

Recreational Nursing Interactions for Children with Brain Disability

Interações Recreativas da Enfermagem para Crianças com Deficiência Cerebral
Interacciones de Enfermería Recreativa para Niños con Discapacidad Cerebral

RESUMO

Objetivo: Este artigo tem por objetivo relatar a experiência vivenciada por acadêmicos de Enfermagem nas interações recreativas com crianças com deficiência cerebral atendidas na brinquedoteca hospitalar, destacando os benefícios observados para o bem-estar e a qualidade do tratamento dessas crianças. **Método:** Trata-se de um estudo de natureza qualitativa descritiva, no formato de relato de experiências abordando as vivenciadas extensionistas no projeto Brincar - o melhor remédio, do curso de enfermagem da Universidade do Estado de Mato Grosso – UNEMAT. **Resultados:** observou-se uma resposta positiva das crianças às atividades, evidenciada pelo aumento do engajamento, da expressão afetiva e pela diminuição de comportamentos de ansiedade e resistência ao tratamento. **Conclusão:** A experiência extensionista desenvolvida no Projeto Brincar, evidencia que as intervenções recreativas planejadas podem contribuir para o bem-estar e favorecer a adaptação de crianças com neuropatias durante a internação hospitalar.

DESCRIPTORIOS: Criança com deficiência; Paralisia Cerebral; Lúdico; Hospitalização.

ABSTRACT

Objective: This article aims to report the experience of nursing students in recreational interactions with children with cerebral palsy attending the hospital playroom, highlighting the observed benefits for the well-being and quality of treatment of these children. **Method:** This is a descriptive qualitative study, in the form of an experience report addressing the experiences of extension students in the "Play - the best medicine" project, from the nursing course at the State University of Mato Grosso – UNEMAT. **Results:** A positive response from the children to the activities was observed, evidenced by increased engagement, affective expression, and a decrease in anxiety and resistance to treatment. **Conclusion:** The extension experience developed in the "Play" Project shows that planned recreational interventions can contribute to the well-being and promote the adaptation of children with neuropathies during hospital stays.

DESCRIPTORS: Child with a disability; Cerebral palsy; Playful learning; Hospitalization.

RESUMEN

Objetivo: Este artículo tiene como objetivo informar sobre la experiencia de estudiantes de enfermería en interacciones recreativas con niños con parálisis cerebral que asisten a la ludoteca del hospital, destacando los beneficios observados para el bienestar y la calidad del tratamiento de estos niños. **Método:** Se trata de un estudio cualitativo descriptivo, en forma de informe de experiencia, que aborda las vivencias de estudiantes de extensión en el proyecto "El juego: la mejor medicina", de la carrera de enfermería de la Universidad Estatal de Mato Grosso (UNEMAT). **Resultados:** Se observó una respuesta positiva de los niños a las actividades, evidenciada por una mayor participación, expresión afectiva y una disminución de la ansiedad y la resistencia al tratamiento. **Conclusión:** La experiencia de extensión desarrollada en el proyecto "El juego" demuestra que las intervenciones recreativas planificadas pueden contribuir al bienestar y promover la adaptación de los niños con neuropatías durante su estancia hospitalaria.

DESCRIPTORIOS: Niño con discapacidad; Parálisis cerebral; Aprendizaje lúdico; Hospitalización.

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INTRODUCTION

Childhood is a phase marked by intense physical, cognitive, and emotional development processes, requiring healthcare professionals to have a sensitive understanding of its peculiarities. In this context, play takes on an essential role, not only as a right enshrined in Article 31 of the United Nations Convention on the Rights of the Child, but also as a therapeutic and emotional expression tool fundamental to children's well-being, which must be preserved and respected. For children, play is a form of communication and understanding, as their symbolic universe is transformed into reality through toys and games. Children communicate through playfulness, which is their form of expression^{1,2}.

During hospitalization, the playful routine is often interrupted, as children are placed in an unfamiliar environment, far from their families and subjected to often painful and invasive procedures. This condition tends to generate fear, insecurity, and resistance to treatment, requiring the nursing team to employ care strategies that promote acceptance, bonding, and communication^{2,3}.

Among hospitalized children, those with special health needs (CRIANES) stand out, a group that includes those living with neurological disabilities, such as cerebral palsy—the leading cause of motor disability in children³. Such conditions require expanded care that addresses not only clinical management but also emotional and social aspects. The use of recreational activities by nurses contributes to the inclusion of these children, favoring their adaptation to the hospital environment and adherence to treatment⁴.

From this perspective, play should be recognized as an integral part of the care plan for hospitalized chil-

dren and should be used by nurses as a strategy to approach clients, reduce anxiety, promote bonding, and provide care guidance⁴. Playful activities enable understanding of the hospitalization experience from the child's perspective, promote therapeutic communication, and assist in preparing for procedures, making care more humanized and effective⁵.

Against this backdrop, the Extension Project "Playing – the best medicine" was launched by the State University of Mato Grosso (UNEMAT) in 2010 and is carried out in the playroom of the Regional Hospital of Cáceres. The initiative involves nursing and medical students and professionals in playful therapeutic activities with hospitalized children, with the aim of humanizing care and enriching academic training.

This study is based on experiences in extension activities at a pediatric clinic in a regional hospital. Through daily life in the clinic, it was possible to observe a lack of playful interaction with hospitalized children. This condition was affected when it came to children with neuropathies, which resulted in increased resistance to treatment, crying and tantrums, as well as constant complaints from caregivers.

In view of the above, the following problem arose: what recreational interventions developed during hospitalization can provide well-being and help improve the clinical condition of children with neuropathies? This article aims to report on the experience of nursing students in recreational interactions with children with cerebral disabilities treated in the hospital playroom, highlighting the benefits observed for the well-being and quality of treatment of these children.

METHODS

This is a qualitative descriptive study in the form of an experience

report addressing the experiences of extension workers in the project *Brincar - o melhor remédio* (Play - the best medicine), from the nursing course at the State University of Mato Grosso - UNEMAT. The project was institutionalized by opinion No. 021/2022. The recreational interactions were conducted in the pediatrics department of the Dr. Antônio Fontes Regional Hospital of Cáceres (HRCFAF), located in Cáceres, a city in the interior of Mato Grosso, with a population of approximately 89,681 inhabitants, according to the latest census⁶. The selected target audience was CHILDREN with neuropathies and/or cognitive impairments admitted to HRCFAF.

The *Brincar* project operates according to the calendar of the State University of Mato Grosso in Cáceres. During the school year, the project is carried out from Monday to Friday, from 5:00 p.m. to 7:00 p.m., in the pediatric ward of HRCFAF. Each day of the week, groups of three and/or four nursing, medicine, or physical education students, who are enrolled and active in their respective courses, in addition to having passed the project's selection process, visit the hospital. During the designated period, recreational activities are carried out with the hospitalized children, with the intention of transforming this frustrating moment into a lighter and more joyful stage.

The reported actions, focused on neuropathic children, began in the second half of 2024 and were carried out twice a month, according to the project schedule. On the days when the activities were carried out, the group of three students was divided as follows: the present author stayed with the patients who corresponded to the target audience of the experience, that is, children with some type of brain disability. This made it possible to carry out interactions specific to their condition. The other two

participants, meanwhile, carried out recreational activities with the other children hospitalized in the hospital. Through this division of tasks, all children were able to use play as a form of treatment.

These results are described in the form of an Experience Report (RE), a methodological choice based on its epistemological perspective, which expands from the particularities and thus becomes a relevant scientific product today. This is due to the fact that it is a theoretical-practical construction that aims to improve the understanding of the experience itself, from the perspective of the subject-researcher in a specific cultural and historical context⁷.

This idea of the ER is complemented⁸ by describing it as a form of knowledge production, in which the text addresses an academic and/or professional experience in one of the pillars of higher education (teaching, research, and extension), with the description of the intervention being its main characteristic. It is important to include scientific reasoning and critical reflection in the elaboration of the study.

As this is an Experience Report of an extension project, there is no need to submit the material to the Research Ethics Committee. It should be noted that all ethical precepts regarding authorship and citation rules will be strictly respected.

Finally, based on the experience and literary findings, a discussion with both parties is presented to analyze whether there is cohesion in the present exposition.

RESULTS (Experience report)

The actions reported began in the second half of 2024, as part of the Extension Project "Playing - the best medicine," developed in the toy library of the Dr. Antônio Fontes

Regional Hospital of Cáceres (HR-CAF). Initially, an exploratory review of studies on recreational strategies aimed at children with special health needs (CRIANES), especially those with neurological disorders, was carried out in order to theoretically support the practices to be applied in the hospital field and ensure the safe and adequate execution of recreational activities.

The activities took place according to the project schedule, from Monday to Friday, from 5:00 p.m. to 7:00 p.m., respecting the hospital's institutional rules and the rights of hospitalized children. At each meeting, a group of three to four nursing and medical students worked in the playroom, developing recreational, artistic, and musical activities with the hospitalized children, seeking to promote acceptance, leisure, and social interaction during their hospitalization.

The authors of this report actively participated in the activities in the pediatrics sector, with an emphasis on monitoring children with neurological disabilities, attending biweekly, on the first and third Mondays of each month, to conduct specific interventions aimed at sensory stimulation, motor coordination, and socialization. During the activities, the other members of the project focused on the other hospitalized children, ensuring that all of them received attention and were involved in the proposed dynamics.

This experience not only provided practical experience of recreational interactions as a therapeutic tool, but also allowed observation of the children's positive response to the activities, evidenced by increased engagement, affective expression, and decreased anxiety and resistance to treatment.

Recreational interactions for children with neurological disabilities

On the days set aside for the activities, the children who made up the project's target audience were observed and analyzed. On average, two children with neurological disabilities participated, with cerebral palsy being the most prevalent condition. These children had no movement in their lower limbs and highly limited mobility in their upper limbs, requiring total dependence on their companions for basic activities. Verbal communication was minimal or absent, manifesting mainly through facial expressions, gaze, and small body gestures, which required the team to listen sensitively and pay attention to nonverbal cues.

For this audience, adapted recreational interactions were used, such as hand puppets, educational readings, illustrative and educational videos, as well as interactive conversations about the procedures performed, conducted in a playful and welcoming manner. Among the activities developed, theatrical performances with puppets proved to be the most effective in stimulating the children's participation and expressiveness.

It was observed that, during these interactions, the children showed positive changes in facial expressions—such as smiles, spontaneous vocalizations, pupil dilation, and subtle movements of the upper limbs—as well as stable vital signs throughout the activities. These responses highlight the therapeutic potential of recreational interactions in reducing stress and promoting children's well-being, as also perceived by the caregivers, who expressed satisfaction and recognition for the initiative.

Table 1. Results of playful interaction with hand puppets

Facial expressions (smiles and communication sounds)
Pupil dilation
Upper limb movements to interact
Stabilization of vital signs

Source: Authors, 2025.

The other recreational interactions also showed positive results, with emphasis on the moments of didactic reading. During these activities, which involved the use of illustrative objects and simple narratives, the children's sustained attention to the stimuli presented was observed, evidenced by fixed gaze, mydriasis, and facial expressions of contentment, such as slight smiles. However, this concentration tended to be transient, diminishing more quickly when compared to activities with puppets, which maintained interest for longer periods.

During the viewing of illustrative and educational videos, there was variation in emotional and behavioral responses, depending on the visual content and the individual sensitivity of each child. Some episodes were marked by positive reactions, with signs of engagement and attempts to participate, while others provoked reactions of discomfort, expressed by fear, withdrawal, and crying, especially when faced with characters or sounds that aroused strangeness.

These observations reinforce the importance of carefully selecting the audiovisual resources used in playful interventions, respecting the uniqueness of each child and their possible sensory, emotional, and cognitive reactions, in order to ensure that play fulfills its therapeutic role and promotes well-being in the hospital setting.

Table 2. Results of playful interaction with didactic reading

Fixed attention on the reader
Pupil dilation
Smiling expressions

Source: Authors, 2025.

Table 3. Results of playful interaction with illustrative videos

Positive episodes: child participation
Negative episode: expression of fear and crying

Source: Authors, 2025.

With regard to didactic conversations, it was observed that such interactions had a greater emotional impact on the companions than on the children themselves, showing that communicative reception contributes to the well-being not only of the pediatric

patient but also of their caregiver. The exchanges of dialogue and moments of listening provided emotional relief, a feeling of security, and greater confidence in the nursing team, which are fundamental elements for building a humanized therapeutic environment.

Table 4. Results of playful interaction with educational conversations

Affecting companions more
Moments of listening
The patient remaining calm during procedures

Source: Authors, 2025.

Recreational and playful interactions have the power to reframe the hospitalization experience, making the hospital space more welcoming and contributing to the physical and emotional well-being of both children and their caregivers. They are an effective strategy for humanizing care, capable of improving routine, reducing stress, and strengthening the therapeutic bond between children, companions, and health professionals.

DISCUSSION

The use of playful resources, as well as the stimulation and motivation they provide, arouses the child's interest in performing the proposed activity. However, children with CP may face challenges in various activities, including play, due to factors such as obstacles to accessing toys, handling problems, social interactions, and environmental conditions⁹.

In this context, nonverbal commu-

nication is one of the main tools of humanized care, allowing healthcare professionals to understand emotions, discomforts, and needs even in the absence of speech. Thus, it is up to nurses to seek strategies for approaching each client that respect their particularities, promoting interaction, bonding, and safety during the therapeutic process¹⁰.

In order for CRIANES to explore and express their feelings, the act of playing must be facilitated for them. It is necessary to provide opportunities for them to engage in play, facilitating interaction with other children, adults, and objects, which contributes to their development and growth¹¹. This is the case with the Brincar Project, which uses games that facilitate and include CRIANES in that playful moment.

In the present experience, the playful activities that demonstrated the best performance were those carried out with hand puppets. These resources allowed visual stimuli to be associated with mild auditory stimuli, favoring the capture and maintenance of the child's attention. Research describes that children's cognitive development is structured based on perceptual interaction with the environment, with visual and symbolic stimuli constituting important elements for the construction of mental schemas and the development of thought. Thus, it was observed that the neuro-pathic children involved in this practice showed greater responsiveness to visual elements, but also demonstrated interest in vestibular, tactile, auditory, and olfactory stimuli, reinforcing the relevance of multisensory stimulation in care and therapeutic interaction^{12,13}.

Reading can be understood as a complex cognitive ability that involves the transformation of a graphic representation into a phonological representation¹⁴. However, children

with neuropathies often have cognitive deficits that interfere with the symbolic construction of words, which directly affects reading comprehension.

“ One strategy to minimize this impact is the use of didactic reading materials composed of symbols, images, and language with simpler verbs and structures. This method was used in this experiment and showed positive results, evidencing greater engagement and attention from the children. ”

This finding is consistent with the literature that discusses the use of books with symbols and images as a resource to facilitate attention and interest in children with cerebral palsy¹⁵. Furthermore, it should be noted that images constitute an important phase in the construction of symbols and, therefore, precede written representation in the hierarchy of cognitive development, which reinforces the relevance of using these resources for children with neuropathies¹³.

With regard to illustrative videos, two distinct patterns of reaction were observed: a set of positive responses, with active participation and maintenance of eye contact; and a set of negative responses, characterized by discomfort, irritability, and crying. The literature shows similar findings, indicating that interactive and short videos can promote greater engagement of children with neuropathies, allowing them to maintain attention and interest for longer periods¹⁶. On the other hand, studies also point out that the introduction of new characters, with sudden changes in stimuli, tends to trigger increased stress and anxiety, possibly because such children have greater difficulty in processing unexpected and unpredictable content. In this sense, it is understood that the child's cognitive development is anchored in the ability to organize previously assimilated stimuli, and when faced with elements that are very new or out of tune with existing schemes, reactions of disorganization and rejection of the stimulus become more common, which partly explains the behavior observed in this study¹³.

Finally, one of the most relevant aspects identified in this experiment was the positive impact of didactic communication with the child and their companion about the procedures and care routine. It was observed that, after interactive dialogue, characterized by simple language, a calm

tone of voice, and validation of feelings with children with cerebral palsy, they were more relaxed when undergoing the procedures. This finding is consistent with studies that reinforce the importance of guiding, explaining, and respecting the child's processing time, since such attitudes contribute to reducing fear, promoting a feeling of security, and strengthening the relationship of trust¹⁸.

The literature indicates that the quality of the relationship between nursing professionals and family members has a direct influence on the child's response to treatment, promoting their adaptation to the hospital environment and reducing resistance and anxiety behaviors¹⁸. In the present experience, caregivers reported that, after the conversations, the children remained calmer during the procedures performed, which reinforces that establishing bonds and effective communication are essential tools for care and humanization.

It is therefore understood that the actions developed in the university extension project focused on recreational activities in the hospital playroom constitute a powerful, light-touch care technology. By mediating play, they encourage sensitive dialogue and promote active listening by children and family members. The extension practice acquires a therapeutic and formative character, since it enables the construction of bonds, acceptance, and emotional security. This movement dialogues directly with the contemporary conception of the Nursing Process, as recommended by COFEN Resolution No. 736/2024, by showing that comprehensive care for neuropathic children is not limited to technical procedures, but is strengthened in the relational, symbolic, and humanized dimensions of care. In this sense, university extension, by bringing practical training closer to the real care scenario, enhances learning,

broadens the clinical perspective, and contributes to health training that is more sensitive to the unique characteristics of hospitalized children.

Finally, this experience shows that recreational interactions between nurses and children with cerebral disabilities constitute a concrete care device, capable of transforming the hospital environment into a space of welcome, bonding, and learning. The playful activities carried out in the playroom, mediated by students in extension activities, demonstrated that play, when intentional and supported by the fundamentals of cognitive development, operates as a clinical resource capable of promoting emotional organization, expanding attention, and reducing suffering during procedures. This understanding is in line with studies¹⁹, recognizing that soft technologies, such as sensitive communication, bonding, and interaction, are central to producing healthcare, especially in contexts where the subjective dimension is decisive in the therapeutic process. Thus, it is reaffirmed that play is also care, it is also intervention, and it is also health production for children with neuropathies.

CONCLUSION

The extension experience developed in the Brincar Project shows that planned recreational interventions can contribute to the well-being and adaptation of children with neuropathies during hospitalization. Playful interactions with hand puppets and reading educational materials proved to be especially effective, allowing for active and meaningful participation, with positive repercussions on the child's emotional state. It was also observed that the use of illustrative videos presented varied results, being well accepted only when the visual and auditory stimuli were predictable and

familiar, which reinforces the need to consider the neurocognitive specificities of this audience. Furthermore, the process of didactic communication with the child and their companion proved to be fundamental in reducing anxiety, strengthening bonds, and promoting emotional security, demonstrating that welcoming and including the family in care has a direct impact on the response to treatment.

It is recognized that play is a powerful therapeutic tool and a right of all children, and it is essential to expand studies and practices that explore, substantiate, and qualify the use of recreational interactions in hospital settings, especially in the care of children with cerebral disabilities.

In addition, the importance of producing and publishing new experience reports is reinforced, as the systematization of these experiences allows for the generation of situated evidence that is sensitive to the real context of care, contributing to the improvement and humanization of care practices aimed at children with cerebral palsy, recognizing that this is still a field with limited scientific production.

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