

# The Hopes and Wishes of Adolescents With Cancer and the Nursing Care That Helps

Pamela S. Hinds, PhD, RN, CS  
2004 Oncology Nursing Society Distinguished Researcher Award

Pamela S. Hinds, PhD, RN, CS, began her involvement with the Oncology Nursing Society (ONS) nearly 20 years ago. As evident by the trajectory below, her contributions to the organization have been widespread. Hinds' work in the areas of certification, education, research, and evidence-based practice has been outstanding and has affected many of the organization's activities and programs. She also has worked diligently to establish a partnership between ONS and the Children's Oncology Group. ONS is very appreciative of her long-standing involvement and congratulates her on receiving the 2004 ONS Distinguished Researcher Award.

1985: Joined ONS and the Memphis Chapter  
1986–1988: Research Committee member  
1988–1991: Task Force on Specialty Certification for Advanced Pediatric Oncology Nursing Co-Chair  
1989–1991: Education Committee member  
1989–1992: *Oncology Nursing Forum* reviewer  
1991–1993: Education Committee Chair  
1994–1996: Task Force on Advanced Practice Certification member  
1995: ONS Foundation Research Fellowship mentor  
1995–1997: Oncology Nursing Certification Corporation Research Committee member  
1996: ONS Foundation Research Grant Review Project Team member  
1997: Joined the Advanced Nursing Research Special Interest Group  
1997: ONS Foundation Research Fellowship mentor  
1997: ONS Foundation Small Grant recipient  
2002: ONS Foundation Center for Leadership, Information and Research Symptom Management Major Grant recipient  
2002: ONS Foundation Research Grant Review Project Team member  
2002–2003: Evidence-Based Practice Resource Center Project Team member  
2003–present: Eighth National Conference on Cancer Nursing Research Project Team member

Patients with cancer believe that hopefulness is essential to allowing them to cope with the cancer experience, and adolescent patients with cancer have been described as particularly vulnerable to the lack or loss of hopefulness during treatment (Fochtman, 1979; Lewis, 1984; Morrow & Wilson, 1981; Snyder et al., 1997; Susman, Pizzo, & Poplack, 1981). Hopefulness is an internal quality that emerges in the process of interaction with others (Fromm, 1968). Nurses and other caring healthcare professionals are able to positively influence hopefulness in adolescent patients with cancer and, in so doing, may improve the outcomes of these patients and diminish their suffering (Hinds & Martin, 1988; Hinds, Martin, & Vogel, 1987). Hopefulness can energize an individual or a group; for that reason, adolescents who

are hopeful are more likely to take action on their own behalf or respond to the care efforts of others (Hinds, 1988a; Stotland, 1969).

To ensure that the interaction between adolescent patients with cancer and their care providers is optimally beneficial, it is necessary to know what adolescent hopefulness is (i.e., its defining characteristics), what process is responsible for adolescents' achieving hopefulness during treatment, how nurses and others can facilitate the process, how to sensitively and accurately measure adolescent hopefulness and assess it clinically, and how to create and maintain a care environment for adolescents that is supportive of hope. The purpose of this article is to describe the evolution of a program of research about adolescent hopefulness that started with efforts to define and measure the concept and is now beginning to test strategies to positively influence the hopefulness of individual patients and their care environment.

## Defining Adolescent Hopefulness

At the time this research program began, remarkable, systematic efforts to define hopefulness had been completed but were limited almost entirely to adults (e.g., those who were seriously ill or hospitalized for psychiatric disorders, prisoners in concentration camps) (Gottschalk, 1974; Perley, Winger, & Placci, 1971). In addition, these research efforts typically relied primarily on self-analyses, literature reviews, analyses of written materials, and selective clinical observations rather than on direct interviews that solicited the perspectives



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of the patients. Subsequently, hope in adult patients with cancer was impressively studied (e.g., Ersek, 1992; Herth, 1989; Raleigh, 1992), but the characteristics, meaning, and function of hopefulness in adolescents were not addressed.

The first series of studies in this program of research focused on creating a conceptual definition of hopefulness in adolescents that included its essential characteristics in diverse health-related contexts. Grounded theory methodology (Glaser, 1978; Glaser & Strauss, 1967) was used because of the repeated implication in the existing literature that hopefulness is a dynamic concept best captured in an interactive social process. After the study was approved by a university's institutional review board, groups of adolescents were theoretically sampled (i.e., data collection and type of patient considered eligible are guided conceptually and evolve as the data are collected and analyzed concurrently) beginning with healthy adolescents from one private secondary school and one neighborhood selected for their number and diversity of adolescents. Healthy adolescents were sampled first in an attempt to learn about the essential nature of hopefulness in its naturally occurring state. After written parental permission was obtained, the 41 participating healthy adolescents responded to interview questions during individual and group meetings and gave the researcher permission to observe their interactions and discussions in the school and neighborhood for several weeks. Similar "grand tour" questions were asked of each adolescent; more pointed questions about the meaning, characteristics, and functions of hopefulness evolved. Example questions included "When you think of the word 'hopefulness,' what kinds of images or thoughts come to mind?" "Tell me about a time when you felt very hopeful." "What kinds of things do you hope for?" Twelve adolescents also forwarded written responses that were included in the data analysis. Data were collected over a period of six months.

The second sample of adolescents was comprised of inpatients on a substance abuse treatment unit. This group was theoretically sampled because of documented wide variations in hope, hopelessness, and despair in adolescents who abuse illicit substances (Gorush & Butler, 1976; Kandell, 1978, 1985; Wright & Pearl, 1986). Forty-two adolescents were interviewed within 24–48 hours of admission to the inpatient unit. They and their parents also gave permission for observation of group and free-time behavior and review of their health records. Data were collected for eight months.

The third sample consisted of 58 adolescents receiving treatment for cancer at one pediatric research center; this group was theoretically sampled because of the need to learn about hopefulness in adolescents who realize the life-threatening nature of their illness (a realization that was missing in the second sample of adolescents). Data sources included individual interviews, review of medical records, and observation of interactions with healthcare personnel and family members. Data were collected for 10 months (see Table 1).

A definition of adolescent hopefulness was derived by an inductive process from the first sample of adolescents: the degree to which an adolescent possesses a comforting, life-sustaining belief that a personal and positive future exists. Theoretical saturation was achieved for the attributes included in the definition. Four related components that seemed to reflect increasing hopefulness were also inductively identified and defined from the data: "forced effort" (the degree to which an adolescent makes an effort to take a more positive

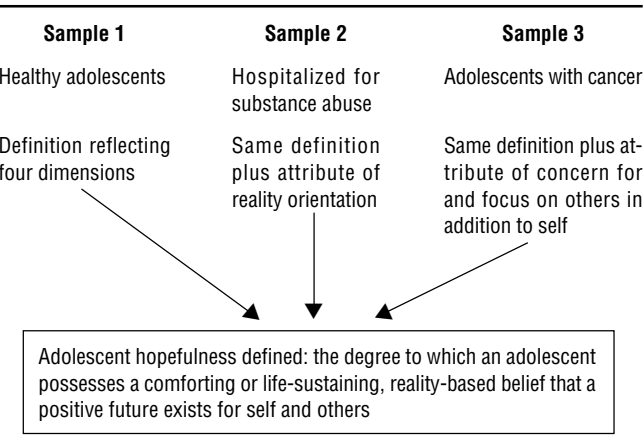
**Table 1. Demographic Information of Adolescents Who Participated in the Studies Used to Inductively Define Adolescent Hopefulness**

| Sample                                       | Males | Females | Age (years) |           |
|----------------------------------------------|-------|---------|-------------|-----------|
|                                              |       |         | Range       | $\bar{X}$ |
| Healthy adolescents                          |       |         |             |           |
| School                                       | 7     | 10      | 13.0–17.1   | 14.9      |
| Neighborhood                                 | 13    | 11      | 13.2–18.1   | 15.8      |
| Adolescents hospitalized for substance abuse | 34    | 8       | 13.0–18.0   | 15.2      |
| Adolescents with cancer                      | 19    | 39      | 12.4–18.9   | 15.5      |

N = 141

view), "personal possibilities" (the extent to which an adolescent believes that a second chance for the self may exist), "expectations of a better tomorrow" (the degree to which the adolescent has a positive though nonspecific future orientation), and "anticipation of a personal future" (the extent to which an adolescent identifies specific and positive future possibilities for self). The same components and essential characteristics emerged in the data from the next two samples of adolescents, but an additional characteristic emerged from the group of adolescents with cancer: concern for and a focus on others in addition to self. The definition of adolescent hopefulness was altered to include this new attribute (see Figure 1).

In response to the interview question about what the adolescents hoped for, the first two samples of adolescents expressed hope for themselves and their futures. In the interviews with the second group (adolescent inpatients being treated for substance abuse), analysis of the objects of hope showed a clear distinction between "wishing" and "hoping." Wishes lacked a strong reality base, were distant in time orientation, seemed to almost ignore the seriousness of the present situation, and were referred to by adolescents as "nice but not essential." In contrast, hopes seemed more likely to be realized, were more immediate or shorter term, and reflected the seriousness of the present situation (Hinds, 1984, 1985, 1988a). Thus, using a



**Figure 1. Depiction of the Conceptual Contributions From Each Theoretically Sampled Group of Adolescents to the Induced Definition of Adolescent Hopefulness**

grounded theory approach in three theoretically sampled groups of adolescents, the findings of this study yielded a conceptual definition of adolescent hopefulness that indicated a difference in focus (on self only or on self and others) by perceived seriousness of health threat and a useful distinction between adolescent hopefulness and wishing.

## Measuring Adolescent Hopefulness

The inductively identified essential characteristics of adolescent hopefulness gave direction for its objective measurement: (a) **Hopefulness occurs in degrees.** There is a range of the intensity of hopefulness rather than mere presence or absence; therefore, interval or ratio level measurement would be most appropriate. (b) The **internal** nature of adolescent hopefulness implies that a self-report measurement approach is needed. (c) The **dynamic** nature of hopefulness implies that measurement at a single time point may be of limited value clinically. (d) **Reality based** indicates a need to identify the object of hope and its specificity and likelihood of being achieved. The qualitative data from the three studies used to inductively define adolescent hopefulness formed the item pool for the new instrument, the Hopefulness Scale for Adolescents (HSA), a 24-item visual analog, self-report scale designed to measure the degree of positive future orientation an adolescent feels at the time of measurement (see Figure 2). Because of the dynamism of hopefulness, two alternative forms of the HSA (A and B) were constructed for use in a repeated measures design. Equivalence of the forms was assessed by panel review and statistical techniques; face and content validity also were established (Hinds, 1985; Hinds & Gattuso, 1991; Hinds & Stoker, 1988). The HSA can be completed in four to nine minutes. The psychometric properties of the HSA have been assessed in several different samples of adolescents; the results indicate that the HSA is internally consistent (see Table 2), has concurrent and construct validity (see Table 3), and is able to sensitively measure change over time (ranging from five weeks to six months) in different groups of chronically ill adolescents (Hinds, 1988a; Hinds et al., 2000).

## Adolescents' Process of Becoming Hopeful: The Self-Sustaining Process

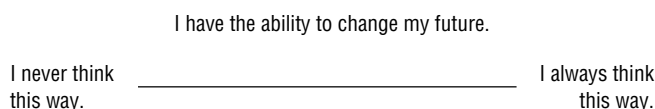
The purpose of the subsequent study utilizing grounded theory methodology was to identify and define the process used by adolescents with cancer to achieve hopefulness during treatment. The purposive sampling included adolescents who were newly diagnosed, were in maintenance therapy, had completed therapy and had no evidence of disease, were being treated for relapse, and were dying. Subjects were interviewed once for purposes of data collection and a second time to validate impressions. The final model was validated

through a process involving 11 adolescents, 6 of whom had not been involved in the initial interviews. Interview questions included some that were similar to those used in the series of studies conducted to define hopefulness; other questions addressed strategies used by the adolescents to become hopeful, the outcome of such efforts, and the actions taken by nurses that influenced their hopefulness.

Four sequential core concepts (cognitive discomfort, distraction, cognitive comfort, and personal competence) defined the process that adolescents with cancer experienced in achieving hopefulness. Each of the core concepts comprised two or more distinct categories of adolescent behavior. The overall organizing construct inductively derived from the four core concepts was labeled the "Adolescent Self-Sustaining Process" and was defined as a natural progression that adolescents who are experiencing serious health threats move through to initiate effective and preferred strategies to achieve hopefulness and competence in resolving health threats (Hinds & Martin, 1988). Specific nursing care behaviors were identified as influencing the Adolescent Self-Sustaining Process (see Figure 3). Seven categories of nursing behaviors that facilitated cognitive distraction were identified; the definitions of all seven categories reflected a personal involvement of the nurse with the adolescent that conveyed the adolescent's likability and the nurse's commitment to the adolescent (combined, these seven categories were labeled "nurse involved"). In contrast, three categories of nursing behaviors were identified as inhibiting "cognitive distraction"; these categories all had an impression that the nurse was distant from the adolescent, not recognizing the adolescent as a unique human being and having an inadequate understanding of the adolescent's perception of the cancer experience (combined, these three categories were labeled "nurse distant"). One additional category of nursing behavior was identified as directly and positively affecting adolescent hopefulness: "Humorous nursing" reflected the adolescent's perception of the nurses as being willing to engage in playful interaction. The eight categories of positive nursing behaviors were grouped into a single construct, "optimistic realism," that reflected characteristics of the nurses' involvement with the adolescent that comprised truthfulness, caring, sharing knowledge, participating in amusing diversions, and a positive focus on the future (Hinds et al., 1987). Data from this study describe the cognitive and behavioral strategies initiated by adolescents to achieve hopefulness when responding to the cancer experience and the nursing behaviors that positively influence or interrupt their strategies.

## Testing the "Adolescent Self-Sustaining Model"

The purpose of the next study, guided by the Adolescent Self-Sustaining Model, was to determine the effect of a three-part educational intervention designed to facilitate coping and hopefulness in adolescents newly diagnosed with cancer on psychological (hopefulness, hopelessness, self-esteem, self-efficacy, and symptom distress) and clinical (treatment toxicity) outcomes. In addition, the Adolescent Self-Sustaining Process was theorized to be influenced by diagnosis, patient gender and age, and locus of control. The two-site study used a prospective, randomized (stratified by diagnosis), two-group clinical trial design. Four measurements (spanning the first six months of treatment) that corresponded to specific coping



**Figure 2. Example Item From the Hopefulness Scale for Adolescents**

**Table 2. Descriptive Findings Obtained by Using the Hopefulness Scale for Adolescents (Form A)**

| Study                  | Population                       | Gender                   | Age (years) |      | $\bar{X}$ HSA Score | Cronbach's Alpha |
|------------------------|----------------------------------|--------------------------|-------------|------|---------------------|------------------|
|                        |                                  |                          | $\bar{X}$   | SD   |                     |                  |
| Hinds, 1985            | Inpatient, substance abuse       | 4 males<br>6 females     | 16.0        | 2.00 | 1,289               | 0.91             |
| Hinds, 1985            | Healthy adolescents              | 8 males<br>20 females    | 15.6        | 1.60 | 1,330               | 0.92             |
| Hinds, 1985            | Residential, emotional diagnosis | 35 males                 | 15.4        | 1.30 | 1,196               | 0.93             |
| Hinds, 1985            | Healthy adolescents              | 16 males<br>13 females   | 15.2        | 0.49 | 1,299               | 0.93             |
| Hinds, 1988a           | Inpatient, substance abuse       | 20 males<br>5 females    | 15.6        | 1.70 | 1,714               | 0.82             |
| Floyd, 1989            | Adolescents with cancer          | 2 males<br>4 females     | 14.7        | NR   | 1,860               | NR               |
| Johnson, 1989          | Healthy adolescents              | 88 males<br>152 females  | 15.8        | 1.90 | 1,873               | 0.88             |
| Hinds et al., 1990     | Adolescents with cancer          | 8 males<br>7 females     | 14.7        | 3.20 | 1,886               | 0.88             |
| Yarcheski et al., 1994 | Healthy adolescents              | 41 males<br>58 females   | 16.0        | 0.77 | 1,864               | 0.90             |
| Connelly, 1998         | Adolescents                      |                          |             |      |                     |                  |
|                        | Healthy                          | 91 females               | 16.5        | 1.30 | NR                  | 0.86             |
|                        | Pregnant                         | 58 females               | 17.3        | 0.90 | NR                  | 0.86             |
| Ruckman, 1999          | Healthy adolescents              |                          |             |      |                     |                  |
|                        | Experimental                     | 15 males<br>14 females   | 17.1        | NR   | 1,694               | NR               |
|                        | Control                          | 6 males<br>10 females    | 16.1        | NR   | 1,600               | NR               |
| Hinds et al., 2000     | Adolescents with cancer          | 32 males<br>46 females   | 16.0        | 2.10 | 1,847               | 0.92             |
| Ritchie, 2001          | Adolescents with cancer          | 24 females<br>21 females | 14.2        | 1.50 | 1,955               | 0.84             |

N = 804 (299 males, 505 females)

HAS—Hopefulness Scale for Adolescents; NR—not reported

stages (Gabriel & Hofmann, 1983; Hofmann, 1997) and points in the treatment process were included in the design. Adolescents aged 12–21 who had a diagnosis of one of six malignancies that required at least six months of treatment were eligible to participate. Hodgkin disease was the most common diagnosis ( $n = 29$ ). Of 93 eligible adolescents, 78 (46 females and 32 males) agreed to participate. Participants ranged in age from 12–21, with a mean age of 16 years ( $SD = 21$ ).

The study intervention was based on metacognition principles (Brown, 1978; Brown, Bransford, Ferrara, & Campione, 1983; Reeve & Brown, 1985; Rock & Bransford, 1992) and required approximately 40 minutes. The three components included (a) the provision of information about self-care coping, (b) a 25-minute video featuring four adolescents being treated for cancer who described the behavioral and cognitive coping strategies they used during treatment, and (c) rehearsal of coping strategies selected by the participating adolescent as most likely to assist him or her with the demands of cancer treatment. Patients randomly assigned to the control group spent an equivalent amount of time with a mem-

ber of the study team discussing topics of their choosing. Nonparametric statistical techniques were used because the distribution of several study variables was not normal, with a skew in the direction of positive scores. Differences between the two groups were tested by using the Wilcoxon rank-sum test, and differences within each group were tested by using the Wilcoxon signed rank test. No pattern in missing data was detected.

The adolescents in both the experimental and control groups were more hopeful at each measurement point than previously studied healthy adolescents or those hospitalized for substance abuse or in residential treatment at a psychiatric facility (Hinds, 1985, 1988b; Yarcheski, Scoloveno, & Mahon, 1994) but were less hopeful (except at the final measurement point) than a group of adolescents with cancer being treated as outpatients who were at least six months into their treatment programs (75%) or who had successfully concluded treatment (25%) (Ritchie, 2001). The adolescents also had lower hopelessness scores than previously tested adolescents (Kazdin, French, Unis, Esveldt-Dawson, & Sherick, 1983; Kazdin, Rogers, &

**Table 3. Tested Relationships Between Hopefulness and Other Variables**

| Study                  | Population                 | n   | Relationship Tested                                                                                                                      | Strength of Relationship                                                                                                                           |
|------------------------|----------------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Hinds, 1988a           | Inpatient, substance abuse | 25  | Hopefulness/caring behaviors of nurses<br>Hopefulness/gender<br>Hopefulness/type of illicit substance                                    | $r = 0.39$ ( $p = 0.028$ )<br>NS<br>NS                                                                                                             |
| Johnson, 1989          | Healthy adolescents        | 240 | Hopefulness/hopelessness<br>Hopefulness/gender                                                                                           | $r = -0.64$ ( $p = 0.001$ )<br>$t = 2.08$ ( $p = 0.039$ )<br>$f = 9.79$ ( $p = 0.003$ )                                                            |
| Hinds et al., 1990     | Adolescents with cancer    | 15  | Hopefulness/self-esteem                                                                                                                  | $r = 0.41$ ( $p = 0.030$ )                                                                                                                         |
| Yarcheski et al., 1994 | Healthy adolescents        | 99  | Hopefulness/social support<br>Hopefulness/general well-being                                                                             | $r = 0.57$ ( $p < 0.001$ )<br>$r = 0.60$ ( $p < 0.600$ )                                                                                           |
| Hinds et al., 2000     | Adolescents with cancer    | 78  | Hopefulness/hopelessness<br>Hopefulness/locus of control<br>Hopefulness/self-efficacy<br>Hopefulness/age<br>Hopefulness/symptom distress | $r = 0.50$ ( $p = 0.002$ )<br>$r = 0.54$ ( $p = 0.040$ )<br>$r = 0.46$ ( $p = 0.010$ )<br>$r = 0.40$ ( $p = 0.010$ )<br>$r = 0.41$ ( $p = 0.010$ ) |
| Ritchie, 2001          | Adolescents with cancer    | 45  | Hopefulness/self-esteem                                                                                                                  | $r = 0.47$ ( $p = 0.010$ )                                                                                                                         |

NS—not significant

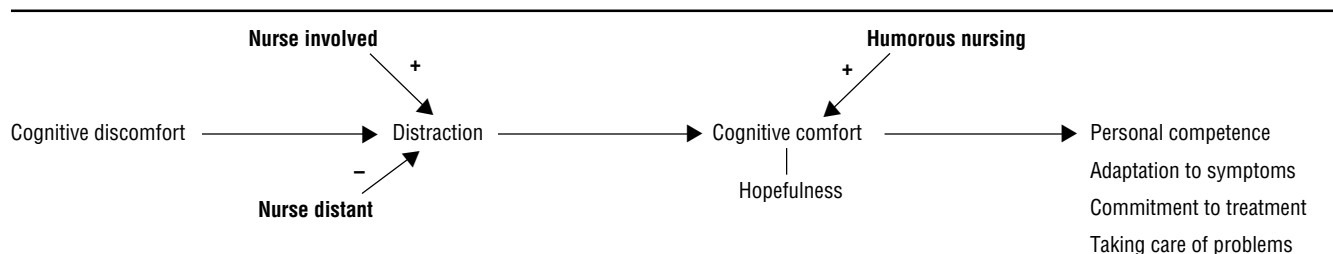
Colbus, 1986). Locus of control scores decreased over time, indicating that the adolescents became more internally oriented during the six-month study. Adolescents in both groups reported moderate to high self-esteem and self-efficacy. Surprisingly, these scores were higher than those previously reported for healthy or overweight adolescents (Button, 1990) and for undergraduate university students (Whisman & Kwon, 1993). Both groups of adolescents in this study reported moderate symptom distress scores (lower than those reported by adult patients with cancer) (McCorkle, Cooley, & Shea, 1998) that decreased over time. The symptoms rated as most distressing by these adolescents at all four measurement points were fatigue, altered sleep, change in appetite, and change in appearance (Hinds et al., 2000; Hinds, Schum, & Srivastava, 2003). Staff ratings of the adverse physical effects of the disease and treatment were lowest at the first data point and highest at the final two points.

Although no statistically significant differences in the main study variables were detected between the two groups at any measurement point, significant differences were found in hopefulness (experimental time<sub>3</sub> – time<sub>4</sub>:  $z = -2.02$ ,  $p = 0.04$ ; control time<sub>1</sub> – time<sub>2</sub>:  $z = -3.10$ ,  $p = 0.002$ ; control time<sub>3</sub> – time<sub>4</sub>:  $z = -2.46$ ,  $p = 0.14$ ) and hopelessness (control time<sub>1</sub> – time<sub>2</sub>:  $z = -2.83$ ,  $p = 0.005$ ) within groups. Additionally, support for the relationships specified in the Adolescent Self-Sustaining Model was noted. Age was significantly associated with hopelessness (adolescents younger than 15 years had

higher hopelessness scores:  $r = 0.49$ ,  $p = 0.01$ ), hopefulness, and self-efficacy (adolescents older than 15 years had higher hopefulness scores [ $r = 0.40$ ,  $p = 0.01$ ] and higher self-efficacy scores [ $r = 0.46$ ,  $p = 0.001$ ]). These combined findings indicate that adolescents younger than 15 years may be particularly vulnerable to the difficulties inherent in the cancer experience (Hinds et al., 2000).

The group mean scores indicated that adolescents in the experimental and control groups began the cancer experience with surprisingly high levels of hopefulness, self-esteem, and self-efficacy. Although these scores changed over time, the possibility of a ceiling effect must be considered. A ceiling effect could represent a self-initiated cognitive defense in response to the diagnosis of cancer. In that case, the adolescents in the experimental group who were taught to cognitively focus on the cancer experience and prepare for associated difficulties could be predicted to have scores indicating a cognitive defensiveness across all time points. The pattern of scores provides some support for this possibility, although it is not consistent (Hinds et al., 2000).

A ceiling effect also could be explained by insufficient sensitivity of study instruments in assessing the psychological outcomes and the outcomes of treatment toxicity in adolescents during the treatment of cancer. Although none of the study instruments was developed specifically for use in patients with cancer, the significant variation within groups in the measures obtained by certain study instruments (including

**Figure 3. Depiction of the Adolescent Self-Sustaining Process and the Nursing Behaviors That Influence the Process**

the HSA) makes this explanation less likely. The study team members' inability to detect a statistically significant difference between the two groups more likely reflected an insufficiently powerful or mistimed intervention. Feedback from the adolescents in the experimental group about the intervention was universally positive. However, these adolescents indicated that they needed more reminders about the importance of self-care coping and hopefulness, the importance of hopefulness, and the practice of their selected self-care strategies. This feedback indicates that a "booster" intervention is needed between the second and fourth time points.

Additional feedback indicated that a subset of adolescents preferred the strategy of "not thinking about having cancer." The intervention studied could interfere with this preferred strategy. Therefore, the efficacy of a self-care coping educational intervention could be tested more accurately by identifying an adolescent's preferred style of coping with health threats before randomization. The matching of children's and adolescents' coping style preferences to healthcare interventions has been studied for specific medical, surgical (Johnson, Kirchoff, & Endress, 1975; LaMontagne, Hepworth, Johnson, & Cohen, 1996), and dental procedures (Christiano & Russ, 1998). The findings of those studies indicate that patient outcomes are improved if coping style preferences are matched to interventions. In view of these results and the implications of the study field notes, design changes are called for to allow measurement of preferred coping style at baseline, reflect that preference in the randomization plan, and provide a booster intervention.

One final possibility must be considered—only a small subset of adolescents being treated for cancer needs an individual hopefulness intervention. The majority of adolescents began the study at a high level of hopefulness and maintained that level throughout the six months of the study; therefore, it was difficult to statistically detect change caused by an intervention. At each time point in the study, approximately 10%–12% of participating adolescents had HSA scores two standard deviations below the mean; this proportion may indicate the approximate size of the group that will benefit from the hopefulness intervention.

## The Object of Hope

In addition to the evidence indicating that adolescent hopefulness changes in intensity over the course of time and treatment, there is also evidence that it can change in focus (the object of hope). Such changes indicate the need for repeated individual assessment of adolescents' hopefulness, including the objects of their hope. Although the multiple characteristics of hopefulness have been studied concurrently in adolescents hospitalized for substance abuse (Hinds, 1988a), they had not been similarly studied in adolescents with cancer. The adolescents who participated in the testing of the Adolescent Self-Sustaining Model also responded to the statement "Please tell me what you are hoping for now" at each of the four measurement points (Hinds et al., 1999). This statement has been used previously in studies measuring change and meaning in hopefulness over time (Hinds, 1988b, 1989). All interview responses were entered into an ethnograph software program and analyzed with a semantic content analysis technique (Krippendorff, 1980).

The realistic nature and specificity of the objects of hope were assessed by two panels of pediatric oncology profession-

als using five-point, Likert-type scales. The expectation was that more realistic, specific hopes would be related to greater hopefulness. Of the 57 unique hopes identified by the 78 adolescents across all measurement points, the majority ( $n = 36$ , 63%) was related explicitly to cancer and its treatment. Other frequently identified hopes were related to relationships, academic and career achievements, and desired possessions such as a driver's license. Gender differences were noted in the nature of the expressed hopes. Twenty-four hopes were identified only by females, the most frequent being hopes for economic independence, family closeness, the well-being of others, and a positive outlook. Eleven hopes were identified by male participants only, the two most frequently identified being publicly recognized accomplishments and athletic accomplishments. Certain objects of hope were reported only by adolescents with the lowest scores on the HSA. These included "forgetting this once it is over," "to not hope because hoping only makes me sadder," "want to fall into a deep sleep," and "not to experience what is happening to me." This difference in the objects of hope between those who score low on the HSA and those who score at moderate or higher levels may provide the basis for rapid clinical identification of adolescents who are at risk of inadequate coping with the cancer experience and who may need additional support.

As in previous reports (Hinds, 1988a, 2000), these adolescents expressed hopes for others: other patients, friends, family, staff, and strangers. Seven to 10 adolescents (approximately 10%–12%) at each data point expressed hopes for others. Examples include hopes that "others will get cured," "world hunger will end," "child abuse will stop," they would "be able to help others," and "others will not suffer." Female patients were three times as likely as male patients to report hopes for others. These findings suggest that the statement about the object(s) of hope may be useful in clinical screening of adolescents to identify those at risk of lacking or losing hope during treatment. The response to this statement very likely may indicate whether a more detailed clinical assessment of psychological state and coping is merited.

## Influencing the Care Environment

The study team believed that oncology professionals who care directly for patients would be the best judges of the clinical usefulness of the adolescent hopefulness-related research findings available to date. The Patient Care Services Leadership Council of St. Jude Children's Research Hospital in Memphis, TN, approved the creation of a divisionwide, multidisciplinary team of direct care providers and researchers to review and critique the applicability of the completed research to the patient population. The multidisciplinary team, named the "Hope Research Translation Team," was charged with translation of the applicable research findings into clinical tools or projects to facilitate hopefulness in patients, family members, and staff. The team selected an evidence-based practice model (Rosswurm & Larrabee, 1999) to guide their efforts. Completion of all steps of the practice model allowed the team to create, implement, field test, and evaluate three projects: a chapter about hopefulness for the St. Jude Patient and Parent Handbook; patient, parent, and staff education sheets about hope developed along the lines of an established institutional format; and the Hopefulness Telephone Hot Line (Hinds, Gattuso, et al., 2003).

**Table 4. Staff Responses to the Six-Item Usefulness Evaluation of the Hope Half-Hour In-Service Presentation**

| Item                                                                                    | n  | %  |
|-----------------------------------------------------------------------------------------|----|----|
| "Thought" about the three hope resources "sometimes" to "often"                         | 49 | 89 |
| Asked a patient, parent, or coworker the "hope question" "one time" to "more than once" | 33 | 60 |
| Directed a patient, parent, or coworker to the Hope Hot Line                            | 17 | 31 |
| Talked about hope with patient, parents, or others                                      | 46 | 84 |
| Included the hope expressed by a patient or parent in subsequent interactions           | 41 | 75 |
| Were "more comfortable" with discussing hope                                            | 25 | 45 |

N = 55

Note. This evaluation was conducted four to six weeks after the presentation.

The second undertaking by the members of the Hope Research Translation Team was to share with the clinical staff at St. Jude its conclusions about the available research and the accessibility of the three newly developed hopefulness resources. The team created a 30-minute in-service presentation called the "Hope Half-Hour" for that purpose. A group of 131 staff participated in one of the eight presentations offered over a three-week period and completed an evaluation of the clarity of the content. A group of 55 participating staff members also evaluated the usefulness of the in-service content approximately four to six weeks afterward; the purpose of the six-item evaluation was to determine whether the content of

the presentation contributed to any changes in staff practice. The results indicated that staff practice was positively altered in the short term (see Table 4). These findings support the creation of a hospitalwide hopefulness intervention to further facilitate patient, parent, and staff hopefulness and thus the hopefulness of the care environment.

## Conclusions

Hopefulness is essential for adolescents who are coping with being diagnosed and treated for cancer, who have been cured of their disease, or who are dying from it. Given that hopefulness emerges in the interaction with others and that nurses are able to influence adolescent hopefulness in positive ways, oncology nurses need to make a moral commitment to fostering hopefulness in adolescents and in the care environment around adolescents.

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**Author Contact:** Pamela S. Hinds, PhD, RN, CS, can be reached at pam.hinds@stjude.org, with copy to editor at rose\_mary@earthlink.net.

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