

## Childcare appointment at the Family Health Strategy in municipalities in the inland region of the State of Paraíba, Brazil

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**Abstract** *This article aims to evaluate the childcare appointments by health professionals working at the Family Health Strategy in municipalities in the State of Paraíba, compare the performance by health team type (The Mais Médicos Program or conventional), and analyze the association of client satisfaction with the developed actions. This cross-sectional study evaluated the structural conditions of health units, the work process of health professionals, and client satisfaction, observing childcare appointments in 22 health teams. Poor employment relationships and professionals' knowledge about child growth curves were highlighted in the structure. In the 175 appointments observed, we detected neglect in completing the Child Health Booklet (CHB), obtaining data on food consumption, and guidance practices. Only 36% of the appointments were classified with adequate duration. There was greater satisfaction for appointments developed in health teams of the Mais Médicos Program, with longer duration and better performance in guidance practices. The implementation of childcare appointments reveals significant gaps that can influence maternal satisfaction.*

**Key words** *Primary Health Care, Childcare, Process Assessment (Healthcare)*

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## Introduction

Child healthcare is essential for healthy development and one of the priority fields of care that should be provided by health professionals in the Family Health Strategy (ESF)<sup>1,2</sup>. In this context, it is vital for monitoring child health and promoting healthy growth and development. Childcare appointments should include child assessment, growth and neuropsychomotor development monitoring, prevalent childhood illnesses care, and development of primary healthcare promotion actions regarding immunization, nutrition, and accident prevention<sup>1,3</sup>. The systematic monitoring of the child's growth and development enables the implementation of essential practices to reduce child morbimortality<sup>4</sup>.

Despite the importance of child growth and development surveillance, evidence suggests that its implementation in Brazil needs to be stronger and influenced by factors such as low awareness and lack of preparation of health professionals, which impairs the quality of care provided to children<sup>3-5</sup>. These gaps can limit advances in the health of the child population<sup>6</sup>, while client satisfaction with the care received can minimize them<sup>7,8</sup>. From the patient's perspective, satisfaction stems from their interaction with health professionals, valuing their ability to improve the most crucial care attributes<sup>7</sup>. As an outcome indicator of health services, satisfaction allows analyzing which objectives are being achieved, reviewing professional practices, and reshaping care organization<sup>9,10</sup>.

The ESF effects and their impacts on health indicators are controversial, questionable, and poorly established. This situation is related to implementing this care model associated with socioeconomically underserved contexts and weak health services<sup>2</sup>, which also characterizes the *Mais Médicos* Program (PMM)<sup>7,11</sup> design. The program is considered one of Brazil's primary responses to the need for public investment in health to strengthen PHC and expand ESF coverage<sup>7,11</sup>. Evidence has shown positive PMM repercussions in training, the work process, the quality of care, and client satisfaction. However, it is necessary to develop research focusing on the care offered by the program's health professionals, namely, comparing the care provided with conventional ESF teams<sup>11</sup>. This study brings a new look at the theme from the perspective of child healthcare.

The present study aimed to evaluate the childcare appointments by health professionals

working in the ESF in municipalities in the State of Paraíba, Brazil, to compare the performance by health team type (PMM or conventional) and to analyze the association of client satisfaction with the actions developed.

## Methods

### Study design

This cross-sectional study evaluated ESF health professionals' childcare appointments based on the health units' structural conditions, the work process, and client satisfaction.

### Context

We selected municipalities in the state of Paraíba with a population ranging from 30,000 to 149,999 inhabitants with funding incentives for structuring and implementing food and nutrition actions<sup>12</sup> and actions aimed at preventing childhood obesity within the Health Program in Paraíba to participate in the School Health Program<sup>13</sup>. We selected municipalities with full ESF coverage with Family Health Support Centers (NASF), including a nutritionist linked to at least one PMM health team or NASF without a nutritionist linked to at least a conventional health team. Meeting these criteria, the survey totaled seven of the 12 municipalities with financial incentives. One of the municipalities was excluded as it had partial ESF coverage, and another because it did not have health teams per the eligibility criteria. Moreover, three municipalities were also excluded because they were considered for other evaluations with similar characteristics.

In the municipalities chosen to participate in the survey, we selected all health teams in the urban area that still needed to change the health team type (PMM or conventional) two years before data collection. This information was obtained through the National Register of Health Establishments (<http://cnes2.datasus.gov.br>) or via personal contact with the nurses of the health teams. The number of PMM and conventional health teams per municipality respected their composition. The study included professionals who performed childcare appointments and children younger than two years (0-24 months) whom they assisted on the day of data collection on a typical work day. Data were collected at health facilities from May to September 2018.

### Data sources

Information on the structure of the health units referred to the availability of their own office, anthropometric equipment, the Child Health Booklet (CHB), and the profile of professionals who performed the childcare appointment according to the professional relationship (type and time) and their knowledge of child growth curves. To this end, we used a standardized questionnaire with closed-ended questions answered by the professionals involved in the service. The assessment of knowledge about growth curves was based on a case scenario (hypothetical case) of a child younger than two years old, with information on head circumference, weight, and length. We requested the records and interpretation of head circumference/age, weight/age, length/age, and body mass index/age based on the corresponding growth curves available in the CHB. Knowledge was considered adequate when records and interpretation were correct.

The actions developed by health professionals were obtained by observing childcare appointments. The observation was conducted by a pair of interviewers who explained the activity's objective in advance and remained at the end of the appointment room without expressing any opinion or behavior. A specific form was used to record the procedures adopted, with "yes" and "no" answers. The practices of interest were measuring growth and assessing development; guidance on growth and development; records of growth and development in the CHB (completion of growth curves and development milestones); monitoring of growth and development through the CHB (continuous completion of growth curves and development milestones); assessment of food consumption and counseling; general guidelines on vaccination, supplementation, and accident and violence prevention. Practices were defined and judged based on the recommendations of the Ministry of Health for the organization of the work process in monitoring the growth and development of children in PHC<sup>14</sup>. In the case of guidance on growth and development, when professionals only said whether the weight, head circumference, length, and development were within normal limits without offering any guidance, the observer coded the answer as "no". Regarding monitoring growth and development through the CHB, a maximum interval of three months was allowed regarding records in the growth curves and a minimum of three notes for the development's milestones.

The start and finish times were also recorded during the appointments. Appointments lasting  $\geq 10$  minutes were considered adequate, and those that lasted  $< 10$  minutes were considered inadequate<sup>15</sup>.

The children's mothers were asked two questions at the end of the appointment: 1 - "Did you ask all the questions you wanted to ask during the appointment?", with two answers (yes and no); 2 - "How do you consider the appointment time?", with three answers (very adequate, adequate, and inadequate) and grouped for analysis in the categories very adequate/adequate and inadequate. The mothers who answered that they asked everything they wanted and considered the appointment time very adequate/adequate were satisfied with the appointment<sup>15</sup>.

### Measures adopted to avoid biases

The study's field team comprised health professionals and students with previous fieldwork experience supervised by a qualified professional. The study's quality control included training and standardization of interviewers, construction of the Instructions Manual, and conducting a pilot study in Campina Grande, Paraíba.

Data were organized into electronic spreadsheets and double-entered in a custom database with consistency checks and interval restrictions. The Epi Info Software Validate application version 3.3.2 was used to analyze data consistency.

### Study variables

We considered the following as parameters of the structure of health facilities: i) The availability of own office for the childcare appointment (yes, no), children's scale (yes, no), anthropometer (yes, no), and CHB (yes, no); ii) The characteristics of the professionals who performed childcare appointments based on the professional relationship type (public examination, contracted), seniority in the current position (two years and over, less than two years) and postgraduate or residency in Collective Health/Family Health (yes, no); iii) Recording and interpreting anthropometric indices head circumference/age, weight/age, length/age, and body mass/age index based on child growth curves (adequate, inadequate).

Regarding the actions developed by professionals in childcare appointments, we analyzed whether the following procedures were performed: i) weight, length, and head circum-

ference measurements and development assessment; ii) guidance based on weight, length, head circumference, and development; iii) recording weight, length, head circumference, body mass index, and development in the CHB; iv) monitoring weight, length, head circumference, body mass index, and development through the CHB; v) using the food consumption marker form in PHC, asking about the children's diet, and advising on the children's feeding; vi) guidelines on vaccination, supplementation, and accident and violence prevention.

We also analyzed the duration of the appointment (adequate, inadequate), satisfaction regarding the possibility of asking questions during the appointment (yes, no), satisfaction with the duration of the appointment (yes, no), and general satisfaction with the appointment (yes, no) as study variables.

### Statistical methods

We analyzed the association of variables related to the structure of health units and actions developed with the health team type (PMM, conventional), the duration of the appointments, satisfaction with the appointments, and possible associations of the variables related to the actions developed and the duration of the appointments with the clients' general satisfaction. The chi-square or Exact Fisher's tests were used (for cases with frequency <5). We admitted a significance level of 5% and adopted the Stata version 12.0 software.

### Ethical considerations

The Research Ethics Committee of the Paraíba State University approved the research project under Opinion No. 2.219.604. The mothers/guardians of children and health professionals who participated in the research signed the informed consent form, a necessary condition for participating in the study.

### Results

The research totaled 22 health teams (11 of the PMM and 11 conventional). Table 1 shows the characteristics of the studied health units' structure. Most units have their own office for childcare appointments (n=20), a children's scale, an anthropometer (n=21), and a CHB (n=18). Fourteen professionals who performed childcare

appointments had a professional relationship by public examination, and 13 had a minimum of two years of seniority in the health team. Regarding the use of child growth curves, 16 participants recorded and adequately interpreted the weight/age and length/age indices. The body mass/age index was the most deficient (more than half of the professionals could not record and interpret it correctly), followed by head circumference/age. PMM and conventional health teams showed no differences regarding structure items.

We identified 175 childcare appointments, 84 in PMM, and 91 in conventional teams. Table 2 shows the main results of the actions developed by health professionals during their appointments. Weight and length were measured in all of them, with head circumference in 96.0%, while development assessment occurred in 21.7% of the cases. Growth and development guidelines ranged from 11.4% (development) to 38.3% (weight). The weight, length, and head circumference measurements during appointments were recorded in 65.7%, 54.3%, and 50.3% of weight/age, length/age, and head circumference/age in CHB graphs, respectively. Completion of body mass index/age (11.4%) and development milestones (12.0%) curves had low frequencies. Regarding continuous CHB records, we observed that only weight had a proportion of over 50%, while frequencies of less than 10% were obtained for body mass index and development. The food consumption marker form's use was observed in only nine appointments and food counseling in 51.4%. Vaccination guidelines (64.0%) were more frequent than supplementation (25.7%) and accident and violence prevention (2.9%).

Comparing the results by health team type, professionals from the PMM teams performed better regarding asking about (p=0.007) and questioning (p=0.001) the children's feeding and vaccination orientation (p=0.009) and supplementation (p=0.001) (Table 2).

Sixty-three appointments (36.0%) had adequate duration, higher in the PMM teams (p=0.014). Mothers' satisfaction with the possibility of asking questions and the duration of the appointments was greater than 85%; the overall satisfaction was 81.1%. Higher satisfaction levels were found for appointments by professionals who worked in PMM teams (p=0.006 for satisfaction with the possibility of asking questions; p=0.014 for satisfaction with the appointment's duration; p=0.002 for overall satisfaction) (Table 3).

As can be seen in Table 4, maternal satisfaction with childcare appointments was associated

**Table 1.** Characteristics of the structure related to the childcare appointments of Primary Family Health Units in municipalities in Paraíba, 2018.

Characteristics	Total (N=22)	PMM (N=11)	Conventional (N=11)	p-value <sup>a</sup>
	n	n	n	
Own office for childcare appointments				0.476
Yes	20	9	11	
Availability of child scale and anthropometer				1.000
Yes	21	10	11	
Availability of Child Health Booklet				0.586
Yes	18	8	10	
Professional recruited through public examination				1.000
Yes	14	7	7	
Professional with a stable contract of at least two years				0.387
Yes	13	5	8	
Recording and interpreting head circumference/age based on child growth curves				0.659
Adequate	14	6	8	
Recording and interpreting weight/age based on child growth curves				1.000
Adequate	16	8	8	
Recording and interpreting length/age based on child growth curves				1.000
Adequate	16	8	8	
Recording and interpreting body mass index/age based on child growth curves				1.000
Adequate	9	5	4	

PMM: Mais Médicos ("More Doctors") Program; <sup>a</sup> Fisher's Exact Test.

Source: Author.

with the guidelines received on weight ( $p=0.001$ ), length ( $p=0.006$ ), head circumference ( $p=0.022$ ), development ( $p=0.022$ ), food ( $p=0.000$ ), vaccination ( $p=0.044$ ) and supplementation ( $p=0.033$ ). The professionals asking about the children's feeding ( $p=0.000$ ) and the duration of the adequate appointment ( $p=0.002$ ) also produced higher client satisfaction.

## Discussion

Implementing the PMM has generated interest in knowledge from the perspective of its formulation process, implementation, and results as an initiative that can reorient the care model in the health system<sup>16</sup>. To this end, the present study compared ESF health teams with and without the PMM model. The results highlighted negligence in the professionals' work process during childcare appointments affecting childcare, such as food consumption assessment, CHB completion, and maternal guidance related to monitor-

ing growth and development. Also, the childcare appointments by professionals from the PMM teams had higher client satisfaction, highlighting the importance of providing guidance and the appointment duration.

As for the structure, the present study's findings showed that most health units had adequate conditions for obtaining and recording parameters related to the children's growth and development, unlike other studies<sup>17,18</sup>. However, professionals in charge of childcare appointments had unstable relationships that could adversely affect the healthcare provided<sup>19</sup>. Moreover, findings from the national and international literature focusing on insufficient knowledge of using child growth curves, which may hinder the development of nutritional counseling actions<sup>20,21</sup>, were confirmed.

The underutilization and under-recording of child growth and development data listed in Brazilian literature reviews<sup>4,5,22</sup> were confirmed in the current study. The incipient adoption of child growth and development guidelines ob-

served also reinforces the findings of other national<sup>4,23</sup> and international<sup>24,25</sup> studies. These circumstances indicate inadequate preparation and awareness of professionals with child healthcare and the support of the hegemonic care model in which the biologist and curative view of the health-disease process predominates. As a result, it is possible to compromise the identification of risk situations for the children's growth and development, the communication between health

professionals, the professional-client bond, care continuity, and comprehensiveness<sup>4,5,18,23</sup>.

Specifically, attention is drawn to the little importance attributed to body mass index, head circumference, and development, as per previous reports in the literature<sup>5,22,23</sup>. This situation becomes particularly special in the current situation of Brazilian children, in which overweight and developmental problems are a concern, signaling the importance of adequate surveillance of

**Table 2.** Actions developed by the Family Health Strategy health professionals in childcare appointments for children under two years of age in municipalities in Paraíba, 2018.

Actions developed and duration of appointments	Total (N=175)		PMM (N=84)		Conventional (N=91)		P-value <sup>a</sup>
	n	%	n	%	n	%	
Measuring growth and assessing development							
Weight	175	100.0	84	100.0	91	100.0	-
Length	175	100.0	84	100.0	91	100.0	-
Head circumference	168	96.0	79	94.1	89	97.8	0.205
Development	38	21.7	22	26.2	16	17.6	0.168
Guidance on growth and development							
Weight	67	38.3	33	39.3	34	37.4	0.794
Length	50	28.6	22	26.2	28	30.8	0.503
Head circumference	29	16.6	11	13.1	18	19.8	0.235
Development	20	11.4	7	8.3	13	14.3	0.216
Recording growth and development in the CHB							
Weight	115	65.7	56	66.7	59	64.8	0.542
Length	95	54.3	42	50.0	53	58.2	0.218
Head circumference	88	50.3	38	45.2	50	54.9	0.140
BMI	20	11.4	7	8.3	13	14.3	0.216
Development	21	12.0	11	13.1	10	11.0	0.668
Monitoring growth and development through the CHB							
Monitoring weight	114	65.1	56	66.7	58	63.7	0.369
Monitoring length	75	42.9	37	44.1	38	41.8	0.760
Monitoring head circumference	55	31.4	32	38.1	23	25.3	0.099
Monitoring BMI	11	6.3	6	7.1	5	5.5	0.654
Monitoring development	12	6.9	7	8.3	5	5.5	0.458
Assessment of food consumption and advice on nutrition							
Using the food consumption marker form in Primary Care	9	5.1	7	8.3	2	2.2	0.104
Asking about the child's diet	107	61.1	60	71.4	47	51.6	0.007
Advising on child nutrition	90	51.4	54	64.3	36	39.6	0.001
General guidelines							
Vaccination	112	64.0	62	73.8	50	55.0	0.009
Supplementation	45	25.7	31	36.9	14	15.4	0.001
Accident and violence prevention	5	2.9	3	3.6	2	2.2	0.546

PMM: Mais Médicos ("More Doctors") Program; CHB: Child Health Booklet; BMI: Body Mass Index; <sup>a</sup> Chi-square or Fischer's Exact Test (for cases with frequency <5).

Source: Author.

**Table 3.** Duration of appointments and satisfaction of clients of the Family Health Strategy with childcare appointments for children under two years of age in municipalities of Paraíba, 2018.

Duration and satisfaction with appointments	Total (N=175)		PMM (N=84)		Conventional (N=91)		P-value <sup>a</sup>
	n	%	n	%	n	%	
Adequate appointment duration	63	36.0	38	45.2	25	27.5	0.014
Satisfaction with being able to ask questions	149	85.1	78	92.9	71	78.0	0.006
Satisfaction with the appointment's duration	159	90.9	81	96.4	78	85.7	0.014
General satisfaction	142	81.1	76	90.5	66	72.5	0.002

PMM: Mais Médicos ("More Doctors") Program; <sup>a</sup> Chi-square or Fischer's Exact Test (for cases with frequency <5).

Source: Author.

child neurodevelopment<sup>5,22,23,26</sup>. Also, the setting revealed reinforces the devaluation of food consumption markers, food guidelines, and advice on supplementation<sup>17,18,20,27-29</sup>, which are essential activities for promoting healthy eating and preventing nutritional deficiencies<sup>30</sup>.

The still incipient literature on the work of ESF health professionals in preventing accidents and violence in childcare appointments<sup>31-33</sup> highlights the importance of the results of the current study, focusing on the lack of professional involvement in preventing accidents and violence through guidelines. Coping with violence in PHC in Brazil is far from the daily work and the necessary public health and sociocultural perspective, as specific care based on the complaint-behavior<sup>33</sup> prevails, which may explain the findings in the present study. In this sense, we should emphasize the relevance of building effective communication, trust, professional-client bond, and collaborative practices, given the recognition of violence as a public health issue and the need for actions to counteract it adequately<sup>31-33</sup>.

In the current study, we identified a better performance of PMM professionals in the guidance on food, vaccination, and supplementation, reinforcing the evidence of the Program's contributions to health promotion, disease prevention, and comprehensive care<sup>16,34</sup>. The results of the PMM are related to improvements in the infrastructure of health services, the doctor-patient relationship, and the training and continuing education of doctors<sup>11,16,35</sup>. Thus, the insufficient knowledge and practices of health professionals who participated in this research raise the need for their qualification to monitor growth and development through continuing education strategies, as recognized in the literature<sup>4,5,20-22,26,30-33</sup>. In this sense, we should mention the importance of training guided by the comprehensive care model, which is one of the significant challenges of

Brazilian PHC<sup>36</sup>. We highlight the PMM's potential for improving learning processes and in-service training<sup>11</sup>.

Regarding the duration of appointments, we identified their commitment, agreeing with the literature<sup>15,23,37,38</sup>. Despite this, we observed high client satisfaction with this parameter, possibly as a condition related to the low level of expectations<sup>39</sup>. However, the duration of the childcare appointment should be analyzed, regardless of the level of satisfaction generated, due to its capacity to influence the number of actions developed, the client's interaction with the professionals, and the quality of care provided<sup>15,24,37,38</sup>. The professionals' workload, exhaustion, efficiency, and satisfaction can significantly influence the duration of the appointment<sup>37,38</sup>.

In Brazil, according to the results of the present study, high satisfaction levels have been recorded regarding the doctors' explanations (91%) and the time they make available for questions (85%)<sup>40</sup>. Additionally, clients are more satisfied with the services they receive when they solve their problems and feel respected<sup>41</sup>, which shows the plausibility of the results presented in this study. As for the greater satisfaction among PMM clients (90.5%), we observe an agreement with what was observed in 32 municipalities in all regions of the country, where being satisfied was associated with the doctors' technical and humanized performance<sup>7</sup>. In the rural area of Porto Velho (RO), a survey of 96 clients from seven health units highlighted the preference for care and communication by PMM doctors<sup>42</sup>. Literature reviews confirm the positive assessment of the PMM based on client satisfaction<sup>11,16</sup>.

The association recorded in this research between maternal satisfaction with childcare appointments, the guidance received during the session, and its duration, can be explained by the clients' appreciation of the professionals' dedica-

**Table 4.** Association between the satisfaction of clients of the Family Health Strategy with childcare appointments for children under two years of age and the actions by health professionals and the duration of appointments in municipalities in Paraíba, 2018.

Actions and duration of appointments	Satisfaction with the childcare appointment				p-value <sup>a</sup>
	Yes		No		
	n	%	n	%	
Measuring weight/length					-
Yes	142	81.1	33	18.9	
No	0	0.0	0	0.0	
Measuring head circumference					0.502
Yes	137	81.6	31	18.4	
No	5	71.4	2	28.6	
Evaluating development					0.569
Yes	32	84.2	6	15.8	
No	110	80.3	27	19.7	
Guidelines on weight					0.001
Yes	63	94.0	4	6.0	
No	79	73.1	29	26.9	
Guidelines on length					0.006
Yes	47	94.0	3	6.0	
No	95	76.0	30	24.0	
Guidelines on head circumference					0.022
Yes	28	96.6	1	3.4	
No	114	78.1	32	21.9	
Guidelines on development					0.022
Yes	20	100.0	0	0.0	
No	122	78.7	33	21.3	
Recording weight in the CHB					0.056
Yes	98	85.2	17	14.8	
No	44	73.3	16	26.7	
Recording length in the CHB					0.107
Yes	82	86.3	13	13.7	
No	60	75.0	20	25.0	
Recording head circumference in the CHB					0.165
Yes	75	85.2	13	14.8	
No	67	77.0	20	23.0	
Recording BMI in the CHB					0.052
Yes	19	95.0	1	5.0	
No	123	79.4	32	20.6	
Recording development in the CHB					0.568
Yes	18	85.7	3	14.3	
No	124	80.5	30	19.5	

it continues

tion to providing information and advice<sup>21,37</sup>, facilitated by longer appointment period<sup>24,37</sup>. Consistent findings were obtained in another study, in which client satisfaction was directly linked to the doctors' interest during care<sup>42</sup>. Another survey showed that PMM clients were satisfied with the care and the information received from

the doctors<sup>7</sup>. Our study adds empirical evidence that suggests the meaning attributed by mothers to the guidelines they received during childcare appointments.

The population assisted by PMM professionals has received better care during childcare appointments than those attended by tradition-



**Table 4.** Association between the satisfaction of clients of the Family Health Strategy with childcare appointments for children under two years of age and the actions by health professionals and the duration of appointments in municipalities in Paraíba, 2018.

Actions and duration of appointments	Satisfaction with the childcare appointment				p-value <sup>a</sup>
	Yes		No		
	n	%	n	%	
Monitoring weight through the CHB					0.068
Yes	97	85.1	17	14.9	
No	45	73.8	16	26.2	
Monitoring length through the CHB					0.220
Yes	64	85.3	11	14.7	
No	78	78.0	22	22.0	
Monitoring head circumference through the CHB					0.069
Yes	49	89.1	6	10.9	
No	93	77.5	27	22.5	
Monitoring BMI through the CHB					0.392
Yes	10	90.9	1	9.1	
No	132	80.5	32	19.5	
Monitoring development through the CHB					0.841
Yes	10	83.3	2	16.7	
No	132	81.1	31	19.0	
Using the food consumption marker form in Primary Care					0.211
Yes	9	100.0	0	0.0	
No	133	80.1	33	19.9	
Asking about the child's diet					0.000
Yes	99	92.5	8	7.5	
No	43	63.2	25	36.8	
Advising on child nutrition					0.000
Yes	87	96.7	3	3.3	
No	55	64.7	30	35.3	
Guidelines on vaccination					0.044
Yes	97	86.6	15	13.4	
No	45	71.4	18	28.6	
Guidelines on supplementation					0.033
Yes	43	95.6	2	4.4	
No	99	76.2	31	23.8	
Guidelines on accident and violence prevention					0.274
Yes	5	100.0	0	0.0	
No	137	80.6	33	19.4	
Appointment duration time					0.002
Adequate	59	93.7	4	6.3	
Inadequate	83	74.1	29	25.9	

CHB: Child health booklet; BMI: Body mass index; <sup>a</sup> Chi-square or Fischer's Exact Test (for cases with frequency <5).

Source: Author.

al ESF teams, with more guidance and a higher satisfaction level. These findings add to those reported that emphasize the benefits of the PMM in the quality of services, the doctor-patient relationship, the development of interdisciplinary

practices, and expanded actions, including health promotion<sup>7,11,16,34</sup>. Regarding childcare, a study conducted in the Federal District showed an improved offer after implementing the PMM<sup>43</sup>. Thus, reading the present article is expected to

contribute to understanding the importance of transforming child healthcare practices into “Health Promotion and Care Trails”.

In interpreting the presented results, we suggest considering possible limitations related to the direct observation of the provision of services and the client’s satisfaction. In the first case, the professionals may have offered a complete service, with overestimations that make undervalued practices even very troubling. Applying a questionnaire right after the appointments can induce a gratitude bias expressed through greater satisfaction. However, observing the appointments and the scope of the research emerge as differentials that presuppose reliability and generalization. Thus, we propose developing other studies with different methodological designs,

notably focusing on effectiveness assessments and problems perceived by the different spheres of the health system.

Based on our evaluation, we identified that the implementation of childcare appointments by professionals has significant gaps that can influence maternal satisfaction. In the professionals’ work process, we highlight the underreporting of growth and development data in the CHB, the low involvement in client guidance practices, and the short duration of appointments. In assessing satisfaction, we highlight the importance of receiving guidance and the appointment duration, with better evaluation in the PMM teams. Thus, there is an urgent need for feasible strategies to improve healthcare during childcare appointments in public health services.

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