

Health assessment: processual and structural dimension of child health in primary care

Avaliação em saúde: dimensão processual e estrutural da saúde da criança na atenção primária

Simone Elizabeth Duarte Coutinho¹, Altamira Pereira da Silva Reichert¹, Jordana Almeida Nogueira¹, Beatriz Rosana Gonçalves de Oliveira Toso², Neusa Collet¹

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ABSTRACT The aim of this study was to assess the attributes of the procedural and structural dimensions of primary health care in two models of health care. This is a quantitative study carried out with secondary data of a multicenter primary study with caregivers of children in family health units and traditional primary care units of two medium-sized Brazilian municipalities, whose data collection took place in 2012 and 2013. The Primary Care Assessment Tool (PCATool-Brazil) children version was used to assess the effectiveness of the models. Inferential statistical analysis was made. In the evaluation of the essential attributes the mean score was equal to or higher than expected (6,6) and the overall score was below (6,4). From the perspective of the caregiver of the child, the two models of care are oriented to primary care only in the essential attributes, although, not in the general score. The weaknesses and potentialities of care models indicate the need for changes in the organization of services to include comprehensive childcare.

KEYWORDS Primary Health Care. Child health. Health evaluation. Structure of services. Effectiveness.

RESUMO O estudo teve como objetivo avaliar os atributos da dimensão processual e estrutural da atenção primária à saúde da criança em dois modelos de atenção à saúde. Estudo quantitativo, realizado com dados secundários de estudo multicêntrico, com cuidadores de crianças em unidades de saúde da família e unidades de atenção básica tradicional, de dois municípios de médio porte brasileiros, cuja coleta de dados ocorreu em 2012 e 2013. O Primary Care Assessment Tool (PCATool-Brasil) versão criança foi utilizado para a avaliação da efetividade dos modelos. Análise estatística inferencial. Na avaliação dos atributos essenciais, o escore médio foi igual ou superior ao esperado (6,6) e o escore geral ficou abaixo (6,4). Na perspectiva do cuidador da criança, os dois modelos de atenção estão orientados à atenção primária apenas nos atributos essenciais, porém, não no escore geral. As fragilidades e potencialidades dos modelos de atenção indicam a necessidade de mudanças na organização dos serviços para contemplar o cuidado integral à criança.

PALAVRAS-CHAVE Atenção Primária à Saúde. Saúde da criança. Avaliação em saúde. Estrutura dos serviços. Efetividade.

¹Universidade Federal da Paraíba (UFPB), Centro de Ciências da Saúde (CCS) - João Pessoa (PB), Brasil.

²Universidade Estadual do Oeste do Paraná (Unioeste) - Cascavel (PR), Brasil.
lb.toso@gmail.com



Introduction

Primary Health Care (PHC) is presented as a strategy for organizing and reorganizing health systems in their first level of care, and a model for changing the clinical-care practice of health professionals¹.

In the Brazilian public health system, PHC has come through cycles. Among them, the Primary Attention to Health (ABS) cycle, characterized by the emergence and consolidation of the Family Health Program (FHP), as a strategy for reorienting the care model¹ in a history of building the Unified Health System (SUS) and struggles against a dominant hegemony in the health sector². However, the FHP, as a strategic model for SUS, did not cause a homogenization of its adoption throughout the national territory, coexisting in Brazilian municipalities both traditional Family Health Units (FHU) and Basic Health Units (BHU), which adopt different perspectives in relation to PHC, and, currently, with the change of the National Policy for Primary Care (PNAB)³, the range of options for primary care models in the Country has expanded. If before the Family Health Strategy (FHS)) was the priority model, now it becomes an option.

The main struggles for changes in Brazilian PHC make it the center of communication for health care networks. For this, PHC will have to be performed, incorporating the attributes of first contact, coordination, longitudinality, integrality, family, community guidelines and cultural competence, and fulfill the essential functions of resolvability and accountability for the health of populations⁴.

Assessment in primary care in Brazil has been monitored by the Ministry of Health (MH)⁵. This has an important role in the improvement of the intervention axes with the purpose of transforming health services guided by PHC, especially when it addresses the population's perspective and considers aspects of PHC, such as the

adequacy of service provision and the evaluation of results in your area⁶.

In this context, the child's health maintained an idea alluded to leveraging the different views of PHC, as childcare can reveal the organization of PHC services and the repercussion on infant mortality, because it includes significant health promotion actions, such as disease prevention⁷. In addition, children have unique needs, requiring a wide variety of service offerings focusing on assessing and supporting comprehensive development⁷.

This study focuses on the assessment of the degree of orientation to the PHC attributes of child primary health care models, using the Primary Care Assessment Tool (PCATool-Brazil) child version, aimed at demonstrating the existence of primary care related to positive outcomes on children's health. It identifies aspects of service structure and processes, in the search for quality in the planning and execution of actions, in different contexts of care models, in different types of organization of basic units, in this case, the FHU and BHU.

Thus, the objective of the present study was to evaluate the attributes of the procedural and structural dimension of the child's PHC, in two models of health care.

Material and methods

Ethical aspects

The research meets the norms of Resolution n° 466/2012 of the National Health Council of Brazil. The project was submitted to the Research Ethics Committee, with the Certificate of Presentation for Ethical Consideration and a favorable opinion. In order to access the data from reports of care provided at the FHU and BHU in the sample, formal authorization was obtained from the municipal health secretariats of

the municipalities under study, through the acceptance term of the person responsible for the study field. The research subjects signed the Free and Informed Consent Form.

Design, study site and period

Quantitative research to evaluate the effectiveness of the structure and process of children's PHC services, classified as an observational cross-sectional study in epidemiology guided by the Strengthening the Reporting of Observational Studies in Epidemiology (Strobe) protocol, which was part of a multicenter project to evaluate the effectiveness of care primary health care for children. Study developed in two of the medium-sized Brazilian municipalities, one in the state of Paraíba and another in the Western region of Paraná. In Paraíba, the study was carried out in one of the health districts of the municipality, the Sanitary District III, at the time of data collection with the largest number of families registered with the FHS and in operation with almost 100% coverage⁸. In the municipality of Paraná, 23 urban BHU were included in the traditional PHC model, existing at the time of data collection. The primary data collection of the study took place from October 2012 to February 2013. The database was created in 2013 and the data from the different locations were grouped for later inferential analyzes, developed in a doctoral thesis completed in 2016, whose results present themselves at that moment, given the relevance of the theme, from the changes that have occurred in the primary care models studied here.

Population and sample

The primary study population consisted of family members (father, mother) and/or caregivers (grandparents, uncles, legal caregivers) of children under the age of 12.

A margin of error of 3.286% was adopted, with a 95% confidence level, to obtain the sample of family members participating in the interview. The sample consisted of 344 in Paraíba and 531 in Paraná. The selection of participants was non-probabilistic, distributed by proportional sharing, according to the number of health units in the municipalities. The following inclusion criteria were adopted: living in the urban area of the municipalities and in the area covered by the units; the child's companion, in the health unit, should be the main caregiver; the child's age should be less than 12 years old; the respondent should know the unit he/she was going to evaluate (at least two visits). The exclusion criteria was: family members who used the unit sporadically for specific purposes.

Study protocol

For the implementation of the PCATool-Brasil child version⁴ form, the participants (children's caregivers) were recruited while waiting for medical consultation or childcare (medicine and nursing), on the premises of the health units. The contact and application of the collection instrument with family members occurred in the waiting list, from the last to the first, until reaching the sample n for each unit. The PCATool-Brasil child version has 55 questions, 52 of which are for measuring PHC attributes regarding aspects of structure and process, and 3 questions measure the user's degree of affiliation with the health service as a structural component of the longitudinality attribute. The responses are of the Likert type, with intervals ranging from 1 to 4 (1=certainly not; 2=probably not; 3=probably yes; 4=certainly yes) for each item that makes up the attribute, disregarding, for each component, the sum of empty answers.

During the analysis, the guidelines of the instrument manual were obeyed in

relation to the calculation of the scores of the attributes of PHC⁴. From these responses, the scores for each attribute and the general score on the quality of PHC services were calculated. The variables analyzed were: procedural and structural essential attributes-longitudinality (degree of affiliation with the health service and longitudinality of care); first contact access (accessibility and use); integrality (services available and services provided); coordination (information system and care integration); and derived attributes – family orientation and community orientation.

Analysis of results and statistics

The collected data were tabulated in Excel spreadsheets, presented in tables, using the software SPSS-version 13. The final score of each of the attributes was obtained by the average of the respondents' answers, reaching a cutoff value ≥ 3 (6,6 for the value transformed into a scale from 0 to 10), classified as satisfactory or as oriented to PHC⁴. Scores below 6,6 were considered as unsatisfactory performance. As the questions and scales are the same for all respondents, it was possible to compare the different models of care. The level of significance of the tests was $\alpha=0,05$. Inferential statistical analyzes of essential and derived attributes, as well as the essential and general PHC scores were performed using descriptive measures of the scores (0-10), the t test for comparison of averages or the Mann-Whitney non-parametric U test and the Chi-square association test.

Results

Table 1 shows the essential attributes related to the procedural and structural dimension, according to the different models of care.

As for the procedural components, only the attributes longitudinality and integrality-services provided showed statistically significant results between the different models of care ($p<0,05$). Similarity was evidenced in the average score and there was no association between the models of care and the access-use and care coordination attributes.

Considering the average scores of each procedural attribute, both models of care showed satisfactory performance for the access-use attribute (FHU – 8,3 and BHU – 8,5). The BHU model was oriented to PHC (7,0) in the coordination attribute. The attributes longitudinality and integrality-services provided were considered unsatisfactory, with average scores below 6,6.

Regarding the structural components, all attributes showed statistically significant results between the different models of care ($p\leq 0,05$). In the analysis of the average scores, two attributes (longitudinality-degree of affiliation and coordination-information systems) presented satisfactory performances in both models. In contrast, the two models studied obtained unsatisfactory performance in the attributes access-accessibility (FHU – 5,0; BHU – 5,6) and integrality-services available (FHU – 5,2; BHU – 6,0).

Finally, the essential PHC score among the health care models in the studied cities was satisfactory, with a statistically significant difference between the essential mean scores (BHU – 6,8; FHU – 6,6).

Table 1. Descriptive measures of the scores (0-10) of the essential attributes related to the processes and structure of the child's PHC services, in the municipalities studied (2012-2013)

Essential attributes	Location/ Municipalities	valid n	Average score	Standard error	Minimum score	Maximum score	P-value
PROCESSES(+)							
Access - Use	municipality -PB	343	8,3	0,12	2,2	10	0,994
	municipality -PR	530	8,5	0,08	1,1	10	
Longitudinality	municipality -PB	343	6,5	0,08	1,4	9,3	0,000
	municipality -PR	531	5,8	0,07	0	10	
Integrality - Services Provided	municipality -PB	343	5,3	0,19	0	10	0,001
	municipality -PR	526	6,1	0,15	0	10	
Coordination - Care	municipality -PB	96	6,5	0,35	0	10	0,200
	municipality -PR	154	7,0	0,27	0	10	
STRUCTURE(+)							
Access - Accessibility	municipality -PB	342	5,0	0,13	0	10	0,008
	municipality -PR	526	5,6	0,12	0	10	
Longitudinality - Degree of Affiliation	municipality -PB	344	8,0	0,16	0	10	0,026
	municipality -PR	531	7,6	0,12	0	10	
Integrality - Available Services	municipality -PB	282	5,2	0,10	0	10	0,000
	municipality -PR	436	6,0	0,11	0	10	
Coordination - Information Systems	municipality -PB	344	7,5	0,11	0	10	0,000
	municipality -PR	531	7,8	0,07	1,1	10	
Essential score PHC(++)	municipality -PB	344	6,6	0,074	3,0	9,5	0,012
	municipality -PR	531	6,8	0,050	2,2	9,3	

Source: Own elaboration.

(+) Mann-Whitney Test (comparison of two independent groups): significant result, p-value<0,05.

(++) T test (comparison of two independent groups): significant result, p-value<0,05.

PB - Paraíba; PR - Paraná; PHC - Primary Health Care.

Table 2 shows the percentage distribution of the procedural and structural attributes, according to the satisfaction scores identified in the two models of care. When using the association test at the 5% significance level ($\alpha=0,05$), there was a statistically significant difference for the procedural attributes, except for the care coordination attribute ($p=0,153$).

The attributes access-use, coordination of care and integrality-services provided reached higher percentages for satisfactory performance in the BHU care model. However, the longitudinality attribute obtained a more

satisfactory performance percentage in the FHU model (53.4%).

As for the structural competent, there was a significant difference for all the investigated attributes. The BHU care model showed higher percentages for satisfactory performance in the attributes access-accessibility (61.2%), coordination-information systems (89.6%) and integrality-services available (51.6%). The degree of affiliation attribute obtained a more satisfactory performance percentage in the FHU model (73.3%).

The percentages were unsatisfactory for

the attributes of integrality-services available (24.8%) and access-accessibility (33.6%) for the FHU.

The essential score regarding the orientation to PHC, obtained through the means of each attribute between the types of services

(FHU and BHU), showed that 58.2% of the study sample provide a satisfactory performance in the two care modalities studied. When compared, the BHU model showed a higher percentage than the FHU model.

Table 2. Evaluation of the structure and process attributes, and the essential PHC score of the child, according to FHU and BHU care models (2012-2013)

EVALUATION OF SERVICES - PHC(+)	Health Units						P-value
	Total		FHU		BHU		
	n	%	n	%	n	%	
PROCESS ATTRIBUTES							
B - Access: Use							
Satisfactory ($\geq 6,6$)	781	89.5	295	86	486	91.7	
Not Satisfactory ($< 6,6$)	92	10.5	48	14	44	8.3	0,007*
Total valid	873	100	343	100	530	100	
D - Longitudinality							
Satisfactory ($\geq 6,6$)	330	37.8	183	53.4	147	27.7	
Not satisfactory ($< 6,6$)	544	62.2	160	46.6	384	72.3	0,000*
Total valid	874	100	343	100	531	100	
E - Coordination: Care							
Satisfactory ($\geq 6,6$)	152	60.8	53	55.2	99	64.3	
Not satisfactory ($< 6,6$)	98	39.2	43	44.8	55	35.7	0,153
Total valid	250	100	96	100	154	100	
H - Integrality: Services Provided							
Satisfactory ($\geq 6,6$)	477	54.9	136	39.7	341	64.8	
Not satisfactory ($< 6,6$)	392	45.1	207	60.3	185	35.2	0,000*
Total valid	869	100	343	100	526	100	
STRUCTURE ATTRIBUTES							
A - Level of Affiliation							
Satisfactory ($\geq 6,6$)	519	59.3	252	73.3	267	50.3	
Not satisfactory ($< 6,6$)	356	40.7	92	26.7	264	49.7	0,000*
Total valid	875	100	344	100	531	100	
C - Access: Accessibility to PHC							
Satisfactory ($\geq 6,6$)	437	50.3	115	33.6	322	61.2	
Not satisfactory ($< 6,6$)	431	49.7	227	66.4	204	38.8	0,000*
Total valid	868	100	342	100	526	100	

Table 2. (cont.)

EVALUATION OF SERVICES - PHC(+)	Health Units						P-value
	Total		FHU		BHU		
	n	%	n	%	n	%	
F - Coordination: Information System							
Satisfactory ($\geq 6,6$)	750	85.7	274	79.7	476	89.6	
Not Satisfactory ($< 6,6$)	125	14.3	70	20.3	55	10.4	0,000*
Total valid	875	100	344	100	531	100	
G - Integrality: Services Available							
Satisfactory ($\geq 6,6$)	295	41.1	70	24.8	225	51.6	
Not Satisfactory ($< 6,6$)	423	58.9	212	75.2	211	48.4	0,000*
Total valid	718	100	282	100	436	100	
ESSENCIAL SCORE - PHC							
Guided towards PHC ($\geq 6,6$)	509	58.2	178	51.7	331	62.3	
Not guided towards PHC ($< 6,6$)	366	41.8	166	48.3	200	37.7	0,002*
Total valid	875	100	344	100	531	100	

Source: Own elaboration.

(+) Chi-square association test, significant results: (*) p-value $<0,01$ or $0,05$.

(++) The numerical ordering of the attributes follows the guidelines of the PCATool.

FHU - Family Health Unity; BHU - Basic Health Unity; PHC - Primary Health Care.

Table 3 presents the results of the derived attributes: family orientation and community orientation, respectively, and the general PHC score of the study.

The two components of the derived attributes showed a statistically significant

difference ($p < 0,05$). In none of these attributes, however, the average score achieved satisfactory performance. As for the comparison between PHC services, from the general score, it was found that both services were assessed as unsatisfactory.

Table 3. Descriptive measures of the scores (0-10) of the derived attributes, related to the child's PHC in the FHU in Paraíba and BHU in Paraná (2012 -2013)

Derived attributes	Location (Municipalities)	valid n	Average score	Standard error	Minimum score	Maximum score	P-value
Family guidance	municipality -PB	341	5,3	0,16	0	10	0,000
	municipality -PR	526	4,4	0,14	0	10	
Community guidance	municipality -PB	241	5,8	0,19	0	10	0,000
	municipality -PR	398	4,9	0,15	0	10	
General score PHC	municipality -PB	344	6,4	0,079	2,5	9,6	0,809
	municipality -PR	531	6,4	0,054	2,4	9,5	

Source: Own elaboration.

(+) Mann-Whitney Test (comparison of 2 independent groups): significant result, p-value $<0,05$.

PB - Paraíba; PR - Paraná; PHC - Primary Health Care.

Table 4 compares the PHC care models. The data show a significant difference ($p < 0,05$) for the derived attributes, with unsatisfactory percentages for family guidance – FHU (59.2%)

and BHU (68.4%), and community guidance – FHU (52.7%) and BHU (64.1%). The general score confirms that the two models of care are not oriented to PHC.

Table 4. Evaluation of derived attributes and general score of the child's PHC, according to health units of the FHU and BHU models (2012-2013)

EVALUATION OF SERVICES - PHC(+)	Health units						Sig. p-value
	Total		FHU		BHU		
	n	%	n	%	n	%	
DERIVED ATTRIBUTES							
I - Family guidance							
Satisfactory ($\geq 6,6$)	305	35.2	139	40.8	166	31.6	$p=0,007^*$
Not satisfactory ($< 6,6$)	562	64.8	202	59.2	360	68.4	
Total valid	867	100	341	100	526	100	
J - Community guidance							
Satisfactory ($\geq 6,6$)	257	40.2	114	47.3	143	35.9	$p=0,006^*$
Not satisfactory ($< 6,6$)	382	59.8	127	52.7	255	64.1	
Total valid	639	100	241	100	398	100	
GENERAL SCORE - PHC							
Guided towards PHC ($\geq 6,6$)	415	47.4	169	49.1	246	46.3	$p=0,459$
Not guided towards PHC ($< 6,6$)	460	52.6	175	50.9	285	53.7	
Total valid	875	100	344	100	531	100	

Source: Own elaboration.

(+) Chi-square association test, significant results: (*) p -value $< 0,01$ or $0,05$.

(++) The numerical ordering of the attributes follows the guidelines of the PCATool.

FHU - Family Health Unity; BHU - Basic Health Care; PHC - Primary Health Care.

Discussion

In the analysis of the attributes, access is addressed as a right and citizenship, based on the first principle of the Users' Rights Charter (CDUS)⁹, which guarantees to all citizens easy access to SUS health services and to its affiliated institutions. At CDUS, access has a conception of users entering the health system through PHC and to the health care network. For the child, it is a right based on the Child and Adolescent Statute (ECA), article 11, as the guarantee of

universal and equal access to health actions and services¹⁰.

Access is the way the child and his/her family experience care at first contact at the health unit in their territory⁸. The use of services comprises all contact, direct or indirect, and results from the interaction of the reaction of users and health professionals in face of the characteristics and practices of each of these subjects and the services available¹¹.

In access, the use of health units, either FHU or BHU, in the present study, was

satisfactory for the caregiver in their experiences of contact and interaction with individuals in the process. Thus, caregivers have been able to use the services of FHU and BHU when they enter the children in the health care network, in SUS.

This result of satisfactory performance has not always been present in studies assessing the attribute access by caregivers of children. However, a study related to the FHS in Diamantina (MG) showed that the attribute access occurs due to conditions related to the choice of family due to proximity to housing, and not due to the easy access to health services¹².

In the attribute access, accessibility to the care network is necessary for children and their families to reach the services and receive care at the first contact⁶. The general result in relation to the items of the accessibility component, in both models of care, had an unsatisfactory performance, showing weaknesses related to the network, as well as to the service organization. This aspect must be reflected by municipal administrations so that access is not penalized due to organizational problems and a lack of understanding of the scope of the fundamental right to care for children and their families¹³. Norms of the MH³ regarding access provide that accessibility to health services is as important as their use, especially in health systems in the care network.

Longitudinality can be constructed as the existence of a guarantee of a continuous source of care by the health team, and its consistent use over time in an environment of continuity of actions, in a mutual relationship, which may characterize the bond/interaction between the team health, children and families, reflecting an intense interpersonal relationship^{4,6}.

In relation to the monitoring of children and their families, based on the guarantee of a continuous source of care, their use and continuity over time are organized as a relevant strategic axis, which involves

several technological actions for the longitudinality of their growth and development. Thus, better results occur, such as the effectiveness and quality of health promotion actions and the prevention of highly prevalent diseases, which may produce accurate diagnoses and treatments, reducing unnecessary referrals to specialists and contributing to the reduction of the hospitalization rate of child health¹⁴.

With the result of the scores in the procedural component of longitudinality, it is analyzed that the FHU are under construction of a therapeutic bond and of informational continuity. In this perspective, studies^{15,16} evaluate that the result of the longitudinality attribute is important for the FHU because it is a central and exclusive characteristic of this level of care and is related to the effectiveness in PHC and to the FHS proposal, as a model of care in the consolidation of the SUS.

In the structural component of degree of affiliation, the literature⁶ asserts that the health unit needs to be able to clearly identify its elective population, and this needs to recognize the unit or professionals as a regular source of care.

From the satisfactory performance of the degree of affiliation in the FHU (73.35%) (8,0), it is evident that caregivers recognize it as their unit. This is an important fact because it characterizes the care model for its elective population. Generally speaking, the registered population is seen, from the physical-social environment, the territory, to regulate and establish the field of action, with areas of coverage ranging from the territory-area to the performance of health teams, through the micro area activities of the Community Health Worker (CHW) and end in the home territory, place of residence of the family.

The BHU also performed satisfactorily for the degree of service affiliation, with the recognition of the caregivers of children, which is important, since the services

offered to users by the traditional BHU occur due to free demand in the area covered by the proximity unit to citizen's home and, based on the new PNAB, the citizen's free choice.

The satisfactory evaluation in the structural component denotes the dimension of the longitudinality attribute of identification of the health units, FHU and BHU, as its regular source of care for the child, mainly in the follow-up of childcare, or for episodes of diseases⁶.

The importance of longitudinality and integrality in the care of children under 1 year of age in the evaluation of their caregivers in FHU was also corroborated in a study¹⁶ that evidenced a high score, a good experience of caregivers with the actions derived from this attribute, favoring the relationship with professionals and knowledge of the children's health situation.

Despite the existence of several angles of the discussion on the integrality attribute, which are not mutually exclusive, to evaluate the practices in PHC, the Starfield⁶ framework, used by this study, is understood as a proposal that allows the operationalization, to the extent that which identifies categories that make up and characterize PHC¹⁷.

In the procedural component of integrality, services provided are related to the work process of the health team, aiming at promoting health and preventing illness in the social environment, as well as functional and organic problems⁶.

Integrality in child health has provoked conceptual discussions, considering the specific needs of children in the health care network, rethinking the practices and conformations of public health services, redefining practices focused on bonding, in addition to welcoming and autonomy to care centered on the child and his/her family, with the valuation of subjectivities, singular needs and the dimensioning of the risks and vulnerabilities to which children are exposed in their social environment. This is in contrast, in the discussion of the care to the health of the child,

with a fragmentary, reductionist approach and focused on curative care^{18,19}.

The statistically significant results with an unsatisfactory performance score for both models of care, the BHU and the FHU, show the need to reorganize the work process of health services. Weaknesses and potentialities were also identified in the official documents of the respective municipal administrations, which point out some elements in relation to the services provided.

Regarding FHU²⁰, management has a strategy of comprehensive and humanized care in SUS, organizing itself in operational modules of health care, management and surveillance. In child health care, there is a follow-up in the care network and health indicators are sequenced by health surveillance. From the initial results of care management, the difficulty is the fragility of the construction of integrality²¹, because it is based on the production of relationships, both between management and workers and between workers and users, for the effectiveness of the action.

In the coordination attribute, the ability to guarantee continuity within the health care network is assessed. The continuity in the procedural component is due to the recognition of problems/diseases, in the care provided by the professional of the PHC unit, involving, for this action, accountability and administrative aspects. Care management in the health sector unifies all the care that the child/family receives as a comprehensive response to their demands, through articulated coordination between health services and actions, and the transfer of information about the user. Coordination is relevant to the other attributes, as it orders users and their information in the health care network^{6,14,22}.

Measures seeking to intensify the role of PHC in the coordination of care have been proposed²². They understand their role as an integrator between institutions, with professionals and health service workers, avoiding fragmentation in search of comprehensive and, mainly, integrated care.

In the official documents of the two models of care, it was possible to identify that the health care network of the FHU is organized in five health districts, in the three levels of health care: primary care; specialized services; pre-hospital and hospital care; pharmaceutical care; and laboratories. The flow in the network is by regulation. The role of the FHU is to make the appointment on the service network. In the BHU, the care network is organized by three health districts in primary care, having the same flow as the care model of the FHU.

The coordination attribute, when evaluated in a study correlating PHC health units, also showed no differences in assessments between the FHU and the BHU²³. In another study, the fragility of some items in the child's PHC is analyzed, saying that comprehensive care in the specialized service is essential²⁴. The assessment of the care coordination attribute refers to the need to create strategies to intensify the role of PHC in the coordination of care, mainly for its integrating function and comprehensive care²².

The e-SUS²⁵ points to this reality, asserting that, with the implantation of the information system through the digital medical record and SUS card, the user's movement in the service network can be registered, enhanced and go further, with a systemic conjunction by internet for integration in the network, being the intranet for the communication of data in the institutions, and the extranet, for the guarantee of information to the citizen. These actions may have results in the attribute of care coordination, as well as reaching the other attributes and the transversality between the critical nodes found in the essential attributes.

In the organization of the Health Information System (SIS), both health professionals and the caregiver and institutions must have guaranteed access to the child's information and mobility in the network, which can lead to a diagnosis of the flow situation, demand and time lost due to organizational problems, in addition to placing PHC as the gateway and coordinator of care

in the network, as the health team in the area assigned is responsible for the family's territory-home, but also for management, as co-responsible for provide activities-means to facilitate activities-purpose of PHC.

In view of the assessment of two PHC care models, the result of the essential scores demonstrated weaknesses and potentialities to be rethought with new practices and actions, in relation to obtaining PHC attributes. The differences found in the study of the two health models are, at times, of political and organizational roots related to the maintenance of the practice, still rooted, of a biologicist vision of health care; other times, advances and setbacks, especially when talking about child health.

In the result of the derived attributes, it is highlighted that the FHU and BHU have more expanded actions in relation to the community orientation of PHC than to family orientation, even in the family health model. In view of this, the discussion of strengthening family orientation in continuing education is considered important, which is assumed as a support policy for a movement to transform the sector's practices, being one of the banners of FHU management, and the same should occur in the BHU, since the derived attributes obtained an unsatisfactory performance.

A study about derived attributes, addressing family orientation, corroborates the result below the expected average score, pointing out that this reality needs to be improved in order to fulfill the role of being a PHC provider service and aimed at the population²⁶. When comparing the health units, another study showed results similar to this one, that is, family guidance with unsatisfactory performance in the FHU, but, even better, than in the BHU²⁷.

The community orientation considers the recognition of the needs of the population in their social context, requiring knowledge of their reality, when planning actions^{18,25,28}. Its importance in the

effectiveness of PHC is perceived when assessing whether the services are directed to the population, when presenting the essential attributes and the derived attributes for an interaction between the PHC services, family and community²⁸.

Some studies^{24,27,29}, when assessing community orientation in child health care, or in the FHS²⁹ and in comparisons between models of care²⁷, demonstrate that it is a dimension with a proportion of low percentages for a positive response²⁷, although with a better evaluation than family orientation²⁴, as in this study.

When assessing the results of the score of essential attributes, it was noticed that the two models of care had a satisfactory performance, that is, the essential scores are oriented to PHC in the modalities of health care, FHU and BHU, with the latter being more prominent.

Bringing the results of the derived attributes, it is possible to make the joint analysis of comparison of the general score of the PHC, between the health services of FHU and BHU, because there was no significant difference between the general average scores. Both primary care health services had the same value in the general score (6,4), considered unsatisfactory.

Given the above, despite the negative result, it can be assessed that the models of care are close to the value referred to as ideal. Therefore, in the presence of the configuration of the attributes according to the caregiver of the child attended at the units, no significant differences were found regarding the type of PHC health unit, that is, regardless of the care models evaluated here.

Study limitations

The study has limitations because it brings the comparison of two locations with different contexts, although this practice is possible due to the uniformity of the instrument used.

Contributions to the field of nursing, health or public policy

The importance of assessment in the daily routine of health services is reinforced, from the perspective of the members of the PHC care process – among them, the nurse – so that the assessment can play its role in the construction of the resoluteness of care in primary health care and, thus, it can be used as a measure to reduce inequities and strengthen PHC.

Conclusions

In the assessment of the attributes of the procedural and structural dimension of the child's PHC in two models of health care, it was evident that FHU and BHU showed differences and similarities, and it can be said that, from the perspective of the child's caregiver, they are guided towards PHC only in the essential attributes, however, they are not guided in the general score.

Although the instrument used in this research has responded to the objective from the perspective of the child's caregiver, research is needed that include health professionals and managers, in order to expand the system's assessment process in relation to the obstacles found and the congruence between different perspectives. Publication gaps related to attributes derived from child health and their contexts are pointed out. Such studies can stimulate discussion and contribute to the consolidation of PHC as an organizer of the health system.

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Collaborators

Coutinho SED (0000-0002-8761-6056)* contributed substantially to the conception and planning, to the analysis and interpretation of data; contributed significantly to the drafting and critical review of the content; and participated in the approval of the final version of the manuscript. Reichert APS (0000-0002-4295-6698)* and Nogueira JA (0000-0002-2673-0285)* contributed significantly to the

elaboration of the draft and critical review of the content; and participated in the approval of the final version of the manuscript. Toso BRGO (000-0001-7366-077X)* and Collet N (0000-0002-4795-0279)* contributed substantially to the design and planning and to the analysis and interpretation of data; they contributed significantly to the drafting and critical review content and participated in the approval of the final version of the manuscript. ■

References

1. Fertoni HP, Pires DEP, Biff D, et al. Modelo assistencial em saúde: conceitos e desafios para a atenção básica brasileira. *Ciênc. Saúde Colet.* 2015; 20(6):1869-78.
2. Rodrigues K. A voz que vem dos municípios. *Rev. Conasems* [internet]. 2016 [acesso em 2018 jun 16]; 67:11-18. Disponível em: https://www.conasems.org.br/wp-content/uploads/2017/02/revista_conasems_edicao_67_web-1.pdf.
3. Brasil. Ministério da Saúde. Portaria nº 2.436, de 21 de setembro de 2017. Aprova a Política Nacional de Atenção Básica, estabelecendo a revisão de diretrizes para a organização da Atenção Básica, no âmbito do SUS. *Diário Oficial da União.* 22 de Set 2017.
4. Brasil. Ministério da Saúde, Secretaria de Atenção Básica. Manual do instrumento de avaliação da atenção primária à saúde: Primary Care Assessment Tool PCATool Brasil [internet]. Brasília, DF: Ministério da Saúde; 2010. [acesso em 2018 jun 16]. Disponível em: http://bvsmis.saude.gov.br/bvs/publicacoes/manual_avaliacao_pcatool_brasil.pdf.
5. Brasil. Ministério da Saúde, Secretaria de Atenção à Saúde. Avaliação na atenção Básica em Saúde: caminhos da institucionalização. Brasília, DF: Ministério da Saúde; 2005.
6. Starfield B. Atenção primária: equilíbrio entre necessidades de saúde, serviços e tecnologia. Brasília, DF: Unesco Brasil; Ministério da Saúde; 2002.
7. Pasche DF, Vilela MEA, Giovanni M, et al. Rede Ce-gonha: desafios de mudanças culturais nas práticas obstétricas e neonatais. *Divulg. saúde debate* [inter-

*Orcid (Open Researcher and Contributor ID).

- net]. 2014 [acesso em 2018 ago 15]; (52):58-71. Disponível em: <http://cebes.org.br/site/wp-content/uploads/2014/12/Divulgacao-52.pdf>.
8. João Pessoa. Prefeitura. Relatório Anual de Gestão-2012. Distrito Sanitário III. João Pessoa: Secretaria Municipal de Saúde; 2012.
 9. Brasil. Ministério da Saúde. Resolução CNS nº 553, de 09 de agosto de 2017. Carta dos direitos e deveres da pessoa usuária da saúde: Brasília, DF: Ministério da Saúde; 2017.
 10. Centro de Defesa dos Direitos da Criança e do Adolescente. Estatuto da Criança e do Adolescente 2017. Rio de Janeiro: Cedeca-RJ; 2017.
 11. Albuquerque MSV, Lyra TM, Farias SF, et al. Acessibilidade aos serviços de saúde: uma análise a partir da Atenção Básica em Pernambuco. *Saúde debate* [internet]. 2014 [acesso em 2018 set 10]; 38(esp):182-94. Disponível em: <http://www.scielo.br/pdf/sdeb/v38nspe/0103-1104-sdeb-38-spe-0182.pdf>.
 12. Ribeiro LCR, Ramos-Jorge ML, Rocha RL. Fatores associados ao acesso aos serviços de saúde na concepção de cuidadores de crianças. *Rev. Científ. Vozes Vales* [internet]. 2014 [acesso em 2018 jul 19]; 6(3):1-14. Disponível em: www.ufvjm.edu.br/vozes.
 13. Marques AS, Freitas DA, Leão CDA, et al. Atenção Primária e saúde materno-infantil: a percepção de cuidadores em uma comunidade rural quilombola. *Ciênc. Saúde Colet.* 2014; 19(2):365-71.
 14. Simone SD, Nóbrega VM, Coutinho SED, et al. Saúde da criança no Brasil: orientação da rede básica à Atenção Primária à Saúde. *Ciênc. Saúde Colet.* 2016; 21(9):2961-73.
 15. Braz JC, Mello DF, David YGM, et al. A longitudinalidade e a integralidade no cuidado às crianças menores de um ano: Avaliação de cuidadores. *Medicina* [internet]. 2013 [acesso em 2018 jun 16]; 46(4):416-23. Disponível em: <http://revista.fmrp.usp.br>.
 16. Frank BRB, Viera CS, Ross C, et al. Avaliação da longitudinalidade em unidades de Atenção Primária à Saúde. *Saúde debate*, 2015; 39(105):400-410.
 17. Silva FCS. O princípio da integralidade e os desafios de sua aplicação em saúde coletiva. *Rev. Saúd. Desenv.* [internet]. 2015 [acesso em 2018 jun 16]; 7(4):94-107. Disponível em: <https://www.uninter.com/revistas/taude/index.php/saudeDesenvolvimento/article/view/373/274>.
 18. Araújo JP, Silva RMM, Collet N, et al. História da saúde da criança: conquistas, políticas e perspectivas. *Rev. Bras. Enferm.* [internet]. 2014 [acesso em 2018 jun 16]; 67(6):1000-7. Disponível em: <http://dx.doi.org/10.1590/0034-7167.2014670620>.
 19. Ferreira TLS, Costa ICC, Andrade FB. Avaliação do atributo integralidade em serviços de puericultura na atenção primária à saúde. *Revista Ciênc. Plu.* [internet]. 2015 [acesso em 2018 jun 16]; 1(1):22-9. Disponível em: <https://periodicos.ufrn.br/rcp/article/view/7320/5497>.
 20. João Pessoa. Prefeitura. Plano Municipal de Saúde 2010-2013. João Pessoa: SMS-JP; 2011.
 21. João Pessoa. Prefeitura. Relatório de Gestão 2010. João Pessoa: SMS-JP; 2011.
 22. Souza GTS, Alves BA, Tacla MTGM, et al. Avaliação do princípio da coordenação na atenção primária à saúde da criança em Londrina-PR. *Semina.* 2015; 36(1):39-46.
 23. Martins JS, Abreu SCC, Quevedo MP, et al. Estudo comparativo entre Unidades de Saúde com e sem Estratégia Saúde da Família por meio do PCATool. *Rev. Bras. Med. Fam. Comunidade* [internet]. 2016 [acesso em 2018 jun 16]; 11(38):1-13. Disponível em: [http://dx.doi.org/10.5712/rbmfc11\(38\)1252](http://dx.doi.org/10.5712/rbmfc11(38)1252).
 24. Nicola T, Pelegrini AHW. Avaliação em saúde nos serviços de atenção primária no Brasil: revisão integrativa da literatura. *J. Nurs. Health.* 2018; 8(1):e188102.
 25. Brasil. Ministério da Saúde, Secretaria de Atenção à Saúde. e-SUS Atenção Básica: manual do Sistema

- com Coleta de Dados Simplificada. Brasília, DF: Ministério da Saúde; 2014.
26. Cascavel. Prefeitura. Relatório Anual de Gestão – RAG 2013. Cascavel: SESAU; 2014.
27. Araújo JP, Viera CS, Toso BRGO, et al. Avaliação dos atributos de orientação familiar e comunitária na saúde da criança. *Acta Paul. Enferm.* 2014; 27(5):440-6.
28. Reichert APS, Leôncio ABA, Toso BRGO, et al. Orientação familiar e comunitária na Atenção Primária à Saúde da criança. *Ciênc. Saúde Colet.* 2016; 21(1):119-27.
29. Daschevi JM, Tacla MTGM, Alves BA, et al. Avaliação dos princípios da orientação familiar e comunitária da atenção primária à saúde da criança. *Semina: Ciênc. Biol. Saúde.* 2015; 36(1):31-8.

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