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ORIGINAL ARTICLE

Instructional song in nursing care for hospitalized children in preparation for venipuncture

Canção instrutiva no cuidado de enfermagem a crianças hospitalizadas no preparo para punção venosa

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ABSTRACT

Objective: To assess children's behavior in venipuncture with musical intervention using an instructional song. **Method:** Case-control study including children aged between 4 and 11 years. Data collection was performed using a sociodemographic form, an instructional song approach presented live by the bedside, and assessment of the observation scale of behavioral distress. Variables were analyzed using the Student's t-test, chi-square and Fisher's exact test. All analyzes were performed using the Data Analysis and Statistical Software (STATA®), version 14.0 with a 5% significance level. **Results:** The use of music favored the reduction of the screaming variable (p=0.049). The search for emotional support was greater without the use of music (p=0.019). Overall, the song reduced concurrent behaviors. **Conclusion:** The interaction between the child and the song reflected a sensitive and adaptable instructional care to the child's world, revealing itself as a technology for pediatric nursing.

Descriptors: Music; Nursing Care; Pediatric Nursing; Child, Hospitalized; Education Technology.

RESUMO

Objetivo: Verificar o comportamento da criança na punção venosa com intervenção musical usando uma canção instrutiva. **Método:** Estudo caso-controle; incluídas crianças de 4 a 11 anos. A coleta foi realizada pela ficha sociodemográfica, abordagem com canção instrutiva apresentada ao vivo, beira leito, e avaliação da escala de observação de distresse comportamental. As variáveis foram analisadas com Teste-T de Student, Qui-quadrado e Exato de Fisher. Todas as análises foram realizadas no programa Data Analysis and Statistical Software (STATA®), versão 14,0, com nível de significância de 5%. **Resultados:** A utilização da música favoreceu a diminuição da variável gritar (p=0,049). A busca por suporte emocional foi maior sem o uso da música (p=0,019). De modo geral, a canção reduziu os comportamentos concorrentes. **Conclusão:** A interação entre a criança e a canção repercutiu um cuidado instrucional sensível e adaptável ao mundo infantil, revelando-se uma tecnologia para a enfermagem pediátrica.

Descritores: Música; Cuidados de Enfermagem; Enfermagem Pediátrica; Criança Hospitalizada; Tecnologia Educacional.

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INTRODUCTION

Music, in its essence, directly affects people's subjectivity. In children, it presents their imagination with beautiful singing, making them dive into a sea of tenderness.

Ludic care in nursing improves children's care and favors creative, spontaneous and instructional involvement. After music is inserted at various times in human beings' life, it becomes an important instrument of care in the pediatric hospital setting[1]. It is also applicable in different age groups and enables an effective promotion of wellbeing in the hospital[2].

The use of a non-verbal technique that facilitates communication and understanding of the situation experienced is necessary for children's expression of their emotions and adaptation to the new environment. In addition, ludic care benefits children's physical, cognitive and social development[3].

The hospital environment is generally unknown to children and their families, both in its physical aspect and in its routine with specific norms and rules, and these conditions can make it difficult to cope with the disease[4]. Hospitalization is stressful for children and can lead to future trauma, often with unpredictable consequences[5].

Musical intervention brings both physiological and psychological benefits to individuals of any age group and can be an effective resource to qualify the care of hospitalized children[6].

Article 1 of Resolution number 546 of 2017 of the Federal Council of Nursing (Portuguese acronym: COFEN) [7] states that the use of toys/therapeutic toy techniques in the care of hospitalized children and the family is at the discretion of nursing staff working in the pediatric department. The National Council for the Rights of Children and Adolescents (Portuguese acronym: CONANDA) emphasizes that hospitalized children have the right to appropriate knowledge about their illness, the therapeutic and diagnostic care to be used and prognosis, respecting their cognitive phase, and to receive psychological support when necessary[8].

The fact that venipuncture is a frequent practice in nursing care that causes pain and trauma processes in children reinforces the need for specific treatments to alleviate the negative effects[9].

Due to all problems of hospitalization, the nurse — as an integrating part of the hospital team at the service of the sick individual — must understand all situations that children go through in order to help them adapt to the hostile hospital environment and minimize the emotional trauma arising from children's hospitalization[10].

Based on these statements, the hypothesis that the instructional children's song can contribute to their acceptance of peripheral venipuncture nursing care emerged.

Therefore, the aim of the study is to assess the child's behavior in the venipuncture procedure using the instructional children's song. The study will provide the nursing team with knowledge about use of the instructional song, contributing to comprehensive care.

METHOD

This is a case-control study. Children hospitalized in the child care sector of the University Hospital of the Universidade Federal do Maranhão (HUUFMA), with 90 beds, participated in the study. This unit offers clinical and surgical care in neurology, nephrology, cardiology, gastroenterology, pulmonology, orthopedics, infectious and parasitic diseases. Data collection took place in August, September and October 2019.

The choice of children met the following inclusion criteria: school aged children from 4 to 11 years; who underwent the venipuncture procedure upon admission to start drug treatment, preparation for surgery and exchange for expiration or phlogistic signs. Children with mental, hearing and visual impairment and those under the influence of anesthetics were excluded.

The sample calculation was performed considering a 50% reduction in concurrent and non-concurrent behaviors in the case group (intervention); 5% confidence level; and 85% test power. The minimum size established was 14 children in each group, totaling 28 participants. This number is justified by the blockage of beds in the data collection sector, an aspect that reduced the number of children of the study. Random selection was adopted with equal probability of selection.

The study was conducted with a presentation to the nursing team, the patient's family members and the hospitalized child. Parents or guardians were asked to sign the Informed Consent Form (IC), while children signed an assent form.

The instruments used for data collection were the sociodemographic form, the children's instructional song about venipuncture, entitled "Veia colorida" (*Colorful vein)* (Chart 1), sung and played using the ukulele instrument, and the Observation Scale of Behavioral Distress (OSBD)[11].

The first approach to children was made with the comic book-style assent form. The music started before the venipuncture, and it was not requested neither suggested that the child sang along with the interventionist. The intervention was performed only once without repetition.

Regarding important information in the report of music intervention, the following criteria were followed: reason for choosing the song and quality: the composition was created from the details and order of the venipuncture technical procedure by clarifying the child as to instruments used and the pain resulting from needle insertion in a singsong way in order to draw attention and induce greater collaboration;

Chart 1. Instructional song used in the case group before venipuncture among children admitted to the Maternal Infant University Hospital of the Universidade Federal do Maranhão. São Luís, MA, 2019.

Title: *Veia colorida* (Colorful vein)	Author: Tamara dos Santos da costa
Tone: C major	Rythym: 130 beats per minute, quarter beat
YouTube link: https:/youtu.be/Obw1KYYQAKk	
A veia colorida é verde, rosa e azul/ Olhe no seu bracinho e toque com seu dedinho/ A veia colorida corre sangue azul/ Faz desenho de emoção, deixa forte o coração/ Preste muita atenção a enfermeira vai explicar/ Será que você vai ajudar?/ É a injeção do amor, remédio do doutor/ Para brincar sem sentir dor/ Com o garrote vai apertar, apalpar até achar/ E com uma agulha vai picar/ Ai ai ai/ Vai doer, mas vai passar, devagarinho para não chorar/ Com o curativo acabar [Parte falada] Vamos ser forte amiguinho! Quer que eu explique mais um pouquinho? Depois vamos dançar e brincar juntinhos! Combinado? The colorful vein is green, pink and blue/ Look at your little arm and touch it with your little finger/ The colorful vein runs blue blood/ Draws emotion, makes the heart strong/ Pay attention, the nurse will explain/ Will you help?/ It's the injection of love, the doctor's medicine/ To play without feeling pain/ With the tourniquet I will press it, feel until I find it/ And with a needle it will prick/ Ouch ouch ouch/ It will hurt, but it will go away, slowly not to cry /With the dressing it will end [Spoken part] Let's be strong little buddy! Do you want me to explain a little more? Then let's dance and play together! Deal?	

intervention content: waiting for the child's need for a venipuncture. When confirmed, the approach was started, adapting to the context of the nursing team's service at times of peripheral venous access change, minutes before referral to the operating room or when children with chronic diseases were hospitalized only for administration of intravenous medications; choice of music: pre-selected and customized from a child's perspective for better understanding and fostering playfulness through the lyrics. Criteria recommended by Robb et al.[12].

The music was played live before the procedure, using the ukulele soprano instrument at a volume between 35 and 45 decibels with a calm and clear voice, facial expressions of joy, attention and sadness (during the excerpt "*ai ai ai*"/"ouch ouch ouch"), in a simple and engaging melody.

The melody[13], in turn, is defined as a succession of musical sounds with a certain rhythmic accentuation that when accompanied by chords (successive sounds), is configured as a harmonic melody. Thus, the melody of the song presented on the YouTube link (Chart 1) represents a harmonic melody with a short/simple melodic-rhythmic structure, ascending phrase in quater beat.

The strategies to ensure the effective execution of the collection were based on the daily relationship with the nursing staff, who had the important role of communicating the time of venipuncture according to the child's need and presenting the study to parents, always making themselves available and collaborative for data collection, as well as for children, since the research collection was explained through a comic book with colored pictures read by the interventionist in an expressive way. At the time of puncture, with the form in hand, the same interventionist checked the behaviors presented before and after the procedure.

The collection was performed in wards with between two and five beds per room, without curtains. The ambient sound was limited only to low volume family conversations that did not interfere with the child's attention during the musical intervention.

The behavioral categories presented by the child were divided into two classes: non-concurrent behaviors, defined as actions that facilitate or do not create obstacles to the performance of the invasive procedure; and concurrent behaviors, defined as those that somehow hinder, delay or prevent the performance of the invasive procedure by the health professional[11].

These behavioral categories were described in the study[11] on the analysis of the behavior of children exposed to venipuncture for chemotherapy, as reported in the study by Oliveira et al[14], in which the behavior of children victims of burns exposed to dressings without sedation in the ward was analyzed.

Concurrent behaviors are: physically assaulting; whining; crying; behaving nervously; running away; shouting; moving until immobilization; protesting.

Non-concurrent behaviors are: helping to carry out the procedure; seeking emotional support; speaking; verbally responding; information seeking.

The registration of categories contained in the scale was done every 15 seconds in a time sampling system in which they are marked as present or absent.

In order to test the hypothesis and the variables, the collection was performed with two groups: case and control.

The selection of children for the investigation started by the control group, as wards are collective, thereby avoiding classification errors. Then, children from the case group were investigated.

In the control group, only the sociodemographic form was completed and the OSBD scale was applied 15 seconds before and 15 seconds after the puncture without the song presentation.

In the case group, the sociodemographic form was completed and, before peripheral venipuncture, the instructional children's song was presented. Subsequently, the OSBD scale was applied 15 seconds before and 15 seconds after the puncture.

Categorical variables were described using absolute and relative frequencies. Quantitative variables were described by mean and standard deviation, according to the normality of data assessed using the Shapiro Wilk test.

The Chi-square or Fisher's exact tests were used to characterize the categorical variables between groups at the beginning of the study. Quantitative variables were evaluated with Student's T-test for independent samples. This same approach was used to assess these variables at the end of the study.

In the evaluation between the initial and final moments, the Chi-square and Fisher's exact tests were used. All analyzes were performed using the Data Analysis and Statistical Software (STATA®) version 14.0. The significance level was set at 5% (p-value<0.05).

The study complied with requirements of Resolution number 466/2012 of the National Health Council on the protection of study participants. Ethical procedures preserved anonymity, autonomy and risk reduction, in addition to other precepts contained in the aforementioned resolution. It was approved by the Research Ethics Committee of the University Hospital of the Universidade Federal do Maranhão under opinion number 3.462.850, on July 19, 2019.

RESULTS

The study sample consisted of 28 children, 14 in each group. As for the characterization of subjects in the groups in relation to sociodemographic data (Table 1), there were few differences in the gender variable, as the control group had equivalent percentage (50%) of female and male children, and in the case group, most were female (57%); the mean age of the two groups was seven years; there was variation in terms of education, as the 3rd grade represented 28.57% of the control group, while the 2nd grade represented 21% of the case group. Most children in both groups had previous hospitalizations (92.86%), and all 28 (100%) children had experiences with peripheral venipuncture.

Table 2 shows the reduction in concurrent behaviors with the instructional song in the first 15 seconds of venipuncture:

Table 1. Sociodemographic characteristics of children admitted to the Maternal Infant University Hospital of the Universidade Federal do Maranhão (n=28). São Luís, MA, 2019.

Variables	Study groups				p-value
	Without the instructional song (control)		With the instructional song (case)		
	n	%	n	%	
Sex					0.750[q]
Female	7	50.00	8	57.14	–
Male	7	50.00	6	42.86	–
Age (years)					0.785[t]
Mean ± Standard deviation	7.21 ± 1.84		7.00 ± 2.25		–
Schooling					0.821[e]
Preschool	3	14.28	4	28.57	–
1st to 3rd grade	9	64.29	6	42.86	–
4th to 6th grade	3	21.43	4	28.57	–
Previous admissions					1.000[e]
Yes	13	92.86	13	92.86	–
No	1	7.14	1	7.14	–
Previous puncture experiences					–
Yes	14	100.00	14	100.00	–

q: Chi-square; e: Fisher's exact; t: T test for independent samples.

Table 2. Evaluation of the Observation Scale of Distress Behavior scale seconds before and after venipuncture in the groups regarding concurrent behaviors of children hospitalized at the Materno Infantil University Hospital of the Universidade Federal do Maranhão (n=28). São Luís, MA, 2019.

Concurrent behaviors	15 seconds before				p-value	15 seconds after				p-value
	Without instructional song (control)		With instructional song (case)			Without instructional song (control)		With instructional song (case)		
	n	%	n	%		n	%	n	%	
Physically assaulting										0.481[e]
Yes	0	–	0	–	–	2	14.29	0	–	–
No	14	100.00	14	100.00	–	12	85.71	14	100.00	–
Whining					0.252[e]					0.257[e]
Yes	10	71.43	6	42.86	–	9	64.29	5	35.71	–
No	4	28.57	8	57.14	–	5	35.71	9	64.29	–
Behaving nervously					0.077[e]					0.705[q]
Yes	13	92.86	8	57.14	–	6	42.86	7	50.00	–
No	1	7.14	6	42.86	–	8	57.14	7	50.00	–
Running away					0.481[e]					0.241[e]
Yes	2	14.29	0	–	–	2	14.29	0	–	–
No	12	5.71	14	100.00	–	12	85.71	14	100.00	–
Screaming					0.165[e]					0.049[e]
Yes	5	35.71	1	7.14	–	4	28.57	0	–	–
No	9	64.29	13	92.86	–	10	71.43	14	100.00	–
Moving until immobilization					0.326[e]					0.241[e]
Yes	4	28.57	1	7.14	–	2	14.29	0	–	–
No	10	71.43	13	92.86	–	12	85.71	14	100.00	–
Protesting					0.648[e]					0.596[e]
Yes	4	28.57	2	14.29	–	3	21.43	1	7.14	–
No	10	71.43	12	85.71	–	11	78.57	13	92.86	–

q: Chi-square; e: Fisher's Exact.

"whining" with 42.86%; "behaving nervously" with 57.14%; "screaming" with 7.14%; "moving until immobilization" with 7.14%; "protesting" with 14.29%.The behavior expressed in the form of children's screams was absent in the case group (with presentation of instructional song), demonstrating the importance of presenting information in a ludic manner for reducing this behavior (p=0.049).

The variable "seeking emotional support" showed a statistically significant difference (p=0.018) in the first 15 seconds before the venipuncture procedure without the instructional song, showing that most children were insecure and afraid of the procedure.

Non-concurrent behaviors (Table 3) showed differences in the following items: without the instructional song, children did not "helping to carry out the procedure" with a percentage of 64.29 and 50%, 15 seconds before and 15 seconds after, respectively; "seeking emotional support" occurred more often when the song was not presented, with 64.29 and 42.86%, with a statistically significant association (p=0.019).

After 15 seconds of venipuncture with the instructional song, there was a decrease in the item "speaking" 23.08%, and an increase in the behaviors "verbally responding" and "information seeking" with 57.14 and 14.20%, respectively. Table 4 shows significance in the variable "behaving nervously" in the group without the song, decreasing at the second moment of the study (p=0.013). This datum is related to pain relief after the puncture, a moment of comfort with

Table 3. Evaluation of non-concurrent behaviors of the Observation Scale of Distress Behavior scale between groups 15 seconds before and after venipuncture in children admitted to the University Hospital of Universidade Federal do Maranhão (n=28). São Luís, MA, 2019.

Non-concurrent behaviors	15 seconds before				p-value	15 seconds after				p-value
	Without instructional song		With instructional song			Without instructional song		With instructional song		
	n	%	n	%		n	%	n	%	
Assisting in performance of procedure					0.165[e]					0.103[e]
Yes	9	64.29	13	92.86	–	7	50.00	12	85.71	–
No	5	35.71	1	7.14	–	7	50.00	2	14.29	–
Seeking emotional support					0.018[e]					0.209[e]
Yes	9	64.29	2	14.29	–	6	42.86	2	14.29	–
No	5	35.71	12	85.71	–	8	57.14	12	85.71	–
Speaking					1.000[e]					0.673[e]
Yes	7	50.00	8	57.14	–	5	38.46	3	23.08	–
No	7	50.00	6	42.86	–	8	61.54	10	76.92	–
Verbally responding					0.648[e]					0.120[e]
Yes	2	14.29	4	28.57	–	1	7.14	8	57.14	–
No	12	85.71	10	71.43	–	13	92.86	6	42.86	–
Information seeking					1.000[e]					1.000[e]
Yes	2	14.29	1	7.14	–	1	7.14	2	14.29	–
No	12	85.71	13	92.86	–	13	92.86	12	85.71	–

e: Fisher's Exact.

care from the nursing team and support from the family caregiver close to the child.

The percentages of non-concurrent behaviors were higher in the group with the song compared to the group without the song. Thus, the influence of music on children's behavior was evident during data collection, even more when instructed with an easy and playful language.

DISCUSSION

The instructional song presented in this study as part of the musical nursing intervention collaborated positively with regard to assimilation and accommodation to the invasive care of venipuncture. Thus, it answered the study question for understanding the benefit of the song for hospitalized children.

It is understood that the application of the instructional song to prepare hospitalized children before the peripheral venipuncture procedure develops a grounded perspective in nursing care with regard to child cognitive development, since music directly influences their intelligence, as it opens doors to the outside world through the act of experimentation[15].

It is known that children's age and stage of cognitive development are relevant aspects and need to be considered in the learning process. In this study, the average age of children was seven years old. According to Piaget[15], children of that age are in the preoperative development stage and through symbology and language, they are able to build mental schemes from the subject (child) and object (reality-venipuncture) interaction by transforming an object (venipuncture) into something pleasurable for them. In this perspective, the musical intervention with the instructional song allowed children to transform the object's mental images (venipuncture), favoring the adaptation of knowledge (resulting from assimilation vs. accommodation) demonstrated by the behavior, especially of not screaming. The opposite happened in the group of children who did not receive the intervention with the song, since the search for emotional support was greater, reaffirming the adaptability provided by the music.

Screaming is one of the first sound experiences produced by the speaking being and this sound, which once was a meaning, returns at the moment of extreme helplessness in pain[16]. Pain only exists after the unconscious has been marked

Table 4. Evaluation of the Observation Scale of Distress Behavior scale between the two groups with and without the song, regarding concurrent behaviors in children admitted to the Maternal Infant University Hospital of the Universidade Federal do Maranhão (n=28). São Luís, MA, 2019.

Concurrent behaviors	Without instructional song (control)				p-value	With instructional song (case)				p-value
	15 seconds before		15 seconds after			15 seconds before		15 seconds after		
	n	%	n	%		n	%	n	%	
Physically assaulting					0.241[e]					
Yes	0	–	2	14.29	–	0	–	0	–	–
No	14	100.00	12	85.71	–	14	100.00	14	100.00	-
Whining					1.000[e]					0.699[q]
Yes	10	71.43	9	64.29	–	6	42.86	5	35.71	–
No	4	28.57	5	35.71	–	8	57.14	9	64.29	–
Behaving nervously					0.013[e]					0.705[q]
Yes	13	92.86	6	42.86	–	8	57.14	7	50.00	–
No	1	7.14	8	57.14	–	6	42.86	7	50.00	–
Running away					1.000[e]					
Yes	2	14.29	2	14.29	–	0	–	0	–	–
No	12	5.71	12	85.71	–	14	100.00	14	100.00	–
Screaming					1.000[e]					1.000[e]
Yes	5	35.71	4	28.57	–	1	7.14	0	–	–
No	9	64.29	10	71.43	–	13	92.86	14	100.00	–
Moving until immobilization					0.648[e]					1.000[e]
Yes	4	28.57	2	14.29	–	1	7.14	0	–	–
No	10	71.43	12	85.71	–	13	92.86	14	100.00	–
Protesting					1.000[e]					1.000[e]
Yes	4	28.57	3	21.43	–	2	14.29	1	7.14	–
No	10	71.43	11	78.57	–	12	85.71	13	92.86	–

e: Fisher's Exact.

by a traumatic situation, and the "repetition" of this affect surfaces every time the screaming presents itself[16]. Thus, in venipuncture, an invasive procedure performed several times, screaming expresses a present pain, returning to the sender's ears to awaken the memory of pain.

The use of music to control pain contributes to care aimed at physical, emotional and social integrality, thus promoting a better quality of care[17].

Music is a succession of articulated sounds capable of accelerating emotional non-verbal responses, converging to points/moments of tension, instability, rest and resolutions[18]. At the time of this study, the instructional musical experience induced psychological aspects of wellbeing that interfered in the area of conflict represented by pain. In addition, the song has a simple melody with intervals in C Major, musical characteristics similar to lullabies, which favors the transmission of tranquility and affection, and evokes memories of maternal protection[13], for example.

Another relevant aspect is the cognitive perception developed with the instructional song in this study, corroborating the fact that playfulness is fundamental in teaching-learning. Music facilitates memorization, stimulates the sensorimotor process and also brings pleasure to children[19]. In the meantime, the benefits in pediatric nursing care from a planned, ludic-engaged perspective and adapted to the reality and needs of hospitalized children are deemed important, as they improve the receptivity of children in terms of acceptance and understanding of procedures. Although the application of care does not need to be done exclusively by the nurse, the presence of the nursing team during this procedure is extremely important because they

provide direct assistance to children, thereby enabling greater interaction between the entire group[20].

In the literature, there are few studies on instructional music, unlike therapeutic toy, in which the instructional technique is the most used and allows children to assimilate, prepare, and participate in the procedure to be performed[21]. The instructional song proved to be an important factor in the experience of children, who became more cooperative, as they assimilated how the venipuncture procedure is performed and its need for their recovery and, consequently, their discharge to return home.

Psychological support is of paramount importance at this time of invasive hospital devices that cause pain. In children's hospitalization, the impact of the health crisis on children and their families is very complex and individual, but some of the psychological suffering of both children and their family can be minimized through strategies[22].

In fact, apparently simple care assumes great relevance, as it contributes to better coping with the difficult experience that hospitalization represents for children and their family. The song "*Veia colorida*" provided significant moments of affection, tenderness and joy for the children who experienced it during the preparation for venipuncture, creating a space for coping and collaboration.

The biopsychosocial impact of hospitalization on children interferes with their recovery. Thus, the use of ludic resources (drawings, playing, games and storytelling) makes them more serene and confident for accepting their disease treatment[23]. The importance of a unique care for this audience requires awareness and goes beyond technicality, as children need symbology, play, dramatization, as clearly observed in this study given the contribution of music in nursing care.

During data collection, the nursing team was sensitized by the influence of the explanation of the procedure — in advance and with use of a song — on children's behavior, resulting in greater collaboration with the team during its performance. It was also noticed that training on the nursing approach related to preparing children for venipuncture using the musical intervention with instructional song is necessary.

The acceptance of families and children who participated in the study was positive and active in the data collection process, as they showed themselves attentive and curious. A limitation of the study was the bed blocking that occurred during collection, which reduced the number of hospitalizations and puncture frequencies. However, the collection was completed successfully.

The instructional song interferes in the behavior of children — who many times, already have fear and traumas — because it explains the procedure by singing what will be done. Thus, during collection, satisfaction with the explanation was perceived, as well as a higher level of fear when there was no information about the procedure to be performed.

CONCLUSION

The musical intervention influenced the behavior of participants and was found in two of them: "screaming" (decreased with music) and "seeking emotional support" (increased without the music).

However, it is understood that the song is part of the musical nursing intervention, which encompasses intentionality and the way it is performed. The answers through this intervention depend on the individuality of each child and the nurse, that is, the experiences produced are specific to each subject and do not depend on the quality of the music or the level of performance.

In this study, the instructional song led to children's interaction with music, providing meaning and respect for their pain, making them more receptive. It also provided moments of awareness of the importance of venipuncture and more special care, paying attention to the needs of an early preparation. With this understanding, the proposed instructional musical intervention reveals itself as a technology for comprehensive care to hospitalized children undergoing a venipuncture procedure.

Therefore, a greater number of studies relating the behavior of hospitalized children with the use of instructional songs is expected, since this is a low-cost, non-pharmacological and non-invasive intervention that offers benefits for children, family and nursing staff. The validation of this product is also required, so that it can be used by any nursing professional who wants to care for hospitalized children with more awareness and sensitivity, performing systematized and humanized care.

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