# SYSTEMATIC REVIEW AND INTEGRATIVE

# PLAY AS A TOOL IN NURSING CARE FOR HOSPITALIZED CHILDREN

ATIVIDADE LÚDICA COMO FERRAMENTA PARA O CUIDADO DE ENFERMAGEM ÀS CRIANÇAS HOSPITALIZADAS

LA ACTIVIDAD LÚDICA COMO HERRAMIENTA DE ENFERMERÍA PARA EL CUIDADO DE NIÑOS HOSPITALIZADOS

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# **ABSTRACT**

The study aims at synthesizing existing knowledge about play as a tool in nursing care for hospitalized children. It is an integrative review carried out at Scopus, PubMed, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane and Latin American and Caribbean Health Sciences (LILACS) databases. Among the thirteen reviewed studies, 46% used randomised clinical trial; doll therapy was most commonly used (46%), followed by toys (30%). As for the benefits of play for children, we observed improvement in negative symptoms such as pain, nausea, anxiety and depression, as well as in the relationship between the nursing staff and the child. Results showed that scientific production on the theme is incipient. The researchers stress that health benefits are closely related to the type of activity carried out; however, it is necessary to emphasize that nurses should be aware of the benefits of this type of therapy to better organize their working process.

Keywords: Child Hospitalized; Play Therapy; Nursing; Child Health, Nursing Care.

### **RESUMO**

Objetiva-se sintetizar o conhecimento produzido sobre as atividades lúdicas do enfermeiro como ferramenta para o cuidado de enfermagem a crianças hospitalizadas. Trata-se de uma revisão integrativa realizada nas bases de dados online Scopus, Pubmed, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane e Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS). Entre os 13 estudos analisados, o método mais empregado foi o ensaio clínico randomizado (46%). O boneco terapêutico foi o tipo de atividade lúdica mais utilizada (46%), seguido das atividades com brinquedos (30%). Quanto aos benefícios da atividade lúdica para a criança, observaram-se a redução de sentimentos negativos, redução das queixas de dor, náusea, ansiedade e sentimentos depressivos, bem como a melhora no processo de comunicação entre a equipe de enfermagem e a criança. Percebeu-se uma produção ainda incipiente sobre as atividades lúdicas utilizadas por enfermeiros no contexto da internação infantil. Ressalta-se que os benefícios estão intimamente ligados ao tipo de atividade que é utilizada. Contudo, faz-se necessária mais ênfase nessas influências para que os enfermeiros tomem conhecimento de como organizar melhor seu processo de trabalho.

Palavras-chave: Criança Hospitalizada; Ludoterapia; Enfermagem; Saúde da Criança; Cuidados de Enfermagem.

#### RESUMEN

El objetivo del presente trabajo fue resumir el conocimiento producido sobre las actividades lúdicas del enfermero como herramienta para atender a niños hospitalizados. Se trata de una revisión integradora realizada en las bases de datos on line Scopus, PubMed, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane y Literatura Latinoamericana y del Caribe (LILACS). Entre los trece estudios revisados el método más empleado fue el ensayo clínico aleatorizado (46%). La muñeca terapéutica fue el tipo de actividad lúdica más utilizada (46%), seguido de las actividades con juguetes (30%). En cuanto a los beneficios de las actividades lúdicas para los niños, hubo disminución de sentimientos negativos, de quejas de dolor, náuseas, ansiedad y sentimientos de depresión, así como mejora en el proceso de comunicación entre el personal de enfermería y los niños. Se observó una producción incipiente de actividades recreativas utilizadas por las enfermeras en el contexto de la hospitalización infantil. Se realza que los beneficios están estrechamente vinculados al tipo de actividad empleada. Sin embargo, debe enfatizarse la influencia de estas actividades en los niños para que los enfermeros la conozcan y organicen mejor su proceso de trabajo.

Palabras clave: Niño Hospitalizado; Ludoterapia; Enfermería; Salud del Niño; Cuidados de Enfermería.

# INTRODUCTION

Hospitalization disrupts daily routine of children and their families; it affects their living and being process. A hospitalized child may express momentary dissatisfaction; have developmental regression or slowdown, sleep and nutrition disorders, addiction, aggression, apathy, depressive states, phobias, anxiety, insecurity, fear and behavioural disorders in general.<sup>1</sup>

Given children's fanciful and egocentric elaborations, they may consider illness and/or hospitalization as a punishment for misbehaviour. In this sense, play is a means through which children can understand their condition, acquire knowledge, and discover their individuality to better cope with their current condition.<sup>2</sup>

In a hospital setting, play can change the ward into a pleasant place to which the child can adapt more easily.<sup>2</sup> Furthermore, it nurtures children's moments of reasoning, discovery, persistence and perseverance through which they can cultivate patience and persistence in the face of adversity. Therefore, toys can be used to recreate, stimulate, and socialize, in addition to fulfil their therapeutic function.<sup>3</sup>

Toy therapy allows the minimization of child anxiety and distress caused by experiences considered atypical at an early age. It is indicated whenever the child has difficulty understanding, does not know how to react to a difficult experience or requires preparation for invasive and/or painful procedures.<sup>1</sup>

Play therapy is a facilitating resource in nursing interventions. However, little or no importance is given to these children's social and psychological aspects, as their physiological needs demand more attention.

The nursing staff should recognize the benefits afforded by playing and provide the means for its implementation, incorporating it systematically in their care routine.<sup>4</sup>

Play is, therefore, a therapeutic tool to promote continuous child development. It also helps children understand the difficult time they are going through. Thereby, the present research raises the following questions: what kind of play do nurses use with hospitalized children? What are the benefits of these activities? What is the impact of the incorporation of play into nursing care? This study aims hence at synthesizing scientific production on play as a nursing care tool for hospitalized children.

# **METHODOLOGY**

The present study is an integrative review, a method that gathers and synthesizes research findings on a defined topic. It aims at expanding and integrating knowledge and possible applicability to practices. 5,6

Search strategies were defined by a research protocol that guided the study. The integrative review included the following stages: definition of themes and guiding questions; criteria for study selection; data definition and study categorization; study assessment; interpretation of results and review presentation.<sup>6</sup>

The studies were selected in May 2013. The consulted databases were Scopus, *PubMed*, *Cumulative Index to Nursing and Allied Health Literature* (CINAHL), Cochrane and Latin American and Caribbean Literature on Health Sciences (LLACS). The controlled descriptors listed by the Health Sciences (DeCS) were *criança hospitalizada*, *atividades lúdicas* and *enfermagem*, and their equivalents in Mesh: *hospitalized child*, play *therapy* and *nursing*. The descriptors were crossed in the same order using operators "e" and/or "and".

The selected studies met the following inclusion criteria: scientific articles dealing with at least one of the guiding questions; written in Portuguese, Spanish or English, full text available and free of charge in the selected databases. The researchers decided to exclude edicts, letters to editors and expert opinions. The period of publication was not taken into account in order to identify as many articles as possible.

Silveira Mendes and Galvão's proposal<sup>6</sup> was used for the critical evaluation of the studies. Such proposal consisted of an instrument to synthesize relevant information. The paper's year of publication, study design, level of evidence,<sup>7</sup> type of play, benefits of the activity to the child and how such activities might influence the nursing process were all identified and analysed.

The final sample consisted of thirteen articles, nine of them in *scopus*, two in CINAHL, one in LILACS and one in Pubmed. It is worth mentioning that one article appeared both in LILACS and Scopus and six studies were found in Cochrane, none of them, however, available for free in full-text.

#### RESULTS

Out of those 13 studies two (15%) were published between 1989 and 1999, five (39%) between 2004 and 2008 and six (46%) between 2008 and 2011. One study (7%) was carried out in Great Britain and two (15%) in the United States. Brazil and China published five (39%) studies each.

As for the method employed, six (46%) articles used randomized clinical trial; five were qualitative descriptive studies (39%); and non-randomized clinical trial and mixed methods one research each (7%). A total of six studies comprised a sample whose results presented level 6 Evidence, as seen in Table 1.

Doll therapy was the most commonly used type of activity, with six (46%) studies, followed by toys therapy, with four (30%) studies. The benefits of play for children are briefly listed in Table 2.

Only three (23%) articles dealt with the impact of play on the nursing work process. They reported that when such therapy is considered part of nursing care in paediatric inpatient units it does not take up much of the nursing staff's time and neither hinders their performance.<sup>16,18,19</sup>

Table 1 - Distribution of studies, according to type of research and level of scientific evidence; Natal, 2013

Title	Authors	Type of study	Level of scientific evidence
The art of clown theatre in care for hospitalized children <sup>8</sup>	Lima, Azevedo, Nascimento and Rocha	Qualitative descriptive	level 6
The effect of play on immobilized children in hospital <sup>9</sup>	Gillis AJ	Randomized clinical trial	level 2
Reading as a method of humanized care in the pediatric neurological clinic: A qualitative study <sup>10</sup>	Silva, Oliveira, Chagas, Sousa, Rodrigues and Vasconcelos	Qualitative descriptive	level 6
Creating opportunities for parent empowerment: program effects  On the mental health/coping outcomes of critically III young children and their mothers <sup>11</sup>	Melnyk et al.	Randomized clinical trial	level 2
Psychoeducational preparation of children for surgery: The importance of parental involvement*12	Li, Lopez and Lee	Randomized clinical trial	level 2
Use of play therapy in care for hospitalized children <sup>13</sup>	Fontes CMB,Mondini,Moraes, Bachega and Maximos	Qualitative descriptive	level 6
Effects of Preoperative Therapeutic Play on Outcomes of School-Age Children Undergoing Day Surgery*14	Li, Lopez and Lee	Randomized clinical trial	level 2
Evaluating the effectiveness of preoperative interventions:the appropriateness of using the children's emotional manifestation scale*15	Li	Randomized clinical trial	level 2
Effectiveness and Appropriateness of Therapeutic Play Intervention in Preparing Children for Surgery:A Randomized Controlled Trial Study*16	Li and Lopez	Randomized clinical trial	level 2
Effectiveness and feasibility of using the computerized interactive virtual space in reducing depressive symptoms of Hong Kong Chinese children hospitalized with cancer <sup>17</sup>	Li, Chung, Ho and Chiu	Non-randomized clinical trial	level 3
Creative Arts Therapy Improves Quality of Life for Pediatric Brain Tumor Patients Receiving 18	Madden, Mowry, Gao, Cullen and Foreman	Mixed methods with randomized trials	level 2
Playing in the hospital: support for nursing care <sup>19</sup>	Furtado and Lima	Qualitative descriptive	level 6
Understanding nurses' awareness as to the use of therapeutic play in child care <sup>20</sup>	Maia, Ribeiro and Borba	Qualitative (symbolic interactionism)	level 6

<sup>\*</sup> Studies using same clinical study.

Table 2 - Distribution of play therapy in the studies according to its benefits for the child; Natal, 2013

Play therapy	Benefits	
Clowning	Children become more active and communicative and improve their own sense of well-being	
Reading groups/storytelling	Facilitates communication process, reduces negative feelings and increases understanding and treatment adherence.	
Creative arts therapy	Reduces pain complaints, nausea and anxiety and facilitates communication with heath professional.	
Interactive virtual playground	Relieves symptoms of depression	
Puppets, clay, games	Boosts physical, mental, emotional and social development and emotional security; reduces fear and anxiety and promotes fun and satisfaction.	
Doll therapy	Reduces anxiety and strengthens self and environment control.	

# **DISCUSSION**

#### PLAY ACTIVITIES CARRIED OUT BY THE NURSE

Care for the hospitalized child should strive to mitigate traumas arising from its stay in hospital. In this context, when play therapy is carried out the hospital environment can be tailored to the child's needs.<sup>3</sup>

Such activities may include several strategies which usually involve play, essential to the interaction between child and environment.

Clowning involves professionals who assume the characters and identities they create. They normally wear clown nose, carry tambourines, colourful stethoscopes and briefcases and use music, storytelling, magic tricks and dramatization. Nurses may choose specific days of the week for such activities. A study using this technique said professionals had agreed on twice a week and that this therapy was now part of the hospital routine.<sup>8</sup>

Source: research data.

Reading groups and storytelling, mentioned in two studies<sup>8,10</sup>, are excellent tools for the development of several aspects of child psychology (imagination, reasoning, creativity, etc.). They transmit values (ethics, love, respect, peace, cooperation, etc.), promote culture and disseminate information.<sup>10</sup> According to the studies, they can be done individually or in groups and without a professional. They should be carried out in quiet and cosy places such as toy libraries.

Another activity used by nurses is creative art therapy (CAT). It involves three techniques: music therapy, dance/movement therapy and art therapy through drawings. It comprises six sessions, two sessions for each technique. It is worth mentioning that in the research using this activity a professional dancer was hired to instruct the dance/movement stage of the experience.<sup>18</sup>

The interactive virtual playground is a new type of play that uses a computer program – PlayMotion® – to create virtual environments such as beaches, parks and sports fields. Projected images of a virtual environment transform ordinary walls, floors and ceilings into interactive virtual playgrounds. Children have to change attitudes according to what is being presented.<sup>17</sup>

It can be an individual activity; however, the best benefits are observed when it is performed in groups of four children, five days a week, during 30 minutes.<sup>17</sup> In this context, it is important to emphasize that this type of play is not recommended to all: children undergoing aggressive treatment and with severe condition need medical and nursing evaluation.

To play alone or in group is another strategy used by nurses to encourage children to play freely, using toys, play dough, old magazine pictures and puppets, among others.<sup>13,19,20</sup> It is a recreational activity that does not need the presence of a professional. Time and place are set by the professional responsible for it; however, we observed that such strategy is usually performed during toy library sessions.

On the other hand, although all these activities are somehow performed, children should be told about what is going to happen to them for them not to feel so uncomfortable at hospital. In this context, the nurse is an educator expected to use creative techniques to meet the needs of the public.<sup>21</sup>

In response to those specific demands, nurses have been using doll therapy simulating procedures the child will be exposed to. 11,12,14-16,19 The child itself may also simulate the procedures in the doll, as observed in a study carried out in Hong Kong. 14 Therefore, it is up to the professional to decide when to use this technique.

#### BENEFITS OF PLAY THERAPY TO THE CHILD

The literature on the subject acknowledges the importance of play and recommends it as part of paediatric nursing care. It helps hospitalized children to cope with the pain and stress generated by the experience.<sup>22</sup>

Considering that the child needs more attention and care and that disruptions interfere with its quality of life and full development, the use of play therapy can contribute to minimizing the stressful effects of hospitalization and provide more humanized care.<sup>3</sup>

These studies demonstrate that the use of play reduces negative feelings and pain complaints, nausea, anxiety and depressive feelings, and also helps communication between nurses and children. Furthermore, the results reveal better adherence to treatment and physical, mental, emotional and social development.<sup>12,14,15,17</sup>

Playing makes hospitalization less traumatic and stimulates the child's normal development, enabling its physical and emotional recovery. Moreover, it can reduce tensions, anger, frustration, conflicts and anxiety, creating helpful ties between children and nurses.<sup>3</sup>

Thus, play therapy for hospitalized children is a therapeutic tool to promote continuous child development and physical and emotional restoration. It also makes the hospitalization process less traumatic and provides better conditions for recovery.

# INFLUENCE OF PLAY ON THE NURSING WORK PROCESS

Nursing has always linked provision of care with art, which is the essence of the profession. It seeks to offer dignity and quality of life through comprehensive and humanized care.<sup>21</sup>

Health professionals consider children to be a differentiated public that requires interventions adapted to different age groups. Play therapy aims therefore at giving dynamism to care and at integrating it into the hospital setting, which is not an easy task.<sup>21</sup>

A rather small number of studies demonstrated the influence of play on the nursing work process and if such influence is negative or not. A study dealing with doll therapy<sup>16</sup> demonstrated that the activity is easily performed and incorporated into the nursing care routine, with the proviso that its use is planned.

According to a research assessing the use of toys<sup>19</sup>, such therapy can be systematically incorporated into clinical practice without inconveniencing the nursing care process. Study on activities on a computer also stressed that they do not require more of the nurse's time. It highlights however that play will only be systematically used by such professionals if they consider that it is part of a holistic approach to nursing care aiming at lessening psychological distress.<sup>17</sup>

Many studies discuss play and its benefits to the child; however, little has been said about how to use it and what the difficulties are. Thus, we believe that these practices will be best incorporated when more research addressing the issues are carried out.

# **CONCLUSION**

The present study evidenced an incipient production on play therapy with hospitalized children and on its use by nurses. More studies with higher levels of evidence are needed in order to provide more reliable results and to encourage the incorporation of such practices into the nursing work process.

The types of activities used were clowning, CAT, interactive virtual playground, reading groups/storytelling. Toys, games and doll therapy were most commonly used.

The benefits obtained from this type of activity are improvement in depressive and anxious symptoms and better communication and adherence to treatment.

Regarding the effects of play on the nursing work process, we assessed that such therapy can be incorporated into their professional routine without delay or inconvenience in their other activities. However, further studies emphasizing these effects are needed. Nurses should be aware of what is being offered, how to offer it and how to incorporate it into their routine without inconveniencing their professional practice.

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