Limits and Potentials of Pediatric Home Care in a Ceará State municipality

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ABSTRACT
Home Care Service (HCS) is the complementary service to primary care and emergency services, replacing or complementing hospital admissions. Therefore, the aim of this study is to know the limits and potentials of pediatric home care of the Melhor em Casa (Better at home) Program in a Ceará state municipality. The choice of pediatric care was due to its specificities, in addition to the difficulty of other levels of care to provide home care to these patients. It is an evaluative research, with a qualitative approach. In order to do that, the evaluation of the triad: structure-process-result, defined by Donabedian theoretical-methodological referencial, was used. For this study, we considered data and analysis referring to the process dimension. Regarding data collection, semi-structured interviews were carried out, based on the script adapted by Oliveira Neto, with professionals who work directly with the pediatric population in the municipalities. The speeches were recorded, in addition to records in a research journal, intended for notes of non-verbal language such as gestures, postures and facial expressions. In order to process the data, the thematic analysis of the speeches proposed by Minayo was carried out, supported by the NVIVO 11 plus software. The most frequent word in the speeches was “child” (158 times), followed by “attention” (107 times), “care” (80 times), patient (76 times) and home (73 times). It can be observed that the most frequent word denotes the importance given to patient-centered care, in this case, the child. According to the discourse analysis, on categories division, Interaction with the Health Care Network (HCN) was more present (39.02%), followed by the Structure-Dependent Process category (SDP) with 27.64, Work Relations (WR) with 26.02% and Professional-Dependent Processes (PDP) with 7.32%. Among the limitations faced, we can pinpoint: the network fragmentation, lack of supplies, transport and specialized professionals. As a potential, we could pinpoint: the decrease of pediatric hospitalizations, as well as the improvement of the quality of recovery at home.

Keywords: Home care services, Service structure, Evaluation of processes and results

INTRODUCTION
The Brazilian healthcare system is organized and offered to the population through the Unified Healthcare System (UHS). The Brazilian UHS is considered one of the largest public healthcare systems in the world, given its integral, universal and free access to the entire population. In this context, the Home Care Policy that has been progressively implemented in the country enhances the service and the implementation of the principles and purposes of the UHS and demands the articulation of the formation processes and provision of healthcare services.

According to Ordinance number 825 of April 25, 2016, which defines the UHS homecare service (Second Article, items I and II):

Home care is the "modality of health care integrated into the Healthcare Network (HCN), characterized by a set of actions for the prevention and treatment of diseases, rehabilitation, palliation and health promotion, provided at home, ensuring the continuity of care."

The Home Care Service (HCS) is complementary to the primary care and emergency services, replacing or complementing hospital admissions. The HCS aims at: to reduce the demand for hospital admissions and the duration of hospitalization, as well as humanize the health care through the increase of the patient’s autonomy; and, deinstitutionalize financial and structural RAS-SUS1 (HCN - Health Care Network) resources.
Currently, in Brazil, there are 435 municipalities of 26 states and the Federal District with 1153 teams of the Better at home Program - BHP (Programa Melhor em Casa) enabled. The State of Ceará has 57 qualified teams distributed throughout 30 municipalities. In the health macro-region of Sobral there are three municipalities with teams in place: Acaraú with one Home Care Multi Professional teams - HCMPT (EMAD - Equipe Multidisciplinar de Atenção Domiciliar) and one Support Multidisciplinary Team - SMT (EMAP - Equipe Multidisciplinar de Apoio), Ipu with one HCMPT and Sobral with two HCMPT and one SMT.4

From a municipal perspective, Sobral has more than 30 patients at home care as part of the actions of the BHP5. Law No. 1696 of December 6, 2017 structures the Program within the scope of the Unified Health System (UHS) in the city of Sobral to reduce the demand for hospital admissions, as well as the duration of hospitalization, humanizing the healthcare and optimizing the financial and structural resources of the Healthcare Network. The flow of care for these patients in the localities occurs weekly, in continuous demands, aiming at adults and children.6

In this context, it was decided to investigate pediatric home care due to providing adequate assistance to the pediatric home care service, despite technical and technological limitations for primary care. Therefore, the objective of the study is to know the limitations and potential of pediatric home care in the view of professionals and caregivers of the Better at Home Program (Programa Melhor em Casa), in a municipality in the state of Ceará.

**METHODOLOGY**

This article consists of an excerpt from the study *Evaluation of the quality of pediatric home care service in the "better at home program": the experience of a large city in Ceará.* This is an evaluative research, with a qualitative approach. The study participants were healthcare professionals who provide assistance to patients of the pediatric home care service in Sobral, Ceará State. Professionals who had been in the program for less than 6 months and who provided occasional assistance to these patients were removed from the sample. The exclusion of these professionals occurred due to the impossibility of getting unbiased answers to the questions about the integrality and longitudinality of the care provided to these users.

The Data collection was carried out through a semi-structured interview based on a script adapted by Oliveira Neto.7 The speeches were recorded using a digital recorder, in addition to the notations in a research journal, intended for recording manifestations of non-verbal language such as gestures, postures and facial expressions.

This research used the evaluation of the structure-process-outcome triad defined in Donabedian’s8 theoretical-methodological framework. For this study, it was considered only the data and analysis referring to the process dimension. The analysis of qualitative data was carried out through the framework of thematic discourse analysis proposed by Minayo.9 The N VIVO 11 plus software was used to support the analysis process. Among the software’s functionalities, the speeches were categorized into similar ideas, themes or concepts.

The research was submitted to the Scientific Committee of the municipality of Sobral with approval No. 0074/2019, and later to the Research Ethics Committee of the Universidade Estadual do Vale do Acaraú - UVA, with approval No. 3,434,187.

**RESULTS**

Figure 1 presents a word cloud of the most frequent words in the research. The more frequent the word appears in the answers, the greater its size. The most frequent word in the speech was “child” (158 times), followed by: “attention” (107 times); “care” (80 times); patient (76 times); and home (73 times). It can be highlighted that the most frequent word denotes the importance given to the user-centered care, in this case: the children.
The correlation among the mentioned words composes the speeches and emphasizes those that serve as a parameter in the content structure. The analysis identifies the basic semantic principles that determine the observed correlations. In the categorization, according to the discourse analysis, interaction with the Health Care Network (HCN) was more present (39.02%), followed by the category Structure-Dependent Process (SDP) with 27.64%, Work Relations (WR) with 26.02% and Professional-Dependent Processes (PDP) with 7.32%, as shown in Table 1:
Table 1
Categories and subcategories division according to NVivo Software.

<table>
<thead>
<tr>
<th>Categories (we)</th>
<th>No. (%)</th>
<th>Description</th>
<th>Subcategories (sub-we) / No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction with HCN</td>
<td>48 (39,02)</td>
<td>Relationship and interaction of the BHP with the different HCN equipments</td>
<td>Tertiary care 23 (18,70)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Primary care 19 (15,45)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Secondary care 6 (4,88)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Transport 14 (11,38)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Supplies 10 (8,13)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Team composition 07 (5,69)</td>
</tr>
<tr>
<td>Structure- Dependent Processes</td>
<td>34 (27,64)</td>
<td>Work processes directly related to the presence, or not, of structure. Supplies 10 (8,13)</td>
<td>Physical structure 3 (2,44)</td>
</tr>
<tr>
<td>Workspace relation</td>
<td>32 (26,02)</td>
<td>Relationship among the professionals and the municipal management</td>
<td>Management relation 17 (13,82)</td>
</tr>
<tr>
<td>Professional- Dependent Processes</td>
<td>09 (7,32)</td>
<td>Processes that directly depend on the professionals characteristics</td>
<td>Interprofessional relation 15 (12,20)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Professional training 3 (2,44)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Commitment 3 (2,44)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Communication 3 (2,44)</td>
</tr>
</tbody>
</table>

Source: Research data, 2019.

The first listed category was “Interaction with HCN”, which focused on the relationship and interaction of the BHP with the various HCN equipment. This category was later subdivided into three sub-categories: Tertiary Care, Primary Care and Secondary Care.

According to P7, there is a lack of knowledge on the part of other healthcare levels professionals about the role of Home Care (AD - Atenção domiciliar). This fact impairs the continuity of care, since the child accompanied by the BHP does not take away the responsibility of the care provided by the Family Health Strategy. Monitoring in the Health Network will be crucial for the continuity of care and availability of access to specialized appointments and the performance of exams to complement the diagnoses.

Another aspect pointed out in the speeches regarding the Interaction with HCN category is the role of Tertiary Care. P8 states that this level of care acts positively when there is a worsening in the health status of pediatric patients. However, he states that there is still a blockage when there is a need for non-emergency articulation.

The quality of the work carried out by the BHP was highlighted by P2, who reinforced the impact of the strategy in minimizing the number of pediatric hospitalizations in the municipality, as well as improving the quality of recovery at home. The interviewee reinforces that although there is a disarticulation among some points of the network, there is still a positive substitution.

The “Structure-Dependent Processes” Category was subdivided into: Transport, Supplies, Team Composition and Physical Structure. P1 evidenced the lack of structure of the BHP, limiting the care that must be provided and impacting the treatment of users attended at home. In addition, he points out the lack of transport and an exclusive physical structure for the BHP.

It is noticed that even with the team composition being in accordance with what the Health Department recommends, through Ordinance No. 825 of April 25, 2016, the lack of some essential categories for the care of the pediatric patients impairs the integrality of care, as mentioned by professionals P2 and P4.

In the “Supplies” subcategory, eight professionals signaled 10 times on the subject. The biggest issue is the professionals’ difficulty on providing quality care if they do not have the essential
supplies to improve the health and quality of life of children assisted by the BHP. The professionals highlighted as negative points:

"The lack of material to our patients, including everything: since probes to medication (P5)."

(...) the supply difficulty: we do not always have the material that should be available at the child’s home, and when it is lacking, even with some mothers being of low income, they are forced to buy it out of their own pocket. (P9)

The category “Professional-Dependent Processes”, which focused on processes that directly depend on professionals’ characteristics, was subdivided into: training, commitment and communication. In words mentioned by P3, the need to invest in professional and continued education of the Better at Home Program members is observed. Not only because it is recommended by the Health Department, but to optimize the assistance provided to this public.

In the last category, “Work Relations”, which focuses on the relationship between professionals and the municipal management, the following themes were identified as subdivisions: Interprofessional Relationship and Relationship with the municipality management. Some points mentioned by professionals are observed, such as: the lack of a closer relationship between professionals from the Better at Home Program and the Primary Care Management (P3 and P4) as well as the process of professional changes at each cycle of the employment contract, cutting the bond between the professional and the patient, and the new professional being compared to the previous one by the patient’s family.

**DISCUSSIONS**

Approaching the category “Interaction with the HCN”, it was highlighted that the limitations pointed out were centered on the disruption of patient follow-up by the different levels of care after being attended by the BHP. That was mainly due to inadequate communication and a lack of understanding of professionals about the program. Castro¹² argues that the dialogue among professionals who work with home care with those from other care areas of the Health Care Network is essential for the consolidation of the doctrinal principles of the Unified Health System.

Oliveira Neto and Dias¹³ emphasize that in home care, the articulation of the Health Care Service (HCS) with other services is essential, through the demand for care that is directed to the following gateways: users coming from the Family Health teams; the hospitals; and emergency care units. For Home Care to be effective, it is essential to articulate with all health establishments and services that make up the Health Care Network. This process represents an important challenge for the Health Care Service.

Regarding the Structure-Dependent-Process category, Castro¹² argues that, in order to provide care to the Home Care Service Patient, it is essential that the residence has a structure with permanent and consumable materials that enable the recovery and/or stabilization of the patient’s health. Thus, it is necessary to develop an individualized care plan, where all the basic and advanced needs of these patients are detailed.

Oliveira Neto and Dias¹³ also focus on the frequent transfer of responsibilities, both in care and in acquiring of supplies/equipment/drugs, which must be the government’s responsibility. However, it is observed that this responsibility is being transferred to the patient and their families/caregivers. It is therefore observed that this discussion does not end in the field of health, requiring the establishment of an intersectoral agenda, especially with the social assistance, so patients, or their families/caregivers, are not responsible for spending on health materials, once it is an obligation of the State and Municipalities.

In what concerns training, commitment and communication, explicit in the category “Professional-Dependent Processes”, Almeida¹⁴, when carrying out a research on the commitment of the home care professional, mentions that the relational competencies with the work developed by the team are described as integration devices with the family dynamics so that comfort, relief from suffering and improvement of the living conditions can be achieved.
It is observed that the professionals surveyed highlight communication as an open channel between them and the users of the Better at Home Program. In this sense, Andrade mentions that communication goes far beyond words and content, as it considers attentive listening, gaze and posture\textsuperscript{15}. Thus, communication is essential to obtain humanized assistance, since when using this resource properly, it becomes a therapy of great relevance for patients who need this care, especially those in a terminal state.

Approaching the category of Work Relations, Valentini\textsuperscript{16} highlights that interprofessional work focuses on improving the quality of health care, integrating the forces of various areas, and maximizing the chance of learning from the various situations encountered by a particular professional group that provides a public service. Through a well-executed exchange of knowledge, the service can be improved and the benefit from this will not only be to the patient, but also to the entire team, since by adding the different experiences of each group member, it increases the shared knowledge and optimizes the patient’s care.

Lorenzetti\textsuperscript{17} also points out that there is a finding that health management is still based on traditional methods and strategies, brought out from the classical theory of administration. And the construction of new forms of management in the health area, anchored in participation, cooperation and interdisciplinary practices, where workers and users are participative as well as active subjects, remains a challenge.

**CONCLUSION**

Understanding different perspectives on the home care service made it possible to reflect on the service quality, observe significant issues about this modality of health care and recognize home care as a strengthening and continuity of care.

Understanding that the pediatric health care service practices are carried out at home, it was found out that the connection and implementation of comprehensive care are essential. The weaknesses found in home care are: a deficiency in both communication and integration of the Care Network; a lack of transport as well as physical structure; insufficient supplies; lack of specialized professionals; in addition to the lack of closeness of the Program professionals with the management.

However, the participants listed the benefits of the Better at Home Program, as well as the humanization of some professionals and the bond that is generated among them, the patients, and caregivers. Caregivers also related that health education was an important tool for prevention and quick intervention in cases of patients’ aggravations, in addition to rapid resolutions in cases of urgency.

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Contribuição na interpretação dos dados (MAMS, FDOM);
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