

Children's perception of venipuncture through therapeutic toy

Percepção das crianças acerca da punção venosa por meio do brinquedo terapêutico

Percepción de los niños acerca de la venopunción a través del juguete terapéutico

Maria Clara da Cunha Salomão Barroso  <https://0000-0003-3817-4017>¹

Ravini dos Santos Fernandes Vieira dos Santos  <https://0000-0002-2378-371X>¹

Antonio Eduardo Vieira dos Santos  <https://0000-0002-4326-0211>^{1,2}

Michelle Darezzo Rodrigues Nunes  <https://0000-0001-7685-342X>¹

Eduardo Alexander Júlio Cesar Fonseca Lucas  <https://0000-0001-6638-0788>³

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Descriptores

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Corresponding author

Ravini dos Santos Fernandes Vieira dos Santos
E-mail: ravini_uerj@hotmail.com

Abstract

Objective: To understand children's perception of venipuncture through therapeutic toy and how therapeutic toy can contribute to the venipuncture procedure and child-nurse interaction.

Methods: This is a study with a qualitative approach. It was held in pediatric nursing, surgery and intensive care sectors of a university hospital in the city of Rio de Janeiro, with seven children between four and 11 years old. It occurred through an audio-recorded interview submitted to thematic analysis. The research was approved by the Research Ethics Committee of the co-participating institution, under Opinion 2.544.589.

Results: By dramatizing the doll, handling hospital supplies, and deriving the ultimate purpose, this imaginary world full of misconceptions becomes a positive experience for both children and nurses. The interaction through toy allows them to have more clarity about the procedure and greater receptivity to the nursing staff, as well as new procedures that may be performed.

Conclusion: This study gave voice to these children as subjects of care, as there is a rupture of the technical-centered vision, favoring children protagonism. This study made it possible to emphasize the importance of incorporating the therapeutic toy in pediatric nursing care, demonstrating its potential therapeutic effect.

Resumo

Objetivo: Compreender a percepção das crianças acerca da punção venosa por meio do brinquedo terapêutico e compreender de que forma o brinquedo terapêutico pode contribuir para o procedimento de punção venosa e na interação entre a criança e o enfermeiro.

Métodos: Trata-se de um estudo com abordagem qualitativa. Realizada nos setores pediátricos de Enfermaria, Cirurgia e Terapia Intensiva de um hospital universitário do Rio de Janeiro, com sete crianças entre quatro e 11 anos de idade, através de uma entrevista audiogravada submetida à análise temática. A pesquisa foi aprovada pelo Comitê de Ética e Pesquisa da instituição coparticipante, sob nº do parecer 2.544.589.

Resultados: Ao dramatizar na boneca, manusear os materiais hospitalares e deduzir o propósito final, esse mundo imaginário e repleto de conceitos equivocados torna-se uma experiência positiva tanto para a criança quanto para o enfermeiro. A interação através da brincadeira permite que elas tenham maior esclarecimento sobre o procedimento e maior receptividade à equipe de enfermagem, bem como a novos procedimentos que venham a ser realizados.

Conclusão: Esse estudo deu voz a essas crianças como sujeitos do cuidado na medida que há a ruptura da visão técnico centrada, favorecendo assim o protagonismo infantil. A realização desse estudo possibilitou ressaltar a importância de incorporar o brinquedo terapêutico no processo de cuidar da enfermagem pediátrica, demonstrando seu potencial efeito terapêutico.

¹Universidade do Estado do Rio de Janeiro, Rio de Janeiro, RJ, Brasil.

²Fundação Oswaldo Cruz, Rio de Janeiro, RJ, Brasil.

³Escola de Enfermagem Anna Nery, Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ, Brasil.

Conflicts of interest: nothing to declare.

Resumen

Objetivo: Comprender la percepción de los niños acerca de la venopunción a través del juguete terapéutico y comprender de qué forma el juguete terapéutico puede contribuir con el procedimiento de venopunción y con la interacción entre el niño y el enfermero.

Métodos: Se trata de un estudio con enfoque cualitativo. Fue realizado en los sectores pediátricos de Enfermería, Cirugía y Terapia Intensiva de un hospital universitario de Rio de Janeiro, con siete niños entre 4 y 11 años de edad, a través de una entrevista que fue grabada y sometida a un análisis temático. El estudio fue aprobado por el Comité de Ética e Investigación de la institución coparticipante, bajo el n° de informe 2.544.589.

Resultados: Al dramatizar en la muñeca, manipular los materiales hospitalarios y deducir el propósito final, ese mundo imaginario y repleto de conceptos equivocados se transforma en una experiencia positiva tanto para el niño, como para el enfermero. La interacción a través del juego permite a los niños tener más claridad sobre el procedimiento y mayor receptividad con el equipo de enfermería, así como con nuevos procedimientos que puedan llegar a realizarse.

Conclusión: Este estudio les dio voz a los niños como sujetos de cuidado en la medida en que hay una ruptura de la visión centrada en lo técnico, lo que favorece el protagonismo infantil. La realización de este estudio permitió destacar la importancia de incorporar el juguete terapéutico en el proceso de cuidado de la enfermería pediátrica y demostró su potencial efecto terapéutico.

Introduction

Child hospitalization represents a different situation from all experienced by children. It is inserted in another reality, in an impersonal environment, full of restrictions and routines, with meanings different from their daily context and away from their family and friends. Children are surrounded by strangers performing procedures that cause them discomfort.⁽¹⁾

To meet the emotional and social needs of children, it is necessary that pediatric nurses use strategies to empower children population under their care. Thus, children can become active subjects and participants in their hospitalization process.⁽²⁾ In this light, the use of facilitating techniques such as playing are essential elements for improving quality of care in pediatric nursing.

Games can help children expand their relationships with the outside, creating a link between their imaginary world and the hospital world. Through games, children can transform the environment in which they are inserted, so that they can positively face the situation they are going through.⁽³⁾

The inclusion of games in care for children makes hospitalization less traumatic and more joyful, as it provides fun, relaxation, expression of feelings and interaction with others.⁽⁴⁾

In the hospital, therapeutic toy (TT) is an approach that is a structured toy for children to relieve his anxiety through the experiences in the hospital and that pose a threat to him. Should be used whenever the patient has difficulty understanding/dealing with the situation or preparing procedures.⁽⁵⁾

Nurses use TT as an appropriate strategy to approach children, establishing bond, empathy and a relationship of trust. In addition to greater understanding by nurses, expanding and qualifying pediatric care.⁽⁶⁾

Regarding the state of the art about TT, some studies have been developed focusing on the theme. However, its use specifically during the venipuncture technique is still scarce.⁽⁷⁻¹⁰⁾ Most of them address the view of TT from the perspective of the parents or caregivers of children,^(7,9) of health professionals,⁽⁷⁾ or even quantitative approaches.⁽⁸⁾ The qualitative perception of hospitalized children about TT in venipuncture still represents a gap in the literature and justifies the importance of conducting this study. This happens mainly if we consider that children's own report is most often the best way to understand his vision, which makes the results of this study valuable for this subject.

This study aimed to understand the perception of children about the care received by nursing through TT in venipuncture. It also aimed to understand how TT can contribute to the venipuncture procedure and the interaction between children and nurses.

Methods

This is a qualitative study⁽¹¹⁾ conducted in the following pediatric units: Pediatric Ward, Pediatric Surgery (ICNP) and Pediatric Intensive Care Unit (PICU). Participants were seven pediatric patients from a university hospital in Rio de Janeiro between four and 11 years old, able to verbalize their expe-

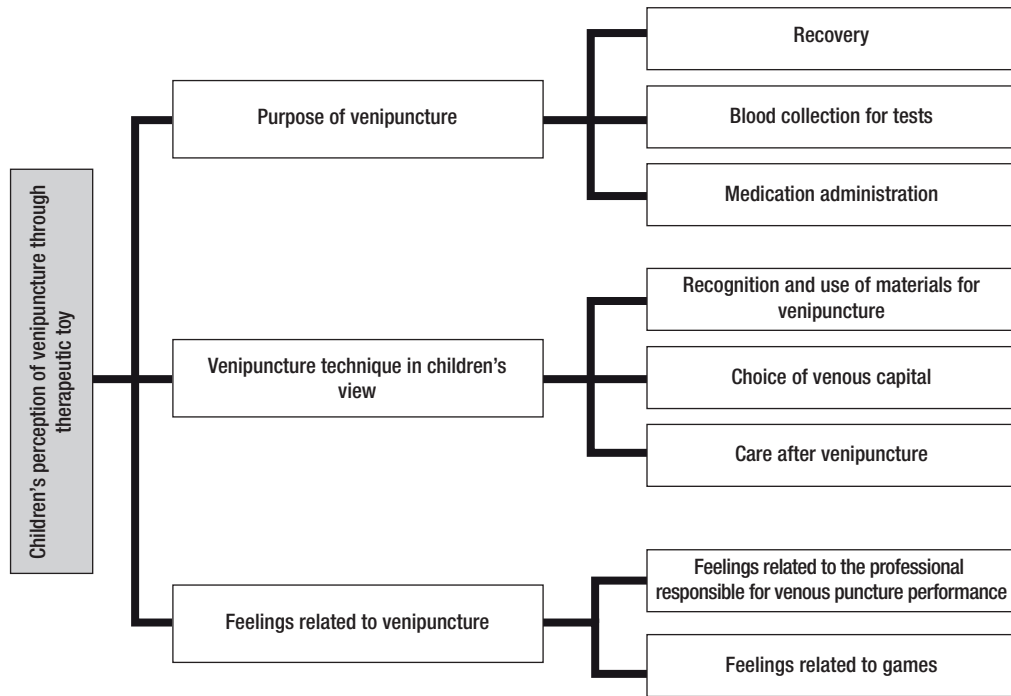


Figure 2. Data analysis

Subcategory 1:

Purpose of venipuncture

During the use of TT, children verbalized the purpose of venipuncture, such as hydration, administration of drugs and blood products, as well as blood collection for laboratory tests. They also highlighted the importance of the procedure to improve their health, recognizing the need for the intervention on screen for its recovery, as explained below:

“Ah, it’s because it’s to give “dicine” (...) to improve”. (Chiquinha)

“To put the serum (...) to pass my fever, I had fever and headache and inflamed ear”. (Ash)

“Uh ... I think it was to see how my nameplate was (...) just to get better, get better and go home soon.” (Ariel)

Subcategory 2:

The venipuncture technique in children’s vision

The statements that structured this subcategory were instrumental in demonstrating how children were

able to reproduce details of the venipuncture procedure. They were related to the execution in logical order of the technique and its equipment, as well as to the problems and failures in their performance.

“Alcohol is to remove bacteria, not to get bacteria! Look ... I also learned that this thing here (needle catheter), you stick, and only the silicone! (...) can be piercing (the doll), collecting blood?” (Sponge Bob)

“I found! I’ll have a needle! My God, I can’t do it! (...) then I shoot ... No! I take the cotton and I will take it and then I put the cotton in the hole and keep doing it until the little blood is no longer like this” (Ash).

“This is a glove to tie in the arm and the blood fill the vein and it appears to be able to take (...) and have to find a very good vein, a very thick vein to put here like this, and the blood, we give a little pressure here to the blood came, then we collect as much as we have to and then take and put the cotton (...) look!!! It came!!! At first, see? (...) then we come here, open the saline solution and take

it out of the container and go slowly giving a few locks like this to see if the vein is good... slowly. Then if the patient says that it hurts, it is because you may have missed the vein (...) if the blood does not reflow, it can also be another risk that we have wrong the vein (...) now I can pierce this other side (from the doll)? Because I just used this vein, probably this one has no holes, it should be better! That one I used to draw the blood!” (Ariel)

“Winged infusion set? The famous butterfly! (...) I think I only see when nurses take this part down here! Because this one afterwards they take and only that little silicone thing! Then it gets better... then this one is just the needle, it bothers me more! (...) we put the little medicine to run. We will connect by a little thread, a little pipe that goes there to the machine and helps the medicine to run”. (Ariel)

“This has a rubber here that is in your arm, but the needle is not (...) put inside this tube here!! Put a little inside this (...) because I will use these two bloods to be able to make a discover”. (Minnie)

Subcategory 3:

Feelings related to venipuncture

Among the statements collected, pain was the most verbalized feeling and directly related to skin puncture caused by needle transfixation.

“The butterfly hurts less”. (Conow)

“The child does not like to be bored! Because it hurts so much, we get a little bit of trauma (...) when they are boring me, I don't like to look, I turn to the side and let them do it (...) I'm thinking she's crying too much (the doll) because it hurts so much. When we put the medicine on our arm, we feel our vein move (...) it shakes a little”. (Minnie)

“It's just that I scream, you already know!! It's just that I'm terrified of a needle since I was a little kid (...) is that the first time I took two needles of blood test (...) and yesterday 4 times!! Because I wasn't pulling the vein (...) I thought it was an absurd!!!

My veins are crazy because the nurse doesn't pull!! (...) look at the size of this needle!!!”. (Ash)

Discussion

Data from this study reveal children's perception of venipuncture through TT and highlight how it can contribute to the procedure and the interaction between children and nurses.

It was noted that children with hospitalization time greater than seven days and submitted to multiple punctures, associated the act of being punctured with improvement of the clinical picture and possible hospital discharge. It was also found that the ages of the interviewed children were a determining factor for a better understanding of the procedure's purpose. From the age of four children understand and can better verbalize their feelings.⁽¹³⁾

The statements clearly demonstrated that TT played a facilitating role so that they could better deal with the need for venipuncture. In addition, TT as a care technology has made the relationship between the reasons, needs and benefits of the procedure with the improvement of these children's physical health more visible.

Corroborating with literature, it was identified that the preparation of venipuncture with the use of TT is extremely important, since it promotes the cooperation and adherence of children to treatment.⁽¹⁴⁾ Through it we realize that children understand the need for hospitalization and can experience this moment in a more tranquil way.⁽²⁾

During the role plays, it was noticed that children were familiar with the materials used for venipuncture. Although they do not know the names of the components used, the demonstration of the technique was performed similarly to that of nurses, with no need, for example, to assist with the handling of needled devices and aspiration of the physiological solution. It is believed that the empowerment of children by the nursing staff is a facilitating factor for the approximation of scientific knowledge and common sense, resulting in greater participation of children in the process.

Thus, through the application of TT, handling the materials and repeating the procedure on the doll, children answered their doubts and anxieties related to the procedure, facilitating their approach with nurses.

The use of TT in venipuncture preparation promotes greater tranquility for children, understanding and acceptance of the procedure.⁽¹⁴⁾

Children get a better understanding of the procedure and consequently become more collaborative when they are allowed to view and handle the instruments.⁽¹⁵⁾

Dolls, needles and syringes are useful objects for children to understand the experience of being punctured as well as gain control of their emotions. Nurses are able to detect misconceptions and obtain information about children's fears and unrealistic fantasies through dolls and hospital supplies, performing not only technical care, but also playing a facilitating role in children and family hospitalization experience.⁽¹⁵⁾

Thus, TT will be able to provide a less traumatic treatment, minimizing the suffering caused by the disease, contributing to children's recovery, valuing their feelings and doubts that occur during hospitalization.

Although it was expected that the feeling of pain would be somewhat predictable in the context of this study, the reports brought to light a correlation of very interesting ideas after the application of TT in these children. If, on the one hand, the sensation of pain caused by the venipuncture procedure is undeniable and inevitable, on the other hand, when closing their eyes or turning their faces during the procedure, these children showed that some coping strategies may permeate the experiences of painful invasive interventions in childhood.

Moreover, such attitudes demonstrate that children's resilience capacity can be mediated by the application of TT.

Applying the TT technique facilitates health professional approach and bond establishment, both necessary elements for the trust relationship mediation.⁽⁶⁾

TT has a healing function, being an "escape valve", reducing children's anxiety for emotional ca-

tharsis.⁽¹⁶⁾ It relieves anxiety of atypical situations at children's age, releasing tension.⁽¹⁷⁾

It was also possible to notice that in some moments of TT sessions children reproduced in the doll situations similar to those experienced by them, sometimes using hospital terminology. Thus, through games, passive suffering becomes an active domain and traumatic episodes can be better mastered.^(2,15)

Authors highlight the importance of applying this instrument to make children more cooperative with the nursing staff. Before children were restless and tearful, and after the use of TT they interacted better with nurses.⁽¹⁸⁾

When children have the opportunity to represent the painful procedure in the toy, he or she goes from passive to active subject, making the toy an effective means to minimize stressful effects.⁽¹⁾

Children may be afraid of the nursing professionals as they associate their presence with procedures that may cause them some painful sensation.⁽¹⁹⁾ With the use of TT, children see it as a professional who not only performs painful activities, but also plays.⁽²⁰⁾

Pediatric nurses are one of the best professionals to use TT because of their knowledge and sensitivities to identify feelings and causes of stress.⁽¹⁵⁾

It is important to emphasize that the toy is a relevant form of communication and interaction between nurses and children. It should be an integral part of nursing care, since this professional knows better the needs of his client from the use of TT.⁽¹⁷⁾

When properly instructed through games, children learn about their illness and treatment and become more participatory. Thus, from the holistic view of hospital treatment, the use of TT provides children with acceptance, upbringing and learning in an environment previously considered new and terrifying.⁽¹⁶⁾

Conclusion

This study deepened the understanding of children's perception of venipuncture through TT

from the children's own perspective. It has been demonstrated how this care technology contributes to the minimization of procedure-related stress, as well as the improvement of interaction between children and nurses. This study gave voice to these children as subjects of care as the rupture of the technical centered vision favored children protagonism. From the children's speech feelings already expected emerged such as pain, fear and anguish, as well as coping and resilience strategies that permeate the experiences of invasive and painful interventions in childhood. By dramatizing the doll, handling hospital supplies, and figuring out the ultimate purpose, this imaginary world full of misconceptions has become a positive experience for both children and nurses. Interaction, based on games, allowed the interviewed children to verbalize about the perceptions concerning venipuncture. In addition, TT favored greater receptivity of these children to the nursing staff, as well as new procedures that may be performed during hospitalization. TT proved to be a channel for verbalization, interaction and bond strengthening, favoring children participation in their care. From this perspective, TT favors that the performance of pediatric nursing is centered on children and their family, because the nursing team is the professional category with the greatest contact with children, having an irreplaceable role in providing less traumatic care. The use of different strategies such as TT is able to create a communication and affection link between children and the nursing team, besides minimizing the impact of invasive procedures. It was concluded that this study made it possible to emphasize the importance of incorporating TT in the process of taking care of pediatric nursing, demonstrating its potential therapeutic effect on care. In addition, the results contribute to teaching by raising awareness and reflection on the importance and effectiveness of such therapy. For the research, this work contributes to the improvement of scientific knowledge about the use of TT as a technology that facilitates nursing care practices for the pediatric population.

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Collaborations

Barroso MCCA, Santos RSFV, Santos AEV, Nunes MDR and Lucas EAJCF contributed to the project design, data analysis and interpretation, article writing, relevant critical review of intellectual content and approval of the final version to be published.

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