

A world of procedures and worries: Experience of children with a Port-a-Cath*

Vivenciando um mundo de procedimentos e preocupações: experiência da criança com Port-a-Cath

Vivenciando un mundo de procedimientos y preocupaciones: experiencia del niño con Port-a-Cath

Circéa Amalia Ribeiro¹, Rosa Maria Coutinho², Talita Ferreira de Araújo³, Vanessa Silva Souza⁴

ABSTRACT

Objectives: To understand the experience of children with cancer who have a port-a-cath using a session of therapeutic instructional play to decrease children worries and anxieties. Methods: Descriptive qualitative study with 6 children and 1 teenager. Data were collected through a session of therapeutic play and analyzed through content analysis. Results: Invasive procedures generated children's anxiety, worry, fear, and pain. The children recognized the need of medical procedures, medications, physical examinations, and laboratory tests. In addition, they also recognized the advantage of the use of the port-a-cath; however, its use was a source of anxiety and worries, especially in regard to infections. The use of therapeutic play made them happier, comfortable, and feeling stronger. Final considerations: Nurses need to be prepared to fully care for children with cancer who have a port-a-cath and to systematically use therapeutic play as a useful strategy for nursing communication and intervention.

Keywords: Play and playthings; Neoplasms/psychology; Oncologic nursing; Pediatric nursing; Child

RESUMO

Objetivos: Compreender como é para a criança com câncer a vivência de ser portadora de Port-a-Cath a partir de suas manifestações numa sessão de Brinquedo Terapêutico Dramático e propiciar a ela um meio de alívio. Métodos: Estudo descritivo qualitativo realizado com seis crianças escolares e uma adolescente, cujos dados foram coletados numa sessão de Brinquedo Terapêutico Dramático e submetidos à análise qualitativa de conteúdo. Resultados: Permitiram compreender que os procedimentos intrusivos geram ansiedade, preocupação, medo e dor às crianças, assim como que elas reconhecem a importância dos procedimentos, dos medicamentos, da realização dos exames físico e laboratoriais para o tratamento; reconhecem as vantagens da utilização do Port-a-Cath, mas que sua utilização é fonte de ansiedade, limitações e preocupações, especialmente as relacionadas ao risco de infecção, e que se sentiram felizes, confortadas e fortalecidas com o brincar. Considerações Finais: Os enfermeiros precisam estar preparados para assistirem a essas crianças integralmente e para utilizarem sistematicamente o Brinquedo Terapêutico como instrumento de comunicação e intervenção de enfermagem.

Descritores: Jogos e brinquedos; Neoplasias/psicologia; Enfermagem oncológica; Enfermagem pediátrica; Criança

RESUMEN

Objetivos: Comprender cómo es para el niño con cáncer la vivencia de ser portador de Port-a-Cath a partir de sus manifestaciones en una sesión de Juego Terapéutico Dramático y propiciarle un medio de alivio. Métodos: Estudio descriptivo cualitativo realizado con seis niños escolares y una adolescente, cuyos datos fueron recolectados en una sesión de Juego Terapéutico Dramático y sometidos al análisis cualitativo de contenido. Resultados: Se pudo comprender que los procedimientos intrusivos generan ansiedad, preocupación, miedo y dolor a los niños, así como que ellos reconocen la importancia de los procedimientos, de los medicamentos, de la realización de los exámenes físico y de laboratorio para el tratamiento; reconocen las ventajas de la utilización del Port-a-Cath, pero que su utilización es fuente de ansiedad, limitaciones y preocupaciones, especialmente las relacionadas al riesgo de infección, y que se sentieron felices, confortadas y fortalecidas con el hecho de jugar. Consideraciones Finales: Los enfermeros necesitan estar preparados para asistir a esos niños integralmente y para utilizar sistemáticamente el Juego Terapéutico como instrumento de comunicación e intervención de enfermería.

Descriptores: Juego e implementos de juego; Neoplasias/psicología; Enfermería oncológica; Enfermería pediátrica; Niño

Corresponding Author: Circéa Amália Ribeiro

R. Napoleão de Barros, 754 - Vila Clementino - São Paulo - SP - Brazil

CEP. 04024-002 E-mail: caribeiro@unifesp.br

^{*} Undergraduate Conclusion Nursing Thesis from the Universidade Federal de São Paulo- UNIFESP – São Paulo (SP), Brazil associated to the GEBring (Play Therapy Study Group) – São Paulo (SP), Brazil.

¹ PhD. Associate Nurse Professor at the Nursing Department of the Universidade Federal de São Paulo - UNIFESP – São Paulo (SP), Brazil, Leader Research at the GEBring (Therapeutic Play Study Group) – São Paulo (SP), Brazil.

² Master's in Nursing. Nurse in the role of support learning for the Nursing Department of the Universidade Federal de São Paulo-UNIFESP – São Paulo (SP), Brazil.

³ Nurse at the Hospital Santa Paula – São Paulo (SP), Brazil.

⁴ Nurse at the Instituto de Oncologia Pediátrica (Pediatric Oncology Institute) – São Paulo (SP), Brazil.

INTRODUCTION

Children's cancer corresponds to a group of illnesses that has in common the uncontrollable proliferation of abnormal cells, which can grow in any part of the body. Although its frequency is not as high as it is for adults, it represents an important cause of morbidity and mortality in Brazil, with an increasing incidence of approximately 1% a year, being the third cause of death for a population under 14 years of age, inferior only to accidents and other external causes⁽¹⁾. Its most common forms are: leuchemia, nervous system tumors, lymphomas and renal tumors. Therapy has progressed satisfactorily in the latest decades, bringing to actually 70% of cases of cured children, if diagnosis is made early and treatment on premises of specialized centers⁽²⁻⁴⁾.

Regarding chemotherapy, the intravenous access is the most adequate in relation to other therapies like the oral, intramuscular or subcutaneous, for being safer in terms of serum level of the drug and its absorption. On the other hand, local complications can occur, associated to injecting chemotherapy drugs via peripheral veining, such as: phlebitis, urticaria, vasospasm, pain, eritema, venous discoloration or hyper-pigmentation, and secondary tissue necrosis due to extravasation, especially when vesicants or irritating drugs are used⁽⁵⁾.

Further, the frequent use of venous system for administering chemotherapy drugs, antibiotics, blood and derivates, or at collecting for lab tests, causes problems of visualization and punctioning of the vase being used. In addition to that, the capillary fragility, malnutrition and venous sclerosis caused by the sickness itself or from the adopted therapy, worsen the issues of vascular access. At the same time, there are patients with good venous peripheral system, however predicted with a chemotherapy long-term treatment⁽⁵⁾.

In such cases, short peripheral catheter gradually loses preference to longer catheter, preferably central, tunneled or not, fully implanted, with long life-cycle, as the Porta-Cath. It is a silicon catheter attached to a self-sealing septum encased in a port, accessed by needle puncture, which is placed under the skin, accommodated within the subcutaneous tissue of the thoracic region, on the surface of a bone. It is implanted through surgery and has a usually good level of acceptance by patients, as it does not require domestic maintenance and promotes minimum interference on self-image, given the device is not exteriorized⁽⁵⁾.

Despite of such advantages, implantation procedure can determine some immediate complications: hematomas, cardiac rhythm disturbances, venous complications, gaseous embolism, anesthetics complications, cardiac tamponade and catheter intolerance. And also late complications: stenosis or thrombosis of the jugular internal vein, infection, catheter obstruction, port disconnection, causing extravasation of liquids and catheter migration, and further exteriorization, rupture, and breaking⁽¹⁾.

Additionally, it has the disadvantage of requiring continuous percutaneous puncture⁽⁶⁾, which, as observed in our daily practice routine, causes on children discomforts and tension. Thus, we emphasize the importance of children being prepared for that, and other intrusive procedures which will be needed for the oncology therapy.

As a resource for kid's preparation, the Therapeutic Play (TP) comes up, based on a playing catartic function been applied by nurses not only as a means of relief of the tension imposed to the children, but also as a possibility of communication through which may explanation be provided and feedback be received from the children, related to what means those situations for them, apart of being an instrument for preparing the procedures⁽⁶⁾.

The TP can be classified in three genders: Dramatic or Catartic TP (DTP, CTP), which allows emotional extravasation; Instructional TP that explains about procedures to the child, and Capacitor TP of physiologic functions, preparing the child for making plenty use of its physiologic capacities⁽⁷⁾.

Thinking on the situation of a child with cancer living with a Port-a-Cath being frequently punctioned, characterizing an intrusive procedure, we elaborated this study with the objective of: understand how is life for the child with cancer and an implanted Port-a-Cath, considering the child manifestations during a DTP session to afford that child some means of relief.

We expect this study can contribute for improving the comprehension on what signifies such experience for the children, and generate subsidies to enable the initiation of actions on nursing care, to attend the Resolution nr. 295/2004 from the Conselho Federal de Enfermagem (Federal Nursing Council), which precognizes pediatric nurses to make use of therapeutic play (TP), in attending the child and families⁽⁸⁾.

METHODS

It is a descriptive study, of qualitative nature; an approach which focus on the reality that cannot be quantified, given it deepens into the world of meaning, causes, beliefs, values and attitudes, which corresponds to a profound relations space⁽⁹⁾. This type of search combines both scientific and artistic sides of nursing, increasing comprehension of life experiences and human health, with a direct relevance on professional practice⁽¹⁰⁾.

The study was elaborated within the premises of a Hospital in the São Paulo city, specialized in Oncology, associated to a public university as means of learning and research.

Starting authorization was granted by the institution where data was gathered and by the Comitê de Ética em Pesquisa (Research Ethical Committee) from the Universidade Federal de São Paulo (Process nr. 0980/07); responsible authorities signed the Term of Free and Cleared Consent, and after asking the children, only those agreeing to participate of the research were selected.

The individuals participating totaled 6 children in scholar age of both genders, with age ranging from six to nine years, including a 14 years old teenager, carrying a Port-a-Cath and have already experienced catheter puncture, and have been to the hospital for chemotherapy and are in conditions to play. That number of individuals was determined by the process of saturation, which occur when data are repetitive, allowing the comprehension of the studied phenomena⁽¹⁰⁾.

Data was gathered between August and October 2007 and mediated by one DPT session per individual, conducted by two researchers, according to the preconized technique⁽¹¹⁾. Ludic materials used were: cloth dolls representing family members, healthcare professionals and domestic pets; several procedure devices, such as syringes, needles, port-a-cath, and other; different household objects as telephone, baby bottle, the family car, drawing and painting materials⁽¹¹⁾.

Behaviors and interactions during sessions were observed, registered and recorded in K-set tapes; while a researcher conducted the session, the other was making registrations. Session's transcriptions were integrally registered for analysis.

A qualitative analysis of the DTP sessions' content was made, followed by encoding and categorization process, for constructing the themed categories represented by the studied phenomena. Encoding is a process of identifying repeated words, phrases, themes or concepts for attributing those with an analytical potential, which fulfills the objectives of the study. Categorization consists of rereading the codes, classification and grouping of similar ones, second their conceptual characteristics, determining each themed category⁽¹²⁾.

RESULTS

Data analysis resulted in four themed categories: Experiencing fear and discomfort from the Port-a-Cath puncture and other procedures; Recognizing the importance and necessity of the therapy and Port-a-Cath; Considering Port-a-Cath infection-related risks; and Feeling happy, comforted and strengthened through playing.

Those categories, as well as their subcategories, are presented next, illustrated by the Therapeutic Play sessions' cuts, in which the letter "R" represents the researcher, letter "C" for child, and letter "M" for mother. To ensure

confidentiality of the children's identity, they were given names of characters from fairy tales or super heroes: Wonder Woman, The Beauty and the Beast, Snow White, Sonny, Power Rangers, and Jack Chan, chosen by the researchers, inspired by the personal characteristics expressed during the DTP sessions.

Experiencing fear and discomfort from the Porta-Cath puncture and other procedures

Children in oncology therapy are subjected to several intrusive procedures, which are not part of a common child's life, but will however be after a cancer diagnosis. Being so, beyond the Port-a-Cath puncture, children dramatize other additional procedures experienced in the course of the therapy and express their feelings and concerns about them. That theme emerged with high frequency during the children's playing sessions, as it can be observed in related subcategories.

- Punctioning the Port-a-Cath. As all the individuals of the study are carrying a Port-a-Cath, its punction is made weekly, in general, in the hospital according to its therapy routine protocol. For its invasive nature and for being frequent in the daily life, children report to it as part of routine.

C: Takes the needle, freezes for a moment and says: Now I can punction! R: Have you seen your tests? C: Yes, and it is all fine. R: What are you punctioning for? C: For taking Chemo (The Beauty)

C: Ready, I have examined her; extracted blood, and now I am going to punction the Port for her Chemo! Where is the Port needle (Snow White)

- Being afraid of the unknown. Children referred to the punction of Port-a-Cath, even though not painful, but generating discomfort and fear, mainly at the beginning given they do not know what would happen next.

R: Lilian (doll with Port-a-Cath) is quiet? C: Yes, because it doesn't hurt. At the beginning it is scaring, ain't it? R: You fearing what? C: Xiih! We duno, ya? First time we go through it, it scares, duno if hurts [...]. Then, after, we relax because it doesn't hurt. (The Beauty)

R: How is the doll? C: she is scared, she fears punctioning the Port! She is crying! R: How is she feeling? C: she does not fear extracting blood, but punctioning the Port. [...] R: How does she feel when punctioning? C: feels nothing! M: Does it hurt? C: not hurting no. It hurts when she moves a lot. She cries of so much fear! (Snow White)

- Feeling pain. During the DTP sessions, children reproduced procedures to which they are usually subjected, mentioning having experienced pain and discomfort during execution, including Port-a-Cath punction-related.

- C: is reproducing liquor collection [...]. M: Does it hurt, son, when punctioning? C: It hurts and I don't like it! (Power Ranger)
- C: Wow, it is true! (referring to the Port-a-Cath punction needle). Look how big it is! You say it is only a little stick and count to three, but it hurts, you say it doesn't hurt because it is not with you. (The Beast)
- Living with limitations. Apart from pain, children with Port-a-Cath express suffering and concerns with limitations generated from having the implanted device, and dramatize them on the TP sessions.
- R: She (doll with a Port-a-Cath), what doesn't she like about the Port? C: She cannot run, she cannot jump a lot, because she gets very tired, and she cannot yet be touching the Port or it will infection. (Snow White)
- C: I also like taking a bath, and when being with the needle it has to be using the little shower. When the Port is punctioned it is not possible to make flexions, and I like it! (Jack Chan)
- **Dressing.** At TP sessions while reporting the fact of having an implanted Port-a-Cath, the children reproduced the dressing procedure with such richness of details, and what that means to them, regarding protection and finishing a treatment.
- C: Gets the micropore tape and gaze, involving the catheter septum. R: What are you doing? C: The dressing to protect from leaking medicine. (Wonder woman)
- C: aspirating saline solution with a syringe injects it into the Port-a-Cath and says: there you go! Now it's only the dressing and then we go home. (The Beauty)
- Peripheral punction. Even not being necessary for chemotherapy infusion, it remains as part of the routine of the children with a Port-a-Cath, once it is continuously used for extracting blood for lab tests.
- C: With a scalp in hands. R: What is that? C: It's a little butterfly! R: What will you do? C: I will punction! [...] and punctions the doll's arm. R: What are you doing now? C: Extracting blood! (Power Ranger)
- C: making a tourniquet in the doll's arm, cleans the skin with alcohol, gently tapping the vein, counts to three, punctioning and says: Let me see if the vein is $good \ [...]$ (The Beauty)

Recognizing the importance and necessity of the therapy and the Port-a-Cath

During dramatization sessions the children seemed to recognize both the necessity of the therapy, and the set of nursing procedures, even though not always comprehending the consequences and impacts throughout the long term treatment. Such recognition is shown in the following sub-categories.

- Recognizing the Port-a-Cath advantages. During the TP sessions, despite of the fear experienced with the Port-a-Cath punctioning, the concerns and limitations children are living with due to the presence of the catheter they expressed recognition related to the device advantages.
- C: Takes the material and extracts the doll's blood. R: Why are you collecting blood? C: She will put the port. R: Why will she put the port? C: Because she doesn't have veins. (Sonny)
- R: How is punctioning for Lilian? C: It doesn't hurt there is a cream they spread over before. R: And does she like the Port? C: Yes, she does. It is better for her! R: Why? C: Because it does not hurt that much. People don't feel it when punctioning, only when the cream doesn't work, but in the majority of times, it does work (...) Now, her medicine, the same I use to take, it was very quick. It is Oncovin, and there is no burning as it goes through the Port, but it is quite burning if injected in the vein. Even so, it needs to be infused slowly. (The Beauty)
- C: Come here baby, tomorrow you got to come back for the Chemo in your buddy and take Nausedron in the Port, because you don't have no veins left. R: How does she feel with the Port? C: She likes it, no need to stick the vein $\lceil ... \rceil$. (Snow White)
- Relating clinical improvements to therapeutic procedures. During TP sessions children seemed to relate clinical improvements and the efficacy of the treatment to invasive procedures, especially the ones involving needles.
- C: Punctioning the doll's abdomen. R: Why did you punction? C: For her to get better. R: What does she have? C: cancer, BurKit Linphoma. M: same as yours. C: Yes [...] (Power Ranger)
- P: How is she? C: She feels pain in her legs; I need the needle. Needle cures for sure! (Wonder woman)
- Relating therapy medicines to improved symptoms. Children under oncology treatment live with the sickness frequent symptoms and also with the therapy side effects, being necessary the use of symptomatic drugs to minimize them. Those experiences were represented in their dramatizations, during which, some times children explicitly referred to them.
- R: Is she feeling something? C: Head ache. I need a little medicine to put over there! Taking a saline solution ampoule, asks for help to inject in the saline solution bag. R: What is that medicine for? C: For not throwing up! [...]. Takes another saline solution ampoule, aspirates and injects into the bag. C: I'm going to examine! She hasn't got better. She needs a little dipyrone! (Wonder woman)
- C: finishes the Port-a-Cath asepsis and says: Done! Now she can come back tomorrow for taking her medicine again! R: The

same she took before? C: How is it called the one I was taking [...] MTX (Metotrexate). (Bela)

- Understanding the need of lab tests to evaluate the illness situation and therapy efficiency. During treatment, children are asked to make several tests for diagnosis and control for the treatment efficacy, reason why lab tests situations were quite frequently dramatized. It is worth mentioning they seemed to have understood the procedures techniques and recognize the importance but not always quite comprehend the reason why are done so.
- R: Why extracting her blood? C: Checking for platelets, if they are Ok, because if level is low, can't take Chemo. R: Really? And do you know why? C: No, I don't. All I know is that is not allowed! (The Beauty)
- R: What is his name (puppet)? C: Bob, and I am going to withdraw for his tests. R: Why? C: Because he has a fever. Make the extraction and says: let's wait for the results then. (Sonny)
- Recognizing the importance of physical examination for evaluating the treatment efficacy. During TP sessions children seemed to associate physical examination to the assessment of the treatment efficiency, and to the long-term practice-related nursing.
- R: What are you gonna do? C: to examine! Hear the heart and lungs breathing. Then he listens to the abdomen, examining by gently pressing it, checks the mouth with a spatula. R: How is she? C: I feel she is not getting better! (Wonder Woman)

C: takes the stethoscope and says: going to see the doctor. Then, she places the stethoscope onto the chest area with the Port-a-Cath. R: What are you hearing? C:her heart beat and her lungs breathing. R: and how is it? C: Excellent! Like yesterday. Now let me see her little mouth. Takes the spatula and puts in the doll's mouth. R: Why are you checking her mouth? C: Because yesterday she had her Chemo and it my got hurt. R: How is it? C: There is nothing there, but tomorrow we need to look again because she had MTX and it can pick on her little mouth! (The Beauty).

Considering Port-a-Cath infection-related risks

During the Playing Therapy sessions kids seemed to have an intensive concern on the Port-a-Cath infectionrelated risks, and regarding the measures to avoid it, which can be observed across various dramatizations about the issue.

- R: How's the punction? C: It doesn't hurt, I'm used to it, have done many times. Oh! But it has to be very careful, imagine how dangerous it is! Once I slept and it did have the lid, and then bugs can come in and bring infections! There was a kid once died because of infection! (Jack Chan)
- C: Reaches out for the Port-a-Cath punction needle [...] and says: let me see her little head for not catching bacteria! R: How

- does it happen? C: Bugs can come in, and need to change after that! (The Beauty)
- C: cleaning with five cloths burns a lot. Oh! Not allowed breathing on it to avoid bacteria! (Power Ranger)
- C: Ready, I examined her and extracted her blood [...] and now to punction the Port. Where is the Port needle? R: gives her the needle. C: pouring the saline solution over a gaze pad and passes on the Port saying: I need gloves to avoid infection, not allowing bugs in it! [...] R: What are you doing? C: cleaning to not allow bugs to come in. Oh! And one needs also to turn the head for the side too. [...] I'm gonna do the dressing to not move and not catch bugs! (Snow White)

Feeling happy, comforted and strengthened by Playing Therapy

During sessions, children expressed how pleasant the opportunity of playing has been, promoting relief, making them feel strengthened, as observed in the following subcategories.

- Playing for satisfaction and pleasure. Children seemed satisfied and surprised by the opportunity of touching every material used in those real invasive and painful procedures, which are usually observed only and, also verbalized their pleasure of playing with it, and how serious and fundamental such real procedures can be to each one.
- C: Observes the liquid really leaking out from the equipment and shouts: Wow, it is real! Just like mine! This thing is very serious! [...] I'm having a lot of fun playing doctor! (Power Ranger)
- C: Ready! Now only the dressing for us to go home. Need some gaze pads [...]. Wow! You really have everything! I just love playing this! How can you have guessed I play like this with my brother? R: Do you like playing? C: I love it and I live with this every day! (The Beauty)
- Playing for having comfort and relief. During the Therapeutic Play sessions, kids seemed comfortable and relieved by the session, and thanking for the opportunity said about willing to play again
- C: How nice that you have come. You came in the right day! I'm about to show you exactly what you do to me! I'm gonna show all my suffering and distress. (The Beast)
- C: After this one, could we play another day again? (Snow White)
- Playing to enable controlling the situation. Children seemed to have acquired control of the situation when assumed fiction roles of physicians and nurses. They also expressed the will for control when verbalized the desire to be like super-heroes, with super powers that can put an end on adverse situations, in a satisfactory way.

C: Gets the doll representing her grandma, take her in her arms with a Port-a-Cath and says: look baby (doll with Port-a-Cath), you can play with this for now. Mom, will you help me? M: How? Shall I hold her hand? C: Mom, you will be the baby's mother, and me the physician and the nurse also. (Snow White)

C: When I grow up, I will be a doctor. (The Beauty)

C: Always loved martial arts, one day my father introduced me to Bruce Lee and because of that I like it even more. (Jack Chan)

C: When I grow up, I will be a nurse and Power Ranger! (Power Ranger)

DISCUSSION

The results of this study strengthen the advantages of using a Port-a-Cath as therapy option for children with cancer. During the Therapeutic Play sessions, the children themselves referred to the therapy relating it mainly to the absence of pain during punction and to the reduction of discomfort during the administration of medicine, different from peripheral punction solution. They also associated their health improvement to the procedures and medicines applied, showing comprehension of the importance of physical examination and lab tests to monitoring the treatment efficiency and the illness evolution.

Children in scholar age have already developed cognitive abilities which enable them to differentiate their ideas from other people, and can express them verbally, as well as the ability to understand the relation cause and effect⁽¹³⁾. Those abilities were identified during TP sessions, in which kids have intensively verbalized ideas, providing detailed answers to questions asked, different than the responses from kinds in pre-scholar age, when the language used is primarily "played", as preached in papers⁽¹⁴⁻¹⁵⁾, and as we have also identified along our professional practice.

Results yet reiterate that in the course of the oncology therapy, children experience a considerable amount of procedures that generate fear, pain, distress, discomfort and concern. Dramatization of procedures was quite frequent during TP sessions, proving a length on how difficult it can be for them to live with them. Other research assignments in trying to understand what means to have cancer for the children found that kids face treatment as a sentence to be taken, but which represents the only hope of a future without the illness⁽¹⁶⁾.

Regarding experiencing pain, significantly expressed in dramatizations, we know that to be an aspect which has been enhanced by literature. Studies on children with cancer concluded that pain is a constant in their lives, emerging from answers on diversified routine situations, as in the case of physical changes⁽¹⁶⁾, and identified cancer as a illness that causes a lot of pain⁽¹⁷⁾.

Fearing the unknown, also expressed by the selected group of children during the dramatization, reinforces

the importance of them to be prepared for procedures, mainly when referring to a new experience, which generate discomfort, expectation and anxiety, emotions that can be minimized through the acknowledgement of what is really going to happen next, which is the focus of the Instructional PT⁽¹⁸⁾.

Recent researches published show the Therapeutic Play as an effective strategy for children's pain and tension relief, during the execution of post-surgical dressing, with 97% of children presenting a reduction on pain scoring after the Instructional TP intervention⁽¹⁹⁾.

Limitations coming from the treatment, specifically Port-a-Cath related, were approached by this study selected children through Therapeutic Play sessions, revealing the length of difficulty for them to interact with such limitations, and concerns about the catheter necessary maintenance, in special about the risk of infection and measures to avoid it. Thus, children found themselves in a world of big responsibilities, such as being careful with the dressing not to get wet; avoid working out to prevent from moving the catheter position, and other.

Although such concerns should not be part of childhood, they are necessary, once the child and family members' participation is essential along the therapy. We consider important that nurses guide them through such careful measures, however it is also relevant nurses being committed to promoting real means to relief the stress produced. For such, we recommend applying the Therapeutic Play technique, which due to its catartic potential enables the dramatization and verbalization of such concerns.

The results of a given study present the illness and hospital admission as key drivers for a kid to turn different, in which due to experiencing innumerous painful and stressful situations, the so natural no worrying of childhood is affected. Results yet emphasize how efficient the Therapeutic Play has been to these children's research, in spite of enabling them to express their feelings towards the situations they've been experiencing, it weakens the sensation of perceiving themselves small, once the necessity to grow before them is satisfied, at least while playing⁽¹⁴⁾.

Important scientists dedicated to studying children development, such as Freud, Erikson and Piaget refer to the importance of playing for the child to interiorize a situation difficult to strengthen in terms of challenging it, dominating it or making it bearable. That can be achieved through dramatizing and reproducing a stressful situations⁽⁶⁾. Thus, during TP sessions, the children of this search expressed verbally the satisfaction they felt with the playing and how important, pleasant, comforting and strengthening was to play

Playing is the most important activity in the life of a child and it is crucial for developing abilities of motor,

emotional, mental and social nature⁽¹³⁾. It is the form through which a child can communicate with its life surroundings, and can express active feelings, expectations, frustrations, transforming into activated controllers and investigators, acquiring the dominance of the situation⁽²⁰⁾. That is, mainly when the child is sick, independently of the therapeutic scenario it is found, a child needs to play⁽²¹⁾.

In relation to assisting children with cancer, it is known objectives have changed, and currently, envision to promote the best life quality possible during the treatment phase, minimizing side effects and thus keeping life integrity, further requiring necessary nursing professionals being prepared to assisting through more integrative practices, considering children feelings, thoughts and emotions, respecting their individuality, specificity, and all complexity of such growing little beings⁽²²⁾.

FINAL CONSIDERATIONS

We consider the objectives of the study are reached, once through the Therapeutic Play sessions, cancer children revealed aspects from experiences of having an implanted

REFERENCES

- Santos AD, Pitta GBB. Acesso vascular para quimioterapia. In: Pitta GBB, Castro AA, Burihan E, editores. Angiologia e cirurgia vascular: guia ilustrado. Maceió: UNCISAL/ ECMAL & LAVA; 2003.
- Ministério da Saúde. Secretaria Nacional de Assistência à Saúde. Instituto Nacional de Câncer (INCA). Particularidades do câncer infantil [Internet]. [citado 2007 Abr 14]. Disponível em: http://www.inca.gov.br/conteudo_view.asp?id=343
- Reis RS, Santos MO, Thuler LCS. Incidência de tumores pediátricos no Brasil. Rev Bras Cancerol. 2007;53(1):5-15.
- Rodrigues KE, Camargo B. Diagnóstico precoce do câncer infantil: responsabilidade de todos. Rev Assoc Med Bras (1992). 2003;49(1):29-34.
- 5. Bonassa EMA. Enfermagem em terapêutica oncológica. 3a ed. São Paulo: Atheneu; 2005.
- Ribeiro CA, Maia EB, Sabatés AL, Borba RIH, Rezende MA, Almeida FA. O brinquedo e a assistência de enfermagem à crianca. Enferm Atual. 2002;25:6-17.
- Vessey JA, Mahon MM. Therapeutic play and the hospitalized child. J Pediatr Nurs. 1990;5(5):328-33.
- Conselho Federal de Enfermagem. Resolução COFEN 295/ 2004, de 24 de outubro de 2004. Dispõe sobre a utilização da técnica do brinquedo/Brinquedo Terapêutico pelo enfermeiro na assistência à criança. Rio de Janeiro: COFEN; 2004.
- Minayo MCS. O desafio da pesquisa social. In: Minayo MCS, Gomes SFD. Pesquisa social: teoria, método e criatividade. 27a ed. Petrópolis: Vozes; 2008. p. 9-30.
- Marcus MT, Liehr PR. Abordagens de pesquisa qualitativa.
 In: LoBiondo-Wood G, Haber J. Pesquisa em enfermagem: métodos, avaliação crítica e utilização. 4a. ed. Rio de Janeiro: Guanabara Koogan; 2001. p. 122-39.
- Ribeiro CA, Almeida FA, Borba RIH. A criança e o brinquedo no hospital. In: Almeida FA, Sabatés AL, organizadoras. Enfermagem pediátrica: a criança, o adolescente e sua família

Port-a-Cath, with the opportunity of relieving tensions, constantly in their life routines. Although the data supports the advantages of an implanted Port-a-Cath, promotes many benefits to the child, like the reduction of peripheral punction frequency, and subsequent pain and different medication side effects, its use does not stop the child from experiencing related concerns, fears and expectations for having an implanted catheter.

We believe the child should be assisted in a holist form, encompassing all essential aspects of a satisfactory and quality human development. Within this context, we reaffirm the importance of Therapeutic Play strategies to integrate nursing care and children cancer, given the large amount of invasive and painful procedures to which a child is exposed in a long-term therapy and inherent illness and therapy exposure related risks.

We highlight this is an initial study, which may be further deepened, in which registered experiences, and others making part of the life of the cancer child and family members, may be better understood and provide subsidies to implement interventions to foster the improvement of life quality along the therapy.

- no hospital. Barueri: Manole; 2008. p.65-77.
- 12. Mayan MJ. An Introduction to qualitative methods: a training module for students and professionals. Edmonton, Canadá: International Institute for Qualitative Methodology, University of Alberta; 2001.
- Hockenberry MJ, Wilson D, Winkelstein ML, editores. Wong fundamentos de enfermagem pediátrica. 7a. ed. Rio de Janeiro: Elsevier; 2006.
- Ribeiro CA, Angelo M. O significado da hospitalização para a criança pré-escolar: um modelo teórico. Rev Esc Enferm USP. 2005;39(4):391-400.
- Castro AS, Sìlva CV, Ribeiro CA. Tentando readquirir o controle: a vivência do pré-escolar no pós-operatório de postectomia. Rev Latinoam Enferm. 2004;12(5):797-805.
- Dupas G, Angelo M. Buscando superar o sofrimento impulsionada pela esperança: a experiência da criança com câncer. Acta Oncol Bras. 1997;17(3):99-108.
- Cagnin ERG, Ferreira NM, Dupas G. Representação social da criança sobre o câncer. Rev Esc Enferm USP. 2004;38(1):51-60
- Ribeiro CA, Almeida FA, Borba RIH. Preparo da criança e do adolescente para procedimentos hospitalares. In: Almeida FA, Sabatés AL, organizadoras. Enfermagem pediátrica: a criança, o adolescente e sua família no hospital. Barueri: Manole; 2008. p.109-23.
- Kiche MT, Almeida FA. Brinquedo terapêutico: estratégia de alívio da dor e tensão durante o curativo cirúrgico em crianças. Acta Paul Enferm. 2009;22(2):125-30
- 20. Trezza EMC. Função dos jogos e brinquedos na vida da criança. J Pediatr (Rio J). 1977;42(6):55-8.
- 21. Li HC, Lopez V. Effectiveness and appropriateness of therapeutic play intervention in preparing children for surgery: a randomized controlled trial study. J Spec Pediatr Nurs. 2008;13(2):63-73.
- 22. 22 Lima RÁG. Á enfermagem na assistência à criança com câncer. Goiânia: AB; 1995.