



# INDICATORS OF THE UAPI PROGRAM TO STRENGTHEN CHILDCARE

INDICADORES DO PROGRAMA UAPI PARA O FORTALECIMENTO DA PUERICULTURA

# INDICADORES DEL PROGRAMA UAPI DE FORTALECIMIENTO DE LA ATENCIÓN INFANTIL

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#### **ABSTRACT**

**Objective:** To analyze the indicators of the UAPI Program at a Basic Health Unit in the municipality of Aracati, Ceará. **Methods:** This descriptive, exploratory, and documentary study was conducted at a Basic Health Unit in a rural area of the municipality of Aracati, Ceará, with parents or guardians of children aged six months to under one year old undergoing childcare follow-up. **Results:** Twenty-nine parents or guardians of children participated in the study and were assessed on eight UAPI Program indicators. The study highlighted the need for a close and continuous focus on child health. **Final considerations:** The UAPI Program presents a positive strategy for evaluating units, developing strategic health planning, and promoting better monitoring of children in primary care.

**Keywords:** Child Care; Primary Health Care; Community Health Status.

#### **RESUMO**

Objetivo: Analisar os indicadores do Programa UAPI em uma Unidade Básica de Saúde do município de Aracati, Ceará. Métodos: Estudo descritivo, exploratório e documental, desenvolvido em uma Unidade Básica de Saúde da zona rural do município de Aracati-Ceará, com pais ou responsáveis de crianças de seis meses a menores de um ano, em acompanhamento de puericultura. Resultados: Participaram da pesquisa 29 pais ou responsáveis de crianças, que foram avaliados em oito indicadores do Programa UAPI. O estudo remeteu para a necessidade de um olhar atento e contínuo para a saúde infantil. Considerações finais: O Programa UAPI apresenta-se como estratégia positiva para avaliação de unidades, elaboração de planejamento estratégico em saúde e promoção de um melhor acompanhamento de crianças no âmbito da atenção primária.

Descritores: Cuidado da Criança; Atenção Primária à Saúde; Indicadores de Saúde Comunitária.

#### RESUMEN

**Objetivo:** Analizar los indicadores del Programa UAPI en una Unidad Básica de Salud del municipio de Aracati, Ceará. **Métodos:** Estudio descriptivo, exploratorio y documental realizado en una Unidad Básica de Salud de una zona rural del municipio de Aracati, Ceará, con padres o tutores de niños de seis meses a menos de un año en seguimiento de puericultura. **Resultados:** Veintinueve padres o tutores de niños participaron en el estudio y fueron evaluados en ocho indicadores del Programa UAPI. El estudio destacó la necesidad de un enfoque cercano y continuo en la salud infantil. **Consideraciones finales:** El Programa UAPI presenta una estrategia positiva para evaluar unidades, desarrollar planificación estratégica de salud y promover un mejor seguimiento de los niños en atención primaria.

Descriptores: Cuidado del Niño; Atención Primaria de Salud; Indicadores de Salud Comunitaria.

#### INTRODUCTION

Childcare consists of the regular monitoring of children for growth and development assessment, immunization, breastfeeding, adequate nutrition, individual and environmental hygiene and early identification of health problems, in order to

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intervene effectively and appropriately. In addition, it is also a space for protection, through the guidance provided to parents and/or caregivers on accident prevention.

Thus, it is important to point out that Primary Care is the main gateway into the Unified Health System (SUS)<sup>1</sup>. Regarding the child's health, it is essential to develop actions to promote health and prevent diseases, through involvement with parents and/or caregivers.

From this, it is relevant to cite the Children's Health Record (CHR) as an important tool for monitoring child growth and development. It was launched in 2005 by the Ministry of Health (MH), replacing the Children's Card, as it is more complete and aims to improve child health surveillance<sup>2</sup>.

In this sense, in order to strengthen the actions of Childcare in the City of Fortaleza, the Municipal Health Department launched in 2018 the Friendly Early Childhood Unit Program (FECU). The United Nations Children's Fund (UNICEF) provided support and technical advice to the IUPI Program and developed the methodology and systematization of the process, from the description of the steps to be followed for implementation. After this event, UNICEF began to promote the dissemination of the IUPI Program to municipalities in different states of the national<sup>3</sup>.

Therefore, it is relevant to mention that the FECU Program presents 10 guidelines, namely: participation of pregnant women in prenatal childcare consultation; conducting at least nine childcare consultations in the first two years of the child's life; carrying out neonatal screening tests on every newborn; recording of anthropometric data in the growth curves in the electronic chart and in the children's notebook; evaluation and adequate registration of the milestones of child development in the electronic chart and in the children's notebook; exclusive breastfeeding until six months of life; home visits recommended by the Grow with Your Child/Happy Child Program; supplementation of iron and vitamin A in an appropriate way; application of vaccines according to the recommendation of the Ministry of Health; Guidance on oral hygiene practices from birth<sup>3</sup>.

Based on the above, it is relevant to mention that, in 2004, the MH launched the Agenda of Commitments for Integral Child Health and Reduction of Infant Mortality, emphasizing the importance of theme<sup>4</sup>. Moreover, we have the child's health as an important guideline of the global strategy for women's health, of the child and adolescent (2016-2030) of the United Nations<sup>5</sup>, from the Sustainable Development Goals (SDGs).

Despite the importance of childcare, studies show that there are difficulties in its implementation, which may be due to the lack of skills of professionals and a multiprofessional approach, results of the low index of permanent education, the shortage of reference specialists, the high rates of absenteeism, lack of active search, and an ineffective physical structure<sup>6</sup>.

Thus, it is pointed out that the interest in the theme occurred due to the insertion of the researcher in the territory of action, where it was possible to observe a high demand for children for childcare consultations. The environment in question is a Basic Health Unit located in the rural area of the city of Aracati-Ceará. The territory is alive

and in constant process of movement, hence the importance of knowing it to better act according to local health needs<sup>7</sup>.

Thus, the question that arose was: What is the status of the indicators of the FECU Program for strengthening childcare in a Basic Health Unit in Aracati?

Given the 10 guidelines of the FECU Program, its application as a unique technology in promoting health in the first thousand days of life<sup>8</sup> and its usefulness in strengthening childcare, The hypothesis is that the verification and analysis of the program indicators can contribute to improving the indicators of a Basic Health Unit in the city of Aracati, Ceará, given its collaboration for quality care with emphasis on the pre- and post-natal period.

Therefore, the objective of this study is to analyze the indicators of the FECU Program in a Basic Health Unit in Aracati, Ceará.

### **METHODS**

This is a descriptive, exploratory and documentary study with quantitative approach. This method uses systematic, objective and rigorous strategies to generate and refine knowledge. Sometimes, quantitative research observes relationships between variables, one being dependent and the other independent<sup>9</sup>.

The study was conducted in a Basic Health Unit in the rural area of the municipality of Aracati, Ceará, from June to October 2024. During the child care consultations of children aged six months to 11 months and 29 days, those responsible were approached about the research. When interested, they signed the Informed Consent Form (ICF) and answered the questions of the form, based on information from the child's medical record and the CHR. This instrument was the same used in the pilot project and filled by the researcher.

Thus, the sample was composed of 29 parents or guardians for children aged six months to 11 months and 29 days. As inclusion criteria, we used parents or guardians of children who were registered in the unit and were monitoring childcare. Parents or guardians with cognitive and/or mental deficits that made it impossible to respond to the data collection instrument were excluded from the study.

As in the FECU pilot project, the guideline related to the Grow with Your Child/Happy Child Program will not be analyzed, as well as the supplementation of iron and vitamin A, since the objective is to perform the situational diagnosis of the first six months of life, period in which such practices are not yet recommended.

Concerning the risks of the study, it should be noted that no research involving human beings is exempt from them. However, for the present situational diagnosis, no risks higher than the proposed benefits were identified, such as negative feelings and constraints, which were easily circumvented, from the promotion of a comfortable and welcoming environment for participants.

As for the benefits, it is worth highlighting the analysis of the attention to local childcare. In addition, health policies in the city may be guided, based on the results, in order to seek a better guidance of health professionals in child care consultations.

The quantitative data were analyzed through graphs and tables created by the author in Microsoft Word and Excel, based on the answers found.

The research met the conditions recommended by Resolution 466 of 12 December 2012 of the National Health Council. This document provides the ethical principles of research involving human beings, in order to ensure the rights and duties of the participants of the research, as well as predicting the principles of bioethics: autonomy, non-maleficence, beneficence and justice<sup>10</sup>.

Therefore, data collection was only carried out with the prior authorization of the parents or guardians of the child, through the ICF. In addition to the above, it has been sent an Institutional Consent Term for the use of medical records, for the collection of data related to growth and development milestones and anthropometric records, and because they are not public domain, it was also necessary, the Faithful Depositary Form.

The project was submitted to the Research Ethics Committee (REC) of the School of Public Health of Ceará (ESP/CE) and approved in May 2024, under the number of opinion 6.821.798 and CAAE 79270224.3.0000.5037.

### RESULTS

The participants were 29 parents or guardians of children aged six months to 11 months and 29 days. As in the initial analysis, the evaluation will be based on eight indicators, namely: participation in groups of pregnant women (I1); conduct of childcare consultations (I2); coverage of neonatal screening (I3); anthropometric records (I4); records of milestones of child development (I5); exclusive breastfeeding for six months (I6); updated vaccination schedule (I7); oral health consultations (I8). The cutoff points were based on the following table.

Table 1 – Cut-off points and scoring in indicators

Indicator	<b>Cutoff Point</b>	0 Point	1 Point	2 Points	3 Points
I1	Participation in the pregnant women group	0.00 – 8.37	8.38 – 24.03	24.04 – 39.69	Above 39.69
12	Minimum of 4 months with consultations	0.00 – 22.36	22.37 – 35.06	35.07 – 47.77	Above 47.77
13	90% coverage	0.00 - 85.50	85.51 – 89.99	90.00 – 96.24	Above 96.24
<b>I</b> 4	Minimum of 4 registrations	0.00 – 11.69	11.70 – 25.07	25.08 – 38.44	Above 38.44
15	Minimum of 4 registrations	0.00 – 4.97	4.98 – 10.72	10.73 – 16.46	Above 16.46
16	Exclusive breastfeeding for 6 months	0.00 – 29.26	29.27 – 39.99	40.00 – 51.03	Above 51.03
<b>I7</b>	Updated vaccination	0.00 – 79.05	79.06 – 94.99	95.00 – 97.01	Above 97.01

	schedule				
18	Minimum of 1 consultation	0.00 - 1.73	1.74 – 8.84	8.85 – 15.95	Above 15.95

Source: Fortaleza (2022).

Thus, each unit can score from zero to 24 and, in order to be considered a Friendly Early Childhood Unit, it must be considered good or excellent, and score at least two in I2, as shown in the following table.

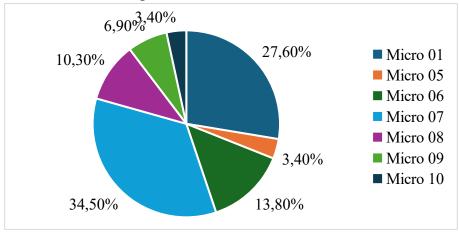
Table 2 – Classification of units based on score

CUTOFF POINT	CLASSIFICATION	
0 - 10	Insufficient	
11 - 14	Fair	
15 - 19	Good	
Above 19	Excellent	

Source: Fortaleza (2022).

In relation to the observed territory, most of the respondents lived in microareas one, six and seven, accounting for 75.9% of the total number of respondents.

**Graph 1 – Micro-areas of research** 



Source: Created by the author (2024).

Regarding the I1, 75.9% participated in groups of pregnant women and 24.1% not, which leads to score three. Concerning the consultations performed (I2), it is noted that 20.7% of the children had only one consultation, 10.3% had two, 17.2% had three, 44.8% four, 3.4% five and 3.4% six. This fact scores three, due to the sum of 51.6% of children with four, five and six consultations.

3,40% 3,40%

20,70%

10,30%

17,20%

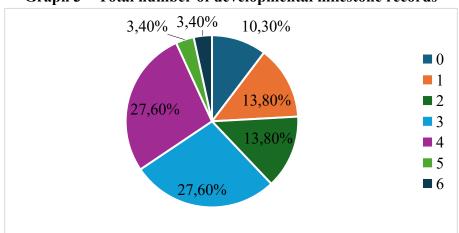
17,20%

**Graph 2 – Total number of performed consultations** 

Source: Created by the author (2024).

In relation to I3, it is observed that 100% of the children performed a foot test, 100% did an eye test and 58.6% an ear test. When averaging, based on the three data, the result obtained was 86.2%, which is one. Analyzing the I4, it is possible to see that 24.1% of the children had at least four records of cephalic perimeter, 79.3% presented at least four records of weight and 48.3% at least four records of length. Averaging the data leads to 50.56%, which is three points.

Regarding the I5, it is noted that 10.3% of the children evaluated had no record of development milestone, 13.8% presented one, 13.8% had two, 27.6% three, 27.6% four, 3.4% five and 3.4% six. This fact makes score three, due to the sum of 34.4% of children with four, five and six records.



Graph 3 – Total number of developmental milestone records

Source: Created by the author (2024).

Moreover, 34.5% of the participating children were exclusively breastfed until six months (I6), which scores one. 75.9% were with updated vaccination calendar (I7), this value does not score, according to the cut-off percentages. In relation to dental consultations (I8), 20.7% of the children had at least one, which receives three points.

By the general sum, the unit scored 17, being categorized as good. For having scored three in I2, it can be considered as a Friendly Early Childhood Unit.

### **DISCUSSION**

In relation to the study territory, the greatest participation was of those belonging to microareas one, six and seven. This happened because the three microareas mentioned are part of the headquarters, and all the others constitute points of support. Thus, it is noticed that in the headquarters the population is larger. Furthermore, there is difficulty in logistics and transportation, in relation to access to other locations, which reduces the amount of service on site.

Regarding the analysis of the indicators, it was possible to observe a satisfactory participation in groups of pregnant women and/or child care consultations in prenatal. Thus, it is emphasized the relevance of the approach, even in the prenatal period, the importance of child care consultations. This is because in the first 1,000 days of life, child morbidity and mortality can be reduced with appropriate interventions in the health system, such as access to a structured prenatal care and childcare follow-up from the first week of postnatal life8.

In addition, there is a good participation of the sample evaluated in childcare consultations. Thus, it is necessary to reiterate childcare as the foundation of comprehensive child health, as recommended in the National Policy for Comprehensive Care of Children's Health (PNAISC). It assesses growth and development, which are determinants for the child's health, and prevents diseases and aggravations<sup>3,11</sup>.

When observing the performance of neonatal screening tests, it is noticed a low coverage, mainly due to a lower rate of completion of the test of the ear. However, Brazilian legislation recommends that the discharge of women and newborns in the postpartum period should only occur after pulse oximetry (heart test) and eye screening (red reflex test or eyeball test). In addition, it is necessary to ensure the auditory screening (ear test) in the first month of life, and the biological screening (heel prick test), preferably between the 3<sup>rd</sup> and 5<sup>th</sup> days of the child's life<sup>12</sup>. Even with the universalization of tests, population differences are observed when access is analyzed.

Moreover, it was possible to positively analyze the record of anthropometric data. Through the recording of such information, it is possible to follow and monitor the child's trajectory, allowing the detection of early deviations in growth and execution of necessary diagnostic and therapeutic interventions<sup>3</sup>.

Concerning the completion of graphs related to child growth and development, the evaluation was also positive. This strategy is essential to detect early growth deviations and increase the possibilities of diagnostic and therapeutic interventions. Despite its importance, it is still a challenge to complete the fields in question, which highlights the importance of stimulating the process by professionals and familiars<sup>3</sup>.

When analyzing exclusive breastfeeding up to six months, the evaluation was not positive. Even such a recommendation from the World Health Organization and the Ministry of Health, there are still several factors that influence breastfeeding, such as fear, insecurity, age, education level, socioeconomic and demographic characteristics, cultural patterns and lack of support. This is exactly why such a subject should be

approached with mastery in the pre- and post-natal period, aiming above all to avoid early weaning<sup>11,13,14</sup>. Thus, childcare is a favorable environment to stimulate breastfeeding, based on the spread of information related to myths, benefits, correct catch, challenges and overcoming breastfeeding.

In addition, it is observed that the vaccination coverage of this unit was also not positive. This fact highlights the importance of research on the subject, considering that it is still a great challenge to achieve vaccination coverage through an equitative <sup>15</sup>. In addition, it is necessary a joint action throughout the national territory for the effectiveness of vaccination coverage, through the expansion of active search of target audience, investment in professional training and combat the anti-vaccination movement in Brazil, due to the repercussion of fake news. This misinformation leads to deleterious effects on health, due to the difficulty in implementing immunization campaigns, a result of the lack of surveillance of shared content on internet <sup>16</sup>.

In turn, dental consultations had satisfactory evaluation. Thus, the main objective of dentistry in early childhood is prevention, early diagnosis and treatment. In addition, it is observed that the earlier the manipulation of the oral cavity of babies, the more receptive they will be in relation to oral health care<sup>3</sup>.

Given the above, it becomes evident the need for an attentive and continuous look at child health, with actions that strengthen childcare, encourage breastfeeding, ensure vaccination coverage and promote equitable access to health services, aiming at the integral and healthy development of children.

## FINAL THOUGHTS

Given the complexity and uniqueness observed in child care consultations, it is observed that the FECU Program is a positive strategy for evaluation of units, development of strategic planning in health and promotion of a better follow-up of children in the scope of primary care based on the guarantee of rights.

Even if the unit in question has been considered good and a FECU, more studies are needed to verify whether the failures identified in the process are due to management, community, professionals and/or lack of structure and physical and financial inputs.

This study is expected to broaden the discussions in the scientific community on the subject and improve the quality of care for children, in order to enhance and strengthen childcare in the context of Primary Health Care.

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