was their noncompliance with the research subject ($n = 80$). Among these, it was common to find papers that addressed the study of some specific childhood-related disease, studies related to other levels of care ($n = 16$), namely, secondary and tertiary care, and hospital care prevailed in most of the cases. There were also studies of another nature ($n = 9$), that is, they were not scientific papers, but

manuals of the Ministry of Health, theses and dissertations. In smaller numbers were papers without abstracts ($n = 3$), not conducted in Brazil ($n = 3$) and those with mother and child approach ($n = 4$).

Of the studies included, as shown in Table 1, there was a predominance of original papers ($n = 31$), among which a relative balance was observed between the qualitative ($n = 16$) and quantitative approach ($n = 13$), and a few of both quantitative and qualitative approach ($n = 2$) were noted. Only one reflection paper ($n = 1$) was identified. Most of the studies were published in Portuguese ($n = 29$) and the remaining ($n = 3$) in English. Literature review papers on the subject were not identified in any of the searched databases.

It is noteworthy that, of all the studies analyzed, only seven had focused their research on one or more of the essential PHC attributes and the remaining ones ($n = 25$) covered at least one of them during the discussion of the outcomes and thus were selected for analysis.

Regarding distribution of studies by regions of the country (Chart 1), South and Southeast regions produced more papers ($n = 17$), especially the states of São Paulo and Minas Gerais, with six and four studies, respectively. The Northeast appears next ($n = 11$), most of those held in the state of Pernambuco and, finally, the Northern region, with only one study ($n = 1$) held in the state of Pará. Studies were identified in four Brazilian regions, except the Mid-West region, allowing evaluation of the orientation of services to PHC focused on child care in different areas of the Brazilian reality. The thematic review identified two categories relevant to understanding the orientation of services to PHC in child care: child care in the context of Brazilian PHC and PHC attributes: limitations to child care.

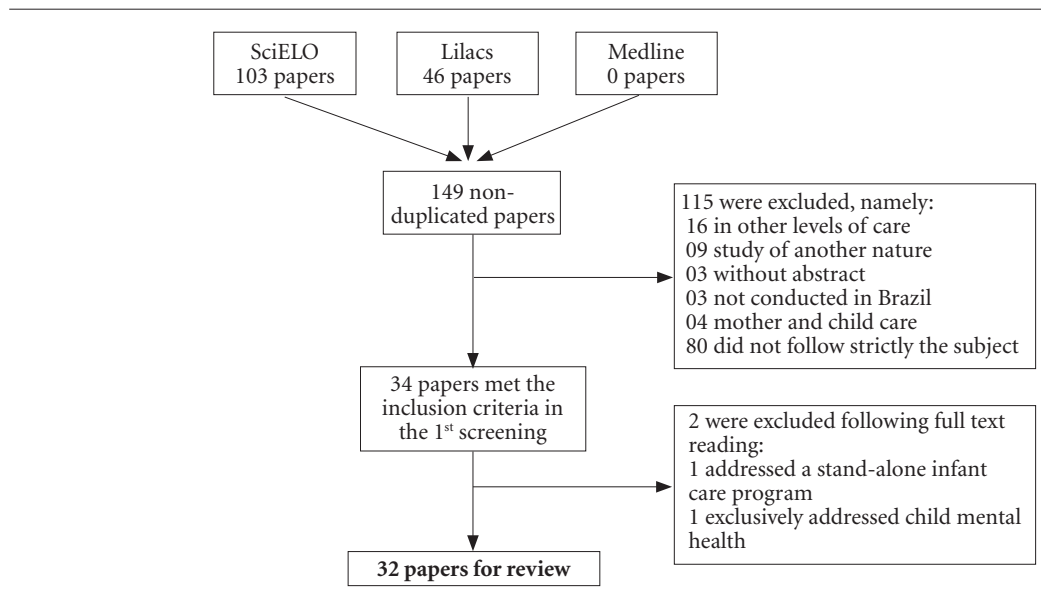


Figure 1. Flowchart with description of steps for the retrieval of papers reviewed.

Discussion

Child care in the Brazilian PHC context

In Brazil, child care has been changing with scientific advances, the incorporation of technologies and the implementation of health care models. The introduction of the Community Health Workers Program (PACS) and later the Family Health Program (PSF) has established itself as the main child health surveillance strategy in primary health care, with emphasis on the adoption of tools for monitoring child growth and development and for the promotion of breastfeeding, immunization, and childhood-prevalent diseases care¹²⁻¹⁴.

Progress such as reducing child mortality achieved with the introduction of PSF is undeniably recognized. However, what still prevails in child health consultations is an individual, biologist care based on complaint-conduct, thus it is unable to fully meet the health needs of this population.

PHC child monitoring performed by doctors and nurses in the Brazilian health system is often based on the biomedical model. Health professionals frequently act as keepers of knowledge, treating the family/caregiver as mere information receiver, leading them to not recognize the importance of regular monitoring of their children¹⁵.

This servicing/providing care to children care in primary health care has been called “unequal care” in the literature¹⁶ and considered as inadequate care, which only uses technical knowledge at the expense of listening and receptive behaviors when meeting with the patient for the production of care. In this case, relational realms distance themselves from care relations.

Another study¹³ uses the term “deaf listening” to describe practices that hear without listening, that barely manage to capture the uniqueness that permeate the human trait. This is a simplified listening reduced to a technique of collecting data and appears to be present in the relationship between professionals, mother and child in the APS. It is also argued that the logic of the biomedical model leads care to the biological sphere, the complaint, the disease, excluding authentic listening, dialogue and expression.

Other studies^{12,35} corroborate this argument by detecting that, during child care, disease control and monitoring and the search for ideal health levels are distant from the daily lives of those involved. Thus, there is prevalence of a restricted concept of care (“unequal care”) that is focused on healing, health and surveillance practices, in other words, fragmented practices without any appropriate coordination to qualify care.

A consequence of this type of child care has been the poor establishment of a link among those involved in the care. A study⁴¹ found that,

Chart 1. Characterization of papers reviewed: Database, authors, year, studied attribute, study type, method, location and authors' practice area.

Database	Authors	Year	Attribute studied	Study type	Method	Study location	Practice area
SciELO	Hadad et al. ¹⁷	2002	Access Comprehensiveness	Original	Qualitative	MG	Social worker Doctor
SciELO	Figueiras et al. ¹⁸	2003	Comprehensiveness	Original	Quantitative	PA	Doctor
SciELO	Amaral et al. ¹⁹	2004	Comprehensiveness	Original	Quantitative	BA CE PB PE	Nurse
SciELO	Kovacs et al. ²⁰	2005	Access Comprehensiveness	Original	Quantitative	PE	Doctor
SciELO	Samico et al. ²¹	2005	Access Comprehensiveness	Original	Both quantitative and qualitative	PE	Doctor
SciELO	Prado Fujimori ²²	2006	Comprehensiveness	Original	Quantitative	SP	Nurse
SciELO	Roncalli Lima ¹⁴	2006	Access Comprehensiveness	Original	Quantitative	CE SE BA	Dentist
SciELO	Saparolli Adami ²³	2007	Comprehensiveness	Original	Quantitative	SP	Nurse
SciELO	Prado et al. ²⁴	2007	Comprehensiveness	Original	Quantitative	SP	Nurse
SciELO	Slomp et al. ²⁵	2007	Comprehensiveness	Original	Qualitative	PR	Nurse
SciELO	Mello et al. ²⁶	2007	Access Longitudinality	Original	Qualitative	SP	Nurse
SciELO	Amorim et al. ²⁷	2008	Comprehensiveness	Original	Quantitative	BA CE PB PE	Doctor
SciELO	Oliveira Borges ²⁸	2008	Comprehensiveness	Original	Quantitative	RN	Accountant
SciELO	Tanaka Santo ²⁹	2008	Access	Original	Quantitative	SP	Doctor
SciELO	Vasconcelos et al. ³⁰	2009	Access Coordination	Original	Qualitative	PB	Physiotherapist
Lilacs	Erdmann Sousa ¹³	2009	Comprehensiveness	Original	Qualitative	MA	Nurse
SciELO	Silva et al. ³¹	2009	Access Comprehensiveness	Original	Qualitative	RJ	Doctor
SciELO	Ribeiro et al. ³²	2010	Comprehensiveness Coordination	Original	Quantitative	MG	Nurse
SciELO	Saparolli Adami ³³	2010	Comprehensiveness	Original	Quantitative	SP	Nurse
SciELO	Ribeiro et al. ³²	2010	Access	Original	Quantitative	RJ	Doctor
Lilacs	Novaczyk Gaíva ³⁴	2010	Comprehensiveness	Original	Qualitative (documentary analysis)	-	Nurse
Lilacs	Alexandre et al. ³⁵	2010	Comprehensiveness Access	Original	Qualitative	PR	Nurse

it continues

Chart 1. continuation

Database	Authors	Year	Attribute studied	Study type	Method	Study location	Practice area
SciELO	Costa et al. ³⁶	2011	Access Comprehensiveness	Original	Both quantitative and qualitative	MG	Nutritionist
Lilacs	Monteiro et al. ¹⁵	2011	Comprehensiveness	Original	Qualitative	RN	Nurse
SciELO	Leão et al. ³⁷	2011	Access Longitudinality Comprehensiveness Coordination Family and community guidance	Original	Quantitative	MG	Nurse
SciELO	Sousa et al. ³⁸	2011	Comprehensiveness	Original	Qualitative	SC	Nurse
SciELO	Oliveira et al. ³⁹	2012	Access Comprehensiveness Longitudinality	Original	Qualitative	PR	Nurse
SciELO	Moraes Cabral ⁴⁰	2012	Access Coordination	Original	Qualitative	RJ	Nurse
SciELO	Sousa Erdmann ¹⁶	2012	Comprehensiveness Access Longitudinality	Original	Qualitative	MA	Nurse
SciELO	Mello et al. ¹²	2012	Longitudinality	Reflexão	-	-	Nurse
SciELO	Machado et al. ⁴¹	2012	Access Comprehensiveness	Original	Quantitative	CE	Nurse
Lilacs	Gaíva et al. ⁴²	2012	Comprehensiveness	Original	Qualitative (documentary analysis)	-	Nurse

of all mothers interviewed, only 57.7% knew the name of the doctor who performed their child's last consultation, dissociating from the ideal situation where all mothers would know the name of the individual who provided care to their children, because name is one of the essential elements in a dialogical relationship. The same study also showed an association between the component satisfaction of mothers who received care and the fact that the professional had treated them and their children by calling their name, which is intrinsically linked to the realm of human being subjectivity.

However, Ribeiro et al.³² showed a positive linkage of users with services, since most of the subjects responsible for the child interviewed knew the name of the doctor who performed the

last consultation, the reasons of the consultation and its implications. However, these differences in the findings may be related both to the diverse ways the work process is organized, established links and available infrastructure and the cultural differences in the various regions of the country. The study⁴¹ that showed a deficient user linkage was conducted in the Northeast, whereas that showing satisfactory linkage shows the reality of the Brazilian Southeast¹⁹.

Regarding regions of the country where studies were developed, there was a predominance of research in the South and Southeast, followed by the Northeast. A recent study⁸ showed that the Northeast is the region of the country with the largest ESF coverage, at 64.7%, followed by the South, with 56.2%, which certainly relates to and

affects the production of knowledge on PHC services.

Another issue reported by some studies^{17,18,20} was regarding the organization of PHC services, work processes and facility infrastructure, considered weaknesses for the orientation of basic network services to PHC in almost all studies. Only one study²¹ conducted in the Southeast diverged from that outcome, pointing satisfactory structure and professional training, meeting the implemented regulatory criteria.

With regard to the organization, there was a lack of coverage of some areas by the ESF, which left some areas without assistance and proper monitoring of children who lived there, limiting health actions in response to families' needs to promote child development. In addition, there is a need for professional education and referral and counter-referral to other services is complicated, which compromises child care effectiveness^{17,22,23}.

It can be concluded that PHC work process faces obstacles within the micro-politics of health work, in the care production setting, specifically regarding the appropriate financial support. Furthermore, there are relational worker-user and worker-worker aspect issues and non-use of new health technologies, such as reception, which make it difficult to break with the hegemonic model centered on disease and medical care^{20,24}.

As for the infrastructure of family health facilities, it was observed that physical space was inadequate and relied on improvised solutions: health installations working in adapted homes, lighting problems, dark rooms without windows and with impaired ventilation, more evident in studies conducted in the Northeast, which reveal the lack of coherence between the existing physical structure and ESF's proposed model^{18,25-27}.

Professionals also claim better working conditions to provide care to children, such as availability of materials, fundamental equipment and / or instruments. Most facilities have only basic kits (scale, tape measure, ruler and thermometer) and lack adequate environment, table for the examination of children, toys, supplies and medicines, showing that the lack of these conditions increases the number of child referrals to secondary services²⁵ and causes distrust among family members as to PHC services' effectiveness.

Child care inadequacies at the primary level have been identified in national policies geared to childhood^{20,28}. Although the prospect of comprehensiveness is there, there are contradictions, since features of the medical-hegemonic model

remain, triggering limitations on the propositions. Despite containing core principles of primary health care, families are not at the heart of policies, which predominantly use curative actions. This can be seen as inconsistency in relation to the proposed change of the desired model for basic care²⁰.

Nevertheless, studies^{21,29,30} have shown that PHC services whose professionals had been trained in the Integrated Management of Childhood Illness (IMCI) strategy provided a significantly better care to children compared to those without IMCI training, concluding that the strategy has a positive impact on child health outcomes.

Authors²⁵ recommend that family health professionals rethink their practices to work in line with the principles and guidelines of the Unified Health System (SUS) and receive training to provide child care in the PHC^{18,35}, much in the same way as training in IMCI has been shown to qualify child care in primary health care^{19,27}.

Before structural, organizational and professional limitations, parents of children seek other means to meet the needs of their children, preferably hospital care in emergency services²⁰. Therefore, it is evident that the ESF has not been able to solve all child health issues, and the coordination of actions between basic care, mid- and high-complexity levels is practically inexistent or occurs informally, causing discredit in the health care system and contrasting with PHC attributes³⁸.

Comparative studies between different types of service or carried out in the context of ESF^{21,36,37} pointed out that this model of care has been more PHC-oriented in child health care than other models, but requires profound changes from services' infrastructure^{38,41} through professional education^{17,18}. Among the suggested changes is the construction of a paradigm that corresponds to the reorientation of the care model, in which the child is seen in its biopsychosocial and family context.

This directionality in the organization of service and work process involves the strengthening of relational technologies guided by the set of knowledge and tools that express interpersonal relationships and intersubjectivities in health care production, including humanization, reception, link, accountability and teamwork³⁴. A study²⁹ showed that reception by professionals interferes in users' evaluation of the quality of care.

While acknowledging different levels of access and linking to PHC services, child care in the context of these services in Brazil proved to be

similar with regard to care and relational realm established between the health professional, family and child. There are calls for the existence of effective care that values listening and dialogue, enabling the construction of trusting relationships and the establishment of a link between those involved in the care (professional, family and child).

PHC attributes: limitations to child care

The commitment to a health service with first contact access, longitudinality, comprehensiveness and coordination of care define it as PHC-oriented while ensuring greater effectiveness of the provided care³⁷.

Among the studies reviewed, only seven^{20,22,24,26,37,38,41} focused on the investigation of one or more child care-related attributes, which reveals the need for further research on the presence and extent of PHC attributes in health services.

The presence of the first contact access attribute in PHC services can be measured taking into account aspects related to the geographical location of services and their regular use over time. A study⁴³ showed that users' (parents of children) access conditions to family health units (USF) are fair, suggesting that the proximity of services to places of residence and their regular use has a positive impact on the frequency of use.

Another study²¹, however, revealed a different reality, because users' access proved to be complicated due to factors related to the organization of services, such as high demand, a booking system for routine consultations, the non-operation of facilities on a 24/7 basis, as well as aspects related to professionals, such as absence from work and difficulties in providing care to the children group.

These differences among findings can be explained by the different levels of ESF implementation in the different regions of the country, since the first study⁴³ was conducted in the Southeast, and the second²¹ in the Northeast. Both studies^{21,43}, however, point that home visit is a facilitator of access to services and adherence to ESF. It is noteworthy that other studies in this review^{22,24,39} ratify access hindrances described.

It is worth highlighting the contributions of another study²⁰ conducted in the Northeast, which found that the main reasons parents take their children directly to a secondary and / or tertiary care facility would be a difficult access to primary health care services, mainly due to the

fact that the responsible is unwilling or unable to wait for the time span between booking and consultation, or wait in line to get the ticket to receive care in the same day. But the most important factor evidenced by this study was that parents or guardians preferred installations with greater technological density due to reliable professionals, expectations about quality of care, personal experience and/or social network experience and satisfaction with services.

This context disfigures PHC as first contact access to the SUS, since as revealed by a study³¹, ESF is only being the gateway to the facility and not to the SUS, increasingly moving away from comprehensiveness and coordination of care. Thus, universal access to effective services does not seem to be in place in Family Health facilities³⁸.

Care longitudinality was studied by a reflection paper¹², which proved that this attribute may be built by securing a continuous source of care, its use over time and continuous actions with families. Children follow-up in PHC is regarded as a health care technology that refers to the reconstruction of knowledge and practices with new realms for the production of care²⁶.

The documentary analysis³⁴ of strategic childhood-targeted policies showed the existence of interdependence between care longitudinality, link and accountability, aspects that underlie basic care. Their development requires those involved in the therapeutic process to show trust, ethics and respect, demonstrating their commitment with the health-disease process, in other words, longitudinality also depends on the relational aspect.

The presence of effective longitudinality is an essential factor to the health system, because this attribute tends to produce more accurate diagnosis and treatment and reduce unnecessary referrals to specialists. In child health, greater interaction with family and the life history of the child is required for proper execution of this attribute³⁷.

A study conducted in western Paraná³⁹ showed the lack of first contact access and longitudinality in the context that led to the hospitalization of children for conditions sensitive to ambulatory care, confirming the relevance of evaluating basic care attributes as health system effectiveness indicators.

The provision of longitudinality in child care necessarily implies rethinking relations, actions and commitments to achieve adherence to health monitoring, respecting, above all, the values of mothers and families²⁶.

Comprehensive child health care was the most explored attribute in the studies reviewed. It is specifically targeted in three studies^{22,24,38} and appears in the discussion of others.

Three main realms and meanings used for this attribute were identified: *comprehensiveness as children's right* to have all of their needs met adequately and the state's duty to provide health services organized to meet these needs³⁴; *comprehensiveness as the organizing principle* of health practices, aiming not at promoting dissociation health / disease, patient / disease and child / family, in which knowledge that underpins the expertise is combined with the care realm and supported by human and ethical values¹³; *comprehensiveness as an attitude*, a way of being not performed out of the multidimensional context of the child, the family, the process of growing, developing and becoming ill and subjectivities³⁸.

In primary health care, comprehensiveness was described as articulate and interactive work between staff, family and community³⁸, therefore a difficult target to be achieved in the care model still in force. Despite this reality, a study²² showed that, within ESF compared to traditional basic facilities, there is greater integration among professionals, systematic child monitoring, promoting continuity of care and, thus, creating favorable conditions for comprehensive care.

Nevertheless, there are recognized limiting conditions for comprehensive child care in primary health care, ranging from political, institutional, physical and managerial structures, especially the lack of resources in PHC, the lack of supplies, especially drugs, as well as aspects relating to installations' inadequate physical structure, health workers' professional and personal characteristics, including the profile, the work process and the values they choose to develop care practices³⁸.

In primary health care, paving the way for comprehensiveness implies facing difficulties related to teamwork because of low interaction among workers and as a result of the difficult task of delineating work in the lack of gathering among professionals and between these and children and their families. These features act as barriers to the construction of new ways of producing care from the perspective of comprehensiveness and make this attribute lie more in the realm of ideas than in actual care practices. Little progress has been made toward its achievement^{24,38}.

Thus, there is consensus among the studies that comprehensive child health care in primary care is still a process under construction, situated

in a practice that seeks to change the care model still centered on disease^{24,25,34,38}.

Coordination as a PHC attribute is the ability to integrate with the health system network³⁰. This attribute was shown to be compromised according to professionals themselves while providing child care at the primary level, which is reflected in hardships in the referral to other services, including between facilities and other levels of care, affecting the planning of child health care practices³⁵.

A survey conducted in Paraiba³⁰ highlights coordination as a major challenge for ESF professionals, since it presupposes the organization of a referral and counter-referral system, with defined flows and routes, organized according to population demand, which is not yet actually observed in the current health system.

Health care coordination was the least mentioned attribute in the papers included in this review. Considerations on the subject were timely, which can be justified from the understanding that this attribute depends on the remaining ones, that is, it refers to a harmonious state between access, longitudinality and comprehensive care. So its scarcity reflects an imbalance among the supply of other essential attributes.

As for derivative attributes, family guidance considers the family context as care potential and also health threat, including the use of familiar tools approach; and community guidance is the recognition of community needs by health services³⁷.

No studies exclusively intended to investigate derivative attributes have been identified, these appeared only in one study that evaluated all PHC attributes³⁷. In this study, family guidance scores were unsatisfactory, which is strange, since PHC child health care requires increased interaction with family. On the other hand, community guidance was better assessed by children caregivers, revealing the valuation of the community context, specifically for ESF services related to actions such as home visits carried out by community health workers, facilitating health surveillance and monitoring of community families.

Reflecting on the characterization of the analyzed studies in this review, it was noted that the target attribute of most studies was comprehensive care, followed by access, longitudinality and coordination. As for the derivative attributes, that is, family and community guidance, no study specifically focused on them.

Regarding researchers' practice area, there is a predominance of professional nurses followed by

doctors, especially nurses authoring twenty studies analyzed in this review. Social worker, dentist, nutritionist and physiotherapist were listed as authors of one study each. This finding reflects that research on PHC aimed at children has been targeted almost exclusively by professions that historically have a technical relationship with health care.

Setting conditions to properly provide PHC attributes implies reformulations of services structure and process conditions. Studies propose changes in the infrastructure and organization of services³³ and the primary health care work process to provide better child care, reflecting even on the distribution of working hours and the number of professionals to mobilize and absorb demand^{22,35,38}.

Among the studies analyzed, only two^{32,37} used in their data collection a tool called the *Primary Care Assessment Tool* - PCA-Tool Brazil in the child version. This tool has already been validated in Brazil to measure the presence and extent of the essential and derivative PHC attributes, thus allowing the evaluation of the level orientation of service to PHC from the experience of users in relation to the Brazilian health facilities.

This information indicates the need to conduct primary child health care evaluation studies which can measure these attributes in different contexts of the Brazilian health services reality.

It is necessary to improve the structure of health services network, matching supply and demand, as well as the clinical effectiveness and interpersonal relationships effectiveness²¹. Thus, conditions are set not only for access, but especially comprehensive and effective care, ensuring continuity of care across the network in a coordinated manner.

Conclusion

The analysis of studies included in this integrative review explains that Brazilian primary health care services are heterogeneous regarding the presence and extent of PHC attributes in child health care, determining the low orientation of these services to PHC. It is noteworthy that studies with a 10-year time frame were selected and, during this period, different contexts of public health policies were reflected in child care, which led to changes in the structure and organization of constantly evolving health services.

Furthermore, it is relevant to consider the co-existence of different models of primary health care in the country, increasing number of Family Health Strategy facilities, Community Health Workers Program installations and even traditional model facilities (traditional facility), which all have different health work processes and ways of producing child care.

However, it was noted that increased supply of primary health care through the ESF has favored access, but still without ensuring comprehensiveness. In addition, increased access was more perceived in studies conducted in the South and Southeast, revealing that there are regional disparities in the provision of services. We can conclude that comprehensive child care is a process under construction in Brazilian PHC, which has found more fertile ground in ESF services. However, it is a model that still requires significant changes in the service structure and professional profile to achieve its effectiveness.

With regard to the first contact access attribute, it was noted that, while expanded primary health care network coverage is noticeable in the country, services have not reached the effectiveness required for a PHC service, which

rules out primary health care as system gateway, since before low resolution, the user, namely, the child family member tends to target mid- and high-complexity services first, creating disbelief in the PHC as health care network coordinator.

Longitudinality and coordination of care, essential PHC attributes, have been little explored in the scientific literature on the subject. Their presence reflects a better structured health system, thus there is need for studies to investigate these attributes in child health, since they are indispensable for understanding the orientation of a service to PHC.

Family and community guidance attributes reflect greater interaction between health staff and family and community. The only study that

considered these attributes showed that family guidance has not yet achieved the desired level, even in the context of ESF. This reality does reflect on how to structure child care in PHC, as the interaction and coordination with the family context is essential to the full childhood care.

This review shows that studies conducted in Brazil point to ways to better organize child care in primary health care, that is, to orient services to PHC. A careful look at the knowledge already produced on the subject is required in order to better plan child care actions in primary health care. Moreover, evaluation studies specifically focused on the investigation of the presence and extent of PHC attributes in child care are required.

Collaborations

SS Damasceno worked on the concept, literature search, data review and interpretation and drafting of the study. VM Nóbrega assisted in the literature search, data interpretation and drafting of the study. SED Coutinho, APS Reichert, BRGO Toso and N Collet contributed to data review, content review and final approval of the version to be published.

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