

EVIDENCE-BASED PRACTICE IN ACTION

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Collaboration of Nursing and Child Life: A Palette of Professional Practice

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This evidence-based practice (EBP) article begins with a case study background. Case studies can be used to illustrate the unfolding of the nursing process, from assessment to reassessment, for particular patient care situations. The evidence-based process, and its importance for successful clinical outcomes, is explicated after the case study presentation. This is an example of how EBP is an integral part of what we do as healthcare professionals: When we are faced with clinical dilemmas, evidence-based tools are there to guide us to solutions. In this example, Child Life and Nursing worked collaboratively to identify key clinical issues. They consulted with clinical experts within the hospital, and they used scientific rationale to select therapeutic interventions to support a patient and her family through several crisis situations. The EBP tools, seeking clinical expertise and applying research-based interventions, resulted in successful outcomes for a complex patient care situation.

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Prior to Sally's admission, she was a healthy, developmentally appropriate 7 year old with no previous medical problems. Two days prior to her admission, Sally began complaining of right leg pain. She had difficulty weight bearing, and she began developing swelling and erythema around the calf. She was seen by her primary care provider and referred to a local hospital where an examination was initiated. It appeared to be compartment syndrome, but she became hemodynamically unstable and was transferred to Children's Hospital Boston (CHB) for further evaluation.

Sally required an emergent surgical resection of her right leg for necrotizing fasciitis: 60% of the muscle mass was removed. After the operation, Sally was transferred to the medical-surgical critical care unit (MICU). Sally's family was in shock from the rapid onset of events, but they were also overwhelmed by the tentative diagnosis: Necrotizing fasciitis is often secondary to a Streptococcus Group A infection, and another family member had recently died from similar infectious complications.

THE MICU

During the first week in the MICU, the critical care environment created additional stressors for Sally and her family. A psychological consultation

was requested by nursing staff, and nursing also asked Child Life to make daily visits to Sally's bedside.

The Child Life Specialist (CLS) walked into a room with a small child laden down with tubes and monitors everywhere. The mother was weeping at the bedside. Normally, the CLS would do an informal coping assessment to ascertain coping strengths and weaknesses for the child and the family, but in this instance, the CLS was challenged to respond to the immediacy of the child's and the mother's distress: "What is one thing I can do to help make this situation easier?" The CLS drew on a common technique that is often used to help de-escalate stressful situations and to focus in a calmer manner: The patient and her mother were encouraged to take some deep breaths. When the mother was less anxious, it was possible for the CLS to talk with her about her perceptions of the situation and her child's needs.

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The mother was able to identify the MICU noises as a source of distress and confusion. It was also possible to talk with the child and confirm her fear of all the unfamiliar noises. Based on feedback from Sally and her mother, the CLS tried to create a calming environment with music and other distraction techniques. Initial, small successes were necessary to win the trust of the child and the family.

During a 7-day stay in the MICU, Child Life and Nursing were faced with other, notable clinical challenges: (a) The mother was always at Sally's bedside. Sally was acutely sensitive to her mother's behavior and would become agitated if her mother was emotionally upset. (b) The constant stream of different medical and surgical faces was confusing and disorienting to the child and the mother. (c) Sally was being barraged by invasive, painful procedures on a frequent basis. Despite Nursing's and Child Life's awareness of these significant problems, the critical condition of the child pre-empted opportunities to provide consistent, therapeutic interventions.

THE ORTHOPEDIC SURGICAL UNIT

After medical-surgical stabilization, Sally was transferred to the orthopedic surgical unit, 10 Northwest (10NW). Although Sally had a private room with less traffic and noise, the possibility of a leg amputation was still a factor that maintained the family's high level of anxiety. In addition, Sally had to undergo daily dressing changes at her bedside. It was apparent to Nursing and Child Life that early and aggressive interventions were necessary to avert further stress to the child and her family. Some of the key features of a collaborative care plan that were negotiated among Child Life, Nursing, Sally (when appropriate), and her mother included the following:

Education. The mother's sense of control was based on her knowledge of the situation—the pros and cons. Sitting down with the mother in a neutral environment provided the staff with an opportunity to give the mother simple, concrete facts for her to process. This time was also used to help the mother identify child-friendly ways to talk with Sally about the equipment, the procedures, her status, and so on.

The CLS as a "safe" person. Sally had special nurse favorites, but she also identified the nursing staff with invasive procedures. A primary CLS was assigned to make regular visits to do therapeutic play with Sally. This CLS was also

able to be present during traumatic procedures, such as the daily dressing changes.

Giving control to Sally. In the nursing care plan, all the nursing staff working with Sally were to pause before doing any procedure or intervention with Sally and offer a choice, even a simple choice. "Before you act, think about a choice and offer it to Sally. Do you want the blood pressure cuff on your right arm or your left arm?"

Creating a daily schedule (see Figure 1) with Sally.

This allowed her to know what to expect each day.

These interventions seemed to help, but Sally's healing process was excruciatingly slow, and she began to act out during her dressing changes. She would scream through the whole procedure and become belligerent. It was impossible for Nursing to accurately assess Sally's pain. The mother and staff, including the CLS, were intimidated by this behavior. Although initial progress had been made by Child Life and Nursing, Sally seemed to regress with each daily dressing change. Sally's primary nurse and her CLS met to reevaluate the care plan and to re-strategize. They recruited the aid of the Pain Team Service and the psychologist. The mother also worked with members of the interdisciplinary team to address Sally's behavioral outbursts during dressing changes.

Child Life used therapeutic play to discover that Sally was especially fearful of tape removal. Tape removal pads were given to Sally, and she was allowed to help remove her dressings, giving her a sense of control over her greatest fear. Child Life and Nursing also identified Sally's unique language for tape, procedures, and other sources of her fear and pain. For instance, she wanted to know when there would be "new owies," her expression for tape being used. Given her age, she understood more about what was going to happen when professional staff used Sally's own language.

Another successful coping intervention included "time-out" coupons during procedures: Psychology implemented this strategy. Sally was given three coupons per procedure. Each coupon was worth 2 minutes. She could use a coupon for a "time-out" as needed. After a while, she depended on the coupons less and less: Her familiarity with the procedures helped her cope with the situation without the need for as many breaks.

Sally enjoyed the Child Life "coping kit," filled with various coping items and distraction tools (see Figure 2). She also enjoyed doing medical play to act out what the procedures would be like. Nursing



Figure 1. Sally glances at her daily schedule to see what is in store for the day.

found that Sally's outbursts could be better managed with incentive charts and sticker rewards that could be frequently exchanged for prizes. The



Figure 2. Post-procedure, Sally picks a prize out of the prize basket.

mother was instrumental in consistently encouraging and rewarding Sally with stickers and small prizes. Table 1 summarizes the key coping strategies used for dressing changes.

Due to slow healing, a surgical/medical decision was made to try vacuum-assisted therapy (VAC) (<http://www.kci1.com/products/VAC>). This therapy promotes the formation of granulation tissue and helps to close large wounds by applying negative pressure to the site. The system also removes interstitial fluid and infectious materials from the tissue. VAC therapy prepared the way for skin grafting procedures. After discontinuation of the VAC, the next hurdle for staff, Sally, and her family was a split thickness skin graft procedure from her right buttock. Post-procedure would require more dressing changes and treatment with a heat lamp four times daily.

In addition to tried-and-true coping techniques, the heat lamp and dressing routine became incorporated into "At the Beach" activities. The heat lamp became "the sun." Sally wore a beach hat, and her mother would use this time to paint Sally's toenails or do some other, fun, primping activity. This worked for Sally, her mother, and the staff.

Sally's greatest progress was made when she was stable enough to go to the activity room (Figure 3). She loved doing arts and crafts, and this was a safe place where she could be a "kid first." Child Life helped Sally make an "All About Me" book with her craft work and pictures devoted to topics such as "What is it like being here?" and "What's best about the hospital?"

DISCHARGE HOME

Fifty-six days post-admission, Sally was ready to go home. To prepare for discharge, a care conference was held to help the family identify their special needs and issues. Social Work, Child Life, and Nursing worked with the mother on a daily basis for 2 weeks before discharge to discuss the

Table 1. New Coping Interventions

Interdisciplinary Interventions
Incentive chart (Child Life, Nursing)
Family-centered schedule (Nursing, Child Life)
Time-out coupons (Psychology)
Special language (Nursing, Child Life, Psychology)
Consistency (Nursing, Child Life)
Coping kit with distractors, therapeutic play (Child Life, Psychology)
Incorporating mother into distraction tasks (Nursing, Child Life, Psychology)
Premedication for all procedures (Nursing)
Age-appropriate pain scale to guide interventions (Nursing, Child Life)



Figure 3. Sally spending time in her favorite escape—the activity room.

home routine for Sally and the other family members. The mother had a chance to go home and even “rehearse” some of her new routines to identify potential problems prior to discharge. Nursing slowly increased mother’s participation in Sally’s care. By discharge, Sally’s mother was able to independently do Sally’s dressing changes. She was also taught how to assess Sally’s pain using a standardized scale and Sally’s verbal and nonverbal cues.

Sally was discharged home, walking with assistance and wearing a knee immobilizer at night to help correct remaining contractures. She continues to visit the hospital, the inpatient nurses, and her CLS during her outpatient appointments. The mother also stays in touch via phone. She recently expressed her concern over Sally’s adaptation to her leg’s appearance—especially with summer coming—and real beach time. Sally’s mother was worried about her child’s reaction to leg wounds and scars. She called the nurses to say that Sally had come up with a solution on her own: “It’s what makes me unique.”

THE EVIDENCE-BASED PROCESS

Hallmarks of EBP are best evidenced from benchmarking and from the literature. In this patient care scenario, benchmarking was an internal, interdisciplinary endeavor. Nursing and CL canvassed opinions from clinical experts within the institution, and coping interventions were styled from input by the Pain Team Service, Medicine, Surgery, a host of nurses with wound care experience, such as the enterostomal nurse, and other Child Life Specialists. Expert advice was substantiated by the research literature on key topics such as coping strategies for the hospitalized child and family-centered involvement.

The critical professional collaboration for Sally and her family was the liaison of Nursing with CL. The primary nurse and the CLS shared several complimentary responsibilities, such as parent and child education, family-centered planning and advocacy, and therapeutic “efficiency.” In this latter case, interdisciplinary cooperation between Nurs-

ing and Child Life aided each others' assessments and management of Sally's and her mothers' needs.

Child Life and Nursing employed a child life-based model where the central premise is that children in stressful circumstances require continuous and consistent developmentally appropriate support. With this special tutelage, a child can learn to understand and to cope better in stressful situations. This kind of learning serves as an "inoculation" against healthcare experiences, and a child can emerge as more resilient and actively involved in the care setting (Bolig & Weddle, 1988). This child life model was specifically tested in 1983 at Phoenix Children's Hospital. Medical and psychosocial outcomes were compared for patients receiving therapeutic CL interventions versus patients receiving traditional hospital care. Children in the experimental group scored significantly better on psychosocial measures, such as exhibiting less distress, expressing better understanding of hospital procedures, and showing better adjustment 10 days post-discharge. Parents of children in the experimental group reported that their children recovered more rapidly with less emotional upset than did parents of children in the control group (Wolfer, Gaynard, & Goldberger, 1988).

There are three major steps to the model: (a) preparation, (b) rehearsal, and (c) support (Blaine, 1999). Whenever time permits, some preparation time should be allowed to educate or explain to the child and parent what is going to happen. Based on the specific coping strategies that work best for child and parent, rehearsal time with the coping skill before a stressful event results in better outcomes. Support can include the physical and emotional presence of a healthcare professional, such as a nurse and/or a CLS, but it also entails the right props. Premade "coping kits" should contain age-appropriate materials as outlined in Table 2 (Blaine, 1999; Mills, 1996). See Figure 4 for a photograph of Sally's coping kit.

Approximately 1 month after Child Life and Nursing concertedly used this model, Sally and her mother finally began verbalizing a sense of trust. The best evidence of a true therapeutic relationship was Sally's willingness to rate her pain and to actively engage in the coping strategies.

EVALUATION OF THE EVIDENCE

Based on review of this complex case, the CLS and Nursing identified some key components to

Table 2. Coping Kit Items

Items	Developmental Age
Pacifiers, rattles, lullaby music, mobiles	Infant
Novel toys—rain sticks and gyroscopes	Toddler
Bubbles	
Pop-up books	
Bubbles	Preschoolers
Magic wands	
Feathers	
Seek and find/flap-up books	
Playdoh	
Action figures	
Imagery aids	School-age
Bubbles	
Books: <i>I Spy</i>	
Story Tapes	
Video games	
Stickers	
Sand/water timers	
Relaxation tapes	Adolescents
Massage	
Stress Balls	

success that are also reinforced by research evidence. Those key components included a respect for Sally's underlying personality, parental support, and assessment/continual reassessment of what was working or not working.

Sally's Personality

Although Sally's outbursts were distressing, they were, perhaps, personality markers of her coping style—a style that may have benefited her. Pain research has shown that children who exhibit more active behavior during invasive procedures significantly rate these procedures as less painful than children who cope passively. Active behavior may function as a type of distraction technique (Broome, Lillis, McGahee, & Bates, 1992).

Parental Support

The presence of a parent or familiar adult can make a significant, positive difference for children in the hospital, but as was true for Sally's mother, it is often hard for parents to see their children in pain and/or undergoing painful procedures. Children sense their parents' emotional discomfort, and it is important for parents to know how to talk calmly to the child, how to touch reassuringly, and how to maintain eye contact during procedures (Stuber, Christakis, Houskamp, & Kazak, 1996). Child life specialists have been trained to help parents accomplish these tasks, as well as to provide them with a vocabulary that will help concretely and honestly describe procedures so that they resemble other, familiar tasks that a child has already mastered (Goldberger, Gay-

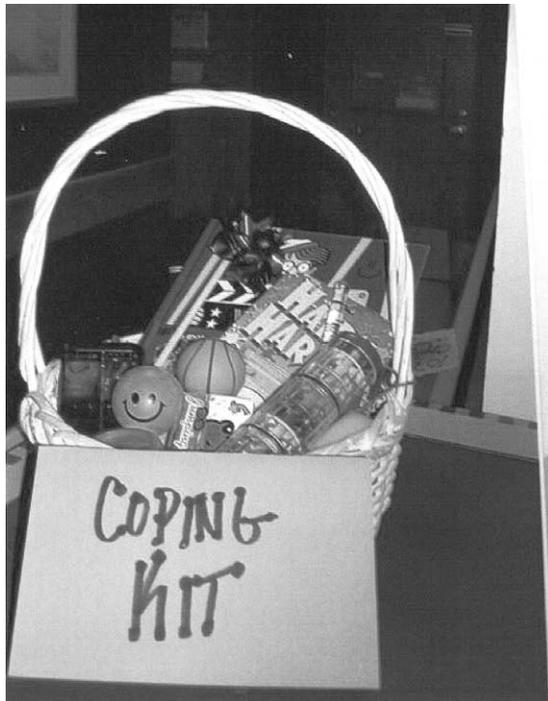


Figure 4. Sally chose a distraction tool out of this basket to help her cope through procedures.

nard, & Wolfer, 1990). In Sally's case, the CLS and Nursing were able to provide mother with emotional support and educational tools to help her (and Sally) better master the hospital regimen. In addition, Nursing and the CLS learned Sally's special vocabulary and incorporated these terms into daily care discussions with the mother. These terms became reflexively used by staff and mother so that Sally had more comfort with what was being said to her and about her.

Continual Assessment and Reassessment

The "right way" to cope with hospitalization and invasive procedures is very child-parent specific. It is necessary to systematically assess coping styles and coping strategies (Barkey & Stephens, 2000). Sometimes what works best will only emerge when a child and parent are given multiple coping strategies from which to choose (Stephens, Barkey, & Hall, 1999; Wolfer, Gaynard, & Goldberger, 1988). In Sally's case, some of the dressing change options/strategies

explored with her included the following: (a) to watch or not to watch; (b) to have someone with her—parent, the CLS, Nursing; (c) to pick something nice to think about, such as the beach; (d) to give stop/start signals and time-outs; and (e) to sing a song, do a spelling bee, or get a pedicure.

Distraction is known to decrease the pain response (Sparks, 2001). Sparks conducted a quasi-experimental study with 105 children ages 4 to 6 years receiving DPT immunizations. She compared two different distraction techniques for efficacy in reducing response to pain: touch versus bubble blowing. Both types of distraction were significantly able to reduce pain responses in comparison to a standard treatment control group. Sparks concluded that the specific distraction technique may be less important than providing a child with some type of age-appropriate distraction. When children are allowed choices, this may also increase their sense of control over a scary situation. Distraction techniques also work because they are usually simple and easy to perform. The child and a parent can be taught to do them, and this heightens their sense of self-efficacy (Sparks, 2001). For Sally and her mother, Nursing and the CLS had to regularly stop and reexamine the care regimen and "invent" other new distraction techniques for Sally and her mother. Evidence of success was the ultimate conversion of Sally's room into a beach scene with a child in "shades" smiling back.

CLINICAL IMPLICATIONS

In children's and families' everyday encounters with our healthcare system, our challenge is to follow the precepts provided by this article: (a) know the child and family, and (b) use time efficiently to prepare, rehearse, and support the child and family with a variety of coping strategies. There are multiple, developmentally appropriate distraction techniques that are easy to use and will probably make a big difference in outcomes. One healthcare professional, however, cannot do it all. Collaboration among disciplines, particularly between Child Life and Nursing, can enhance the process of assessing and reassessing how the family and the child are coping in our healthcare world.

REFERENCES

- Barkey, M., & Stephens, B. (2000). Comfort measures during invasive procedures: The role of the Child Life specialist. *Child Life Focus*, 2, 1-4.
- Blaine, S. (1999). The where, why, and how: Coping kits and distraction techniques. *Child Life Focus*, 1, 1-6.
- Bolig, R., & Weddle, K. (1988). Resiliency and hospitalization of children. *Children's Health Care*, 16, 255-260.
- Broome, M., Lillis, P., McGahee, T., & Bates, T. (1992). The use of distraction and imagery with children during painful procedures. *Oncology Nursing Forum*, 19, 499-502.

Goldberger, J., Gaynard, L., & Wolfer, J. (1990). Helping children cope with health care procedures. *Contemporary Pediatrics*, 7, 141-162.

Mills, L. (1996). Easing the pain of invasive procedures: Comfort kits. *The Playground*, 3, 1-6.

Sparks, L. (2001). Taking the "ouch" out of injections for children. *Maternal Child Nursing*, 26, 72-78.

Stephens, B., Barkey, M., & Hall, H. (1999). Techniques to comfort children during stressful procedures. *Advances in Mind-Body Medicine*, 15, 49-60.

Wolfer, J., Gaynard, L., & Goldberger, J. (1988). An experimental evaluation of a model child life program. *Children's Health Care*, 16, 244-254.

ERRATA

In "The Relationship Between Health Risk Behaviors and Fear in One Urban Seventh Grade Class" by Elizabeth Burgess Dowdell, PhD, RN and Mary Ellen Santucci, DNSc, RN (*Journal of Pediatric Nursing* 18:187-94, 2003), a paragraph on page 189 was printed with a section of text missing. The paragraph should have read as follows:

SAMPLE

Before the beginning of data collection, permission was obtained to conduct this research from the Institutional Review Board at the researcher's institution. Then, the researchers contacted a parochial (Catholic Church-sponsored) school in the Southwest section of Philadelphia, PA. A formal meeting was held with the parochial school's Principal to review all details of the study, including informed consent, student confidentiality, and the questions to be asked in the study. An information sheet describing the purpose of the study and an informed consent sheet was sent home to all seventh grade parents regarding this study. A signed consent sheet for participation was received from every student. A date was set for data collection with the entire seventh grade, all of whom willingly agreed to participate in this study. The school itself has been located, along with its parish, in the same densely populated neighborhood for over 100 years. The majority of the students walks or rides their bikes to school; uniforms are required for the entire student body of kindergarten through 8th grade. Class sizes range between 25 to 30 students per class; 25% of the faculty is male and the schoolyard is fenced.

In the August Editorial, "Healthy People 2010: A Sequel" by Cecily Lynn Betz, PhD, RN, FAAN (*Journal of Pediatric Nursing* 18:223-224, 2003), a team of nurses on page 223 was listed with incorrect affiliations. Edie Roderick, RN, MS, CS, PNP, and Carol Hafeman, RN, MA are from Children's Mercy Hospital in Kansas City, MO and Anne Stanton, RN, MSN is from Kansas University Medical Center in Kansas City, KS.