

CHILD LIFE COUNCIL EVIDENCE-BASED PRACTICE STATEMENT

SUMMARY

THERAPEUTIC PLAY IN PEDIATRIC HEALTH CARE: THE ESSENCE OF CHILD LIFE PRACTICE

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Rebecca Mador, research assistant at the Hospital for Sick Children, is gratefully acknowledged for her contributions in the preparation of this statement.

Through a review of the best available research, the purpose of this statement is to present empirical findings regarding the value of play for children in the hospital and to assert that play constitutes an integral component of evidence-based practice in child life. After systematically evaluating 62 articles retrieved from searches conducted on PsycINFO, MEDLINE and CINAHL, 10 studies (nine quantitative and one qualitative) were included in this statement.

BACKGROUND

Children from all cultures play. Even in cultures where young children are expected to assume adult work responsibilities, anthropologists cite examples of how children manage to integrate play into their daily tasks¹⁴. This suggests that play is not only universal but essential to human development. Indeed, research has repeatedly shown that the benefits associated with play are profound and wide-ranging. Play can be broadly defined as any activity in which children spontaneously engage and find pleasurable¹⁶.

THERAPEUTIC PLAY

For children in the hospital, specific forms of play can provide an effective venue for personal development and overall well-being. In particular, *therapeutic play* refers to specialized activities that are *developmentally supportive* and facilitate the emotional well-being of a pediatric patient. Therapeutic play typically consists of at least one of the following types of activities: 1) the encouragement of emotional expression (e.g. re-enact-

ment of experiences through doll play), 2) instructional play to educate children about medical experiences, and 3) physiologically enhancing play (e.g. blowing bubbles to improve breathing)¹⁶.

Therapeutic play is important for hospitalized children because it offers greater and distinct benefits than those obtained through traditional forms of childhood play. For example, therapeutic play was found to alleviate a child's emotional distress^{5,11} and to help them cope with difficult medical experiences^{5,7}. Psychological and behavioral outcomes of therapeutic play include diminishing children's anxiety and fear^{1,4,5,7,9}, and increasing their cooperation^{4,7} and willingness to revisit the hospital^{3,7}. Therapeutic play has also been found to reduce a child's negative physiological responses such as palm sweating, excessive body movement, escalating pulse rate and high blood pressure^{1,7,8}.

CONCLUSION

Empirical evidence provides support for the effectiveness of therapeutic play in reducing psychological and physiological stress in hospitalized children. Additional research is necessary regarding the effectiveness of specific forms of therapeutic play, as well as how children in hospital perceive the value of these play experiences. By obtaining children's perspectives on therapeutic play, evidence-based practice in child life can be enhanced.

For the detailed information and studies reviewed to support this statement, review the complete version of the evidence-based practice statement on therapeutic play in, available through the Resource Library section of the CLC Web site (www.childlife.org).

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PREAMBLE

The purpose of this statement is to present empirical findings regarding the value of play for children in the hospital and to assert that play constitutes an integral component of evidence-based practice in child life. This statement is based on a review of the best available research from the year 1960 to December 2006. The following search engines were used: i) PsycINFO, which records literature from psychology and related disciplines such as medicine, psychiatry, nursing, sociology, and education; ii) MEDLINE, which focuses on biomedical literature; and, iii) CINAHL, the Cumulative Index to Nursing & Allied Health Literature, which covers literature relating to nursing and allied health professions. A variety of keywords and combinations such as “therapeutic play,” “hospitalized children,” “recreation,” and “pretend play” were used to conduct the search with the assistance of a medical librarian. (See Table 1 for a complete list of keywords used).

Searches revealed 62 articles pertaining to therapeutic play in pediatric settings. After the results were sorted to exclude repeats and non-empirical based literature, 41 articles remained, of which 26 were eliminated because their topics were beyond the scope of this review (e.g. pet therapy, music therapy, and video games). The remaining 15 articles were scored by one of two independent raters. For the quantitative studies, “The Quality of Study Rating Form”^{1, 2} was used. Articles that received a rating of at least 60 out of 100 points were selected for inclusion. Any article that scored between 55 and 65 points was re-scored by a second rater to confirm inclusion or exclusion. For the qualitative studies, the Qualitative Study Quality Form² was used.

A total of 10 studies (nine quantitative and one qualitative) is included in this statement. Children involved in these studies ranged from 3 to 12 years of age and were hospitalized for a variety of reasons, including dental surgery, cardiac catheterization and tonsillectomies. Eight quantitative studies³⁻¹⁰ used a randomized experimental design to examine the effects of therapeutic play, while one¹¹ provided a descriptive content analysis of interviews involving play. The single qualitative study examined the process of play when children engaged in expressive arts¹² (see Table 2 for a list of studies included in this review).

Since evidence-based practice represents an integration of both clinical experience² and the best available research¹³, this statement was also reviewed by Certified Child Life Specialists across North America in order to ensure clinical applicability. In addition, evidence-based practice acknowledges patient preferences and needs when determining the most appropriate clinical applications for a child and family.

THE VALUE OF PLAY

Children from all cultures play. Even in cultures where young children are expected to assume adult work responsibilities, anthropologists cite examples of how children manage to integrate play into their daily tasks¹⁴. This suggests that play is not only universal but essential to human development. Indeed, research has repeatedly shown that the benefits associated with play are profound and wide-ranging. Following a meta-analysis of 800 studies, Fisher concluded there was cogent evidence for the positive impact of play on children’s developmental outcomes¹⁵. *Play was found to significantly promote cognitive and social aspects of development and these effects were magnified when adults participated in play with children.* Accordingly, childhood play is understood to be critical to children’s development for multiple reasons, including the opportunity to communicate feelings, misunderstandings and concerns in

their own language using both verbal and behavioral expression⁹. Since play teaches children how to handle the world and the social roles in it, play is the predominant context in which children interface with their environment.

WHAT IS THERAPEUTIC PLAY?

Play can be broadly defined as any activity in which children spontaneously engage and find pleasurable¹⁶. For children in the hospital, specific forms of play can provide an effective venue for personal development and increased well-being. In particular, therapeutic play refers to specialized activities that are developmentally supportive and facilitate the emotional well-being of a pediatric patient.

The discourse on play acknowledges important distinctions between therapeutic play and play therapy. Although these terms are often used interchangeably, the focus of therapeutic play is on the promotion of continuing ‘normal development’ while enabling children to respond more effectively to difficult situations such as medical experiences¹⁷. In contrast, play therapy addresses basic and persistent psychological issues associated with how a child may interact with his or her world. Therefore, therapeutic play, in a less structured way, focuses on the process of play as a mechanism for mastering developmental milestones and critical events such as hospitalization.

Since therapeutic play comprises activities that are dependent on the developmental needs of the child as well as the environment, it can take many forms⁹. For example, therapeutic play can be delivered through interactive puppet shows¹⁰, creative or expressive arts¹², puppet and doll play⁷, and other medically oriented play^{3-6, 8, 9, 11}. It can be directive or non-directive in approach and may include re-enactments of medical situations to facilitate children’s adaptation to hospitalization^{3, 4, 16, 17}.

Regardless of the form that therapeutic play takes, the child life specialist (CLS) ensures that the play is developmentally appropriate while using language that is understandable to the child^{4, 5, 7}. During therapeutic play children are encouraged to ask questions to clarify misconceptions and express feelings related to their fears and concerns³⁻⁹. In this way, therapeutic play acts as a vehicle for eliciting information from children while also sharing information about what to expect from medical procedures and what sensations may be experienced⁴.

Therapeutic play typically consists of at least one of the following types of activities: 1) the encouragement of emotional expression (e.g. re-enactment of experiences through doll play), 2) instructional play to educate children about medical

experiences, and 3) physiologically enhancing play (e.g. blowing bubbles to improve breathing)¹⁶. The studies reviewed here predominantly address medically oriented play, including emotional expression and instructional play forms.

RESEARCH ESPOUSING THE BENEFITS OF THERAPEUTIC PLAY

Psychological and Behavioral Outcomes

Several studies have shown that therapeutic play is effective in decreasing anxiety and fears for children from the time of admission to immediately after surgery and to the time of discharge^{4, 5, 8-10}. In one qualitative study, Wikstrom investigated how children in the hospital experienced expressive arts through the use of clay, paint and textile. The primary finding from this study was that the children spontaneously described themselves through their art by expressing emotions such as fear and powerlessness¹². Thus, a defining feature of therapeutic play is its ability to elicit emotional expression leading to greater psychological well-being for a child in the hospital^{4, 5}. Accordingly, in studies where children were offered therapeutic play, they exhibited greater cooperation during stressful procedures^{4, 5} and were more willing to return to the hospital for further treatment⁷.

In one study, Schwartz, Albino and Tedesco found that medically related therapeutic play was more effective than medically unrelated therapeutic play⁴. The authors examined the effects of preoperative preparation on stress reduction in 45 children aged 3 and 4 years. The children were randomly assigned into one of three groups: a control group, a medically unrelated play therapy group, and a medically related play therapy group. The medically related play included providing information to the child and parent and a role play that resembled actual medical procedures with hospital toys. Results from the study concluded that children in this group were more cooperative and less upset than children in the other two groups, which suggests that medically related play can be more effective in alleviating stress than unrelated play.

Studies have shown that therapeutic play produces benefits not evidenced with alternative types of play or methods of preparation. Rae and colleagues compared the effects of play on the psychosocial adjustment of 46 children, aged 5 to 10 years, who were hospitalized for an acute illness. They randomly assigned the children to one of four groups: therapeutic play, diversionary play, verbal support, and no treatment. The therapeutic play consisted of playing with medical and non-medical materials as well as puppets, dolls and toy animals. During

this non-directive play, the facilitator encouraged re-enactments of experiences while allowing the child to reflect and interpret feelings. Results showed that children who engaged in therapeutic, non-directive play showed a significant reduction in self-reported hospital fears in comparison with children from other groups⁸.

Only one study did not show a statistically significant decrease in anxiety for children following therapeutic play. Fosson, Martin and Haley⁶ investigated the effectiveness of guided medical play in reducing anxiety in latency-age children. Fifty children, aged 5 to 9 years, were randomly assigned to either the control group, where the child watched TV with a recreational therapist for 20 minutes, or the experimental group, where a recreational therapist facilitated medically-oriented play with the child. This study found that although the mean levels of anxiety of children in the experimental group decreased more than children in the control group, the difference was not sufficient to reach statistical significance. In order to explain these findings, the authors noted that the intervention consisted of only one 30-minute play session and the control group had access to other forms of play during hospitalization.

Physiological Outcomes

In addition to relieving psychological stress, therapeutic play is also effective in reducing apprehensive physiological responses, such as palm sweating, excessive body movement, escalating pulse rate and high blood pressure⁵. In two studies, children who were provided opportunities for therapeutic play showed less physiological distress, as indicated by lower blood pressure and pulse rate and shorter time between surgery and first voiding³. They also exhibited less palm sweating than children who did not have opportunities for therapeutic play¹⁰.

GAPS IN CURRENT LITERATURE

Although there is considerable literature concerning play in hospitals, much of this material is anecdotal and non-empirical. From an evidence-based practice perspective, this is problematic. For instance, little is known about the process and development of therapeutic play. How does play evolve over the course of a child's hospitalization, and should more complex forms of play (i.e. medically related) be offered only after a trusting relationship has been established with the child? Also, to what extent does therapeutic play rely on non-directive approaches? In terms of timing the introduction of therapeutic play, Young and Fu found that regardless of whether needle play took place before or after the blood test, children who

received therapeutic play showed significantly lower pulse rate five minutes after the blood test when compared to those who did not³. Although the timing of medical play did not alter its effectiveness in reducing pulse rate, additional studies should be conducted in order to verify these findings across different forms of therapeutic play.

The majority of research in this area addresses the use of medically related play, while areas such as creative arts, body image activities and tension-release forms of play are understudied. Not only is the comparison of various forms of therapeutic play lacking, but also the suitability of specific types of play for particular age groups, gender types, or anxiety levels. As well, it is unclear whether group or individual therapeutic play is generally more effective for children in hospital.

Perhaps most importantly, there is a limited understanding of how children perceive therapeutic play through *their own descriptions and experiences*. The paucity of research **with children** (participatory) rather than 1 (non-participatory) is recognized as problematic by those working in the field¹⁸⁻²¹. Inherent complexities also are associated with how play is studied and evaluated. For instance, the way in which a child life specialist facilitates play can determine the degree of therapeutic value and the establishment of trust with the child. Qualitative studies which are more suitable for exploring health care issues with children should address the following questions: how do children experience therapeutic play with their CLS and what types of activities are most meaningful to them?

SUMMARY

A central goal in pediatric health care is to facilitate the emotional and physical well-being of children in the hospital¹⁶. Research provides evidence for the effectiveness of therapeutic play in reducing psychological and physiological stress for children facing medical challenges. Therapeutic play offers long-term benefits by fostering more positive behavioral responses to future medical experiences. Since childhood play transcends cultural barriers, play opportunities should be provided for children of all ages and backgrounds.

Despite a large amount of literature purporting the value of play, research gaps exist regarding the evaluation of therapeutic play in health care settings. Future research must address the play preferences and perspectives of children if evidence-based practice is to reflect the needs of pediatric patients. Since therapeutic play embodies the essence of the child life profession, it should remain the focus of ongoing critical analysis and empirical investigation.

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TABLE 1. LIST OF KEYWORDS USED TO CONDUCT LITERATURE SEARCH

PsycINFO	
Category	Search Words
Therapeutic play	Play therapy, childhood play behavior, games, recreation, toys, pretend play, anatomically detailed dolls, childhood play development, children's recreation games, doll play, role playing
Hospitalized Children	Hospitalized patients (limit to childhood and adolescence)
MEDLINE	
Category	Search Words
Therapeutic play	Art therapy, dance therapy, music therapy, play therapy, role playing, play and playthings, illustrated books, recreation, anatomic models
Hospitalized Children	Inpatient (limited to all child), hospitalized child, hospitalized adolescent
CINAHL	
Category	Search Words
Therapeutic play	Art therapy, dance therapy, music therapy, pet therapy, play therapy, play and playthings, games, anatomic models, recreational therapy, role playing
Hospitalized Children	Hospitalized infant, hospitalized children, hospitalized adolescent, inpatients (limit age from 0 to 18)

TABLE 2. FINAL SELECTION OF STUDIES INCLUDED IN THIS REVIEW

Cassell, S. (1965). Effect of brief puppet therapy upon the emotional responses of children undergoing cardiac catheterization. <i>Journal of Consulting Psychology</i> , 29(1): 1-8.
Clatworthy, S. (1981). Therapeutic play: Effects on hospitalized children. <i>Journal of Association for Care of Children's Health</i> , 9(4):108-113.
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