Analysis of the use of therapeutic toys in children from 3 to 12 years hospitalized

Objective: To analyze the practice of activities with therapeutic toys with children hospitalized or undergoing outpatient treatment before the invasive procedure. Methodology: This is a field research, with a cross-sectional qualitative character, analyzing the feelings of children using therapeutic toys. Six children were followed, from 03 to 12 years old in outpatient treatment and admitted to the oncology sector in a large pediatric hospital in Vitória, for 14 days, being applied to children undergoing cancer treatment with up to 3 months of treatment initiation. During the procedures with the children, their reactions were observed before and after the use of the therapeutic toy and recorded in logbooks. As for the procedures, the research work was experimental, with the doll as the facilitating agent of the process and introduced in the routine. Results: The procedure was performed together with the nurse at the health institution, due to the greater contact he has with the child and his family, facilitating the child's understanding. Everyone liked to experience this new experience. Conclusion: It was concluded when using the therapeutic toy before the invasive procedures contributed to a better understanding of the children about the procedures that would be submitted, leaving them calmer and safer.

Descriptors: Therapeutic Toy; Children; Invasive Procedures.

RESUMEN
Objetivo: Analizar la práctica de actividades con juguetes terapéuticos con niños hospitalizados o en tratamiento ambulatorial antes del procedimiento invasivo. Metodología: Se trata de una investigación de campo, de carácter cualitativo transversal, que analiza los sentimientos de los niños utilizando juguetes terapéuticos. Se siguió a seis niños, de 03 a 12 años en tratamiento ambulatorial e ingresados en el sector de oncología en un gran hospital pediátrico de Vitória, durante 14 días, aplicándose a niños en tratamiento oncológico con hasta 3 meses de inicio de tratamiento. Durante los procedimientos con los niños, se observaron sus reacciones antes y después del uso del juguete terapéutico y se registraron en los libros de registro. En cuanto a los procedimientos, el trabajo de investigación fue experimental, con el muñeco como agente facilitador del proceso, e introducido en la rutina. Resultados: El procedimiento se realizó en conjunto con la enfermera de la institución de salud, debido al mayor contacto que tiene con el niño y su familia, facilitando la comprensión del niño. A todos les gustó vivir esta nueva experiencia. Conclusión: Se concluyó que el uso del juguete terapéutico antes de los procedimientos invasivos contribuyó a una mejor comprensión de los niños sobre los procedimientos que serían sometidos, dejándolos más tranquilos y seguros.

DESCRIPTORES: Juguete Terapéutico; Niños; Procedimientos Invasivos.

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INTRODUCTION

The hospitalization of a child is something that shakes the whole family emotionally and structurally, as the whole routine is changed. It is potentially stressful for children to be perceived as something that deprives them of their freedom, autonomy, changing their routine of being together with their families, causing anxiety, stress, fear, anguish, insecurity, and can cause emotional problems, if there is no qualified assistance (1).

The motivation for carrying out this study is to offer the child humanized assistance through the therapeutic toy and, through the toy, to explain the invasive procedure, ensuring the child not only physical care. Adapting communication for a better interpersonal relationship, creating a bond between patient / family and team. Seeking techniques for the child to understand the moment experienced, contributing to the reduction of stress and anxiety, reducing the trauma that hospitalization can cause, through therapeutic play.

The National Humanization Policy of the Ministry of Health, with the objective of strengthening humanized and more qualified assistance, has been improving and creating practical techniques in order to guarantee the user a more human assistance and the therapeutic toy comes as a facilitating agent to contribute to this process (2).

Playing favors the strengthening of the bond between family and patient, as parents are also weakened by hospitalization, and need to see their children happier. When children play they represent being better, giving parents greater confidence and hope, strengthening them so that they can be support for the child (3).

During hospitalization, the child stays in bed for much of the day, being subjected to invasive procedures, restricted to playing and to their routine habits, some painful procedures, such as: needles, cuts, medications, passage and removal of tubes, many times without being properly guided, in a way understandable to their age about the procedures to be performed, becoming passive to images, associating smells, strange sounds and surrounded by unknown people, who are not part of their daily routine, and associate with them as the cause of this suffering, having a bad view of the hospital and the team, leaving them more vulnerable and at risk of psychological damage (4).

In this perspective, the importance of playing for the child’s development is fundamental, where there are several laws and organizations that defend the right to play, placing them together with the rights of basic needs such as food, school, health and others (5).

Playing is something natural in the child’s routine, so it can be used as a strategy for care, offering more comprehensive assistance. In playing, the child develops the neuropsychomotor and socializes, the use of the doll, in addition to developing these sides, will serve to relieve stress, fear, understand them so that they can be support for the child (6).

Following this same reasoning, in this period of hospitalization the child is also submitted to fundamental invasive procedures for the treatment and recovery, however, painful leaving aside the games, being important that the assistance of this child is beyond the physical care, that is an assistance welcoming, covering all states, physical, psy-
The hospitalization of an individual is something that alters his whole life routine, of family life; in the case of a child, these changes may be much greater, generating stress, fear, in addition to the illness that is experiencing(8).

It is common for anxiety to arise before or during the procedure, causing great discomfort for the child, causing him to develop fear, fear of going to the health service, can cause insomnia, nightmares, it also causes damage by breaking the routine and separation from a family environment. The child with these traumas will become an adult for fear of seeking medical care, which will avoid hospital environments, causing serious damage to health(9).

This leads us to reflect on the form and attitudes that we should have with this child during his hospital experience. Therapeutic play is one of the possibilities to help children overcome this critical and painful period for them.

The therapeutic toy offers the child a moment to release his fears, fears, anxieties, allowing him to express what he feels and what he thinks(8).

For authors(10:1164), “[... ] the therapeutic toy has a pre-defined structure that uses playfulness to reduce stress and other adverse effects that hospitalization can cause to hospitalized children”.

The therapeutic toy is a structured game, which has several functions and purposes, such as: relieving tensions, reducing anxiety due to the procedures, providing guidance on invasive procedures, strengthening the bond between the nursing team and the child. The toy can be applied in three ways, and it is up to the nurse who will apply to establish which will be the most appropriate at that moment for the child, the session should last from 15 to a maximum of 45 minutes(11,12).

- Dramatic or Cathartic Relief, in which it allows the child to channel his emotions and needs. And that allows the child to dramatize new experiences, difficult to be verbalized, and become emotionally safe;
- Instructional or preparatory: It has the function of clarifying, guiding an event that prepares the child, through a game, for the procedures to be submitted, in order to promote their understanding of the treatment and clarify concepts;
- Physiological function trainer: It is one that teaches the child to handle equipment with physiological functions, in which he participates in activities to improve his physical state, through games that reinforce and involve his own care.

The art of playing helps the child in his motor, emotional, mental and social development, and the lack of games during the hospitalization period can contribute to the child presenting psychic alterations, apathy, mood changes and impaired self-image(8-10).

Playing is so necessary for a child that its constant inhibition in childhood can be the indicator of severe neurosis that can often be ignored, being seen as a quiet or shy child, but in fact the act of not playing shows that it can be suffering for something or someone, a healthy child plays, runs, has fun. The use of playfulness as a facilitating agent in illnesses promotes psychophysiological well-being and can help children during difficult processes that they are going through(13).

Study states that play is one of the main languages in childhood, and that it is through it that children give meaning and know the world, constituting their cultural practices(14).

Authors(8) mention how painful the hospitalization process is, and that they can cause disorders and trauma to people. In childhood, these disorders are more evident and more intense, which can make the child more aggressive, more self-centered, more selfish due to the length of hospital stay, and can be seen by the children as a punishment for some inappropriate behavior or disobedience.

The use of therapeutic toys in hospitalized children or in outpatient treatments may help in the hospitalization process, reduce trauma, fears, anxieties, but it is extremely necessary for the child to trust the environment, which has a bond between the team and the family, so that you can play in a pleasant and creative way(15).

Care is a nursing role, and this care must meet all needs: emotional, social and must ensure adequate techniques for communication and interpersonal relationships, the Therapeutic Toy can be a tool to improve this integration and guarantee assistance comprehensive and more humanized. It is also affirmed that it is the role of the nurse to take care of the patient fully, not only of his pathology, but also of the emotional, social, interpersonal aspect, aiming at qualified and humanized care seeking to meet all.
the particularities for better assistance of the same\textsuperscript{(16)}.

The process of hospitalization of a child is stressful, as it changes his whole routine, having time for medication, different food, changing his daily habits; these changes cause anxiety, fear in the child and the therapeutic play contributes to increase and improve the bond between health professionals with him and his family\textsuperscript{(17)}.

In this sense, the research is relevant, as it will fully care for the child, qualifying care and making it more humanized, minimizing the trauma that hospitalization generates in children and family.

**METHODOLOGY**

This is a qualitative research, as it allows understanding and experiencing the moments, which will be observed. Qualitative research requires a methodology sensitive to differences, events, unforeseen changes and observable manifestations\textsuperscript{(18)}.

As for the procedures, the research work was experimental, as the therapeutic doll was introduced into the child's routine before an invasive procedure, with the doll as a facilitator of the process. And after performing the procedure, the doll is removed from the child.

The procedure was performed together with the nurse at the health institution, due to the greater contact he has with the child and his family, having established bonds, facilitating the child's understanding.

The place for the development of the study was the Children's Hospital Nossa Senhora das Graças, in the greater Vitória, which serves outpatient children, in the oncology sector who will perform an invasive procedure. The sector chosen was the chemotherapy outpatient clinic, which is open from Monday to Friday from 7 am. Children arrive for chemotherapy daily at 7 am and enter the service that starts at around 7:30 am, stay almost all day, are discharged and return the next day, so it was possible to apply the therapeutic toy in the oncology sector.

The research was developed during the period of 15 days on Mondays, Tuesdays, Wednesdays, and Thursdays during the month of June and July in the morning, as it was the time that the children entered to start the chemotherapy procedure.

The research subjects were children who were present at the chemotherapy outpatient clinic and oncology ward within 3 months of starting treatment. The children's age ranged from 03 to 12 years.

The choice of children who would participate in the research was made by the social worker together with the nurse, who would undergo some invasive procedure, who had physical and mental conditions that made their participation in the study feasible and had the acceptance of the responsible person, through the signature of the Informed Consent Form (ICF).

For this study, participant observation was used, which is the type of procedure that helps the researcher to obtain information about the research subject and that are not accessible through other methods, and which aims to analyze physiological and psychological procedures, enabling the interaction and bonding between the researcher and the participants, leaving them free to reliably express their experiences and feelings that might not be exposed without this integration\textsuperscript{(19)}.

The observation diary was used every time the therapeutic toy was used. From the moment the child was chosen to participate in the research, the therapeutic toy was used before starting the procedure on the child; first, the procedure was performed on the doll, with the help of the child and, later, the procedure was performed on the child.

06 children were observed and the weekly routine of procedures was followed. Being two 9-year-old girls and four boys aged 3 to 12, the initials of the names were used in the results, thus guaranteeing anonymity. During the study, children's reactions were observed du-
ring the period they were with the doll and then during the procedure itself.

This study was approved by the Ethics Committee responsible for the research at Católica de Vitória Centro Universitário with the number 3,349,300.

The data were collected from an observation instrument that was unique for each child. The child was observed during the installation of the chemotherapy, that is, during the puncture of the Port a Cath (fully implantable catheter) or PICC (peripherally inserted central catheter), during the realization of a dressing, and noted on his own form behavior.

The procedure was performed first on the doll and shown to the child what was going to happen, then the sector nurse started the procedure on the child. At this time, the researcher observed the reactions in the child and the guardian. These children were followed for 3 sessions.

RESULTS AND DISCUSSION

Six children participated in the study, two 9-year-old girls named here by the initials, the I.S.F with the diagnosis of Leukemia ALL, who lives in Itarana-ES and 9-year-old R.V.S.M with the diagnosis of rectosacral ganglioneuroblastoma and who resides inside Guriri-ES; and four boys, two 3 years old and also referred to by the initials, A.M. 3 years, with the diagnosis of Leukemia ALL, resident in Vila Velha-ES, 3 years old H.C.O, with the diagnosis of Pilocytic Astrocytoma residing in the interior of Linhares, the M.P.P of 5 years, with Leukemia LLA, who lives in Colatina, L.H.S.D of 12 years, with Epidermolysis Bullosa, Down Syndrome and Aplesia Heritoíde, resides in Grande Vitória-ES.

In the logbook it was possible to identify how the child reacts to a procedure, being observed, and analyzed before and after the dolls. In the pre-doll collection, it was identified, through information collected from the mother, that children have different ways of expressing their fears and desires, as described below.

The I.S.F when seeing the nursing team shows fear with frightened facial expressions, and during some procedure she screams, sometimes there is not even an invasive procedure, but just manipulating it is already frightening. But it still allows the procedure to be performed.

R.V.S.M, when seeing the team, looks scared, but does not scream, calls the mother and cries. She resists a little but manages to do the procedure.

The A.M. is afraid when he arrives at chemotherapy because he knows that he will have to be punctured, remains with facial expression of anguish until they come to perform the procedure. He has resistance to perform the procedure, cries a lot while holding his grandmother’s hand and asks to hold the hand of someone on the team.

The H.C.O arrives at the clinic with a crying facial expression. The procedure needs to be done in two people. There is resistance to the team and only the nurse handles it.

M.P.P does not show fear of the nursing team, cries a little during the procedure, but does not show much resistance during the procedure.

L. H. S. D., is resistant to the team and the procedure, gets irritated facial expression for the team and chooses who will puncture it, requiring the presence of the nurse.

From these data, it can be said that the team must know the child, keeping him as comfortable as possible, as he has already had a break from his routine due to his hospitalizations, long treatments, and coping with undesirable effects of medications, to minimize her anxieties, always listening to her, valuing her opinion, treating each one with her peculiarity, because she is part of the treatment and also has her doubts, she has to be aware of what will happen to do part of the process, clarify your fears, for better adherence to treatment Rectosacral Neuroblastoma Ganglion (20).

When the doll started to be used, everyone, children, and companions, accepted without resistance, as can be reported through the companions’ speech:

“Everything to help is valid” (Mom of L.H.S.D)

“Glad you’re here and will explain the procedure, it’s her first time, today the doctor talked to me, but I’ve been out of orbit since I heard the news, I didn’t hear it until I said that my baby has cancer” (Mom of R.V.S.M).

Health education is a way of reducing anxiety caused by hospitalization, as well as starting the process of welcoming and knowledge among those involved. In the post-doll diary, it was noted that there was an improvement, with lines like:

“I think he liked the doll, liked to interact, today he got calmer, it was one of the days he got calmer” (Mom of L.H.S.D.).

“Look, he’s asking about the procedure, he seems to understand!” (Mom M.P.P).

“Glad you are looking like a child, playing, and not just a cancer patient, he has cancer, the professionals here have to look like a child, not with pity, because I expect comfort, to give him confidence” (Grandma of A.M).

“I.S.F cries a lot, in the first application of the doll she cried, but she liked the doll, this second time I couldn’t believe she didn’t even cry!” (Mom of I.S.F).

When applying at I.S.F, it was noted that the mother was very protective, that she even wanted to answer for her daughter, claiming that she was a girl who does not speak much, who does not
interact much with people, was more insecure than the child about the project of the toy. But when the doll was shown and explained how it would be (change the PICC dressing), we got dressed and talked, she was collaborative, asked if it would hurt, why the different gloves, she reports that she is afraid of the hair falling out, that is homesick. When performing the procedure she cries and screams asking to stop that it hurts, when finishing the procedure we talk, doing the agreement that next time we would do it again, and that would have to be more courageous as the doll. The following week, we did the dressing on the doll again, when we did it (inpatient nurse and me) we were pleasantly surprised, we did the procedure without any complications or fear. The unknown generates fear, with a detailed explanation and when placing the child to perform the procedure, it showed a notable improvement.

When applying the doll in the R. V.S.M, I realized what the little princess of the house was, that even with her soft and childlike speech how scared she was by the changes in her daily life, especially by the unpreparedness and insecurity of her mother (a 61 year old lady who got pregnant at 52, twin pregnancy). We put the doll on the bed, put on gloves to assess the veins and talked about how the puncture would be and why we would have to “pierce” the doll’s arm. She was very collaborative, when the procedure was done on her, she cried, but without resistance to the team, her reaction being satisfactory compared to the previous day.

A.M is a child with 3 years old who seems to be a boy, he tries to repress his feelings, even when crying. I followed during the puncture, we did it on the doll, he was scared at first with the intravenous device, then I showed that the needle is removed, that what remains is soft, he took the plastic looked, looked, in the procedure he cried, asked to hold the hand, but it did not resist the team nor the procedure. The other day, he came to do intraosseous chemotherapy on the spine. We talked that he would sleep, that when he woke up he would have a bandage in the middle of the back, we did the bandage on the doll he named Guigui, when the doctor arrived for the procedure he looked a little scared asked to hold the grandmother’s hand and the doll’s hand and soon fell asleep while applying the sedative.

The H.C.O was very curious, he went to the clinic to do chemotherapy through Port-a-Cath, he was visibly apprehensive, but when he saw the doll interacted well with him, I explained the procedure, he looked attentively, then when the nurse came to apply, he cried, but he couldn’t resist, becoming calmer according to his mother. He asked me if Teco (the name he gave the doll) cried, said that he cried a little bit, but that he is really cute so he doesn’t need more people holding him to do the procedure, because when Teco didn’t move he saw that it was over quickly. H.C.O wanted to meet the other doll, who named her Rebeca, after the friend of the daycare center, he played with them, punished them, when I asked why Teco was punished, he said it was because Teco cried, and then he ate with them. When they finished snacking (the child and the dolls) I asked the mother if she thought he understood that the doll represented him and she asked the child about the procedure and he showed it on the doll, besides she reported that he was calmer, since that the last few times it took more than one person to do the procedure.

The M..PP in the application of the doll interacted very well, we put on the glove to do the puncture, we did the puncture on the doll after we occluded, I said that before applying chemotherapy we had to wash it with serum, he questioned leaving his mother surprised, with the questions, asked if it would hurt, how to wash with serum, I said that some children feel a shock, others that say they feel cold, I asked for permission for the nurse to put it on and he gave me the arm, when he applied the serum he said there it doesn’t hurt, just got cold and smiled.

L.H.S.D. arrived at the clinic in a bad mood, I explained the project to her mother (the one who says everything to help is valid), but that he does not like to interact very much, she reports that the son who chooses who will do the procedure, only allows nurses puncture it. When I get close to him, I realize he is afraid, but collaborative, he left his cell phone to listen to me, I say that he will have to be punctured to transfuse blood, I demonstrate on the doll he is attentive, helps me with the procedure. When we finish the puncture on the doll, I say that now we will do it, he looks with his head no, I put the doll next to him (the doll already punctured) and he shows the place that he prefers to puncture, the nurse arrives to perform the procedure, he still afraid shows the place again, cries a little, but remains calm.

When analyzing the children's logbooks, a better manifestation of the procedure was noticed, the child is calmer when he knows exactly how the procedure will be and with the doll he asks questions to try to understand, he realizes that he is being heard. In children who are not hospitalized, only hospitalized for chemotherapy, there was an improvement in coping with the treatment routine, but it was noted that there would be the formation of a greater bond between child and doll if they each remained with their doll.

Coping with the diagnosis of a child with cancer is not easy, seeing him being subjected to various invasive procedures, undesirable reactions to the treatment (such as nausea, hair loss, etc.) and realizing the fear of just getting to the hospital, or seeing someone in white makes the prospect of treatment more painful for the family and the child[20].

The nursing team is the one that spends more time with the child and the family, when using playfulness, strengthens the bond and, with that, one can perceive and understand the feelings and needs of the child and his family, clari-
fying doubts, decreasing the anxiety and fear that hospitalization brings. 

To establish a clearer and more humanized communication, it is valid to use strategies that offer greater interaction, such as playing, bringing playfulness to improve interaction, since the universe of playing is already part of children's daily life.

CONCLUSION

The study allowed the methods, types of therapeutic toys and their applicability to be known. The instructional toy was chosen, informing the child of the procedure to be performed on the day, as health education is part of the hospitalization process, since the unknown generates fear and anxiety. And through the logbook it was observed that the child starts to manipulate the toy in a dramatic way, in which she vented feelings, reports situations experienced, decreasing fear and anxiety. During observation, there was a better coping with the procedure after the application of the therapeutic toy, with the change in the child’s behavior being notorious. Both those who are in outpatient treatment and those who are hospitalized in the wards.

It was concluded that the use of the toy leads the child to experience pleasurable moments due to the stress of the procedure, contributing so that he can vent, express feelings, relieve emotional tension, create bond with the team and, thus, reduce fear and apprehension before and during the procedure, as it allows her to know exactly what will happen during hospitalization. The result of its application being satisfactory, as it enabled an improvement in coping with treatment and rescued the right to play.

REFERENCES