ORIGINAL ARTICLE

BETWEEN ADVANCES AND GAPS: EVALUATION OF CHILD HEALTH SURVEILLANCE (PUERICULTURE) ACTIONS IN PRIMARY HEALTH CARE IN EASTERN MARANHÃO

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Highlights: (1) Positive evaluation of child health surveillance (puericulture) in Primary Health Care in eastern Maranhão. (2) High average scores, but with points needing improvement, such as coordination and comprehensiveness. (3) Study results highlight the need for greater integration and continuity of care offered by PHC.

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ABSTRACT

Objective: To analyze childcare actions in Primary Health Care (PHC) in eastern Maranhão, from the perspective of parents and caregivers. **Method:** A descriptive and evaluative study with a quantitative approach, carried out in the municipality of Caxias, Maranhão. The Primary Care Assessment Tool (PCATool), child version, validated by the Brazilian Ministry of Health, was used as an instrument to assess the essential and derived attributes of PHC, including first-contact access, longitudinality, comprehensiveness, care coordination, family orientation, community orientation, and cultural competence. **Results:** An overall positive evaluation of childcare actions was evidenced, with high scores in most of the analyzed attributes. The degree of affiliation stands out by presenting the highest values, indicating a strong bond between users and health services. On the other hand, attributes related to care coordination and comprehensiveness obtained lower scores, pointing to limitations in the continuity of follow-up and in the expanded offer of services aimed at child health. **Conclusion:** Despite the favorable evaluation of childcare in PHC, important weaknesses persist, especially regarding the integration between services and the scope of actions offered. The results reinforce the need to strengthen the coordination of the care network, focusing on expanding strategies that ensure continuous and comprehensive care for children.

Keywords: Primary Health Care; Health Services Evaluation; Child Care; User Satisfaction.

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INTRODUCTION:

Primary Health Care (PHC) is recognized as a structural axis of health systems, since it is responsible for organizing care based on the needs and specificities of the population, articulating the different levels of care. In this sense, it acts as the preferred gateway to the system, ensuring continuous, comprehensive, and coordinated access to health services, in addition to promoting the reorganization of care resources in a more equitable manner[1,2].

In the Brazilian context, PHC plays a fundamental role in health promotion, prevention, and recovery, structuring actions aimed at ensuring quality of life for the population. In the field of child health, in recent years there has been an increasing prioritization in public policies, especially with the incorporation of approaches that overcome the traditional biomedical model and come to value the comprehensiveness of care. This perspective gains strength with the implementation of strategies aimed at articulating the care network and consolidating specific policies, such as the National Policy for Comprehensive Child Health Care (PNAISC)[3].

Inserted in this scenario, childcare stands out as one of the main strategies developed within the scope of the Family Health Strategy, being focused on the systematic monitoring of child growth and development. This practice involves a set of actions that go beyond clinical evaluation, encompassing guidance, health promotion, and disease prevention, aiming to favor the healthy development of children and reduce risks to their health[4].

Furthermore, childcare contributes significantly to the reduction of child morbidity and mortality, consolidating itself as a routine practice in primary care services. The expansion of these actions was strengthened by the establishment of the PNAISC, which establishes guidelines for the organization of comprehensive child care in Brazil[5].

Given the relevance of PHC and childcare actions in the context of public health, it is necessary to investigate how these practices have been developed and perceived by service users. In this sense, this study seeks to answer the guiding question: what is the evaluation of childcare actions in Primary Health Care in eastern Maranhão?

The analysis of parents' and caregivers' perception of the services offered proves to be fundamental to understand the effectiveness of the implemented actions, since these individuals directly experience the care provided and can indicate both potentialities and weaknesses in the provision of services. Thus, the present study contributes to the expansion of the discussion on the quality of child health care, providing reflections and possible improvements in the practices developed by health teams within the FHS.

Therefore, the research is relevant not only for the field of public health, but also contributes to the strengthening of public policies focused on childhood. By identifying advances and gaps in childcare actions, it becomes possible to guide more resolutive, humanized strategies aligned with the real demands of families, contributing to the qualification of PHC and to the improvement of child health care.

METHOD

This is a descriptive and evaluative study with a quantitative approach, carried out in the municipality of Caxias, located in the eastern region of the state of Maranhão. The municipality is an important regional hub, being one of the most populous in the state, with a Human Development Index (HDI) of 0.624, a value below the national average, estimated at 0.755[28].

Regarding the organization of the health care network, Caxias currently has 56 Family Health teams, in addition to 425 Community Health Agents and 38 Basic Health Units, distributed between urban (27 units) and rural (11 units) areas, composing the scenario in which the present investigation was developed.

Data collection was performed using the Primary Care Assessment Tool (PCATool), child version, validated in Brazil by the Ministry of Health and widely used in the evaluation of Primary Health Care. The instrument allows measuring the presence and extent of the essential and derived attributes of PHC, including first-contact access, longitudinality, care coordination, comprehensiveness, family orientation, community orientation, and cultural competence[2].

For data processing, the scores of the evaluated components were calculated according to the guidelines of the PCATool manual, and subsequently transformed into a

standardized scale from 0 to 10. From these values, the Essential Score and the General PHC Score were obtained through the arithmetic mean of the corresponding components.

Statistical analyses were conducted using Microsoft Excel® 365 and the Statistical Package for the Social Sciences (SPSS) software, version 22.0. Descriptive statistics were used for data characterization and Spearman's correlation test for association analysis, adopting a significance level of 95%.

Regarding ethical aspects, the study was submitted to and approved by the Research Ethics Committee of the Universidade Estadual do Maranhão, in accordance with the guidelines established by Resolution No. 466/2012 of the National Health Council, which regulates research involving human subjects. The project is registered on the Brazil Platform under opinion No. 6,413,300.

RESULTS:

Regarding the essential attributes of PHC, Table 1 provides a detailed view of these attributes according to the perception of parents and caregivers, which is extremely important for evaluating the quality of the services offered.

Table 1 – Description of essential and general attributes of childcare in primary health care, Caxias, Maranhão, 2024 (n=386)

Attribute	Mean	Standard Deviation	Minimum	Maximum
Degree of Affiliation - Structure component and Longitudinality attribute	9.92	0.60	3.33	10.00
First Contact Access - Utilization	8.12	0.87	5.56	10.00
First Contact Access - Accessibility	8.14	0.89	4.00	10.00
Longitudinality	7.48	0.67	4.76	9.52
Care Coordination - Integration of Care	8.08	1.53	0.00	10.00
Care Coordination - Health Information Systems	7.97	1.03	2.22	10.00
Comprehensiveness - Available Services	7.16	0.94	2.59	10.00
Comprehensiveness - Provided Services	7.86	1.03	2.67	10.00
Family Orientation	8.09	1.22	1.11	10.00
Community Orientation	8.08	1.22	0.00	10.00
PHC Essential Score	8.09	0.43	5.88	9.85
General PHC Score	8.09	0.46	5.35	9.88

Source: Research data (2024)
PHC: Primary Health Care
PCATool: Primary Care Assessment Tool
n: number of research participants

All analyzed attributes showed mean scores close to 10.00, which may signal a positive evaluation by parents and caregivers of the services offered by PHC, thus meaning that, in general, the public is satisfied with the professional care they have received.

However, even with high means, the standard deviation in some attributes shows variability in the evaluation, which may indicate that there are differences in how each individual evaluates PHC care. It should be noted that these differences usually arise from inequalities or even difficulties in service accessibility. Thus, even with the satisfaction of parents and caregivers, especially regarding continuity of care, integration, and accessibility, many users have different experiences, revealing traits that need to be improved within the services.

Regarding improvements, Table 2 describes results on PHC attributes,

highlighting their analysis as satisfactory and unsatisfactory, in the perception of parents or caregivers.

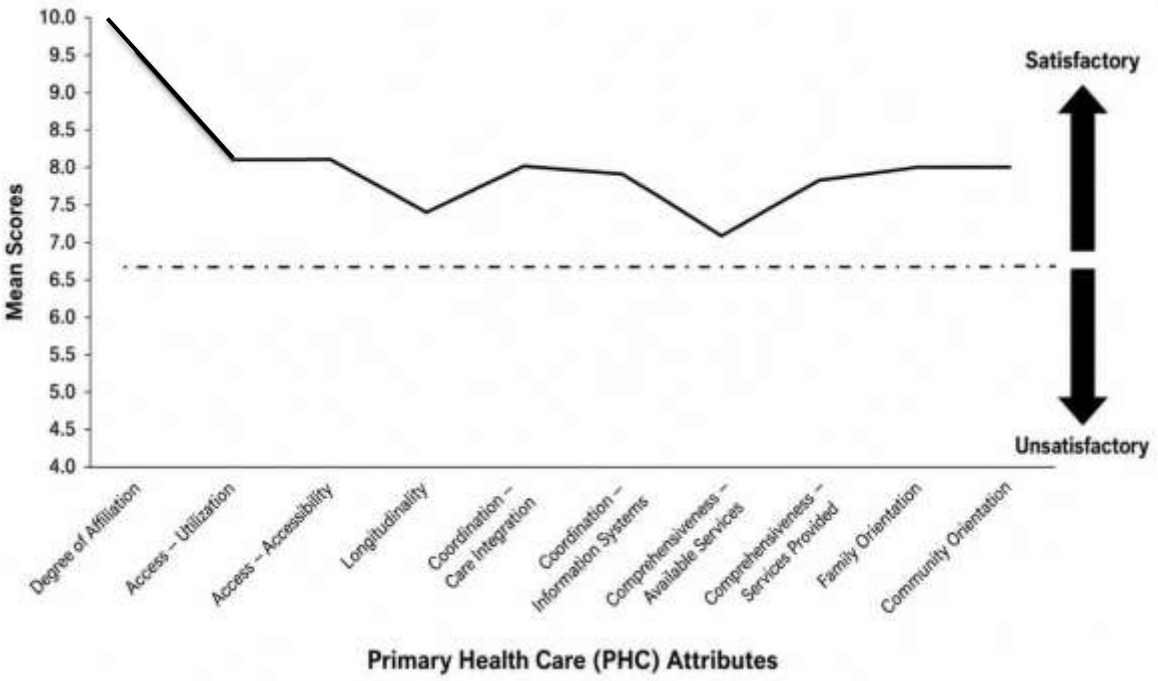
Table 2 – Distribution between satisfactory and unsatisfactory of PHC attributes, Caxias, Maranhão, 2024

Attribute	Assessment of PHC attributes			
	Satisfactory		Unsatisfactory	
	Freq.	%	Freq.	%
Degree of Affiliation - Structural component and Longitudinality attribute	384	99,5	2	0,5
First Contact Access - Utilization	381	98,7	5	1,3
First Contact Access - Accessibility	374	96,9	12	3,1
Longitudinality	359	93,0	27	7,0
Coordination - Care Integration	74	91,4	7	8,6
Coordination - Information Systems	373	97,1	11	2,9
Comprehensiveness - Services Available	308	80,0	77	20,0
Comprehensiveness - Services Provided	362	93,8	24	6,2
Family Orientation	367	95,1	19	4,9
Community Orientation	370	96,1	15	3,9
PHC Essential Score	383	99,2	3	0,8
PHC Overall Score	381	98,7	5	1,3

Source: Research data (2024)
PHC: Primary Health Care
PCATool: Primary Care Assessment Tool
n: number of research participants

90% of respondents rated the care provided by the FHS as "satisfactory." The attribute "Degree of Affiliation" reached 99.5%, indicating an extremely positive evaluation of the results. All attributes showed statistically significant differences between satisfactory and unsatisfactory evaluations, confirming that the satisfactory evaluations are not random but rather statistically robust, reinforcing the reliability of the results.

Figure 1 – Mean scores of PHC attributes in the FHS and their classification as satisfactory and unsatisfactory, PHC Caxias, Maranhão, 2024



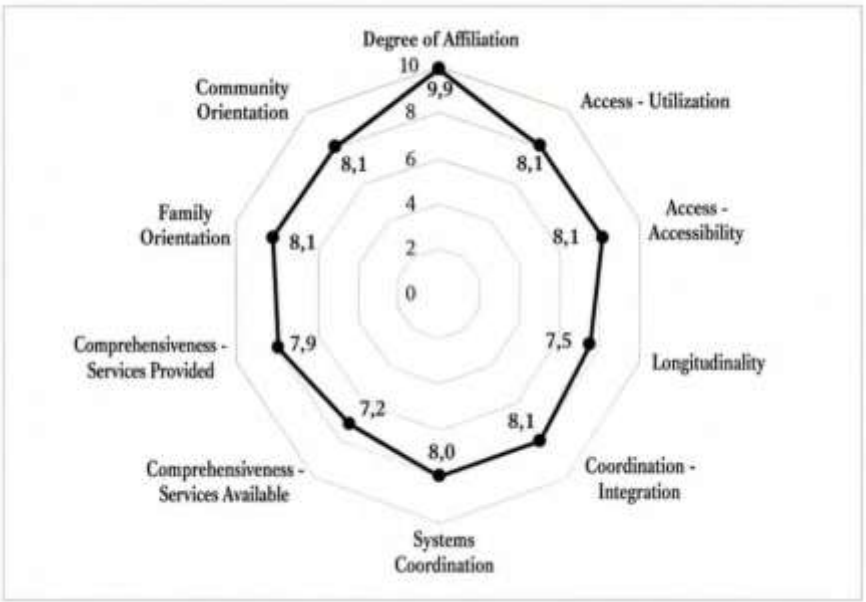
Source: Research data (2024)

The PHC attributes as a whole have scores above the average (>7) in terms of satisfaction, indicating that, in general, the services meet the needs of patients. However, the attribute "Degree of Affiliation" stood out, reaching nearly the mean of 10.0, whereas the attributes "Coordination - Integration of Care" and "Comprehensiveness - Provided Services" presented low scores, being considered an area in which the health service needs to improve.

The general trend line of the information remains above 7 for all attributes evaluated in the research, highlighting consistency in the actions offered by PHC. However, lower scores indicate that these services do not always reach all users with the same quality and efficiency, compromising the results and expectations of users.

Figure 2 shows the mean scores of all evaluated attributes. It is noted that the farther from the center, the more qualified the attribute was, with all seven attributes above the expected mean. The lowest scores are seen in "Comprehensiveness – Available Services," "Comprehensiveness – Provided Services," and "Longitudinality," respectively, yet with mean scores above the minimum average. The results of the PHC attribute evaluations demonstrate that this type of evaluation can contribute to improving the quality of care provided to the population in the long term and establishes parameters that guide managers, researchers, and health professionals[23].

Figure 2 - Mean scores of essential and derived attributes evaluated in Primary Health Care in Caxias-MA, Brazil, 2024



Source: Research data (2024)

Thus, when evaluating, it is expected that most results are satisfactory, as this finding demonstrates that this PHC is effective in its promotion, prevention, and recovery actions, having a universal approach while acting with equity in mind[24].

DISCUSSION:

Childcare constitutes a central strategy within the scope of Primary Health Care, as it promotes the continuous monitoring of child growth and development through multiprofessional action. This monitoring aims not only to ensure adequate conditions for physical and cognitive development but also to favor the construction of healthier life trajectories from childhood onwards, with positive repercussions throughout the life cycle[6].

Beyond biometric and anthropometric assessments, childcare involves an expanded approach to care, which considers the child in their entirety and inserted in a specific family and social context. Thus, the actions developed include not only clinical aspects but also educational, preventive, and health promotion dimensions, recognizing the importance of family and community participation in this process[7].

In this context, PHC professionals play a fundamental role in reducing child morbidity and mortality, since, during childcare consultations, they have the opportunity to early identify health problems, guide families, and intervene in a timely manner in factors related to the health-disease process. This action directly contributes to the qualification of care and the strengthening of preventive actions[6],[21].

However, the effectiveness of these actions is directly related to the ability of health teams to recognize and meet the specificities of families, which requires a sensitive, continuous, and coordinated care practice. The systematic monitoring of children enables not only the monitoring of development but also the early detection of risk situations, in line with the principles of primary care and health surveillance[10],[22].

The evaluation of childcare services, in this sense, configures itself as an essential tool for analyzing the quality of care provided, allowing the identification of weaknesses and potentialities in the organization of care. Aligned with the guidelines of the Ministry of Health, this evaluation contributes to the improvement of care practices and the strengthening of child health surveillance actions[18].

In the Brazilian scenario, although childcare is consolidated as an essential practice in primary care, challenges related to equity in access and the quality of services offered persist. Socioeconomic, territorial, and structural inequalities still influence the availability and effectiveness of actions, especially in more vulnerable contexts[6].

These disparities become even more evident when analyzing differences between urban and rural areas, as observed in eastern Maranhão. In these regions, limitations in service provision and in the health system's response capacity may compromise the comprehensiveness of care, directly reflecting on user perception and the quality of care provided.

Furthermore, weaknesses in the articulation between management and the community, associated with low social participation in decision-making processes, may result in fragmented practices that are poorly aligned with local needs. This scenario highlights the importance of strengthening governance and social participation as structuring elements for the effectiveness of health actions[19].

Another relevant factor refers to the working conditions of health teams. Work overload, combined with insufficient human and structural resources, can negatively impact the quality of care provided, limiting the ability of professionals to develop more comprehensive and resolutive actions[8].

In this context, accessibility to services emerges as a key element in the evaluation of PHC quality. Ease of scheduling appointments, geographic proximity of services, and resolutive capacity of care directly influence family adherence to child follow-up and continuity of care[17].

Additionally, the quality of relationships established between health professionals and users plays a determining role in service evaluation. Welcoming, qualified listening, and bond building favor greater family engagement and contribute to the effectiveness of childcare actions, consolidating more humanized and user-centered practices[8],[9].

Communication between the team and the family also presents itself as an essential component, requiring approaches that value family knowledge and promote clear and accessible guidance. This interaction strengthens the therapeutic bond and enhances the results of health interventions[13].

On the other hand, operational obstacles, such as difficulties in scheduling

appointments, absence of active search, and weaknesses in conducting home visits, may compromise access and continuity of care. Such limitations contribute to the distancing of families from services and to the reduction of the effectiveness of childcare actions[5],[10],[16].

Structural issues, such as insufficient material resources, infrastructure limitations, and inadequate service management, also directly impact the quality of care, generating professional overload and dissatisfaction of both teams and users[12].

Family adherence to child follow-up, in turn, is directly related to the quality of actions offered and the construction of bonds with the health team. Childcare, by enabling continuous monitoring of the child, contributes to the identification and early coping with biological and social risks, reinforcing its importance in the context of PHC[15].

The findings of this study converge with evidence from other investigations carried out in the regional and national context, which point to the need to strengthen attributes with lower performance, especially those related to care coordination and comprehensiveness of services[19].

At the national level, studies indicate that attributes such as longitudinality and coordination still present lower performance when compared to more consolidated health systems, evidencing the need to improve integration mechanisms between levels of care and continuity of care[25].

In the international scenario, experiences from countries such as the Netherlands and Portugal demonstrate that investments in strategies aimed at strengthening first contact and continuity of care are associated with better child health outcomes, reinforcing the importance of qualifying not only access but also the quality of relationships established in the care process[26],[27].

Given this, the need to plan childcare actions based on territorial specificities stands out, considering population demands and local conditions of service provision. The integrated action of health teams, combined with the strengthening of public policies, proves to be fundamental to overcome the identified challenges.

Childcare plays a strategic role in consolidating more resolutive and comprehensive health care, contributing to the early detection of health problems and the promotion of better living conditions in childhood. The absence or weakness of these

actions can significantly compromise child development, evidencing the importance of its strengthening within the scope of PHC[14].

CONCLUSIONS:

The results evidenced that Primary Health Care in eastern Maranhão presents satisfactory performance in most of the attributes evaluated by the PCATool, especially the degree of affiliation, which obtained the highest scores among the analyzed domains. This finding indicates the existence of a strong bond between users and health services, an essential element for continuity of care in childcare.

Despite the good performance observed in essential attributes, weaknesses were identified in care coordination – especially in the integration between services – and in comprehensiveness, both in terms of available services and effectively provided services. These results point to the need to strengthen processes of organization, communication, and articulation of teams, in order to expand the offer of actions and favor the continuity of child follow-up.

Therefore, improving care coordination and comprehensiveness is fundamental to qualifying childcare actions in the territory, contributing to a more resolutive and equitable PHC capable of comprehensively and continuously meeting the needs of children and their families.

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