

# Comfort Theory and Its Application to Pediatric Nursing

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Although written protocols currently are directed more to pain relief than to the comfort of each child, there is increasing interest in pediatric literature about comforting strategies for children and their families. However, pediatric nurses/researchers currently utilize measures of discomfort that designate a *neutral* sense of comfort as in the absence of a specific discomfort. Assessing comfort as a positive, holistic outcome is important for measuring effectiveness of comforting strategies. Comfort Theory (Kolcaba, 2003), with its inherent emphasis on physical, psychospiritual, sociocultural, and environmental aspects of comfort, will contribute to a proactive and multifaceted approach to care. The framework of Comfort Theory for pediatric practice and research is easy to understand and implement. The application of the theory is strengthening and satisfying for pediatric patients/families and nurses, and benefits institutions where a culture of comfort is valued. Moreover, comfort is a transcultural and interdisciplinary concern.

According to the American Nurses Association (ANA) Standards (ANA, 1996/2000), pediatric nursing is focused on the care of children and their families in a variety of health care settings. These settings include pre and post-operative arenas, ambulatory care centers, primary care offices (both physician and nurse-run), specialty clinics, community shelters, and hospitals. The type of nursing care ranges from well baby to acute and chronic care. Pediatric nursing also includes care for grieving families as they deal with devastating diagnoses, congenital anomalies, and sudden trauma (ANA, 1996/2000).

Some of the principals that undergird pediatric nursing are: (a) care is individualized with high respect for the goals and preferences of each child within the context of his or her family; (b) each child/family is encouraged to participate in goal setting; (c) care is holistic, encompassing physical, emotional, spiritual, mental, sociocultural, genetic, and developmental aspects of each child/family; (d) care is proactive with attention to prevention of disease and injury through family-centered education, advocacy, and effective

communication; and (e) health care is interdisciplinary (ANA, 1996/2000).

Although written protocols currently are directed more to pain relief than to the comfort of each child, there is rising interest expressed in pediatric literature about comforting strategies when assisting with or performing invasive procedures. These strategies include "positioning for comfort;" facilitating a child's special "self-comfort habits," such as thumb-sucking, blanket-holding, or rocking; and advocating for the presence of family members (Stephens, Barkey, & Hall, 1999). In order to compare the effectiveness of such strategies, however, pediatric researchers utilize measures of discomfort, which, at best, designate a neutral sense of comfort as in the absence of a specific discomfort or discomforts. At worst, such measures perpetuate a narrow view of the child, as they fail to reflect the holistic, proactive, and positive standards of care so important to pediatric nursing.

Proactive assessment and care seeks not only to minimize negative aspects of illness and trauma (such as pain, depression, anxiety), but to enhance positive indicators of daily function (such as comfort, hope, resiliency) (Magvary, 2002). Magvary calls this positive orientation "a turn-of-the-century perspective" and calls for documentation and valuing of positive outcomes of care. Comfort is a positive outcome that has been linked empirically to successful engagement in health seeking behaviors and theoretically to positive institutional outcomes such as higher patient satisfaction and

cost-benefits ratios (Kolcaba, 2003). In view of these relationships and the fact that children and families want to be comforted in stressful health care situations, comfort is an important outcome to measure for pediatric care and research.

An orientation to Comfort Theory (Kolcaba, 2003), with its inherent emphasis on simultaneous physical, psychospiritual, sociocultural, and environmental aspects of comfort, will contribute to a well-articulated, multifaceted approach to pediatric education, practice, and research. The purposes of this article are to (a) introduce Comfort Theory and apply it to pediatric practice and research in ways that are easy to understand and implement; (b) define holistic comfort in terms that are relevant to children and families; (c) discuss how application of the theory is strengthening and satisfying for pediatric patients, families, nurses, and administrators; and (d) describe how the creation and implementation of Clinical Guidelines for Patient/Family Comfort is a valuable proactive strategy for pediatric nurses.

## What is Comfort Theory?

The first article about the Theory of Comfort was published in 1994 by Kolcaba. In 2001, a subsequent article provided an expansion of the theory to include institutional outcomes (InO). In 2003, Kolcaba published a comprehensive book about the development, testing, and application of the theory. Comfort Theory has been tested and supported in several patient populations, including psychometric and

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experimental studies in small samples of women with early stage breast cancer going through radiation therapy (Kolcaba & Fox, 1999), persons with urinary frequency and incontinence (Dowd, Kolcaba, & Steiner, 2000), and persons near end of life (Novak, Kolcaba, Steiner, & Dowd, 2001). Other nurse researchers have utilized the theory in settings such as labor and delivery, peri- and intra-operative care, critical care, burn units, gynecological practice, nursing care of persons with mental or hearing disabilities, emergency air transport, and newborn nurseries. Perianesthesia nurses have developed clinical practice guidelines and advanced care competencies (Wilson & Kolcaba, 2004).

The Theory of Comfort is a mid-range theory for nursing practice and research. It is a mid-range theory because of the limited number of concepts and propositions, low level of abstraction, and ease of application to actual practice (Kolcaba, 2003). In order to use the theory, three steps are required: (a) understanding the technical definition of comfort and its origins, (b) understanding the relationships (propositions) between the general concepts entailed in the theory, and (c) relating the general concepts to specific pediatric problems/settings in order to enlighten practice and generate research questions.

**Meanings of comfort.** Webster (1990) defined comfort in several ways: (a) to soothe in distress or sorrow; (b) relief from distress; (c) a person or thing that comforts; (d) a state of ease and quiet enjoyment, free from worry; (e) anything that makes life easy; and (f) the lessening of misery or grief by cheering, calming, or inspiring with hope. In these definitions, comfort can be a verb, noun, adjective, adverb, and it can be negative (absence of a recent discomfort), neutral (ease), or positive (inspiring hope). The origin of comfort is *confortare*, meaning to strengthen greatly (Kolcaba, 1992). This strengthening property associated with enhanced comfort is especially intriguing for nursing.

By the very diversity of these definitions, we see that comfort is a holistic, complex term. The term comfort also is used in a variety of forms such as comfortable, in comfort, comforting, and comforter. Comfort is also a process ("The nurse comforted me") and a product ("The child felt comforted"). And, the state of comfort is more than the absence of discomfort. Clearly, for standards of care and clinical practice guidelines, a technical definition of comfort is needed so that all

practitioners and researchers are "on the same page."

**Definition of holistic comfort for nursing.** Kolcaba (1994, 2001, 2003) has defined comfort as "the immediate state of being strengthened through having the human needs for relief, ease, and transcendence addressed in four contexts of experience (physical, psychospiritual, sociocultural, and environmental)" (2003, p. 251). The terms relief, ease, and transcendence are derived from the above dictionary definitions plus a review of the professional literatures in medicine, theology, ergonomics, psychology, and nursing (Kolcaba & Kolcaba, 1991). *Relief* is the state of having a discomfort mitigated or alleviated. *Ease* is the absence of specific discomforts. To experience ease a child or family does not have to have a previous discomfort, although the nurse may be aware of predispositions to specific discomforts (e.g., the tendency for shortness of breath in an asthmatic child or acute anxiety in family members). Many medical and psychological conditions disturb homeostatic mechanisms, and nurses must be aware of risk factors for depression, stress-related illness, dehydration, bleeding, or vomiting to name a few examples.

*Transcendence* is the ability to "rise above" discomforts when they cannot be eradicated or avoided (e.g., the child feels confident about ambulation although (s)he knows it will exacerbate pain). Transcendence, as a type of comfort, accounts for its strengthening property and reminds nurses to "never give up" helping their children and family members feel comforted. Interventions for increasing transcendence can be targeted to improving the environment, increasing social support, or providing reassurance as described below. Developmentally, the experience of feeling strengthened, empowered, or courageous may be more relevant to school-aged children and adolescents. Also, interventions to enhance transcendence may be more effective coming from parents/families, although nurses can certainly give encouragement and instructions for motivating messages.

The three types of comfort occur in four contexts of experience: *physical, psychospiritual, sociocultural, and environmental*. These contexts were derived from an extensive review of the nursing literature on holism (Kolcaba, 1992). When the three types of comfort are juxtaposed with the four contexts of experience, a 12-cell grid is created, which is called a taxonomic structure (TS). Taken together, these cells repre-

sent all relevant aspects (defining attributes) of comfort for pediatric nursing and demonstrate the holistic nature of comfort as an important goal of care. All comfort needs can be placed somewhere on the TS, and the cells are not mutually exclusive. A sample pediatric case study using the TS as a guide for a holistic comfort assessment is demonstrated below (see Figure 1).

## Pediatric Case Study Using The TS

Eva is a 12-year-old Hispanic female with scoliosis, admitted to the pediatric intensive care unit (PICU) immediately following spinal fusion. The nurse uses the TS as a guide for the initial assessment, locating discomforts mentally on the TS. Eva currently is not in pain because she has a patient-controlled analgesic (PCA) pump; however, she is predisposed to breakthrough surgical pain so this comfort need is located in the cell that can be labeled physical-ease. This location designates that Eva will be observed for breakthrough surgical pain. In addition, pain is often exacerbated by anxiety, and Eva is worried about the surgical outcome and asks the nurse, "Is my back going to be straight now?" Anxiety is located in the cell that can be labeled psychospiritual-relief, and the nurse knows she will listen to Eva's concerns and prior understanding about the surgical results when a translator is available. Anxiety is often exacerbated when no family members are present, and the nurse plans to bring her family members into the PICU as soon as the assessment is completed. Thus, at the moment, Eva needs relief from her social comfort needs to be with her parents. When the sociocultural needs for a translator are met, anxiety will be decreased and pain management will increase because Eva's understanding of the self-administered pump will be enhanced. The comfort assessment proceeds in this manner. The nurse is aware that all Eva's comfort needs interact and that comfort measures directed to one need also have positive effects on other needs.

Nurses attend to all attributes of comfort within the parameters of developmental age and family system. Adolescents are very concerned about privacy and body image, so the environmental needs require privacy with Eva's care. Peers are also important for the adolescent so the sociocultural needs of Eva would not

**Figure 1. Taxonomic Structure of Eva's Comfort Needs**

*Eva, a 12-year-old Hispanic female with Scoliosis is admitted the PICU immediately following spinal fusion.*

| Physical        | Relief                                                                                | Ease                                                               | Transcendence                                                                            |
|-----------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|                 | Nausea<br>Lack of mobility                                                            | Comfortable bed,<br>homeostatis,<br>position of<br>comfort<br>Pain | Patient thinking,<br>"I can tolerate<br>this pain."                                      |
| Psychospiritual | Anxiety                                                                               | Uncertainty<br>about success of<br>surgery                         | Need for<br>spiritual support<br>and reassurance<br>from health care<br>team             |
| Environmental   | Noisy PICU<br>Bright lights<br>Cold                                                   | Lack of privacy                                                    | Need for calm,<br>familiar environ-<br>ment<br>Need for privacy<br>with personal<br>care |
| Sociocultural   | Absence of<br>traditions and<br>culturally<br>sensitive care<br>Family not<br>present | Language<br>barriers                                               | Need for support<br>from family and<br>friends; need for<br>information                  |

#### Type of Comfort

*Relief* – the state of having a specific comfort need met.

*Ease* – the state of calm or contentment.

*Transcendence* – the state in which one can rise above problems or pain.

#### Context in which Comfort Occurs

*Physical* – pertaining to bodily sensations and homeostatic mechanisms.

*Psychospiritual* – pertaining to internal awareness of self, including esteem, concept, sexuality, meaning in one's life, and one's relationship to a higher order or being.

*Environmental* – pertaining to the external background of human experience (temperature, light, sound, odor, color, furniture, landscape, etc.)

*Sociocultural* – pertaining to interpersonal, family, and societal relationships (finances, teaching, health care personnel, etc.), also to family traditions, rituals, and religious practices.

**Note:** Adapted from Kolcaba, K., & Fisher, E. (1996). A holistic perspective on comfort care as an advance directive. *Critical Care Nursing Quarterly*, 18(4), 66-76.

only include contact with family members but with peers as well. Because the aspects of comfort are interrelated, the whole (Total Comfort) is greater than the sum of its parts (as represented by each cell in the figure). That is, caring attention to one cell that needs it, in the form of a comfort intervention, can enhance total comfort more than could be expected by the nature of that one

specific comfort measure. Also, from our experience with our own comfort, we know that comfort is a dynamic state, subject to change (positively or negatively) very quickly. As the TS demonstrates, comfort is different and more than the experience of pain, and pain can be transcended with positive messages, optimistic body language of nurses, and reassurance to Eva that she is safe.

#### Premises About Comfort

Placing the goal of comfort within a framework or theory for pediatric nursing provides nurses with rationale for enhancing child/family comfort. Prior to presenting the theory; however, it is important to understand the authors' premises as applied to pediatric nursing. They are:

- Children/families have holistic responses to complex stimuli.
- Comfort is a desirable, positive, holistic outcome that is germane to the discipline of nursing, the specialty of pediatric nursing, and to a lesser extent, other health care disciplines.
- Children/families strive to meet, or to have met, their basic comfort needs; it is an active endeavor and sometimes requires the help of the nurse or supportive others.
- Children/families vary significantly in their personal need or desire for certain levels of comfort.
- Prevention of discomforts, including those related to physiological or psychological stressors, is easier than *treating* discomforts. Prevention is also better for children/families.
- When discomforts such as environmental chaos or pain cannot be prevented, children/families can be assisted to experience partial or complete transcendence through comfort interventions that convey hope, success, caring, and support for their fear.
- When nurses apply Comfort Theory, they efficiently consider and minister in a caring way to the uniqueness and complexity of each whole child within the context of the family system. Thus, the theory offers an efficient way to pattern care and communicate to the interdisciplinary team the interventions that "work."

#### The Theory of Comfort

According to the theory, enhanced comfort strengthens recipients (children and/or family members) to engage in activities necessary for achieving health and remaining healthy. In her classic article, Schlotfeldt (1975) calls these activities health seeking behaviors (HSBs), and they include internal HSBs, external HSBs, or a peaceful death. After frightening or painful experiences, nurses are the recipients' first link with normalcy. Nurses facilitate a supportive environment for recovery and rehabilitation. Nurses are coaches in pediatric settings, assuring the child/family that (s)he can recover, is safe, is protected

**Table 1. Propositions Theory of Comfort**

1. Nurses identify comfort needs of children/families that have not been met by existing support systems.
2. Nurses design interventions to address those needs.
3. Intervening variables are taken into account in designing the interventions and determining if they have probability for success.
4. If the intervention is effective, and delivered in a caring manner, the immediate outcome of enhanced comfort is attained.
5. Children/families and nurses agree upon desirable and realistic HSBs.
6. If enhanced comfort is achieved, children/families are strengthened to engage in HSBs which further enhances comfort.
7. When children/families engage in HSBs as result of being strengthened by *Enhanced comfort*, nurses and recipients of care are more satisfied with health care and demonstrate better health related (diagnosis specific) outcomes.
8. When children/families and nurses are satisfied with health care in a specific institution, public acknowledgment about the institutions' contributions to health in the United States will enable institutions to remain viable and to flourish.
9. A professional working environment produces better outcomes for recipients of care and better institutional outcomes.

from harm, and is capable to participate in the treatment plan appropriate to her/his developmental age. Kolcaba (2001) states that HSBs are further related to desirable institutional outcomes such as decreased cost, improved family and nurse satisfaction, and better outcomes for children/families including earlier discharge and low readmission rate. The central propositions for Comfort Theory are in Table 1.

**Three types of comfort interventions.** Comfort interventions have three categories: (a) *standard* comfort interventions to maintain homeostasis and control pain; (b) *coaching*, to relieve anxiety, provide reassurance and information, instill hope, listen, and help plan for recovery; and (c) *comfort food for the soul*, those extra nice things that nurses do to make children/families feel cared for and strengthened, such as massage or guided imagery (Kolcaba, 2003).

Sometimes, the most realistic outcome for a child is a peaceful death, and this realization comes slowly to nurses, other care providers, and families. At these times, hope can still be maintained, but gradually the focus for hope changes to the possibility of a "good death." Kolcaba and Fisher (1996) cited Dozor and Addison (1992) in defining a good death as, "being meaningful for all, a death that ends well for patient, health care workers, and family. It is a time to say goodbye to each other and to the mortal life of the patient and to find meaning in

that life" (p. 75). Helping children and their families to let go peacefully, with a minimum of psychological and physical pain, is a most profound nursing act and one that embodies the true art of nursing. And, theoretically, comfort provides some of the strength for the child and family to facilitate a peaceful death.

### **Organizing Care that is Focused on Comfort**

When nurses are committed to providing holistic comfort, needs for relief, ease, and/or transcendence are identified routinely throughout their pediatric experience. Nurses move back and forth among these three types of comfort, realizing that if total relief is not possible, interventions to enhance transcendence are appropriate. However, it is essential to determine in which context(s) the child's or family's comfort needs are occurring in order to correctly apply the theory. Thus, a mini-assessment would consist of the nurse mentally checking for physical, psychospiritual, sociocultural, and environmental comfort needs. When comfort needs are addressed in one context, total comfort is enhanced in the remaining contexts.

**Physical comfort needs.** Physical comfort needs include deficits in physiological mechanisms that are disrupted or at risk because of an illness or invasive procedure. Subtle physical needs of which the child or parent may not be aware include the need for

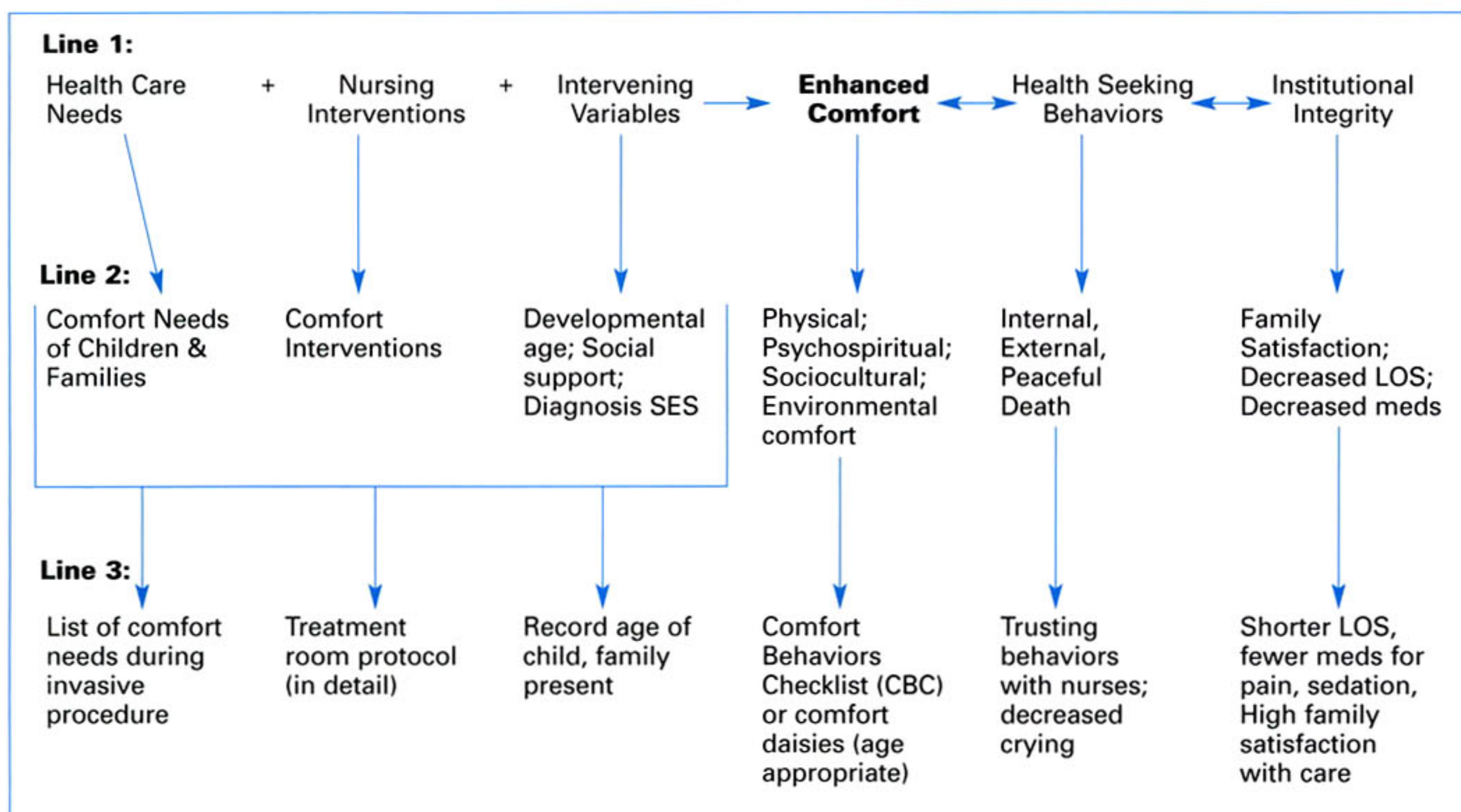
improved fluid or electrolyte balance, oxygenation, or thermoregulation. Obvious physical needs such as pain, nausea, vomiting, shivering, or itching are easier to see and treat with and without medications. Standard comfort interventions are directed to regaining or maintaining homeostasis. Taken together, subtle and obvious physical comfort needs are often where novice nurses implement interventions to the exclusion of needs in the other three contexts described below.

**Psychospiritual comfort needs.** Psychospiritual comfort needs include the need for confidence, motivation, and trust in order for the child/family to "rise above" or move peacefully through the discomforts of painful procedures or trauma that cannot be immediately relieved. These needs are often met by comfort food for the soul targeted to transcendence, such as a massage, mouth care, special visitors, caring touch, facilitation of self-comforting strategies, and special words of continued encouragement. These "extra special" interventions, for which nurses often have trouble finding time, are unexpected but endearing to children and family members and they facilitate transcendence. Transcendence is a key factor in a child's peaceful death.

**Sociocultural comfort needs.** Sociocultural comfort needs are the needs for culturally sensitive reassurance, support, positive body language, and caring. These needs are met through coaching, which includes a can-do attitude, messages of wellness and encouragement, assurances of "you're doing great," companionship of the nurse during the tasks ahead, developmentally appropriate information about every aspect that relates to a procedure, waking up, discharge, and rehabilitation. Social needs also include the needs of the family for financial assistance, paper work assistance, honoring cultural traditions, and sometimes for friendship during the hospitalization if the family unit has a limited social network. Discharge planning also helps meet social needs for a smooth transition home, as does discussion of funeral plans and help with bereavement in those special circumstances.

**Environmental comfort needs.** Environmental needs include orderliness, quiet, comfortable furniture, minimal odors, and safety as far as is possible in the pediatric setting. It also includes attention to and suggestions for environmental adaptations in the child/family's hospital room and home. When nurses are unable to provide a

**Figure 2. Comfort Theory Applied to Pediatric Nursing**



totally peaceful, strengthening environment (such as Nightingale mandated!), they may be able to help children and families transcend less than ideal settings. However, nurses should make conscious efforts to cut down noise, lights, and interrupted sleep in order to facilitate a health-promoting environment.

### Application of Comfort Theory to Pediatric Nursing

Figure 2 is a diagram of relationships between important concepts in the Comfort Theory. Line 1 depicts the theory in generalizable concepts and is the mid-range level of theory. This line is the highest level of abstraction and each subsequent line becomes more concrete. Line 2 is the practice level of Comfort Theory applied specifically to pediatric nursing. Line 3 is the way in which each concept in line 4 is operationalized, which means to put into practice (such as a protocol) or to measure (such as with a comfort instrument). To show how this figure helps nurses to apply the theory in practice and research, an example from the literature is used below.

Stephens and colleagues (1999) list several interventions to comfort children and families during stressful procedures. Among them are (a) preparing the child and parent, avoiding the word "pain" in all explanations (social

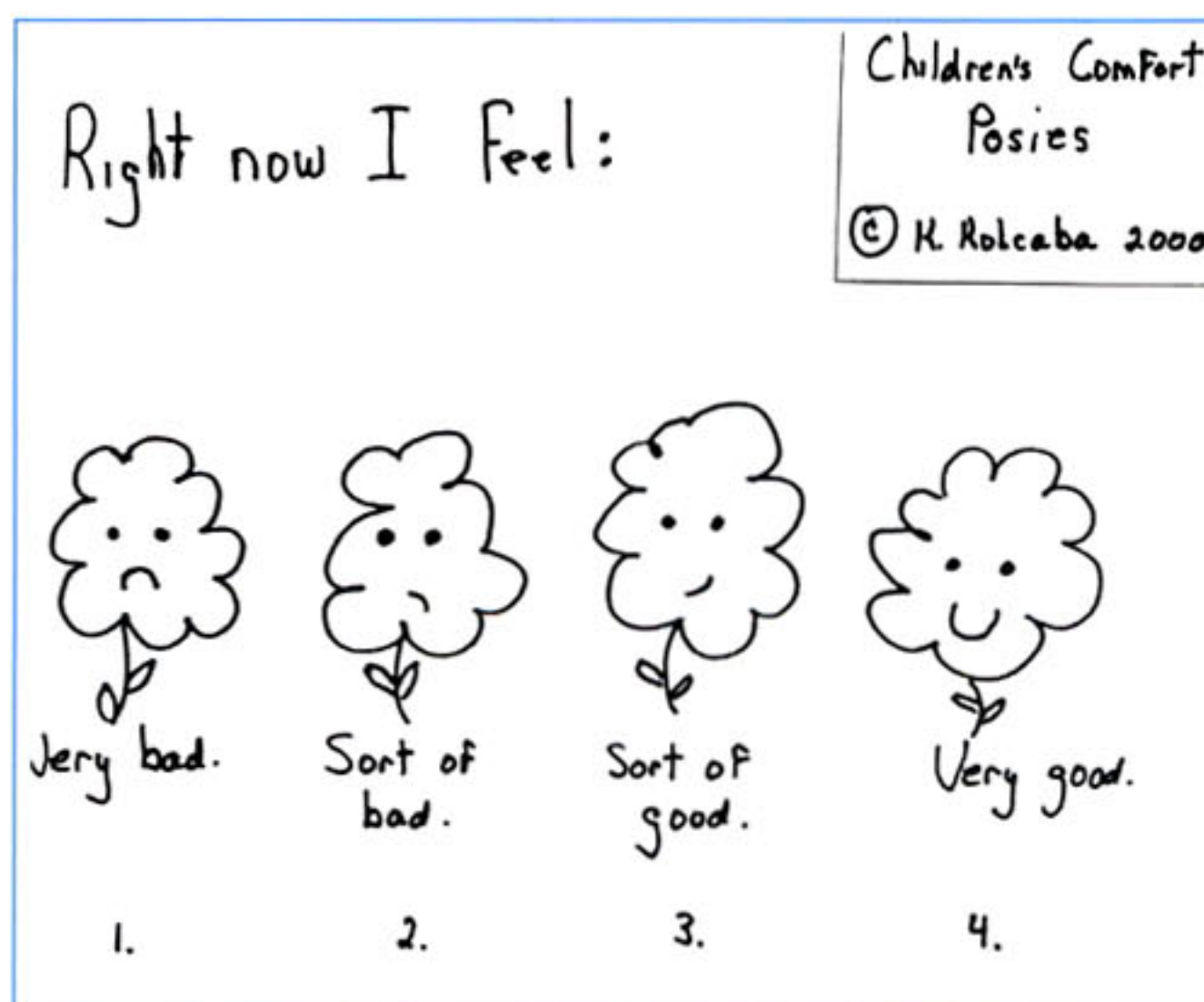
comfort); (b) inviting the parent/care-giver to be present (social and psychospiritual comfort); (c) utilizing the treatment room for stressful procedures instead of the child's hospital room (environmental comfort); (d) positioning the child in a comforting manner (physical comfort); and (e) maintaining a calm and positive atmosphere (environmental comfort). The policy of utilizing the treatment

room for stressful procedures is included in line 3 of Figure 2.

### Measurement of Comfort in Children and Families

There are several ways to measure changes or differences in children's comfort for practice or research. Selections can be made from the following formats, depending on the developmental abilities of the child, the

**Figure 3. Children's Comfort Daisies**



**From:** Kolcaba, K. (1997). The comfort line. Retrieved from [www.uakron.edu/comfort/](http://www.uakron.edu/comfort/).

setting, and the purpose (for practice or research). All of the following are congruent with Magvary's(2002) "turn-of-the-century" perspective for encouraging the assessment and facilitation of positive outcomes. And these instruments are congruent with Stephens et al.'s (1999) suggestion to avoid using the word "pain" with children.

1. Nurses can ask children the question, "Are you feeling ok?" This is a phrase to which a 2- to 3- year-old child can relate. The nurse circles "yes," "no," or "not sure" on a documentation form, providing rudimentary but empirical evidence of comfort levels in a young child.
2. Children's Comfort Daisies (Kolcaba, 1997) is a more sensitive instrument than the simple question asked above because it involves a child's rating his or her comfort from one to four (see Figure 3).
3. The child places a dot on a vertical 10-centimeter line (visual analog scale) called a Comfort Line. The statement, "I am as comfortable as possible," is at the top and, "I am as uncomfortable as possible" is at the bottom.
4. The nurse asks, "Can you tell me how comfortable you are by giving me a number from 0 to 10, with 10 being the highest possible comfort?"
5. For older children and teens, an adaptation of the General Comfort Questionnaire may be appropriate. Family comfort also can be measured by adapting the GCQ for families in pediatric settings. See Kolcaba (1997) or Kolcaba (2003) for instructions on how to do this.
6. For a child who is non-verbal, the Comfort Behaviors Checklist (CBC) (Kolcaba, 1997) is an instrument on which nurses can record their observations of a child's comfort behaviors (see Figure 4). This checklist also can be used to supplement other rating scales. Unlike other observational checklists of pediatric discomfort, the CBC is constructed to document positive aspects of comfort. Thus, it is more holistic and congruent with Comfort Theory and our "turn of the century perspective" than are current checklists that focus on absence of discomfort(s).

#### Comments about measurement.

The first imperative for promoting Comfort Theory for pediatric nursing is to test the instruments above for appro-

**Figure 4. Comfort Behaviors Checklist**

How is the child acting right now? Please circle best response.

NA = *sleeping, or not appropriate for this child because of diagnosis or age.*

(For example, if child is sleeping, questions 3-5 are circled NA.)

| <b>Vocalizations</b>                                                                                                                              | <b>NA</b> | <b>No</b> | <b>Somewhat</b> | <b>Moderate</b> | <b>Strong</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|-----------------|-----------------|---------------|
| 1. awake                                                                                                                                          | 0         | 1         | 2               | 3               | 4             |
| 2. moaning                                                                                                                                        | 0         | 1         | 2               | 3               | 4             |
| 3. complaining                                                                                                                                    | 0         | 1         | 2               | 3               | 4             |
| 4. content sounds/talk                                                                                                                            | 0         | 1         | 2               | 3               | 4             |
| 5. crying/shouting                                                                                                                                | 0         | 1         | 2               | 3               | 4             |
| <b>Motor Signs</b>                                                                                                                                |           |           |                 |                 |               |
| 6. peaceful                                                                                                                                       | 0         | 1         | 2               | 3               | 4             |
| 7. agitated                                                                                                                                       | 0         | 1         | 2               | 3               | 4             |
| 8. rapid pacing                                                                                                                                   | 0         | 1         | 2               | 3               | 4             |
| 9. fidgety                                                                                                                                        | 0         | 1         | 2               | 3               | 4             |
| 10. muscles relaxed                                                                                                                               | 0         | 1         | 2               | 3               | 4             |
| 11. rubbing an area                                                                                                                               | 0         | 1         | 2               | 3               | 4             |
| 12. guarding                                                                                                                                      | 0         | 1         | 2               | 3               | 4             |
| <b>Performance</b>                                                                                                                                |           |           |                 |                 |               |
| 13. anxious movements                                                                                                                             | 0         | 1         | 2               | 3               | 4             |
| 14. accepts kindness                                                                                                                              | 0         | 1         | 2               | 3               | 4             |
| 15. likes touch/hand holding                                                                                                                      | 0         | 1         | 2               | 3               | 4             |
| 16. able to rest                                                                                                                                  | 0         | 1         | 2               | 3               | 4             |
| 17. able to eat                                                                                                                                   | 0         | 1         | 2               | 3               | 4             |
| 18. calm, at ease                                                                                                                                 | 0         | 1         | 2               | 3               | 4             |
| 19. purposeful movements                                                                                                                          | 0         | 1         | 2               | 3               | 4             |
| 20. tries to move away                                                                                                                            | 0         | 1         | 2               | 3               | 4             |
| <b>Facial</b>                                                                                                                                     |           |           |                 |                 |               |
| 21. appears depressed                                                                                                                             | 0         | 1         | 2               | 3               | 4             |
| 22. grimaces/winces                                                                                                                               | 0         | 1         | 2               | 3               | 4             |
| 23. relaxed expression                                                                                                                            | 0         | 1         | 2               | 3               | 4             |
| 24. hyper-vigilant                                                                                                                                | 0         | 1         | 2               | 3               | 4             |
| 25. appears frightened or worried                                                                                                                 | 0         | 1         | 2               | 3               | 4             |
| 26. smiles                                                                                                                                        | 0         | 1         | 2               | 3               | 4             |
| <b>Miscellaneous</b>                                                                                                                              |           |           |                 |                 |               |
| 27. unusual breathing                                                                                                                             | 0         | 1         | 2               | 3               | 4             |
| 28. focuses mentally                                                                                                                              | 0         | 1         | 2               | 3               | 4             |
| 29. able to converse                                                                                                                              | 0         | 1         | 2               | 3               | 4             |
| 30. awakens smoothly                                                                                                                              | 0         | 1         | 2               | 3               | 4             |
| NA = sleeping or not appropriate for this child because of diagnosis or age.<br>(For example, if child is sleeping questions 3-5 are circled NA.) |           |           |                 |                 |               |

**Figure 4. Comfort Behaviors Checklist (continued)**

If this is the only comfort/pain instrument being used, ask the child:

31. Do you have any pain? No Yes [Please rate your pain from 0 to 10, with 10 being the highest possible pain]. (rating)

32. Taking everything into consideration, how comfortable are you right now? [Please rate your total comfort from 1 to 10, with 10 being the highest possible comfort.] (rating)

**Note:** Adapted by K. Kolcaba from Volicer, L. (1988). Management of advanced Alzheimer's dementia/The comfort checklist. In Volicer et al.'s (Eds.), *Clinical management of Alzheimer's disease*. Rockville, MD: Aspen Publications.

#### Other open-ended information

(change in medication use, recent injury, recent decline in functional status, staff reports of comfort/discomfort, changes in appetite, ambulation, etc.)

#### Scoring of the Behaviors Checklist

1. Subtract number of "not appropriate" (NA) from 30, to obtain total answered.
2. Multiply total answered (step 1) by 4, to obtain total possible score.
3. Reverse code: numbers 2, 3, 5, 7, 8, 9, 11, 12, 13, 20, 21, 22, 24, 25, 27 to obtain raw comfort responses.
4. Add raw comfort responses (step 3) for all questions not marked NA, to obtain raw comfort score.
5. Divide actual comfort score (step 4) by total possible score (step 2) and round to two decimal places. (If the third decimal place is a 5 or greater, round the second decimal place up to the next number.)
6. Report score as a 2-digit number (percent without the % sign or decimal). Higher scores indicate higher Comfort.

**From:** Kolcaba, K. (1997). The comfort line. Retrieved from [www.uakron.edu/comfort/](http://www.uakron.edu/comfort/).

appropriate use with children of different developmental levels and cognitive abilities. Other considerations are the practice setting, clinical comfort needs, and purpose of measurement (practice or research). Recommendations for uses of each instrument must be verified with psychometric testing and results published. Once that task is accomplished, documentation of children's and families' comfort in clinical settings can be instituted and research with these instruments can be conducted.

Generally, for research, sensitivity to change in comfort over time is increased when more items are on an instrument. Thus, Comfort Lines will not be as sensitive as the General Comfort Questionnaire (adapted for pediatric research) will be. Also, any time a child can give his or her own responses to questions about his or her own comfort, even if very simple responses, is preferable to using the CBC observational instrument alone.

#### Implications for Practice: Clinical Practice Guidelines

Comfort Theory provides a framework for clinical practice guidelines, which state that the provision of holistic care oriented to comfort must be explicit and well-documented. In turn, the desirable outcome of comfort is related to engagement in HSBs (important to patients, families, and the health care team) and to better institutional outcomes (important to administrators). The framework also suggests to administrators that a culture of comfort in the pediatric setting cannot be achieved without necessary institutional commitment and support. Not only can clinical practice guidelines specify comfort as an outcome, they can describe staffing levels and patterns of interdisciplinary care delivery that are necessary to reach specific comfort goals.

The proactive model for a specialty that shaped its own practice is the American Society of Perianesthesia Nurses (ASPAN). Over the past 5

years, ASPAN took well-planned steps to gain consensus on comfort needs and interventions in all perianesthesia settings, to develop practical measures of comfort, and to write *ASPAN Pain and Comfort Clinical Guideline* (Krenzischek & Wilson, 2003) and *Advanced Comfort Competencies* (Kolcaba & Wilson, 2002; Wilson & Kolcaba, 2004).

#### Implications for Research

After it has been determined which comfort instruments work well with specific ages of children and in specific settings, future research can explore the relationships between a child's estimate of his or her own comfort, a family members' estimate of the child's comfort, and/or an observer's score for that child on the CBC. Intervention research can test research questions about how to enhance comfort during certain procedures, traumas, or end-of-life situations. The relationships between comfort and selected HSBs need to be established.

#### Summary

Research about interventions that enhance holistic comfort in children has not been initiated to date because of prior conceptual and measurement issues with this complex but desirable outcome of care. This article clarifies some of these issues, paving the way for application of Comfort Theory to pediatric nursing. Comfort Theory is easily applied to pediatric nursing as demonstrated by the conceptual map provided in Figure 2.

Magvary's (2002) "turn of the century perspective" entails a positive orientation for health promotion and processes related to it. While her positive perspective focused on mental health, it is applicable to public health in general and to pediatric nursing specifically. She states that a positive perspective on health contributes to a national prevention agenda in four ways: (a) prevention of illness in the general public; (b) prevention of secondary comorbid conditions, disabilities, negative consequences, and relapses; (c) reduction of risk factors and the enhancement of protective factors; and (d) enhancement of a sense of well-being and productivity at the individual, family, and community level (Magvary, 2002, pg. 333).

Comfort is a positive outcome that theoretically empowers children and their families to engage in health seeking behaviors. Comfort is also important for a peaceful death. Enhancing comfort of children/families in clinical settings is altruistic, practical, and sat-

isfying to recipients and nurses. Measuring the strength of relationships between comfort, health seeking behaviors, and institutional outcomes will provide rationale for strong staffing, committed to outcomes of comfort.

Readers are invited to Kolcaba's Web site to download instruments for inspection and use. No fees or permissions are required, but Kolcaba requests a brief description of the sample, intervention (if any), and psychometric properties of any instruments accessed through her Web site. Kolcaba will publish cumulative evidence about any instrument in use.

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