CHILD CARE CONSULTATIONS HELD BY NURSES WITHIN THE FAMILY HEALTH STRATEGY*

CONSULTA DE PUERICULTURA REALIZADA PELO ENFERMEIRO NA ESTRATÉGIA SAÚDE DA FAMÍLIA

CONSULTA DE PUERICULTURA POR EL ENFERMERO EN LA ESTRATEGIA SALUD DE LA FAMILIA

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The study aimed at identifying initiatives taken by nurses during child care routine visits in Family Health Units. It is an observational, descriptive and quantitative research. Data collection took place from August to October 2011, through the observation of three consultations carried out by eight nurses (24 appointments) for the Family Health Strategy Scheme in Picos - Piauí. During consultations, the following issues were more frequently observed: anthropometry, reflexes according to age, encouraging of exclusive breastfeeding and advice on child hygiene. The need for further nurse training through continuous education was verified, seeking to improve care in order to contribute to the improvement of nursing care quality focused on promoting child health thru childcare consultations.

Descriptors: Nursing Care; Child Health; Primary Health Care.

O estudo objetivou identificar as ações implementadas pelo enfermeiro durante as consultas de puericultura em Unidades de Saúde da Família. Trata-se de pesquisa observacional, descritiva, quantitativa, cuja coleta de dados ocorreu de agosto a outubro de 2011, por meio de observação de três consultas realizadas por oito enfermeiras (24 consultas) na Estratégia Saúde da Família em Picos-Piauí. Durante as consultas foram verificados com maior frequência: a antropometria, os reflexos de acordo com a idade, o incentivo ao aleitamento materno exclusivo e a orientação acerca da higiene da criança. Averiguou-se a necessidade de capacitação dos enfermeiros, pela educação permanente, para aperfeiçoamento do cuidado, visando contribuir com a melhoria da qualidade da assistência de enfermagem voltada à promoção da saúde da criança durante as consultas de puericultura.

Descritores: Cuidados de Enfermagem; Saúde da Criança; Atenção Primária à Saúde.

El objetivo fue identificar las acciones realizadas por enfermero durante las consultas de puericultura en Unidades de Salud de la Familia. Investigación observacional, descriptiva, cuantitativa, con recolección de datos entre agosto y octubre de 2011, mediante observación de tres consultas por ocho enfermeras (24 consultas) en la Estrategia Salud de la Familia en Picos – Piaui, Brasil. Durante las consultas se observaron con mayor frecuencia: antropometría, reflejos de acuerdo a la edad, incentivo a la lactancia materna exclusiva y orientación sobre higiene del niño. Hay necesidad de formación del personal de enfermería a través de la educación continua, para mejorar la atención, para contribuir a la mejora de la calidad de la atención de enfermería dirigida a la promoción de la salud del niño durante las consultas de puericultura.

Descripciones: Atención de Enfermería; Salud del Niño; Atención Primaria de Salud.

¹Work extracted from the graduation monograph entitled “Aspects included in childcare consultations held by nurses” submitted to the Piauí Federal University in 2011.  
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Child care consists of a number of rules and concepts on the art of physiological and hygienic child care, being recently denominated Preventive Pediatrics, a discipline that aims at promoting healthy children as a means to reach healthy adulthood. Therefore, nursing must be supported by its own professional theoretical framework in order to collect information on child progression, growth and development, seeking to ensure a personalized care aimed at the child’s wellbeing according to the life conditions of his/her family and the society in which is inserted\(^1\).

Within the offer of clinical health care services through childcare consultations, we perceived that not all nurses are qualified and many don’t perform this activity as a routine\(^2\). However, we know that such consultations can promote individual and collective changes, both with regards to sickness preventions and to promote health recovery. Such changes are not just inherent to children but also to their families, resulting in the improvement of epidemiological data\(^3\).

In childcare, nurses invest time in health promotion initiatives, playing a key role, as it is through such initiatives that nursing can detect the most diverse child growth, nutrition and psychomotor development disorders at an early stage\(^4\).

Considering that the Family Health Strategy (ESF) has been promoting changes in health practices, the way in which the teams that act in their units have organized their working processes with regards to specific childcare initiatives has concentrated much attention. Reflecting on this aspect of childcare in basic care, we notice that taking care of children implies promoting a warm welcome, attentive listening, dialog, connection and responsibility\(^5\).

The inclusion of researches for this study in the Picos – Piauí health care unit has revealed the existence of gaps with regards to nursing initiatives proposed to perform childcare consultations. We noticed a predominance of child anthropometry follow-up and aspects related to nutrition in comparison to other nursing initiatives such as clinical records, physical exam and health education, which constituted the research hypothesis.

In the referred municipality, we also verified the difficulty to implement a systematized child follow-up in the ESF, mainly in relation to the implementation of a systematized nursing assistance, which should empower nurses in their role of preventing illnesses and promoting health improvements for assisted children.

A similar situation was found in a study that investigated child growth and development records in basic care in another Northeastern Brazil municipality. The weaknesses appointed by authors correspond to findings in clinical records entered by nurses, in particular with regards to child identification, health professional identification and physical exams, which were almost always incipient or even inexistent\(^6\). Therefore, we corroborated the need to familiarize with childcare consultations held by nurses in Picos through observational research, which is what this study is about.

An investigation of performed consultations was necessary to verify if children are receiving adequate accompaniment. The goal set was to identify initiatives implemented by nurses during ESF childcare consultations.

This is an observational descriptive study of quantitative nature carried out in eight Picos USFs. Data collection took place between August and October 2011 in the referred health unit, specifically in the room in which nurses were conducting childcare consultations. Observations were performed by a previously trained nursing specialist.

The target population for this study involved all ESFs within the Picos urban population (21), as each USF had one nurse, except from one unit, in which there
were two nurses working. Out of the 21 nurses, only eight accepted to take part in this research. As inclusion criterion, it was established that participating nurses must have been holding childcare consultations for at lest six months. Questioned on this, we corroborated that all contacted nurses were eligible to participate in the study, however only eight of them agreed to be included.

Three consultations of each participant nurse were observed through a previous checklist containing aspects related to nursing records, physical exam and implementation of nursing initiatives (health education and subsequent follow-up) approached in the childcare consultations of children from zero to six months old.

It was considered that observation of three consultations for each nurse would be quantitatively satisfactory, as studying fewer cases might negatively affect the achievement of set goals, as suggested by one of the authors in a previous study (7).

The option of observing consultations with children of up to six months of age was selected with the aim of avoiding bias in the research, as nursing initiatives may differ according to the child age, such as their guidelines for child feeding, which in babies of up to six months is almost exclusively focused on breastfeeding, whereas older babies might include other types of food. This age range was selected with the aim of making the consultations target more homogeneous.

This document was elaborated based on the Ministry of Health publications for child growth and development accompaniment (8-9). The pilot test was elaborated using this instrument as a guide for childcare practical activities in the Picos basic assistance unit for the Piauí Federal University Child and Adolescent Health subject within the Bachelor of Nursing Course, making the necessary adjustments.

After all consultations were observed it was possible to add all implemented items as follows: compliance with each set item in the three consultations would equal three points (horizontal addition). As the document has 38 observation items, after the three consultations, each nurse could reach a maximum score of 114 points (vertical addition).

The instrument is divided into four parts: nursing records (6 items) physical exam (24 items) health education (4 items) and child follow-up (4 items). Considering the subdivision of all 38 items into these four parts it was possible to calculate the maximum score that each nurse could reach on each stage, should he/she include all items in the three observed consultations. Therefore, 18 points would be allocated for the implementation of the six items related to nursing records in the three observed consultations; 72 points would correspond to the implementation of the 24 physical exam items in the three consultations and 12 points would be given for health education initiatives mentioned in four items of that stage. The same score would be granted to the implementation of child follow-up initiatives, thus totaling a maximum score of 114.

Chart 1 includes a partial representation used as sample. At the end of the document there is a free space reserved for relevant additional information on researched activities, such as the implementation of items not included in the chart.

<table>
<thead>
<tr>
<th>Activities performed by nurses</th>
<th>Consultation 1</th>
<th>Consultation 2</th>
<th>Consultation 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing records</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child age registered in medical records</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questions on child complaints</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questions on child feeding</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chart 1 – Partial reproduction of document with evaluated items. Picos, PI, Brazil, 2011
We remark that a total of 24 childcare consultations conducted by ESF municipality nurses were observed, as three consultations from each of the eight nurses were analyzed. There was a need to visit the USF more than once in order to collect data during care offered to children of up to six months of age. Whenever there were no children in that age range, the specialist would arrange for a new visit together with the nurse. Therefore, in all cases it was necessary to observe some consultations in different days.

Data analyzed was entered in the *Statistical Package for the Social Science* (SPSS) program, version 17.0. Descriptive analysis was carried out by calculating absolute frequencies of researched variables, as well as through the measures of central tendency (average and mean) and dispersion (deviation standard) variables.

The project was approved by the Research Ethics Committee of the Piauí Federal University (UFPI) through the Certificate of Ethical Research Evaluation (CAAE) Nº 0301.0.045.000-11 after which data collection began. This research met expressed recommendations outlined in law Nº 196/96 of the National Health Council (CNS) on research ethics involving humans. Study participants signed an Informed Consent Agreement (ICA) after being clarified on the research goals and procedures to be developed.

**RESULTS**

Results herein shown are related to the 24 childcare consultations held by eight ESF Picos nurses (urban area). In figure 1, items observed on each childcare consultation stage are entered, as well as quantitative results from consultations in which each of these items were implemented.
During childcare consultations, age recording (20) and the investigation on child nutrition (14) were the most frequent issues, while questions on the mothers’ perceptions on child development were the least asked by nurses (3).

As for the physical exam, aspects most often included were assessments on height (22), cephalic perimeter (22), thoracic perimeter (21), weight (20) and anthropometric measures entry in the child health records (21); investigation of child reflexes according to...
his/her development stage (20); palpation of fontanelles (16) and cardiac auscultation (10). No consultation included locomotor exams.

Health education initiatives most frequently implemented during observed appointments were advice on exclusive breastfeeding (15) and advice on child hygiene (11). At the moment of consultations, nurses did not evaluate the vaccination status of assisted children; neither did they offer advice on the importance to keep immunization up to date.

With regards to follow-up, it was verified that during childcare consultations, data collected was usually entered in the child’s clinical records (21). This activity was evident in the context of nursing evolution.

Seeking to evaluate the quality of childcare consultations held by nurses with children aged 0 to 6 months we calculated the score obtained on each consultation stage (Table 1).

### Table 1 – Scoring and average percentages related to childcare consultations held by nurses. Picos, PI, Brazil, 2011 n=24.

<table>
<thead>
<tr>
<th>Consultation Stage</th>
<th>Average score*</th>
<th>Standard Deviation</th>
<th>Mean Score</th>
<th>Minimum and maximum score reached on each stage</th>
<th>Maximum score on each stage **</th>
<th>Completion percentage for each stage(%) ***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing records</td>
<td>7.3</td>
<td>2.7</td>
<td>7.0</td>
<td>5 – 14</td>
<td>18</td>
<td>40.5</td>
</tr>
<tr>
<td>Physical exam</td>
<td>28.0</td>
<td>4.3</td>
<td>29.0</td>
<td>19 – 33</td>
<td>72</td>
<td>38.8</td>
</tr>
<tr>
<td>Health education</td>
<td>3.6</td>
<td>1.5</td>
<td>3.5</td>
<td>2 – 7</td>
<td>12</td>
<td>30.0</td>
</tr>
<tr>
<td>Follow-up</td>
<td>3.7</td>
<td>1.6</td>
<td>3.5</td>
<td>2 – 7</td>
<td>12</td>
<td>30.8</td>
</tr>
</tbody>
</table>

* The maximum score is 114 points as 38 items were analyzed in three consultations performed by each nurse.

** Maximum score that each nurse can reach, should he/she include all stage items.

*** Percentage of items included by nurses on each stage calculated as from the mean score obtained with regards to the maximum score achievable on each stage using the formula: (average/maximum score) X 100.

This way, it was verified that averages, means and medians of reached scores were much lower than the maximum score possible for each stage. Besides, it was corroborated that proportionally, nursing records entries (40.5%) and physical exams (38.8%) were carried out more frequently during consultations when compared to the percentage of materialization of health education activities and child subsequent follow-up.

Based on the analysis of different aspects of childcare consultations conducted by ESF nurses at Picos, we verified that certain specific initiatives are being implemented without enough frequency, which shows that important activities for growth and development accompaniment of children of up to six month of age require more attention. These results demonstrate that some consultations presented some weaknesses, being the main one the lack of completeness, as none of the items was fully implemented during consultations. In many cases, full child evaluation was inexistent.

Despite this fact, we know that in Brazil, child health care is one of the most widely available services offered by basic health assistance, mainly at the ESF, however not much is known about the effectiveness of such initiatives in USFs nationwide.

According to the Ministry of Health\(^\text{11}\), childcare has been given less concern than prenatal, being this assistance somewhat more frequent in southern ESFs (63%) than in Northeastern ones (54%). A study developed in Caracol – Piauí and Garrafão do Norte – Pará, found stories of mothers reporting that there were almost no childcare consultations available, which can be the result of a low valorization of this type of health care and/or lack of available infrastructure to meet existing demand, prioritizing the offer of curative care\(^\text{12}\).

As for the emphasis on entering age details in the

**DISCUSSION**
child’s clinical records and asking about child nutrition during the nursing records stage, this is due to the need to lead the consultation according to the baby’s age, as advice often differs depending on the child development phase. Besides, questions on feeding offer subsidies to verify if exclusive breastfeeding guidelines are being followed, once we are dealing with babies of up to six months(8).

Exclusive breastfeeding tends to be encouraged since prenatal. In consultations and ambulatory assistance, continuous breastfeeding is supported, thus justifying its importance and demonstrating its positive influence in the child growth graphic(13).

Contrary to this, questions aimed at mothers’ perceptions on child growth and development were observed in few consultations. Despite the preventive role of childcare, initiatives still tend to be curative, as demonstrated through the unawareness on this fact of both professionals and parents responsible for investigating child growth and development issues. In this sense, emphasis on anthropometric measurements has been given priority instead of finding out more on the perceptions of the person in charge of looking after the baby(14).

Amongst measures used by nurses in consultations seeking to evaluate children, anthropometry was the most frequent, as it allows to control growth, mainly in the period from birth to the first two years of life. In another study(15), weight and height control was evidenced through consultation of children’s medical records. It was verified that in more than half of them there were complete records on their measures, ratifying the importance of this follow-up as a reference for all childcare activities, mainly those aimed at detecting infant mortality and malnutrition/obesity risks.

Besides the emphasis on keeping exclusive breastfeeding, we noticed that there were a considerable number of consultations in which child hygiene issues were approached, mainly concerning advice for adequate home care. Such approach may be justified by the fact that hygiene is a basic health-keeping need, seeking to develop healthy habits with the perspective of developing self-care and self-esteem(16). Advice on hygiene for children of up to six months contributes to avoid dermatitis, which are common at this early age.

When a nurse finds out about child hygiene he/she also has the opportunity to listen to the mother/father or responsible person on the habits and difficulties encountered, as in many cases there is certain insecurity when providing hygiene care, in particular with regards to diapering and bathing(17). Studies show that the inefficacy in providing hygiene-related care may be the cause of illnesses such as enteroparasitosis, dental problems, scabies and pediculosis(18).

With regards to the non-evaluation of the child vaccination status during consultations, it is important to highlight that although immunization is regarded as an individual and collective protection in health programs(19), its lack of approach by nurses reveal that vaccination is left out and not considered as an essential part of child care practices.

Besides, it is known that in Picos, accompaniment of children’s vaccination is oftentimes performed solely by community health agents and nursing technicians, although it is a nurse attribution to check the vaccination status of children during consultation and reinforce the importance of compliance with set vaccination dates for the success of immunization campaigns(20). However, it is understood that such situation is the result of failure to perform routine childcare consultations, which affects the whole child health care follow-up, as when the child is sent to the nursing assistance service, nurses tend to focus their attention to specific actions.

Due to the non-materialization of several important practices to evaluate child health, we verified that nurses are not adequately trained with regards to consultations. We also noticed that actions taken corresponded predominantly to nursing records and physical exams.
aspects, while many of the health education initiatives were omitted. Therefore, we corroborated that childcare accompaniment is being carried out incipiently, which reflects the emphasis on the curative care model mainly aimed at signs and symptoms detectable during consultation.

**CONCLUSIONS**

This study allowed to identify initiatives implemented by nurses during childcare consultations at the Picos USF, concluding that nursing records and physical exams aspects were the most frequently approached during consultations. Health education and the subsequent follow-up actions allowed us to verify that child vaccination statuses were not checked in any of the observed consultations.

Through the analysis of childcare consultations we identified activities to which nurses have focused their attention on (nursing history and physical exam) as well as weaknesses that need to be paid more attention to (health education and child follow-up) in order to offer quality assistance aimed at the prevention of disease and the promotion of child health in the researched municipality. Although the study was performed with a small number of nurses, it is worth highlighting that the situation found encourages us to better understand the management of childcare at USFs, seeking to create a childcare protocol for the municipality.

The most frequently included aspects were child anthropometric checks and data entry in clinical records and reflex assessments according to age. Health education aspects highlighted were the incentive to exclusive breastfeeding and child hygiene advice. Data collected during consultation was filed in the child’s clinical records by almost all nurses through nursing evolution standards.

Study results may sensitize nursing professionals with regards to the need to include questions inherent to a systematized assistance in childcare consultations. Based on these research findings, we believe in the possibility to act in order to contribute to a more qualified childcare for the children and their families, besides enabling a quality improvement in the consultations carried out by nurses.

It is also desirable that this work can contribute to encourage further discussion on the subject, as well as evidencing the need for further professional training for those involved in childcare services in Picos, as the results herein expressed offer a significant diagnosis on the situation of the municipality’s public health.

The main limitation of this study is related to the quantitative aspect of nurses included in the research. However, it is important to remark that the details provided by data collected permitted to find out which items nurses give more importance to during consultations, besides those that present gaps.

Finally, we verified that there is a need for further nurse training through ongoing education initiatives to improve assistance services, seeking to contribute to the improvement of the nursing care quality aimed at the promotion of child health through childcare consultations.

**REFERENCES**