# Humanized physical therapy assistance to hospitalized children from the perspective of family members

Manoela Gomes da Silva<sup>1</sup>, Giovanna Porto dos Santos<sup>2</sup>, Karine Orrico Góes<sup>3</sup>, Juliana Barros Ferreira<sup>4</sup>, Samara de França Ferreira<sup>5</sup>, Priscila d'Almeida Ferreira<sup>6</sup>, Nayara Alves de Sousa<sup>7</sup>

Abstract— Introduction: Nursing care in the hospital environment can have an emotional impact on children and families, but humanized care has made this process less traumatic. Objective: To verify if the physiotherapist's care with the children hospitalized in a public hospital occurs in a humanized way from the perspective of the relatives. Methods: This is an observational, descriptive and quantitative study. The population was composed of 20 relatives of children under 12 years of age, hospitalized at least 24 hours, who performed at least three physiotherapy sessions. As instrument, a questionnaire elaborated by Lopes (2009) was used, adapted by the researchers. Results: The majority of the children were male (55%), mean age 03-24 months (55%), with a predominance of pneumonia (25%). The female gender (95%) was the prevalence of family members, mothers (90%), single women (40%), with ages ranging from 18 to 29 years (50%). Cardiorespiratory Measurement and guidelines (16%) were the most used physiotherapeutic procedures. The care of the physiotherapist was predominant (100%) and the use of playful care was (75%) negative. Conclusion: it was observed that the care of the physiotherapist with hospitalized children occurs in a humanized way, but leaves gaps regarding the use of playfulness.

Keywords—Physiotherapy, Humanization, Hospitalization.

# I. INTRODUCTION

Hospitalization results from a pathology in the child, which has the consequence of an alteration in the family routine, and can cause different sensations, which alternate between guilt, uncertainty, anguish, fear, distress and fear (OLIVEIRA et al., 2010). Therefore, the duties and tasks of the child's companion during the hospitalization period are highlighted, especially because they face complications such as: being away from family comfort to a different environment, full of doubts,

vulnerabilities and changes in the daily routine (HAYAKAWA et al., 2009).

These circumstances can cause exhaustion for both the child and those who monitor and therefore generate an emotional impact (COYNE, 2006). During child hospitalization, the family experiences periods of insecurity in relation to the child's health condition, resulting from the probability of complications of the clinical condition, with risk of death (GOMES et al., 2012).

The care attributed to the child during the hospitalization period, and also to his family, provides

<sup>&</sup>lt;sup>1,5</sup>Physiotherapist. Graduated from the State University of Southwest Bahia (UESB).

<sup>&</sup>lt;sup>2,3</sup>Physiotherapist. PhD by the State University of Santa Cruz (UESC). Adjunct Professor B at the State University of Southwest Bahia (UESB).

<sup>&</sup>lt;sup>4</sup>Physiotherapist. Master in Health Technologies by the Bahiana School of Medicine and Public Health (EBMSP). Professor at Fainor, FTC and UninassauAU.

<sup>&</sup>lt;sup>6</sup>Physiotherapist. PhD from the State University of Southwest Bahia (UESB). Adjunct Professor B at the State University of Southwest Bahia (UESB).

<sup>&</sup>lt;sup>7</sup>Physiotherapist. PhD by the State University of Santa Cruz (UESC). Adjunct Professor B at the State University of Southwest Bahia (UESB). Rua Dr. Raimundo Bahia da Nova, 36, Address of Bem Querer, Vitória da Conquista-Bahia

assistance that is conducive to the progress of reestablishing the child's health and aims at humanized assistance (SOSSELA et al., 2017). According to the National Humanization Policy (PNH), humanizing means first of all to respect the people involved, be it a family member, a health professional or a child. In view of this hospitality, special attention must be emphasized, the ability to understand understood, help available, verify the claims and establish a union between the patient, the family member and the team (BRASIL, 2004).

The hospital team has an essential role in providing necessary assistance to the family, understanding the caregiver's attitude towards the care received and the circumstances that are found (COSTA et al., 2018). This is composed of several professionals, among them the physical therapist who is able to identify restrictions, difficulties, variations, functional disabilities, propensities and individualities and from these observations proposes a therapeutic plan based on the needs of each child (REIS et al., 2016).

Therefore, after the assessment, indications of an instructive nature are made to enable preventions, with regular reevaluations and interventions taking into account the children's particularities. The insertion of the physiotherapist in hospital environments improves health, quality of life of hospitalized children and reduces possible trauma resulting from the length of hospital stay (REIS et al., 2016).

In view of the data presented above and considering that there is a low scientific investigation in relation to the subject addressed (SILVA et al., 2017), the present study proposes to verify if the physiotherapist's care with children admitted to a public hospital occurs in a humanized way from the perspective of family members.

# II. METHODOLOGY

This is an observational, descriptive study, with a quantitative approach. Approved by the Ethics and Research Committee, according to opinion 3,050,213 on November 30, 2018. This study is part of a larger project entitled: 'Humanized Physiotherapeutic Care for Children in Pediatrics'. The research was carried out in the Pediatrics sector of a Public Hospital, in the interior of Bahia, from December 2018 to March 2019.

The study population consisted of 20 family members (parents, mothers or guardians) of children under 12 years old, who were hospitalized in the Pediatrics sector for at least 24 hours and who had already undergone at least three physical therapy sessions.

Family members were invited to participate in the research and signed the Free and Informed Consent Form (ICF). Parents under 18 were excluded and the right to interrupt their participation in any stage of the research was guaranteed, without any penalty or loss, as well as confidentiality and anonymity regarding the data collected.

The questionnaire was applied in the child's own room or in the external area of pediatrics, without the presence of any other health professional, especially physiotherapists, in order to provide the families with the necessary safety and comfort, preserve the confidentiality of responses and avoid embarrassment or mandatory requirements.

This questionnaire was developed by Lopes (2009) and adapted by the researchers, consisting of closed questions regarding the characteristics of the children, the sociodemographic characteristics of the family members and the physiotherapeutic procedures performed.

About the characteristics of the children, it was argued about: gender, age, diagnosis of hospitalization, length of hospital stay and physiotherapy sessions. Regarding the sociodemographic characteristics of the family members, they were asked about: gender, age group of the family member, degree of kinship and marital status.

Regarding the physiotherapeutic procedures, it was asked whether during any conduct by the physiotherapist he realized that there was a lack of care, punctuating with no or yes, if so in which / which procedures: positioning therapy, breathing exercises, aspiration, cough stimulus, motor kinesiotherapy, stretches and if others specify. It was also asked whether playfulness (toys) was used during the conduct and which physical therapy procedures were performed.

The collected data were submitted to descriptive statistics and presented as absolute numbers and percentages, using the Statistical Package for Social Sciencespor (SPSS) software, version 22.0 for Windows.

# III. RESULTS

The research consisted of 20 family members (parents, mothers or guardians) of children under 12 years of age, who were hospitalized in the Pediatrics sector for at least 24 hours and who had already undergone at least three physical therapy sessions. The incidence of males was predominant (55%). Regarding the age variable, children between 03 months and 12 years were surveyed, with dominance from 03 to 24 months prevailing in more than half of the total children surveyed (55%). As for the diagnosis of hospitalization, pneumonia remained with

more than (25%), followed by respiratory infection (15%) and bronchiolitis (10%). When assessing the length of hospital stay, it was seen that the majority was hospitalized between 4 to 7 days (55%). In analyzing data on the

number of physiotherapy sessions performed, most children performed between 6 to 9 sessions (45%) (TABLE 1).

Table 1 - Characteristics of Children. Jequié / BA, 2019.

| Variables   | % answer | N  | %   |
|---|----------|----|-----|
| Genre   | 100      |    |     |
| Feminine  |          | 9  | 45% |
| Male  |          | 11 | 55% |
| Age   | 100      |    |     |
| 0 to 24 months  |          | 11 | 55% |
| 3 years   |          | 2  | 10% |
| 4 years   |          | 2  | 10% |
| 6 years   |          | 1  | 5%  |
| 9 years   |          | 1  | 5%  |
| 10 years  |          | 1  | 5%  |
| 12 years  |          | 2  | 10% |
| Inpatient Diagnosis                                   | 100      |    |     |
| Shortness of breath                                   |          | 1  | 5%  |
| Urinary infection                                     |          | 1  | 5%  |
| Pneumonia   |          | 5  | 25% |
| Seizure crisis  |          | 1  | 5%  |
| Bronchiolitis   |          | 2  | 10% |
| Respiratory infection                                 |          | 3  | 15% |
| Sepsis  |          | 1  | 5%  |
| Nephrotic syndrome ? (Pleural effusion and pneumonia) |          | 1  | 5%  |
| Left upper limb fracture                              |          | 1  | 5%  |
| Rheumatic Korea                                       |          | 1  | 5%  |
| Bacterial meningitis                                  |          | 1  | 5%  |
| Renal Parenchymal Disease                             |          | 1  | 5%  |
| Acute Cerebellar Axia                                 |          | 1  | 5%  |
| Length of hospital stay (days)                        | 100      |    |     |
| 1 to 3  |          | 3  | 15% |
| 4 to 7  |          | 11 | 55% |
| Over 7 days   |          | 6  | 30% |
| Physiotherapy sessions                                | 100      |    |     |
| 3 to 5  |          | 8  | 40% |
| 6 to 9  |          | 9  | 45% |
| Over 10 sessions                                      |          | 2  | 15% |

<sup>% =</sup> percentage, n = number of participants. Source: Research data.

Regarding the sociodemographic characteristics of the family members, as shown in Table 2, the most prevalent gender was female (95%), the age group of the family members was between 18 and 29 years old (50%) and the degree of kinship most prevalent was mothers (90%) and single (40%) (TABLE 2).

Table 2 - Sociodemographic characteristics of family members. Jequié / BA, 2019.

| Variables            | % answer | N  | %   |
|----------------------|----------|----|-----|
| Genre                | 100      |    |     |
| Feminine             |          | 19 | 95% |
| Male                 |          | 1  | 5%  |
| Age of family member | 100      |    |     |
| 18 to 29 years       |          | 10 | 50% |
| 30 to 39 years       |          | 9  | 45% |
| 40 to 49 years       |          | 1  | 5%  |
| Degree of kinship    | 100      |    |     |
| Dad                  |          | 1  | 5%  |
| Mother               |          | 18 | 90% |
| Others               |          | 1  | 5%  |
| Marital Status       | 100      |    |     |
| Not married          |          | 8  | 40% |
| Married              |          | 6  | 30% |
| Stable union         |          | 6  | 30% |
|                      |          |    |     |

% = percentage, n = number of participants. Source: Research data.

As for the physical therapist's care, there was a predominance of (100%). Regarding the use of playfulness during consultations, it was (75%) negative.

According to table 3, in the physical therapy procedures performed, it was noticed that the Cardiorespiratory Measurement (MCR) and the guidelines were (16%) and the other procedures (22%) (TABLE 3).

Table 3 - Physiotherapeutic procedures performed. Jequié / BA, 2019.

| Variables   | %answer | N   | %   |
|---|---------|-----|-----|
| Procedures  | 100     |     |     |
| Cardiorespiratory Measurement (MCR)                           |         | 220 | 16% |
| Retrograde Rhinopharyngeal Clearance with Instillation (DRRI) |         | 88  | 6%  |
| Mucociliary transport   |         | 66  | 5%  |
| Prolonged Slow Expiration (ELPR)                              |         | 88  | 6%  |
| Vibrocompression  |         | 77  | 5%  |
| Positioning   |         | 55  | 4%  |
| Increased Expiratory Flow (AFE)                               |         | 88  | 6%  |
| Compression-decompression                                     |         | 66  | 5%  |
| Cough Stimulation   |         | 66  | 5%  |
| Ambulation  |         | 66  | 5%  |

| Guidance | 220 | 16% |
|----------|-----|-----|
| Others   | 28  | 22% |
|          |     |     |

% = percentage, n = number of participants. Source: Research data.

### IV. DISCUSSION

The purpose of this study was to verify the physiotherapist's care with children admitted to a public hospital and certified that the humanization process occurs in the visits, but leaves gaps regarding the use of playfulness.

The study showed a predominance of males. Corroborating this research, studies show that male children are associated with major hospitalization events, especially children under the age of one year and between four and six years (MENEZES et al., 2010). Another study also confirmed the prevalence of males hospitalized for respiratory diseases in childhood (CAETANO et al., 2002).

The diseases of the respiratory tract that occur in childhood are in their prevalence caused by viruses and / or bacteria that usually are prevalent in environments with a large flow of people, closed and humid places (GONZALES et al., 2008). Studies also point out that pathologies of the urinary and renal tract are common during childhood, with hygiene practices and the peculiar characteristic of the genitals one of the important reasons that contribute to this eventuality (AVERBUCH et al., 2014).

When examining the findings of the study and those in the literature, it should be noted that research conducted with children hospitalized with a diagnosis of pneumonia, it was found that the average length of stay was 7 days (VERAS et al., 2010). A survey carried out in Joinville-Santa Catarina found that the children remained around 7.5 days of hospitalization. Referring to community-acquired pneumonia, the common hospitalization period of 7.5 days is seen positively, since recovery usually occurs within 72 hours (SOARES, 2011). Staying hospitalized for around 5 days is the fundamental time to consolidate comorbidities, make use of antibiotic therapy in its almost total cycle and succeed with another that can be administered at home (STORCK et al., 2012).

There is also the monitoring of vital signs that are important to maintain, modify or establish conducts. Vital signs characterize the hemodynamic situation and act as possible indicators of imbalance of these functions, which can be of a physical and / or psychic order, the identification of changes in these parameters allows us to

make a quick assessment, enabling an early intervention, if necessary. These data are measured by checking the temperature, respiratory rate, heart rate, pulse and blood pressure (AMARAL et al., 2012).

Regarding age and gender, most of the accompanying family members are mothers, young and single. The findings of the present study are in accordance with the literature (ALMEIDA et al., 2012). It is believed that the life of the mothers undergoes changes in the personal, social, financial and occupational spheres, as they are accompanying the child during the hospitalization process (COSTA, 2018). A study shows that family perceptions in relation to humanization come from sensations, which remain according to their intensity and duration and this refers to the care that is an attribute or peculiarity of the quality of humanization (NOGUEIRA et al., 2012). This perception of care involves the moral principles of health professionals to provide care based on welcoming and sensitivity (CAREGNATO, 2017).

In another study, companions of hospitalized children described humanization, in a complete way, when there is a condition of the therapeutic relationship and of a good and clear communication established between the multidisciplinary and family team. Therefore, when care is provided with respect and attention, showing competence and relevance in communication, these are effective particularities of humanized care (SPIR, 2011). Studies point out that the creation of a child's affection with an adult occurs through the achievement that can be facilitated through play, however, this relationship happens in a progressive way (FUJISAWA, 2010).

Treatment with recreational activities has both physical and emotional benefits, and favors the approach of hospitalized children, because playing, in addition to being pleasurable, is an instrument that facilitates treatment (ARÁUJO et al., 2017). The moment playfulness is addressed, the child identifies the moment he plays and establishes expectations for other care. It is important to emphasize that play therapy needs to be continuously related to the established purposes, this being a double return solution. The playful moment experienced in physiotherapy is different from having fun freely, as it requires that it be in accordance with physiotherapeutic purposes (NOGUEIRA, 2012).

It should be noted that the treatment of children is less traumatic when using playful activities, as this practice fills a considerable space in improving child health. It is known that therapeutic playfulness still presents itself in a very limited way and because it is an effective mediator in the bonds between child, family, team and hospital environment, it is necessary to make a greater effort in the use of these activities during all pediatric care (MUSSA et al., 2008).

Physiotherapeutic guidelines for children's companions during and after hospitalization are essential to unify and complement the treatment performed. Therefore, physical therapy assistance is also directed towards education and prevention in order to reduce possible readmissions of these children (SANTA et al., 2002).

### V. CONCLUSION

It was found that the physiotherapist's care for hospitalized children occurs in a humanized way, but leaves gaps regarding the use of playfulness in physiotherapy treatments.

One of the limitations of this study was that a qualitative analysis was not carried out to check the perception of family members. Therefore, other studies in this line of research are being carried out in order to implement new research on hospital humanization and physical therapy interventions.

Thus, it is hoped that this study can contribute to new reflections on public policies, serving to expand analyzes on the practice of humanization in health services.

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