

Therapeutic toy in nursing care in inhalation therapy with children: experience of mothers**Brinquedo terapêutico na assistência de enfermagem em terapia inalatória com crianças: experiência das mães****Juguete terapéutico en los cuidados de enfermería de terapia inhalatoria para niños: experiencias de las madres**

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Objective: to describe mothers' experiences regarding the use of therapeutic toys on their children during nursing care in inhalation therapy. **Methods:** descriptive, exploratory and qualitative analysis study, developed in an emergency care unit. Mothers who accompanied their children during inhalation therapy participated. Data collection took place between October 2018 and March 2019, through semi-structured interviews. The data was interpreted through Thematic Content Analysis. **Results:** 23 mothers participated, aged between 22 and 44 years old, 54% had a civil union with the child's father, 40% had completed secondary education, 55% were homemakers and 60% had a family income of one minimum wage. Two thematic categories were created: "*Toys as a relief from the tension caused by the procedure*" and "*Toys as a strategy for improving care*". **Conclusion:** the use of therapeutic toys from the mothers' perspective contributed to the treatment of their children, as they became calmer and safer when undergoing inhalation therapy.

Descriptors: Administration, inhalation; Child; Nursing care; Play and playthings; Child, preschool.

Objetivo: descrever as experiências de mães acerca do uso do brinquedo terapêutico em seus filhos durante a assistência de enfermagem na terapia inalatória. **Método:** estudo descritivo, exploratório e de análise qualitativa, desenvolvido em uma unidade de pronto-atendimento. Participaram mães que acompanhavam seus filhos durante a terapia inalatória. A coleta de dados ocorreu entre os meses de outubro de 2018 e março de 2019, por meio de entrevista semiestruturada. A interpretação dos dados se deu através de Análise Temática de Conteúdo. **Resultados:** participaram 23 mães, com faixa etária entre 22 e 44 anos, 54% viviam em união estável com o pai da criança, 40% possuíam ensino médio completo, 55% do lar e 60% tinham renda familiar de um salário mínimo. Foram elaboradas duas categorias temáticas: "*O brinquedo como alívio das tensões provocadas pelo procedimento*" e "*O brinquedo como estratégia para a melhoria da assistência*". **Conclusão:** o uso do brinquedo terapêutico na perspectiva das mães colaborou no tratamento dos filhos, uma vez que ficaram mais calmos e seguros ao realizar a terapia inalatória.

Descritores: Administração por inalação; Criança; Cuidados de enfermagem; Jogos e brinquedos; Pré-escolar.

Objetivo: describir las experiencias de las madres en el uso de juguete terapéutico con sus hijos durante los cuidados de enfermería de terapia inhalatoria. **Método:** estudio descriptivo, exploratorio y cualitativo realizado en una unidad de cuidados de urgencia. Las participantes fueron madres que acompañaron a sus hijos durante la terapia inhalatoria. Los datos se recogieron entre octubre de 2018 y marzo de 2019 mediante entrevistas semiestructuradas. Los datos se interpretaron mediante Análisis Temático de Contenido. **Resultados:** Participaron 23 madres, con edades entre 22 y 44 años, el 54% vivía en pareja de hecho con el padre del niño, el 40% habían concluido la secundaria, el 55% eran amas de casa y el 60% tenían un ingreso familiar de un salario mínimo. Se establecieron dos categorías temáticas: "*El juguete como alivio de las tensiones provocadas por el procedimiento*" y "*El juguete como estrategia para mejorar el cuidado*". **Conclusión:** desde el punto de vista de las madres, el uso de juguete terapéutico colaboró con el tratamiento de sus hijos, ya que quedaron más tranquilos y seguros cuando se sometían a la terapia inhalatoria.

Descriptores: Administración por inhalación; Niño; Atención de enfermería; Juego e implementos de juego; Preescolar.

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INTRODUCTION

Playing is an essential recreational activity for child development, acting as a way of adapting and expanding the child's relationships with the outside world so that they can face the feelings resulting from unpleasant and painful procedures or situations¹⁻².

Therapeutic Play (TP) is a strategy that supports children in reducing anxiety resulting from everyday situations caused by experiences and circumstances unusual for their age². TP promotes physical well-being and emotional relief from tensions caused by health problems typical of this vital cycle, ensuring adequate assistance for recovery³.

In the care practice offered to children, the nurse must establish a relationship and adequate communication, through TP, allowing the child to express feelings, illusions, desires based on lived experiences, as well as externalize the relationships and social roles internalized by them when representing situations while playing. The Brazilian Federal Nursing Council (*Conselho Federal de Enfermagem - COFEN*) regulated this activity through Resolution No. 0546/2017, which indicates the competence of the nursing team in using the TP technique in assisting children and families⁴.

The use of TP, in Emergency Care Units (*Unidade de Pronto Atendimento - UPA*), is a strategy that helps in the preparation of procedures, allowing the child to reorganize their emotions after experiencing a situation of illness⁵⁻⁶. This strategy can facilitate professional/user interaction and help carry out procedures in a humanized, less painful and more comfortable way for the child and family⁷. Regarding the child care offered in these health units, there is a predominance of acute diseases of the lower respiratory tract in children under the age of five. The highest incidence is of bronchial and alveolar infections, which are the cause of 90% of deaths from respiratory diseases⁵⁻⁸.

Inhalation therapy or administration by inhalation represents the main form of treatment for acute respiratory failure, and its appropriate use has been a factor for controlling these conditions⁷. This technique, however, can compromise medication delivery due to the child's anxiety and discomfort during the procedure⁹.

The use of TP to assist preschool aged children with respiratory problems seems to be useful to minimize obstacles resulting from inhalation therapy and provide maternal understanding of the procedure. Thus, this study aims to describe the experiences of mothers regarding the use of therapeutic toys on their children during nursing care in inhalation therapy.

METHODS

Descriptive, exploratory and qualitative data analysis study. This methodology focuses on the experience of relationships and the meanings that individuals attribute to certain phenomena, providing opportunities for reflection on acting, thinking and sharing with their peers based on lived reality¹⁰.

The research was carried out in an Emergency Care Unit (UPA), located in a municipality in the interior of the state of Minas Gerais, Brazil. This secondary care unit was chosen as the study site because it is the gateway to the tertiary service and is the only one in the city that served children and adolescents at the time of the research.

Mothers who accompanied their children during inhalation therapy participated in the study, according to the following inclusion criteria: being a mother, over the age of 18 and accompanying their preschool child between the ages of two and five years, for two or more inhalation therapy sessions in the aforementioned unit during the data collection period. Mothers who were unable to produce comprehensible narratives were excluded.

The participants were contacted with the help of the service's nursing team. Before starting the interview, the Free and Informed Consent Form (FICF) was presented in two copies and read together in a conversational manner and possible doubts were promptly clarified, highlighting the study's propositions and the importance of their participation. To evaluate the children's reaction during inhalation therapy before and after the use of TP, in this same unit, another investigation was developed with a quasi-experimental design, with a quantitative approach, with the technique of observation before and after the therapeutic intervention¹¹.

Data collection took place between the months of October 2018 and March 2019 through a semi-structured interview, divided into two parts: the first included sociodemographic data (age, marital status, education, profession and origin) and the second had the following open-ended questions: "*What did you think of preparing your child for inhalation therapy with the therapeutic toy?*", "*Did this preparation provide safety and comfort for your child?*", and they were also asked if they would like to say anything else.

The interviews were carried out individually in a private location at the UPA, with an average duration of 15 to 20 minutes, recorded on a digital voice recorder and later transcribed in full. The interviews ended when the speeches proved to be sufficient, reaching theoretical saturation¹².

The data was interpreted using the Thematic Content Analysis¹⁰ modality, according to the following steps: pre-analysis, which consists of exhaustive reading of the material collected from the interviews and in an organized sequence for formulating and reformulating the study

objectives. The second stage of the analysis was the exploration of the material, classification of the collected data into categories organized according to expressions, words or significant words. The third stage concerned the treatment of the results obtained and their interpretation¹⁰. The texts from the interviews were revised for spelling, without changing the essence. When presenting the results, the participants' statements were coded using the letter "E" followed by a sequential number to the interview carried out (E1...E26), according to chronological order.

Ethical aspects were respected, in accordance with the recommendations of Resolution 466/12 of the National Health Council. The research was approved by the Ethics Committee of the proposing Institution, under Opinion No. 1.547451 - CAAE 51995315.8.0000.5154.

RESULTS

23 mothers participated in the study, aged between 22 and 44 years old; 54% were in a civil union with the child's father, 40% had completed secondary education, 55% were homemakers and 60% had a family income of one minimum wage.

From the analysis of the speeches, various particularities about the experiences of mothers regarding the use of TP during their children's inhalation therapy were understood through the following thematic categories: "*The toy as a relief from the tensions caused by the procedure*" and "*The toy as a strategy for improving care*".

"The toy as a relief from the tensions caused by the procedure

In this category, the interviewees, when experiencing their child's suffering and anxiety regarding the procedure, highlighted that the use of TP was a source of relief:

[...] every time he has to inhale he gets angry, cries a lot [...] then you played a game with him and it made it a lot easier [...] you saw, he was calm. He didn't even cry, look, it was the first time this happened... interesting? Now look at him doing that on the doll [...]. (E11)

Every time she has to do inhalation it's a tragedy [...] she cries a lot [...] I suffer too... because she's sick and the crying makes it even worse [...] then when you started to play, she slowly became interested [...] then when she picked up the doll I thought and now [...] wow it worked [...] playing with the doll seems to have relieved her [...] it made a difference. (E18)

I thought it was good, it calmed my daughter down, she had been irritable since the morning, she hadn't eaten anything today [...] I thought: this isn't going to work very well [...] but you were great [...] she reacted very well, she played and wanted to [...] For me, it was very good [...] I understood that distracting the child is very good, better this way, right? [...] the child wins. (E6)

In the mothers' reports, after their children received guidance on inhalation therapy through TP, they appeared more collaborative during the procedure, maintaining a relaxed posture, feeling safer, indicating that this activity provided better acceptance of the procedure:

[...] You started talking to her slowly and playing with her, it even seems like she got better [...] It was easier for her to do the second time. This preparation provided her with safety and comfort. (E9)

He came into the UPA here throwing a tantrum, afraid that he was gonna get an injection [...] then I think his breathing would become more difficult [...] but today was interesting [...], he was entertained with you [...] with the game he got better [...] in the first inhalation a lot of medicine was lost and he struggled with his head a lot, it was done kind of by force. I really liked what you did [...]. (E20)

I thought it would be difficult for you to get close to him [...] he's shy, I think he's embarrassed. That's why I asked you to give me the doll and then I did it with him [...] I think it was easier for you [...] now he's even talking softly more [...] I think this game had always be done. (E22)

The participants reported that the use of TP was important to avoid making the child nervous or scared, in addition to promoting tranquility during the procedure, being positive in relieving tensions and fears that are caused by coming to the health service:

After the game, he was calm [...] at first when they got close to him I thought he was going to cry but no, you started getting closer [...] it was peaceful [...] for me, it was really good [...]. (E19)

For me it was very good [...] I understood that distracting the child to undergo treatment is very good. The inhalation must feel very bad [...] the noise, the vapor that comes out... it's bad [...] I think this game helped a lot, it helped her, I felt calmer [...] I think I was too anxious. (E2)

With the game you played, I noticed that he was calming down [...] relaxing [...] he seems to have forgotten that he is in the hospital [...] in the hospital, not in the UPA [...] for me it was very good , it's quite beneficial [...], I felt calmer, too [...]. (E13)

Mothers approve of preparing their child through TP, recognizing its benefits for both themselves and the children and understand that this is an effective tool to minimize the child's fear at the time of the procedure:

I noticed that after you played with her there was a good improvement, she stopped crying [...] it made a difference, I said look at the doll, she's not crying! [...] you have to act like a doll [...] So, she calmed down. [...] then I talked to her, explaining and she started doing the inhalation with the doll [...]. (E15)

When you started I thought it would be difficult [...] every time she has to inhale it is so dramatic [...] but when she picked up the doll I saw that it would work [...] she likes to play with a doll [...] I took the opportunity to explain if she stayed calm we could leave faster [...]. (E1)

[...] you arrived, approached with the doll and toys, he took a look [...] he started playing [...] I felt calm when he stopped crying, I felt safer [...], he got better... without crying, inhalation works better. It was good, it was nice... it made me realize that playing is good for her... I think it's good for all children, right... well, I liked it, very good. (E7)

They noticed an improvement in the child's clinical condition after the intervention with TP, and reported that the child became more collaborative because they knew what would happen to them:

It was very good because, after she was hospitalized, we had to keep poking her all the time with needles, all the time [...] Then she got scared, she was terrified [...] upset [...] nobody comforted her. [...] Then you got close, she saw the doll [...] at that age she likes to play with dolls [...] this made it easier for you [...] she got interested and started playing despite being still sobbing [...] it even seems like she is healed [...]. (E26)

[...] today after you played the game, she was very calm [...] she liked it, look, she's smiling [...] I think she'll want to take it home [...] For me, this preparation was better than inhalation [...] her breathing seems to have improved a lot. (E23)

It was good, I liked it [...]. When you got close, she was crying and sobbing, it seemed like she was gasping for air and stopped breathing, I thought she wouldn't want to play [...] You got close to her [...] she was interested because she had the doll. She likes to play with the dolls... After she did it to the doll, she calmed down [...]. The second inhalation was calmer. (E8)

The toy as a strategy for improving care

Mothers were able to perceive that the TP sessions offered to their children provided improvements in assistance, facilitating the execution of the procedure, becoming a differentiator in the way of assisting the child, from the mothers' perspective and providing more humanized care:

[...] I think it could always be like this [...] my son accepted it so well the game should be played everywhere [...] because it distracted my son [...] I was very satisfied with the result of this service. (E14)

[...] in the other service that I go to here in the city, they say that this is humanization [...] humanizing the service [...] that is why I believe that this improves the service [...]. (E17)

It was very good to prepare the child [...] and it improves anxiety [...] it's good, I liked it, very good [...] it was great. In my opinion, I think this preparation should always be done [...] it seems that the child improves faster [...] I liked it, I give it a ten, if I could I would give it an eleven, I would. (E24)

For mothers, the use of TP is something new in the unit, however, as it offers numerous benefits for the child and the assistance provided to them, they believe that it should be incorporated into all care units, with a view to promoting quality care:

This is new here, the last time I brought him here he didn't have this, so I think this is new. In other hospitals there is nothing like this [...] for me, it is important to entertain the child, it seems that the medicine goes in better, is more effective [...] This type of work has to be done all the time... the child stays quieter and calmer. (E5)

Ah.... for me, this is new [...] because not all places have this. At least I didn't know. This is from UPA [...]. I think this could always exist, that's good [...]. If everywhere there is a concern about distracting the child, prepare the child to receive the inhalation. (E10)

If it was good [...] it was very good [...] for her it was good for me [...] I'm her mother and I end up suffering too [...] because she's sick and crying makes it even worse [...] Just having her play with the doll relieved me [...]. Her handling and playing with the doll made a difference. I go home calmer [...]. (E21)

DISCUSSION

The mothers' reports showed that the use of TP in inhalation therapy made the children more relaxed, calmer, provided tension relief and better acceptance of the procedure. The use of games and toys enables better interaction between the child and the environment in which the procedure will be carried out. Therefore, in addition to having a recreational purpose, TP also generates relaxation for the child during the assistance provided¹³. Participants pointed out significant benefits of TP for both themselves and their children. Studies carried out with companions showed that the activity of playing for children affected by an acute or chronic disease process during care favors acceptance of the proposed treatment procedure, showing improvements in symptoms of anxiety and discomfort caused by the health condition¹⁴⁻¹⁵.

Mothers were able to feel safer and calmer when they realized that their children were calmer and accepting treatment. Furthermore, they understood that TP takes the focus away from the child, making it easier to carry out the procedure in the care environment in which they are located. Studies that deal with the effects of TP on care indicate that its inclusion in nursing care for children minimizes or even eliminates traumatic events produced by painful or uncomfortable procedures generated by the illness process, in addition to facilitating interaction between the child, companions and health professionals^{7,14-15}.

In a systematic review on the effects of TP on hospitalized children in Turkey, most studies highlighted as positive points the children's adaptation to the environment, improved communication with health professionals and reduction of stressful and painful effects¹⁶, which corroborates the mothers' report.

Another point indicated by mothers is the collaboration of children during the procedure, reinforcing the importance of explaining in a playful way what will be done to them in order to minimize fear of the procedure and understanding of the situation experienced. Research indicates that TP allows children to better understand the care provided and reduces

the stress caused by the procedure^{1,7,17-18}. Playful activity contributes to atraumatic care, as a way of minimizing the suffering caused by other experiences resulting from health problems, contributing to the maintenance of physical and emotional balance^{1,10,14-15}.

In a study carried out with pre and post-operative children in Hong Kong, explaining the procedure through playful activities was essential for them to feel calmer and understand the current situation, as reported by their parents, even if they had to stay longer in the hospital due to the intervention¹⁹.

The participants highlighted that the use of TP in inhalation therapy results in benefits related to the delivery of the medication. Based on their perceptions, there were no significant losses, as the children remained calmer. Studies^{17,20,21} with preschool-aged children during inhalation therapy show the occurrence of loss of medication due to the child's agitation, showing that the insertion of TP in preparation for the procedure acts to complement the treatment, helping the child to expand their adaptation to the procedure, relieving anxiety symptoms and increasing their satisfaction¹⁷. A study carried out by nurses showed the effectiveness of TP in the immediate post-intervention of inhalation therapy, as it guarantees the delivery of the medication²⁰. The use of TP as an educational strategy for the use of inhalers by preschoolers indicates improvements in the clinical picture, demonstrating the importance of appropriate information for this age group^{17,21}.

Participating mothers recommend TP in child care health services as a way of qualifying the assistance provided, in addition to considering it relevant in communication and interaction with health professionals and as a facilitator of care. In the participants' recognition of humanized care, it was pointed out that TP provides a more pleasant and welcoming environment, also indicating this tool as a differentiator in the care provided to children and its potential therapeutic effect. This corroborates another study in which family members were able to identify changes in their children's behavior after therapeutic intervention, perceiving this practice as positive in the care provided to the child²².

The use of TP involves bringing agents of the care system closer to family members and children, through effective communication and emotional support, considering the biopsychosocial and spiritual needs of the mother-child binomial, for more humanized assistance^{14,23}.

CONCLUSION

Through this study, it can be stated that the experience of mothers regarding the use of TP during nursing care in their children's inhalation therapy indicated that this strategy

contributed to the child's treatment in order to provide security in the face of the treatment, to overcome anxiety and other fears inherent to the procedure, helping in interaction and establishing bonds between mothers, children and nursing staff.

The mothers also pointed out that the use of TP is a factor in the quality of the service provided by the nursing team, which makes the care of their children humanized. TP, as a differentiated strategy, is capable of minimizing the impact of procedures, such as inhalation therapy, highlighting the importance of incorporating this strategy into care due to its potential therapeutic effect on child care.

This study reinforces the need for implementation of TP by health professionals in pediatric care settings, as the use of this strategy directs assistance based on care, respect and interactivity with the child and family, with emphasis on playing, positively affecting the child health care.

The findings represent a specific context, as they were limited to describing the maternal experience regarding the use of TP during nursing care in inhalation therapy for their child with respiratory discomfort in an emergency care unit. Therefore, further studies are suggested to verify the use of TP in other contexts and with other types of procedures.

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Divanice Contim contributed to the conception of the study and its design, data collection and analysis, writing and revision. **Isabella Luiz Resende** collaborated in data collection and analysis, writing and revision. **Jesislei Bonolo do Amaral Rocha** participated in revision. **Maria Paula Custódio Silva** collaborated in the conception of the study and its design, writing and revision. **Mariana Torreglosa Ruiz** and **Raquel Pan** contributed to writing and revision.

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