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Original article

# Actions developed during consultations on children's growth and development in a West Amazonian health center

Ações desenvolvidas durante as consultas de crescimento e desenvolvimento infantil em um centro de saúde da Amazônia Ocidental

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#### Abstract

**Objective**: Demonstrating the actions taken during consultations on child growth and development at a health center in the Western Amazon. **Methods**: This is a cross-sectional study with a quantitative approach, developed during child growth and development consultations. **Results**: The study was conducted with 20 children attended in the period, of which there was a female prevalence of 55% (n = 11), aged between 0 to 2 months 30% (n = 6) and 6 to 12 months 30% (n = 6). Most 65% (n = 18) were not exclusively breastfed, however 55% (n = 11) were still breastfeeding. The books, in their majority (90.0%), presented the records of anthropometric data from the last 2 months. As for the frequency of children to consultations, most had attended the unit between 2 to 4 times and 8 to 10 times (30.0%), respectively, according to age. All mothers reported having received guidance on the child's condition, recommending care at the unit and returning to care. **Conclusion**: The monitoring of child growth and development in the health unit are taking place according to the parameters recommended in the protocols defined by the Ministry of Health, however, it is necessary that the actions now developed have continuity, favoring an adequate monitoring of the child throughout childhood.

**Keywords**: growth and development; childcare.

#### Resumo

**Objetivo**: Demonstrar as ações realizadas durante as consultas de crescimento e desenvolvimento infantil em um centro de saúde da Amazônia Ocidental. **Métodos**: Trata-se de um estudo transversal de abordagem quantitativa, desenvolvido durante as consultas de crescimento e desenvolvimento infantil. **Resultados**: O estudo foi realizado com 20 crianças atendidas no período, destas houve prevalência do sexo feminino 55% (n=11), com idade entre 0 a 2 meses 30% (n=6) e 6 a 12 meses 30% (n=6). A maioria 65% (n=18), não estava em aleitamento materno exclusivo, no entanto 55% (n=11), ainda mamavam. As cadernetas, em sua maioria (90,0%), apresentavam os registros dos dados antropométricos dos últimos 2 meses. Quanto a frequência das crianças às consultas, a maioria havia comparecido à unidade entre 2 a 4 vezes e 8 a 10 vezes (30,0%), respectivamente, de acordo com a idade. Todas as mães relataram terem recebido orientações sobre o estado de saúde da criança, recomendariam o atendimento da unidade e voltariam a serem atendidas para as consultas de acompanhamento. **Conclusão**: O acompanhamento do crescimento e desenvolvimento infantil na unidade de saúde está ocorrendo de acordo com os parâmetros recomendados nos protocolos definidos pelo Ministério da Saúde, no entanto, fazse necessário que as ações ora desenvolvidas tenham continuidade, favorecendo um adequado acompanhamento da criança durante toda a infância.

Palavras-chave: crescimento e desenvolvimento; cuidado da criança; puericultura.

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#### Introduction

According to the World Health Organization (WHO), estimates indicate that about 6 million children under the age of five die each year from complications in the neonatal period and from common childhood diseases, which could be avoided if there was better health care aimed at them. However, despite the advances made in the face of maternal and child health actions worldwide, there are still gaps between coverage and the quality of care provided to this target audience. <sup>1.2</sup>

The surveillance of child development is an important instrument of child health care, through the implementation of actions aimed at promoting growth and development (C and D) in a healthy way, in addition to the early identification of deviations in this process. All this to reduce the incidence of diseases and increase the chances of the child reaching its full potential for growth and development.<sup>3,4</sup>

Data from the Ministry of Health have shown that the interventions carried out in the first years of life, during the monitoring of children in health units, are essential for them to grow and develop satisfactorily, in the biological, psychoemotional and social aspects.<sup>5</sup>

In view of this follow-up, the correct use of the child's health booklet (CHRS) in all consultations is one of the best strategies for the early identification of injuries, since it allows the health professional to visualize any change that may be occurring. In this sense, it is characterized as an important instrument of longitudinal monitoring and health education, capable of assisting in comprehensive care, which can have a positive impact on the reduction of infant morbidity and mortality.<sup>6.7</sup>

Thus, it is important to emphasize that adequate growth and development are important indicators of quality of life and health of the child, as they are closely related to the socioeconomic, environmental and cultural aspects of the population. Through this, it is indispensable that during the follow-up consultations, the environment in which the child is inserted, to take measures of addressing, in the face of issues that may interfere with his/her health and that need to be discontinued, as well as reaffirm environmental conditions favorable to its full development.<sup>8, 9</sup>

Thus, it is reaffirmed among the most significant characteristics of the consultations of (C and D), is the integral view to the child's health, which can be performed with the assessment instruments contained in the booklet. These instruments are tools that guide mothers, to better understand the growth of their children and as a monitoring strategy by health professionals, due to the easy applicability and low cost. <sup>10.11</sup>

Considering that the actions developed during consultations are one of the guide axes of actions aimed at this target audience and that during nursing consultations, the professional the nurse can identify problems and consequently implement actions that can contribute to solve them, thus improving the child's health conditions. Thus, this article aims to show the actions developed

during child growth and development consultations in a health center in the Western Amazon.

#### Materials and Methods

A transversal character study was conducted, with a quantitative approach, based on primary data, regarding the evaluation of child growth and development consultations in a unit in the Western Amazon.

Children from 0 to 7 years old, assisted in the growth and development program of the health unit, accompanied by their mothers and who sought care in March 2020, were selected for convenience. All invited mothers agreed to participate in the study.

To make up the sample, the following inclusion criteria were adopted: children under monthly follow-up in the child growth and development program, registered in the health unit, aged 0 to 7 years old, who attended the unit during the period of data collection accompanied by their mothers, who agreed to participate in the research. Users over 7 years of age, those who were not in monthly follow-up in front of growth and development consultations in the unit and who were not in the consultations accompanied by the mothers were excluded.

To obtain the research data, we used a questionnaire with closed questions applied to the mothers, which addressed the following questions: profile of the children followed, perceptions of mothers about the care received during consultations. In this stage, in addition to the interview, the researchers also performed an analysis of the child's health booklet, to evaluate its completion by health professionals.

For the typing, review and analysis of the data for categorical variables, the Statistical Package for the Science (SPSS) program was used, in version 21.0, where statistical analyses were performed. These were presented in tables and graphs.

This research was based on the recommendations of Resolution NO 466 from December 12, 2012 of the National Health Council, which governs the conduct of research with human beings. The research participants were instructed on the objectives of the research and on the term of free and informed consent (TCLE). During the research, the right of free choice was respected, ensuring their willingness to contribute and remain, or not, in the research and autonomy of manifestation of the participants, promising the maximum benefits and the lowest damages and risks.

For ethical purposes, the research project was approved by the Research Ethics Committee, CAAE: 20676819.9.0000.8028, Opinion under NO 3,777,816 on December 3, 2019.

### **Results**

The study was conducted with 20 children attended in the period, of which there was a prevalence of females 55% (N=11), aged between 0 and 2 months old 30% (N=6) and 6 to 12 months old 30% (N=6). Most of

them 65% (N=18) were not exclusively breastfed, however 55% (N=11) were still breastfeeding. (Table 1).

**Table 01.** Profile of children attending child growth and development consultations at a health unit in the Western Amazon in 2020 (N=20).

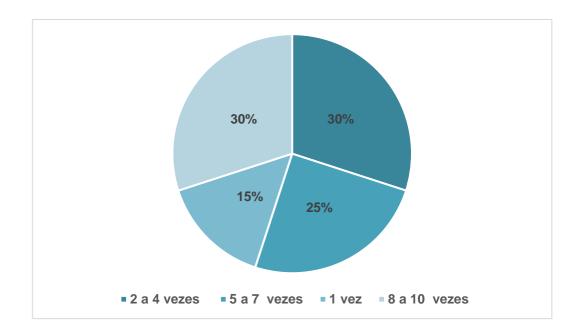
| Variables                     | Descriptive Analysis |
|-------------------------------|----------------------|
| Age                           | N (%)                |
| 0 - 2 months old              | 6 (30)               |
| 2 - 6 months old              | 1 (5)                |
| 6 - 12 months old             | 6 (30)               |
| 12 months old                 | 3 (15)               |
| 3 years old                   | 1 (5)                |
| 4 years old                   | 3 (15)               |
| Gender                        | N (%)                |
| Female                        | 11 (55)              |
| Male                          | 9 (45)               |
| Under Exclusive Breastfeeding | N (%)                |
| Yes                           | 7 (35)               |
| No                            | 18 (65)              |
| Breastfeed                    | N (%)                |
| Yes                           | 11 (55)              |
| No                            | 9 (5)                |

Regarding the evaluation of the booklets of children attending the unit for C and D consultations, it was observed that 60% (N=12) had records of weight and height in the last 2 months and that 90 (N=18) had at least 2 records of BMI x Age and CP against Age. Most of the records 90%, (N=18), were performed by the nursing professional.

Regarding the frequency of children's C and D consultations, the majority attended between 2 and 4 times

30% (N=6) and 8 to 10 times 6 (30%), respectively. These data are related to the age results described in table 01, since most of them were in the age group between 0 and 2 months old and 6 to 12 months old, which justifies the variable result in the frequency of consultation.

**Figure 01.** Frequencies of children in consultations on growth and development in the Western Amazon health unit in 2020 (N= 20).



Regarding the evaluation of the mothers on the consultations, all 100% (N=20), reported having received guidance from the health professional about the child's health status, recommended the care of the health unit and returned to be attended in the health unit for the consultations of C and D.

#### **Discussion**

The main findings highlighted that most of the children participating in the study were female aged 0 to 2 months old and 6 to 12 months old, were not exclusively breastfed, however some of them were still breastfeeding. Most of them were attended by a nurse. Regarding the frequency of consultations, most had attended the unit between 2 to 4 times and 8 to 10 times, respectively, according to age. All mothers were satisfied with the care provided to the children during the consultations to monitor growth and development.

Regarding the gender variable, the findings of the present study differ from the results of a study on the filling of the booklet in early childhood, where most of the children who attended the consultations belonged to the male gender. No data were found in the literature, which could justify the reason why children's frequency of consultations is higher in one gender over another, so it is understood that it is an occasional finding.

Regarding the age of the children most frequent at the consultations, the results of a study conducted in northeastern Brazil showed that the median age of the children in the first-time consultations was two and a half months old, ranging between one and a half months old and four months old and those in subsequent consultations, the median was six months old, ranging from four to nine months old, <sup>13</sup> corroborating the findings of this study. Considering this, the Ministry of Health recommends at least eight consultations until the first year of life, every six months until reaching two years old, and annually after three years of age.<sup>2</sup>

Regarding breastfeeding-related practices, a study on the influence of breastfeeding on child neuropsychomotor growth and development showed that most children, especially those older than six months, were totally weaned, <sup>14</sup> which is in line with the results of the present study.

Breast milk is essential for child growth and development, as it has a protective effect on children's health, since it is considered a universal source of nutrition for small babies and children up to 2 years old and older, besides contributing to the intake of energy and essential micronutrients in the first years of life. <sup>15</sup> In this perspective, the act of breastfeeding has a triggering effect for healthy growth and development, and whose practice should be stimulated during follow-up consultations of C and D. <sup>16</sup>

About the proper filling of the booklets, data from a study differed from the findings of the present study, since this showed an unsatisfactory level of

completion, because only 25% of the booklets had the variables filled, with the variable head circumference x age the lowest index (21.9%),<sup>17</sup> while in the present study, mostly the booklets, presented the records of anthropometric data of the children.

The notes in the booklet are of central importance, considering that, through them, there is a multiprofessional communication, providing the correct monitoring of the child's C and D, enabling the early recognition of problems in childhood, besides keeping the family aware of the follow-up being performed and on what parameters the growth and development of their children is.<sup>18</sup>

The underuse of the accompanying instruments present in the booklet may reflect low sensitization of health professionals to record data, since their use with emphasis on the variables of C and D is currently the central axis of child health care.<sup>19</sup>

During the consultations, the periodic evaluation of weight gain allows monitoring the progress of the child, identifying those at higher risk of morbidity and mortality, signaling the early alarm for malnutrition, the underlying cause of the installation or worsening of most child health problems, so it is essential that anthropometric data be adequately recorded in the booklet.<sup>20</sup>

In this sense, the recording of this information constitutes a means of communication used by professionals in their actions, mainly by nurses due to their closer contact with families during consultations. <sup>21, 22</sup>

It was noted with the present study that the frequency with which children performed childcare consultations was in accordance with what the Ministry of Health recommends, which recommends seven routine consultations in the first year of life, in addition to two consultations in the second year, when they are at higher risk and in need of periodic consultations.<sup>2</sup>

Thus, following a timeline of consultations, it is of fundamental importance for the follow-up of the child, moreover, they are the main form of prevention of injuries in this phase of life, because they allow the professional to strengthen the bond with the assisted families. The establishment of this bond is a fundamental condition for obtaining success and positive repercussion on the care of the child, since in this phase, they may present levels of risk of falling ill and dying completely different, according to the conditions and quality of life of their families. <sup>23,24</sup>

In view of the mothers' assessment of the quality of C and D consultations performed in the health unit, a study that analyzed the mothers' satisfaction regarding the consultations made it possible to identify that most of them approved their dynamics and made suggestions for improvement, such as the process of marking follow-up consultations. <sup>25</sup> Having this partnership and family approval is of central importance for the success of monitoring child growth and development.

It is notable the importance of implementing actions that can favor the child's attendance to

consultations, since these constitute an important instrument for monitoring the health conditions of the child population. For this, it is necessary that the professional who works in the program, can recognize and have mastery of the procedures that integrate this assistance, to perform a systematized, ordered, authentic and capable care to involve the family in this process.<sup>26</sup>

The present study presented some limitations, since data collection occurred during the COVID-19 pandemic period in Brazil, which certainly limited the number of users in the health unit studied, in this sense, it is recommended to conduct further research in the region, in the face of this theme, with a larger study population.

**Conflict of interest:** The authors stated that there was no conflict of interest.

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#### Conclusion

At the end of this study, it is concluded that the consultations of growth and child development in the health unit researched are occurring according to the parameters recommended by the Ministry of Health, because it was observed the adequate frequency of children, in addition to the professional used the anthropometric indexes and growth curves contained in the child's health booklet and that these data served as an instrument for guiding mothers on the child's health status, as well as its adequate fulfillment which led to the satisfaction of mothers with the care received.

These findings reaffirm the importance of correct and continuous performance of child growth and development consultations, as well as the use of the health booklet in all consultations.

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