## ACTION AND INTERACTION STRATEGIES FOR THE CARE OF HOSPITALIZED CHILDREN WITH CHRONIC CANCER PAIN<sup>1</sup>

Thiago Privado da Silva², Joséte Luzia Leite³, Jennifer Stinson⁴, Chitra Lalloo⁵, Ítalo Rodolfo Silva⁶, Lindsay Jibb⁻

- <sup>1</sup> Article extracted from the dissertation Management of the nursing care for hospitalized children with chronic cancer pain, presented to the Postgraduate Program in Nursing Escola de Enfermagem Anna Nery (EEAN), Universidade Federal do Rio de Janeiro (UFRJ), in 2016.
- <sup>2</sup> Ph.D. in Nursing. EEAN/UFRJ. Rio de Janeiro, Rio de Janeiro, Brazil. E-mail: thiagopsilva87@gmail.com
- <sup>3</sup> Ph.D. in Nursing. Professor of the Postgraduate Program in Nursing, EEAN/UFRJ. Rio de Janeiro, Rio de Janeiro, Brazil. E-mail: joluzia@gmail.com
- <sup>4</sup> Ph.D. in Nursing. Professor, University of Toronto. Toronto, Canada. E-mail: jennifer.stinson@sickkids.ca
- <sup>5</sup> Ph.D. in Medical Sciences. Professor, University of Toronto. Toronto, Canada. E-mail: chitra.lalloo@sickkids.ca
- <sup>6</sup> Ph.D. in Nursing. Professor of Nursing and Obstetrics Course, UFRJ. Rio de Janeiro, Rio de Janeiro, Brazil. E-mail: enf.italo@ hotmail.com
- <sup>7</sup> Ph.D. in Nursing. Professor, University of Ottawa. Ottawa, Canada. E-mail: lindsay.jibbs@sickkids.ca

#### **ABSTRACT**

**Objective**: to discuss, from the complexity underpinning, the action and interaction strategies adopted by healthcare professionals for the care of hospitalized children with chronic cancer pain.

**Method**: qualitative approach research, performed based on the methodological underpinning of the Grounded Theory and on the theoretical underpinning of the Complex Thought, from the perspective of Edgar Morin. The semi-structured interview and the non-participant observation were used to collect data. A total of 21 health professionals were included in the research and they were organized into three sample groups: nurses; nursing technicians; and professionals of the multiprofessional healthcare team. The results of the research were validated by five examiners, three of whom present expertise in the research method.

Results: the category "Dealing with the complexity of the managerial context of the care provision to children with chronic cancer pain to children with chronic cancer pain", through its subcategories, showed that healthcare professionals use the playful activities, the dialogue, the empathy, the affective relationship, and the teamwork as interaction strategies to provide care to the child and the family. In addition, the results present the search for spirituality and emotional balance as action strategies that are necessary to deal with child and family suffering.

**Conclusion**: the results present the need for healthcare professionals to establish action strategies that improve their interaction with the child and their relatives, since an effective interaction makes the process of assessment and management of pain easier, as well as it favors the continuity and the quality of the care provided.

DESCRIPTORS: Child care. Interpersonal relations. Strategies. Chronic pain. Neoplasms.

# ESTRATÉGIAS DE AÇÃO E INTERAÇÃO PARA O CUIDADO À CRIANÇA HOSPITALIZADA COM DOR ONCOLÓGICA CRÔNICA

#### **RESUMO**

**Objetivo**: discutir, a partir do referencial da complexidade, as estratégias de ação e interação adotadas pelos profissionais de saúde para o cuidado à criança hospitalizada com dor oncológica crônica.

**Método**: pesquisa de abordagem qualitativa, realizada com base no referencial metodológico da Teoria Fundamentada nos Dados e no referencial teórico do Pensamento Complexo, na perspectiva de Edgar Morin. A entrevista semiestruturada e a observação não participante foram utilizadas para a coleta de dados. Participaram da pesquisa 21 profissionais de saúde, os quais foram organizados em três grupos amostrais: enfermeiros; técnicos de enfermagem; e profissionais da equipe multiprofissional de saúde. Os resultados da pesquisa foram validados por cinco examinadores, dos quais três apresentam *expertise* no método de pesquisa.

Resultados: a categoria "Lidando com a complexidade do contexto gerencial de cuidado à criança com dor oncológica crônica", por meio de suas subcategorias, revelou que os profissionais de saúde utilizam o lúdico, o diálogo, a empatia, a relação afetiva e o trabalho em equipe como estratégias de interação para cuidar da criança e do familiar. Ademais, os resultados apresentam a busca da espiritualidade e do equilíbrio emocional como estratégias de ação necessárias para lidar com o sofrimento infantil e familiar.

Conclusão: os resultados revelam a necessidade de os profissionais de saúde estabelecerem estratégias de ação que melhorem a sua interação com a criança e com o familiar, posto que uma efetiva interação facilita o processo de avaliação e manejo da dor, bem como viabiliza a continuidade e a qualidade do cuidado prestado.

DESCRITORES: Cuidado da criança. Relações interpessoais. Estratégias. Dor crônica. Neoplasias.

# ESTRATEGIAS DE ACCIÓN E INTERACCIÓN PARA EL CUIDADO AL NIÑO HOSPITALIZADO CON DOLOR ONCOLÓGICA CRÓNICA

#### RESUMEN

**Objetivo**: discutir, a partir del referencial de la complejidad, las estrategias de acción e interacción adoptadas por los profesionales de salud para el cuidado al niño hospitalizado con dolor oncológico crónico.

**Método**: investigación de abordaje cualitativo, realizada con base en el referencial metodológico de la Teoría Fundamentada en los Datos y en el referencial teórico del Pensamiento Complejo, en la perspectiva de Edgar Morin. La entrevista semiestructurada y la observación no participante se utilizaron para la recolección de datos. Participaron de la investigación 21 profesionales de salud, los cuales fueron organizados en tres grupos muestrales: enfermeros; técnicos de enfermería; y profesionales del equipo multiprofesional de salud. Los resultados de la investigación fueron validados por cinco examinadores, de los cuales tres presentan experiencia en el método de investigación.

Resultados: la categoría "Lidiando con la complejidad del contexto gerencial de cuidado al niño con dolor oncológico crónico", por medio de sus subcategorías, reveló que los profesionales de salud utilizan el lúdico, el diálogo, la empatía, la relación afectiva y el trabajo en equipo como estrategias de interacción para cuidar del niño y del familiar. Además, los resultados presentan la búsqueda de la espiritualidad y del equilibrio emocional como estrategias de acción necesarias para lidiar con el sufrimiento infantil y familiar.

Conclusión: los resultados revelan la necesidad de que los profesionales de salud establezcan estrategias de acción que mejoren su interacción con el niño y con el familiar, puesto que una efectiva interacción facilita el proceso de evaluación y manejo del dolor, así como viabiliza la continuidad y la calidad del cuidado prestado.

DESCRIPTORES: Cuidado del niño. Relaciones interpersonales. Estrategias. Dolor crónico. Neoplasias.

## **INTRODUCTION**

Pain is one of the most common symptoms experienced by the child with cancer, and the one that causes more suffering. The cancer pain may have as causes: the presence of an underlying disease, the diagnostic and therapeutic procedures, as well as the own progression of the disease. <sup>1-3</sup> At this juncture, the World Health Organization reveals that, in developing countries, where many children have advanced cancer and few have access to effective treatment, the cancer pain is related to the progression of the disease. In developed countries, child cancer pain is related to the treatment and to the diagnostic and therapeutic procedures.<sup>4</sup>

The cancer pain may manifest in the child as acute or chronic. The acute pain arises as a result of a tissue injury and tends to disappear when the wound heals. On the other hand, the chronic pain is continuous (persistent) or recurrent (episodic) and persists beyond the normal expected time. The American Society of Pain points out that while the acute pain is usually self-limited, in some patients, the pain persists beyond the expected cure time (arbitrarily defined > 3-6 months) and progresses to chronic pain.

A study<sup>6</sup> revealed that 52% of children with leukemia had chronic pain throughout their treatment. This result is important because the World Health Organization<sup>4</sup> points out that the presence of chronic pain in children with a chronic disease, such as cancer, can adversely affect various aspects of the child's life, including the practice of physical activities, school attendance, sleep pattern, family interaction, social relations, humor, among other

aspects. In this regard, the above mentioned study<sup>6</sup> identified that children who presented chronic cancer pain presented difficulties in the following areas: extracurricular (16.7%), domestic (14.6%), social (12.6%) and academic (12.5%), as well as in sleep (12.6%).

Thus, it is understood that chronic cancer painis a complex phenomenon, since it conditions several aspects of the human life. Through this view, the multidimensional nature of chronic cancer pain requires thinking about the spiritual, biological, social and psychological aspects as interdependent units that constitute a complex whole, understood in this study as total pain, a concept elaborated by the English woman Cicely Saunders to refer to the pain of patients with an advanced disease.<sup>7</sup>

This perspective is aligned with Edgar Morin's Complex Thought, which postulates that the complexity is on every network of heterogeneous constituents inseparably associated. Thus, the Complex Thought is important for the study of chronic cancer pain in childhood, not only because of the multidimensional nature of pain, but also because its complexity demands interprofessional assessment and management.

The assessment and effective management of chronic cancer pain depends on the quality of the interactive processes, which should be developed by healthcare professionals, through action strategies that make their approximation, gaining of confidence and building bonds with the child and with the relative easier. The establishment of strategies is also important to deal with the multiple disorders that emerge from interpersonal and interprofessional relationships in the care of children with

chronic cancer pain.

Although there are statements advocating for a multiprofessional approach to children with chronic cancer pain, little is known about how healthcare professionals interact with the hospitalized child and the relatives and which interaction and action strategies they use to provide care. <sup>6,9-11</sup> In view of the evident gap, there is a need for this study that aims to discuss, based on the complexity underpinning, the action and interaction strategies adopted by healthcare professionals for the care of hospitalized children with chronic cancer pain.

#### **METHOD**

Qualitative approach study, anchored on the Grounded Theory (GT) methodological underpinning and in the theoretical underpinning of the Complex Thought, from Edgar Morin's perspective. The choice by the Grounded Theory method for the understanding of the phenomenon in question is due to the interest in producing a content that is conceptually theorized and grounded in the qualitative data of the research, which makes it possible to know the phenomenon in a more dense way, considering the underlying aspects related to it. On the other hand, the use of the Complex Thought is justified by the need to explore the multidimensionality of the chronic cancer pain and the complexity of the multiprofessional approach provided to the child who experiences this phenomenon.

The data were collected between August 2014 and June 2015, through a semi-structured interview and non-participant observation, which were performed with healthcare professionals allocated to the Pediatric Hospitalization Unit (UIP - "Unidade de Internação Pediátrica", in Portuguese) of a hospital in the city of Rio de Janeiro, Brazil. The Pediatric Hospitalization Unit has 13 beds, one of which is reserved for children in contact isolation. In this context, the main diagnoses of the hospitalized children are: leukemia, lymphoma and sickle cell disease.

The research participants were organized into three sample groups, according to the theoretical sampling resource, <sup>12</sup> which are: the first sample group was composed of seven nurses; the second sample group was composed of seven nursing technicians; and the third and last sample group was composed of seven other healthcare professionals, two physicians, two physiotherapists, a social worker, a psychologist and a pharmacist. All the

participants met the inclusion criteria: having at least one year of experience in the care of children with cancer, and the same period of professional contract with the institution. Healthcare professionals absent from work or on vacation were excluded.

It is important to highlight that, initially, the only sample group delimited for this research was the first, which was composed of nurses. However, one of the characteristics of the research method adopted is the possibility of, in the analytical course of the data, arising hypotheses that may direct to other sample groups, according to the need to elucidate the research phenomenon. This is only possible because, by the use of this method, the data is collected and analyzed concomitantly.

The analysis of the interviews with the nurses allowed reflections that subsidized the formulation of the following hypothesis/assumption: the nursing care provided to hospitalized children with chronic cancer pain presents interfaces/ interdependencies with different disciplines and professions; therefore, the complexity of this phenomenon is not limited to the nurse's role, but, as a necessity, it encompasses a network of interactions with technicians and nursing assistants, as well as with the multiprofessional healthcare team, given the importance, participation and influence of these professionals in the nurses' work process. For this reason, it was necessary to expand the data collection for other healthcare professionals, in order to better understand how care relationships occur and which interaction strategies are established by healthcare professionals for the care of children with chronic cancer pain. The interviews with all the participants were recorded, later transcribed, and had as guiding question: what are the main interaction strategies that you use to provide care for children with chronic cancer pain?

The data collection was finished when the theoretical saturation was obtained, <sup>12</sup> moment at which the new data collected were no longer changing in consistency and theoretical density the concepts constructed. The non-participant observation was performed on five occasions, during the daytime period, according to the researcher's availability; after this process, the interviewees' discourse analysis was carried out, totaling 54 hours. The contents were recorded in observation notes and were related to behaviors, attitudes, actions and interaction strategies for teamwork and for the care of hospitalized children with chronic cancer pain.

The comparative data analysis process oc-

curred through the following coding steps: open, axial and selective.<sup>12</sup> In the open coding, the data were coded line by line, generating the preliminary codes which, in turn, after being grouped by similarities of meaning, gave rise to the conceptual codes. The conceptual codes were compared to each other and organized by sense similarities, giving rise to categories and subcategories.

In the axial coding, the categories were related among each other and among their subcategories, in order to determine their properties and dimensions. At this moment of the analysis, an analytical tool called Paradigmatic Model was used, which allowed the reunion/ordering/integration of the categories previously elaborated, favoring the emergence of the central phenomenon of the study, which occurred in the selective coding stage. In this last step, the validation of the results was also performed.<sup>12</sup>

This process occurred in the months of September and October 2016 and had the participation of five validators, which were:three researchers of the Nursing area with expertise in the Grounded Theory and/or research in the area of Nursing Management and two nurses from the first sample group of the current study. It should be highlighted that the selection of the validators was carried out for convenience. In addition to the coding process, memos and diagrams were used to aid in the theoretical analysis of the data.<sup>8</sup>

It should be highlighted that the data collection was only initiated after the approval of the study by the Ethical Committee on Research of the partner institution, under the Opinion No. 355/14, and by the Ethical Committee on Research of the proposing institution, under the Opinion No. 816,736 and CAAE no. 32795514. 8. 0000. 5238. All the participants have signed the Free and Informed Consent Term.

Considering the recommendations of the Resolution 466/2012 of the National Health Council of the Ministry of Health, the nurses' statements are identified by the letter E; those of nursing technicians by the letter T; those of the physicians by the letter M; those of the pharmacist by the letters FC; those of the psychologist by the letter P; those of physiotherapists by the letters FS; and those of the social worker by the letters AS. All of them are followed by a number that refers to the order of the interviews in each sample group (E1, T1, M1).

## **RESULTS**

Of the total of 21 research participants, only

one is male and composes the first sample group. In this same group, the experience time in oncologic children care ranged from one to thirteen years. In the second sample group, considering the same item, there was a variation between one and two years. In the third sample group, the hematopediatrists presented experience ranging from three to five years. In this direction, the physiotherapists, as well as the psychologist, had experience of one year and six months in the care of the child with cancer, while the social worker reported having two years of experience in the same setting. It should be highlighted that the pharmacist who participated in the research informed that she did not work directly in the care of the child with cancer, given her responsibility in managing the institution's pharmacy. However, she mentioned that for two years she has been working in a team with the healthcare professionals of the Pediatric Hospitalization Unit, subsidizing drugs capable of promoting the relief of chronic cancer pain.

The use of the Grounded Theory as a qualitative research method allows the construction of a theoretical matrix/theory capable of a dense explanation on a given phenomenon. Through the Paradigmatic Model,12the categories are related to each other and can be configured as: causal condition, contextual condition, intervening condition, action and interaction strategies, and consequences. This configuration facilitates the definition of the central phenomenon of the research, which was defined as "Management of the nursing care to hospitalized children with chronic cancer pain: an experience of multiple interactions". The exposed central phenomenon presents as action and interaction strategy the category entitled: "Dealing with the complexity of the managerial context of the care provision to children with chronic cancer pain", which is composed by five subcategories: "Using the playful activities with multiple purposes"; "Establishing interaction strategies with the child with chronic cancer pain"; "Establishing interaction strategies with relatives"; "Working in a team"; and "Dealing with child and family suffering".

In the subcategory "Using the playful activities with multiple purposes", it was understood that the playful activities are configured as an important interaction strategy, whose benefits include: the reduction of stress, the strengthening of the relationship of trust, and the preparation of the children for the procedure to which they will be submitted.

The playful activities make the child trust you more. When the child sees you as a friend and not as a

tormentor, she/he trusts you more (E2). When you come playing, trying to get closer, they trust you more [...] then this side of the playing facilitates the approach with the child (T2). The child becomes more relaxed, at least at first, and the playful activities reduce the stress of the hospitalization (E5). I give stuffed animals, I give balls, sometimes I try to show what I am going to do, I show the syringe I am going to use, I squeeze it without the needle, I ask the child to do it first on me and then I do it on them. I try to use the playful activities approach (E6).

By favoring the distraction, the playful activities are used in care relationships as a strategy of non-pharmacological analgesia, while it reduces the child's perception of their pain.

I use the playful activities to take the focus from the suffering (E2). Sometimes I play with the child to reduce the intensity of pain (E3). The games help a lot in the sense that you can distract the child and so they forget for a while what is happening (T2).

In the scope of teamwork, the playful activities emerged as an action strategy aimed at: improving the interaction between the professional and the child, favoring the participation of the child in the care, performing the physical examination, and constructing a meaning about the painful experience.

We take advantage of the games to seriously examine them [children] so they can feel better (M1). I try to take care through the playful activities approach. I try to play and stimulate so that she/he [child] gets interested in the care provision (FS4). Often the child cannot put into words their pain, their suffering. And by playing, they tell a story. It is a resource that enables us to understand what the child is rescuing at that moment. We play as a way for the child to communicate, express, symbolize, construct a meaning (P6). I play with the kids and they start to let go. I make some jokes. They show the drawings they made and we start interacting (AS7).

In the subcategory "Establishing interaction strategies with the child with chronic cancer pain", it was understood that healthcare professionals use other strategies to improve their interaction with the child, among which, it is necessary to emphasize: the dialogue and the establishment of an affective relationship.

I ask what they are doing, I talk to the child, and I ask questions, because otherwise, the children will not answer me anything (T4). I use the conversation a lot, because sometimes the child does not like that touch them, so I talk, I introduce myself and I say I am coming back to do the physical therapy (FS5). I take care of these children with much respect, a lot of affection, as if they were my

children (E3). I try to take care of them in the best possible way, I say that I love them, I do everything (T5).

In the dialogue with the child, there is a concern of the healthcare professional in making them understand the message that is being conveyed. At this point, the professionals make use of language with vocabulary that is appropriate to the child's age.

The approach is the closest to the child's language (E1). I try to use the same language they use [children] (T2). You have to explain in a way that they [children] understand they are ill, so they need to be hospitalized; and that the medication for chronic cancer pain is important (M2).

In "Establishing interaction strategies with relatives", it was understood that empathy and dialogue are used by healthcare professionals as strategies to improve their interaction with the relatives/parents of the hospitalized child with chronic cancer pain. Empathy is valued when it allows the understanding of the relative's behavior and feelings, while dialogue is used to gain trust, clarify, and manage conflicts.

I say this a lot to my team: let us trade places with the family in our minds. The person had a life just like ours and suddenly receives the diagnosis and that is it (E4). I always try to talk to them [mothers]. I wake them up at dawn to say that I am giving antibiotics, painkillers because, from that, I gain their trust (T5). I try to calm the mother down, talk to her, I explain to her that chronic cancer pain, as much as we give a drug, it will not go away, it will only be softened and that is the way it is, but with all the affection, attention, so they do not feel so alone (E3). In relation to the mother, we always talk. All problems with the mother are solved with conversation (T4).

One of the action strategies used by healthcare professionals in regarding the family members is to show interest in knowing them, as well as caring for the child with chronic cancer pain.

Most of the times, they [mothers] close themselves because you do not say good morning. You do not communicate with them. You do not show interest in knowing how they are, so I always have interest in talking to them (T2).

I always show interest in their children. I try to see what is going on with them. When I start my shift, they say, Oh! It is you who is on duty, that is good! (T5).

In the subcategory *Working in a team,* it was possible to understand how healthcare professionals organize themselves to provide care for hospitalized children with chronic cancer pain and the

meanings they attribute to teamwork. In this sense, teamwork was defined by healthcare professionals as fundamental, because it favors the planning and implementation of care, the interprofessional interaction, thus subsidizing an comprehensive approach to hospitalized children with chronic cancer pain.

Teamwork is essential because you guarantee health care in a comprehensive way (FC3). I think the work of the multidisciplinary team is fundamental because the child with chronic cancer pain is seen in a holistic way (T6). When we work as a team, things flow better. In fact, it is not possible to treat health in separate parts. The more you interact, the better (AS7).

Health professionals characterized teamwork as a strategy for interaction and action that are necessary for the care of hospitalized children with chronic cancer pain. Next, they emphasize their attributions and competences in the provision of care.

When the nurse visits, they already ask if the child is in pain, the type of pain. And if the child presents pain, they take the necessary measures, and the nursing technician is also encouraged to make this kind of questioning [...] We manage the human resources, material resources and care (E5). First, we assess the pain, and then we prescribe the drug that should be administered by the nursing professional. We always start with a weaker drug and then move on to a stronger one. The treatment is always individual (M1). The pharmacist may act by suggesting to prescribers other therapeutic options so that the patient is not left without the drug (FC3). I think the psychologist is a fundamental professional [...] we are the professionals in white that will listen, that will facilitate this communication, that will be able to symbolize this suffering that is indescribable, that will embrace the child (P6). I think physiotherapy is very important for the care of this child, because you put the child to move, to move a little (FS4). The work of the social service is aimed at the rights of the patient, in this case, the right of the patient with cancer. So we work with family counseling, and sometimes with guidance to the team, because the staff not always know everything (AS7).

In the subcategory "Dealing with child and family suffering", the different ways the nursing professional uses to deal with the suffering of the child and the family are presented. At this point, spirituality emerged as a strategy for resignation, as well as a strategy to believe that there will be no worsening of the clinical condition of the child.

You also need something to justify what you are witnessing, and you seek in your belief what might justify a child with a disease without a cure (E4). I keep praying that nothing serious will happen to the child because we

get affectionate to them (E7).

Faced with child and family suffering, the nursing professional seeks to maintain an emotional balance to deal with this context. However, the results indicate that this balance is not always possible, especially in relation to the child's death process.

I cannot be such a soft person to cry. So, I do the necessary and the possible to prevent the child from suffering. We cannot be a rock, which is hard and feels nothing, but here we have to be strong in order to deal with suffering and to treat it the best way (E6). At the time of the crisis, I become emotionally fragile, but I try not to show what I feel because I know that it affects the child too (T1). There have been several deaths where I cried with the mother because it is not possible! You cannot be strong all the time (T4).

In the situations presented, nursing professionals recognize and value the human vulnerability in the face of cancer and seem to enhance these experiences from the correlation they make with their own families, especially as a result of the fear they have regarding the possibility of experiencing this reality from another perspective - that of the mothers of children with cancer.

I report all the situations to my son. I think it is going to happen to me, so I do not deal so well with it (E7). We immediately think of our family. I always bring it to my life (T4).

The exposed subcategory showed, therefore, that the suffering of the child and the relatives/parents is a characteristic of the pediatric oncologic context, which demands from the nursing professionals ways of coping that aim, above all, to deal as best as possible with the human finitude.

### **DISCUSSION**

The action and interaction strategies adopted by healthcare professionals to care for hospitalized children with chronic cancer pain should be developed in a way that is contrary to isolated thoughts and interventions. Thus, the complex thought emerges as the guiding axis of health and nursing care, based on a contextual, interdisciplinary, objective and subjective point of view to deal with the uncertainties<sup>8</sup> within the dialogical health/illness and life/death of the child with cancer.

In view of the above, among the strategies presented in the results, the playful activities emerged as an important action mechanism, which, under the gaze of complexity, displaces the healthcare profes-

sional from the prosaic, rational-utilitarian state to a state of consonance, empathy and harmony with the world,<sup>8</sup> without thereby disassociating their work process from the scientific scope. Thus, the playful activities make it possible to enter into the poetic state of life by favoring the use of emotion, affectivity and spirit, as elements that subsidize objective approaches in the care of children with chronic cancer pain. Through the lens of complexity, the poetic state can be achieved in the relation with the other, in the imaginary or aesthetic relation,<sup>8</sup> expressing, in this sense, the importance of interactions, creativity and otherness in the development of care.

From this perspective, nursing professionals use the playful activities in their care relationships with the child with chronic cancer pain, in order to make them calmer, less anxious, more confident, and prepared for the procedure to which they will be subjected. In the care of the child with pain, it is emphasized the importance of the healthcare professional to gain the confidence of the child, in order to avoid that they develop a negative memory about their painful experience. In this sense, it is the responsibility of the nurse to develop a relationship of trust with the child, since this relationship may let them free to express their emotions, without fear of being rejected or judged.

In a study<sup>15</sup> the playful activities were also used to maintain the comfort of the child with cancer. Thus, nursing professionals organize, plan and implement care using the playful activities technique, such as: playing, telling stories and singing at the time of the procedures. In addition, among the benefits of ludic care for children with cancer, it is possible to mention: better adherence to treatment, strengthening of the bond between healthcare professionals and the child, as well as the acceptance of this child regarding the care of the health team.<sup>16</sup>

In the current study, the playful activities were also used by nursing professionals as a strategy of non-pharmacological analgesia of chronic cancer pain, since it promotes distraction, thus reducing the child's perception of their own pain. In the scope of teamwork, the other healthcare professionals use the playful activities with the following purposes: improving their interaction with the child, getting their attention, performing physical examination, and helping them build meaning within the pain experience.

Through this point of view, it is possible to emphasize that the playful activities calm the child

down, making them more confident in the treatment, less aggressive; strengthens the bond with the professional; provides well-being; promotes distraction; reduces negative feelings, complaints of pain, nausea and anxiety; improves the communication process between the nursing team and the child; and neutralizes boredom.<sup>17-19</sup>

In the relationship with hospitalized children with chronic cancer pain, healthcare professionals use dialogue and affectivity as interaction strategies, since they favor the approximation, embracement, understanding and the humanization of care, thus avoiding social isolation, indifference and impersonality in caring relationships. From the perspective of complexity, it is understood that everything that is human involves affectivity. Such element allows the communication in interpersonal relationships, sympathy and empathy with the other, which maximizes the possibility of mutual understanding. Thus, affectivity is intimately linked to the idea of subject and intersubjectivity, on which is the greatest, most important, richest and most ardent part of social life.8

In agreement with the result of this research, a study reinforced that the affective relation is an important strategy of interaction for the care of the hospitalized child in chronic condition. Dialogue is fundamental in the care of hospitalized children with advanced cancer, as it allows the nurse to talk to the child and explain what will be done, favoring a relationship of trust and mutual respect. 15,19

In the relationship with the relative, healthcare professionals value dialogue and empathy as strategies to strengthen the interactive process. It should be emphasized that the communication between the healthcare professional and the child's family in an onco-hematological context may be difficult in times of crisis, such as: at the time of diagnosis of the disease, in the relapse of the disease, and when the child is in palliative care.<sup>21</sup> At this point, a study showed that relatives feel the need for open, accessible and enlightening communication with healthcare professionals at the time of diagnosis of the disease, since sometimes they do not have the understanding of what is said by the professionals.<sup>15</sup> For this reason, the open dialogue with the family of the child with cancer, especially in difficult moments, such as coping with chronic cancer pain, should be valued in the care planning of the multiprofessional health team, especially of nursing, because it has greater contact with the child. Through dialogue, healthcare professionals can involve the family in the assessment and management of chronic cancer pain for better results.<sup>4</sup>

Regarding empathy, two studies mentioned above<sup>15,20</sup> have identified that establishing an empathic relationship with the family of the hospitalized child with advanced cancer is important for meeting the needs of the family and the child. Thus, empathy can be presented as a facilitating condition of the interactive process between the nursing professional and the family of the hospitalized child in chronic condition, corroborating the findings in the literature.<sup>22</sup>

The nursing professionals reported having interest in getting to know the relatives/parents better, as well as in caring for the child, in order to gain the confidence of the family member regarding their work process. In this respect, the importance of the parents of children with chronic pain to value the interest of healthcare professionals in the treatment of their children is highlighted, since it contributes to generate a feeling of satisfaction for the work of the team. As a consequence, high parental satisfaction rates have an important correlation with the child's adherence to treatment and with the reduction of occurrences of pain crisis.<sup>23</sup>

Teamwork was configured as a strategy for interaction and action for healthcare, while it is also a way of articulating actions, integrating the agents, overcoming the isolation of knowledge and democratizing the labor relations.<sup>24</sup> Such a way is related to the idea of complexity, since it entails in itself a relation of complementarity and interdependence among the different types of knowledge and practices that permeate care.

In the scope of teamwork, it is verified that each professional has a specialized knowledge that complements the knowledge of the other professional. Thus, the collaboration among healthcare professionals is necessary to promote high-level care for children with chronic cancer pain, and also to provide adequate health education for cancer patients with chronic pain.<sup>14,25</sup>

From this work perspective, the psychologist emerged as a professional who embraces and helps the child to symbolize their chronic cancer pain, through the meanings attributed to their painful experience. The pharmacist is involved in the management of chronic cancer pain, while offering pharmacological support to the nursing staff as well as to the medical staff. Physicians are

the professionals who prescribe the medicines and who define the diagnosis and the most appropriate treatment for the child with cancer. The physiotherapist focuses on the promotion of quality of life through the rehabilitation of the regions affected by chronic cancer pain. The nurses and the nursing technicians are the professionals who develop the nursing care, being the first one also responsible for managing the Pediatric Hospitalization Unit as a whole. In turn, the social worker is the professional responsible for guaranteeing the rights of the child and their family. It should be highlighted that the services of all these professionals complement each other in theory and practice, and together they add quality and complexity to the care provided.

Coping strategies are established by nursing professionals to deal with child and family suffering, as well as to deal with the death and dying process of the oncologic child. In this sense, spirituality emerged as a strategy to achieve resignation and to believe in the child's clinical stability. Corroborating this result, a study identified that nursing professionals adopted spirituality as a coping strategy for self-care and for the care of hospitalized children in chronic conditions.<sup>20</sup>

Nursing professionals strive to keep their emotions balanced in order to prevent the child from perceiving their suffering. When the child is close to death, nursing professionals assume they cannot contain the emotion and suffer from the proximity of mourning. A study revealed that, faced with the child's imminent risk of death, the nursing professional experiences suffering, becoming involved with the family's pain, staying close to it and offering support and comfort.<sup>26</sup>

The professional effort to remain emotionally balanced reveals that, behind the professional figure, there is a human being who engages and also suffers in caring relationships. Thus, it is difficult for nurses working in the pediatric oncology context to identify when their involvement goes beyond the professional frontier. Long periods of hospitalization, frequent crises and caring relationships between the professional and the child are among the reasons why professional limits are over imposed on the care of the oncologic child.<sup>27</sup>

Also, when witnessing the intense suffering of the hospitalized child with chronic cancer pain, the nursing professionals stated reporting to their relatives. They also assumed fear of experiencing such a circumstance with their beloved ones. Such a situation, if not well managed, may generate psychic

suffering and physical exhaustion to the professional, contributing to the emergence of diseases such as stress, depression and anxiety.

In this regard, it is revealed the difficulty of the nursing team to face the death of the child with advanced cancer, the importance of training and professional qualification to develop palliative care and the need for articulation between the work process and the health of the worker .<sup>15</sup> These circumstances reinforce the onco-hematological pediatric context as complex, and highlight the need for the health professional to have theoretical-practical knowledge and emotional preparation to deal with the specificities of this scenario.

The action and interaction strategies presented showed that the healthcare professionals' performance in the care of children with chronic cancer pain and their relatives are based on ethical, subjective and relational competences that aim to attenuate the suffering of the child/family binomial, valuing the human suffering as a multidimensional construction, constituted by the following components: physical, spiritual and emotional.<sup>28</sup> Similarly, the chronic cancer pain of the child needs to be assessed and managed as total pain, which includes, in addition to the physical, the spiritual, the psychological and the social component.<sup>7</sup>

Based on the action and interaction strategies presented, it is possible to suggest that the care of children with chronic cancer pain is being developed through attitudes aimed at meeting the physical, psychological and social needs of the child and their family. It is emphasized, therefore, that the establishment of action and interaction strategies should be widely developed by healthcare professionals, in order to ensure, in a contextualized way, an effective process of assessment and management of chronic cancer pain.

The present study has as limitation the generalization of the results, since they reveal contextual specificities belonging to a single institution in the city of Rio de Janeiro. For this reason, the development of studies with this aspect is encouraged, in order to strengthen or refute their findings.

#### **CONCLUSION**

The results of this study favored the discussion of the different action and interaction strategies adopted by healthcare professionals for the care of hospitalized children with chronic cancer pain. The findings revealed coping mechanisms adopted by

healthcare professionals to deal with the challenges that emerge from their interpersonal and interprofessional relationships in care relationships.

Therefore, it is possible that the interaction and action strategies presented offer clues about how the chronic cancer pain of the child can be approached by the multiprofessional health team. In this sense, understanding the results shows the importance of healthcare professionals to establish action strategies that improve their interaction with the child and with the relatives/parents, since an effective interaction makes the assessment and management of chronic cancer pain easier, as well as it enables the continuity and quality of the care provided.

#### REFERENCES

- Beretta S, Polastri D, Clerici CA, Casanova M, Cefalo G, Ferrari, A, et al. End of life in children with cancer: experience at the pediatric oncology department of the istituto nazionale tumori in Milan. Pediatr Blood Cancer [Internet]. 2010 [cited 2017 Feb 22]; 54(1):88-91. Available from: https://www.ncbi.nlm.nih.gov/ pubmed/19760770
- Van Cleve L, Muñoz CE, Savreda M, Riggs M, Bosset E, Grant M, et al. Symptoms in children with advanced cancer. Cancer Nurs [Internet]. 2012 [cited 2017 Feb 22]; 35(2):115-25. Available from: https://www.ncbi. nlm.nih.gov/pubmed/21760496
- 3. Rodrigues AJ, Bushatsky M, Viaro WD. Cuidados paliativos em crianças com câncer: revisão integrativa. Rev Enferm UFPE on line [Internet]. 2015 [cited 2017 Feb 22]; 9(2):718-30. Available from: https://periodicos.ufpe.br/revistas/revistaenfermagem/article/viewFile/10392/11150
- World Health Organization (WHO). WHO guidlines on the pharmacological treatment of persisting pain in children with medical illnessess [Internet]. 2012 [cited 2017 Feb 22]. Available from: http://whqlibdoc.who. int/publications/2012/9789241548120\_Guidelines. pdf
- American Pain Society (APS). Assessment and management of children with chronic pain [Internet]. 2012 [cited 2017 Feb 22]. Available from: http://www. americanpainsociety.org/uploads/pdfs/aps12-pcp. pdf
- Fortier MA, Wahi A, Bruce C, Maurer EL, Stevenson R. Pain Management at home in children with cancer: a daily diary study. Pediatr Blood Cancer [Internet]. 2014 [cited 2017 Feb 22]; 61(6):1029-33. Available from: https://www.ncbi.nlm.nih.gov/pubmed/24376073
- 7. Schute C. The challenges of cancer pain assessment

- and management. Ulster Med J [Internet]. 2013 [cited 2017 Feb 22]; 82(1):40-2. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3632849/
- 8. Morin E. O método 5: a humanidade da humanidade. 5ª ed. Porto Alegre (RS): Sulina; 2012.
- Afshan G, Bashir K. Cancer pain in children: a twostep strategy. Anaesth Pain Intensive Care [Internet]. 2014 [cited 2017 Feb 22]; 18(1):106-10. Available from: http://www.apicareonline.com/special-articlecancer-pain-in-children-a-two-step-strategy/
- 10. Batalha LMC, Fernandes AM, Campos C, Gonçalves AMPMPC. Pain assessment in children with cancer: a systematic review. J Nurs Ref [Internet]. 2015 [cited 2017 Feb 22]; 4(5):119-27. Available from: http:// www.scielo.mec.pt/pdf/ref/vserIVn5/serIVn5a14. pdf
- 11. Fortier MA, Wahi A, Maurer EL, Tan ET, Sender LS, Kain ZN. Attitudes regarding analgesic use and pain expression in parents of children with cancer. J Pediatr Hematol Oncol [Internet]. 2012 [cited 2017 Feb 22]; 34(4):257-62. Available from: https://www.ncbi.nlm.nih.gov/pubmed/22322939
- 12. Strauss AL, Corbin J. Pesquisa qualitativa: técnicas e procedimentos para o desenvolvimento de teoria fundamentada. 2ª ed. Porto Alegre (RS): Artmed; 2008.
- 13. Simons J. A proposed model of the effective management of children's pain. Pain Manag Nurs [Internet]. 2015 [cited 2017 Feb 22]; 16(4):570-8. Available from: http://dx.doi.org/10.1016/j. pmn.2014.10.008
- 14. Neale KL. The fifth vital sign: chronic pain assessment of the adolescent oncology patient. J Pediatr Oncol Nurs [Internet].2012 [cited 2017 Feb 22]; 29(4):185-98. Available from: https://www.ncbi.nlm.nih.gov/pubmed/22797680
- 15. Silva MM, Vidal JM, Leite JL, Silva TP. Care strategies adopted by nurses in the care of hospitalized children with advanced cancer and in the self care. Cienc Cuid Saude [Internet] 2014 [cited 2017 Feb 22]; 13(3):471-8. Available from: http://periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/19937
- 16. Depianti JRB, Silva LF, Carvalho AS, Monteiro ACM. Nursing perceptions of the benefits of ludicity on care practices for children with cancer: a descriptive study. Online Braz J Nurs [Internet].2014 [cited 2017 Feb 22]; 13(2):158-65. Available from: http://www.objnursing. uff.br/index.php/nursing/article/view/4314
- 17. Nicola GDO, Freitas HMB, Gomes GC, Costenaro RGS, Nietsche EA, Ilha S. Ludic care for hospitalized children: perspective of family caregivers and nursing staff. J. Res.: Fundam Care. Online [Internet].2014 [cited 2017 Feb 22]; 6(2):703-15. Available from: http://seer.unirio.br/index.php/cuidadofundamental/article/viewFile/3079/pdf\_1269

- 18. Lima KYN, Barros AG, Costa TD, Santos VEP, Vitor AF, Lira ALBC. Paly as a tool in nursing care for hospitalized children. Rev Min Enferm [Internet].2014 [cited 2017 Feb 22]; 18(3):747-51. Available from: http://www.reme.org.br/artigo/detalhes/959
- 19. Brannstrom CA, Norberg A. Children undergoing cancer treatment describe their experiences of comfort in interviews and drawings. J Pediatr Oncol Nurs [Internet].2014 [cited 2017 Feb 22]; 31(3):135-46. Available from: https://www.ncbi.nlm.nih.gov/pubmed/24651546
- 20. Silva TP, Silva MM, Alcantara LM, Silva IR, Leite JL. Estableshing action/interaction strategies for care delivery to hospitalized children with chronic conditions. Esc Anna Nery Rev Enferm [Internet]. 2015 [cited 2017 Feb 22]; 19(2):279-85. Available from: http://dx.doi.org/10.5935/1414-8145.20150037
- 21. Citak EA, Toruner EK, Gunes NB. Exploring communication difficulties in pediatric hematology: oncology nurses. Asian Pac J Cancer Prev [Internet]. 2013 [cited 2017 Feb 22]; 14(9):5477-82. Available from: https://www.ncbi.nlm.nih.gov/pubmed/24175845
- 22. Silva TP, Silva IR, Leite JL. Interactions in the management of nursing care to hospitalized children with chronic conditions: showing intervening conditions. Texto Contexto Enferm [Internet]. 2016 [cited 2017 May 16]; 25(2):e1980015. Available from: http://dx.doi.org/10.1590/0104-07072016001980015
- 23. Gorodzinsky AY, Tran ST, Medrano GR, Fleischman KM, Anderson-khan KJ, Ladwig RJ, et al. Parents' initial perceptions of multidisciplinary care for pediatric chronic pain. Pain Res Treat [Internet]. 2012 [cited 2017 Feb 22]; 2012:791061. Available from: https://www.ncbi.nlm.nih.gov/pubmed/22966428
- 24. Camelo SHH. Team working in hospital intitutions: in integrative revision. Cogitare Enferm [Internet]. 2011 [cited 2017 Feb 22]; 16(4):734-40. Available from: http://dx.doi.org/10.5380/ce.v16i4.19977
- 25. Shepherd E, Woodgate R, Sawatzky J. Pain in children with central nervous system cancer: a review of the literature. Oncol Nurs Forum [Internet]. 2010 [cited 2017 Feb 22]; 37(4):318-30. Available from: https://www.ncbi.nlm.nih.gov/pubmed/20591796
- 26. Reis TLR, Paula CC, Potrich C, Padoin SMM, Bin A, Mutti CF, Bubadué RM. Relationships establishing by nurse professionals when caring for children with advanced cancer. Aquichan [Internet]. 2014 [cited 2017 Feb 22]; 14(4):496-508. Available from: http:// aquichan.unisabana.edu.co/index.php/aquichan/ article/view/3070/pdf
- 27. Hartlage HN. Exploring boundaries in pediatric oncology nursing. J Pediatr Oncol Nurs [Internet]. 2012 [cited 2017 Feb 22]; 29(2):109-12. Available from: http://www.ncbi.nlm.nih.gov/pubmed/22472484

28. Delgaldo-guay MO, Hui D, Parsons HA, Govan K, Cruz MDL, Thorney S, et al. Spirituality, religiosity, and spiritual pain in advanced cancer patients. J Pain

Symptom Manag [Internet]. 2011 [cited 2017 Feb 22]; 41(6):986-94. Available from: https://www.ncbi.nlm.nih.gov/pubmed/21402459

Correspondece: Thiago Privado da Silva Rua Afonso Cavalcanti, 275 20211-110 - Cidade Nova, Rio de Janeiro, RJ, Brazil E-mail: thiagopsilva87@gmail.com Received: May 16, 2017 Approved: November 08, 2017

This is an Open Access article distributed under the terms of the Creative Commons (CC BY).