Storytelling Intervention for Patients With Cancer: Part 2—Pilot Testing

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Purpose/Objectives: To evaluate symptom reports and the impact of a nurse-led storytelling intervention in a supportive group setting on mood, stress level, coping with stress, pain, self-efficacy, and satisfaction with life in patients with cancer.

Design: Descriptive pilot project using a pretest/post-test control group.

Setting: Local regional medical center in the Pacific Northwest region of the United States.

Sample: Convenience sample of 10 patients with various cancer diagnoses; 7 completed the intervention.

Methods: Participants were randomly assigned to a storytelling or control group. Using a tool kit generated for this project, a nurse facilitator guided storytelling group participants in 12 1.5-hour sessions. Six instruments, symptom assessments, and a retrospective physician chart review were completed for each group. Data were analyzed using repeated measures analysis of variance.

Main Research Variables: Mood, stress, coping, pain, self-efficacy, and satisfaction with life.

Findings: Comparison of changes in group mean scores revealed a significant decrease in anxiety in the storytelling group despite disease progression. Documentation of psychosocial symptomatology by physicians is limited; however, nursing assessments were useful in determining psychosocial status before and after the intervention.

Conclusions: Results can be viewed only in context of a feasibility study and are not generalizable because of a limited sample size. A trained oncology nurse was able to use the storytelling intervention. Initial results are promising and warrant further study.

Implications for Nursing: After additional testing, the intervention could be used to enhance storytelling groups for patients with cancer or for individuals who are uncomfortable in or do not have access to storytelling groups.

Use of story in nursing education, including discussion about potential effect on clinical outcomes, has been well documented (Diekelmann, Swenson, & Sims, 2003). Some authors have advocated the use of story to guide nursing practice (Clarke, Hanson, & Ross, 2003; Leight, 2002; Liehr & Smith, 2000; Sandelowski, 1994) and encouraged its use as a means of generating new models of nursing practice (Carson & Fairbairn, 2002). Little is known, however, about the effects of storytelling on patients with cancer.

The purpose of this article is to evaluate symptom reports and the impact of a nurse-led storytelling intervention in a supportive group setting on mood, stress level, coping with stress, pain, self-efficacy, and satisfaction with life in patients with cancer. This pilot study explored the feasibility of storytelling as a therapeutic modality suitable for independent nursing practice.

Key Points . . .

- Stress and anxiety levels of patients with cancer may be mitigated by a storytelling intervention.
- Noninvasive, inexpensive interventions that minimize anxiety and stress in patients are clinically useful to nurses.
- Many patients with cancer experience suffering, yet physicians may not treat or address psychosocial issues during office visits.
- Nurses customarily assess and intervene in psychosocial issues. Acknowledging suffering in a storytelling group could be a useful part of patient care.

Background

Stories allow articulation of an individual's identity (the core of human dignity) to an immediate, interactive audience (Errante, 2000). This can be therapeutic and creates a bridge of trust, respect, and validation that ties people together (Errante; Sandelowski, 1994).

Formal storytelling has been explored in nursing education since the early 1990s (Boykin & Schoenhofer, 1991; Paterson et al., 1995). Narrative pedagogy has been called "a research-based innovative alternative for reforming nursing education" (Diekelmann, 2001, p. 53); since the 1980s, many researchers have investigated its use (Andrews et al., 2001; Ironside, 2003, 2004). Storytelling empowers nursing students (Branch, Min, & Anderson, 1999) and teaches them about clinical practice (Ramsey, 2000; Seifert, 1999) and the use of metaphor (Sutherland, 2001).

The concept of storytelling as a therapeutic modality in nursing practice has been discussed by others (Kahn & Steeves, 1995; Kirkpatrick, Ford, & Castelloe, 1997; Leight,

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2002; Moules & Streitberger, 1997; Taylor, Banks-Wallace, & Tripp-Reimer, 2001). Attentively Embracing Story, a middle-range nursing theory (Liehr & Smith, 1999, 2000; Smith & Liehr, 1999), has been proposed as a basis for clinical research in addressing such healthcare challenges as drinking and driving situations (Higson & Winter, 2003; Smith, Kennison, Gamble, & Loudin, 2004), decision making in adolescents (Jolly, Weiss, & Liehr, 2007), and hypertension (Liehr et al., 2006).

Other studies using storytelling as a nursing intervention are rare, although some researchers have investigated the illness experience through the use of story (Cohen, Kahn, & Steeves, 1998; Steeves, 1996). Clarke et al. (2003) gathered biographic data from patients in a National Health System hospital in England and found that the data helped practitioners understand patients and form relationships with families. A qualitative study by Archibald (2003) analyzed the experiences of five patients with hip fractures and revealed themes that emphasized ways that a nursing intervention could increase quality of life. Banks-Wallace (1998) used intervention to examine health-promoting functions of storytelling in 28 women of African descent. She found that group storytelling created a supportive environment where experiences were evaluated, well-being improved, and problem solving promoted.

Storytelling is even used in the medical field as a way to teach ethics (Nicholas & Gillett, 1997), values, and attitudes of the profession (Hensel & Rasco, 1992). The importance of the patient's story has been well recognized (Cole-Kelly, 1992; Greenhalgh & Hurwitz, 1998; Platt et al., 2001), but few clinical investigations have been carried out. Spiegel, Stroud, and Fyfe (1998) reported on a series of studies conducted over 20 years that involved group support and sharing of stories. Three of the five studies provided evidence of a survival advantage for participants in groups. Also, in a randomized clinical trial, 71 patients with asthma and rheumatoid arthritis wrote about an emotionally stressful experience and 41 wrote about an emotionally neutral topic (Smyth, Stone, Hurewitz, & Kaell, 1999). Clinically relevant changes were observed after four months in lung function and overall disease activity ($p < 0.001$) in the stressful experience group, whereas those who addressed neutral topics showed no improvement.

Behavioral and psychosocial interventions such as storytelling improve quality of life for patients with cancer (Burish, 2000; Spiegel et al., 1998; Ten Kroode, 1998). Ten Kroode offered guidelines for storytelling with patients with cancer in existential crisis based on more than 200 oncology referrals. The guidelines noted that helping patients "out of the hole of anxiety and depression" (Ten Kroode, p. 51) requires listening with empathy without giving advice. "The most natural ladder [professionals] have is our capacity to listen heartily to their story or narrative" (Ten Kroode, p. 51), and patients need to be taught to structure and tell their stories.

Discovering meaning through storytelling in the context of a trusting relationship allows deep reflection and illumination of future possibilities, particularly for women (Leight, 2002). The literature suggests that storytelling also may be particularly effective in older patients with breast cancer or chronic illness, a major health concern in the rapidly growing population of older adults (Clarke et al., 2003; Utley, 1999). The research provides a venue for oncology nurses to generate independent interventions that influence patient care outcomes in a noninvasive, inexpensive, holistic, and low-risk manner.

Conceptual Framework

Watson's (1985) 10 carative factors of nursing were used to explore storytelling as a feasible intervention (see Table 1). According to Watson (2002), nurses create spiritual connections with patients that promote caring-healing energy, assist in finding meaning in the spiritual journey, acknowledge patient suffering and help transform it, help patients accept the life cycle and prepare for their own deaths, and help patients heal their relationships with self and others. This connection is an important step in the effective, compassionate care of patients with cancer and provides a framework for studying the implementation of the intervention. Instruments measuring how patients are functioning in the psychosocial-spiritual parameters of stress and coping ability, depression, satisfaction with quality of life, and feelings of control and self-efficacy (all of which may be affected by a cancer diagnosis) should provide data on whether the storytelling intervention influenced patients' interpretation and reinterpretation of the illness experiences. Physiologic measures of change in pain over the course of the intervention could be related to these parameters.

Translation of Storytelling Principles Into Clinical Intervention

Principles derived from Benner and Wrubel (1989) and Frank (1997) were used successfully over a five-year period to teach nursing students about caring through the use of story (Severtsen & Evans, 2000). Literature on storytelling was then reexamined, and storytelling principles, such as those espoused by Frank, were compared and contrasted with standard group process techniques. The storytelling principles derived from those activities were combined with the educational strategies used in class and translated into a set of guiding strategies for a clinical intervention (see Table 2). Six patients with cancer took part in a 10-week preliminary project using the strategies in a storytelling group. Group techniques, such as gatekeeping and probing for coping skills, were not used in the storytelling group.

Table 1. Watson's Carative Factors With Corresponding Outcome Variables and Indicators

Outcome Variable and Factor	Indicator
Mood and satisfaction with life Formation of humanistic-altruistic values Instillation of faith and hope Cultivation of sensitivity to self and others Allowance for existential forces	Brief Depression Rating Scale (Kellner, 1986) and Satisfaction With Life Scale (Diener et al., 1985)
Stress level and coping Development of a help-trust relationship Promotion and acceptance of feelings Use of the scientific problem-solving method Promotion of interpersonal teaching-learning	Index of Clinical Stress (Abell, 1991) and Cantril's Ladder (Kilpatrick & Cantril, 1960)
Pain Provision for a supportive mental, physical, sociocultural, and spiritual environment	McGill Pain Questionnaire (Melzack, 1975)
Self-efficacy Assistance with gratification of human needs	Physical Self-Efficacy Scale (Ryckman et al., 1982)

Note. Based on information from Watson, 1985.

A control group made up of five patients with cancer used standard group process techniques, such as running the group according to an agenda, gatekeeping, and probing participants' coping strategies. The goal was to improve participants' coping abilities and provide social support and information on cancer treatment. The Index of Clinical Stress (Abell, 1991), Cantril's Ladder (Kilpatrick & Cantril, 1960), the McGill Pain Questionnaire (Melzack, 1975), the Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985), and the Brief Depression Rating Scale (Kellner, 1986) were administered to both groups at the beginning of the sessions.

Control group members joined the storytelling group after 10 weeks so they could receive the intervention. The combined group met for an additional 10 weeks. After the last session, the five instruments were administered and exit interviews completed. Although no significant difference was found between the storytelling and control groups on any of the instruments over the course of the intervention, participants in both groups reported quality-of-life benefits in exit interviews. In addition, some of the participants' disease progressed over the study period and scores on the quantitative instruments did not change, which could be considered a positive outcome.

Development of the Tool Kit

A written, formalized tool kit was created for research on nurse-led storytelling, defined as a narrative-based method of forming and maintaining a power-sharing community in which stories are elicited, told, and heard nonjudgmentally in an effort to find meaning in the cancer experience. The tool kit contains theoretical principles, guidelines for implementation, and specific strategies for presenting storytelling, role-modeling self-disclosure and caring behaviors, using storytelling techniques to find meaning in the illness experience, focusing on the personal narrative of the illness rather than on the medical signs and symptoms, and being a witness to and sharing in stories about suffering and growth associated with the cancer diagnosis.

A nurse facilitator helped participants tell the group about the cancer experience—living day-to-day with the diagnosis and, for some, the possibility of death. At first, some participants could only discuss the medical signs and symptoms of their disease (usually in a disconnected language, such as "the cancer" and "the pathology report," rather than "my cancer" or "my cells"). As participants became comfortable with group storytelling, however, they shifted their focus to the cancer experience and the loneliness, fear, and sense of isolation that accompany it. Participants told and retold stories, encouraged by the group to move beyond illness to find meaning in life.

The tool kit was used as a protocol to train two nurse facilitators and deliver the nurse-led intervention to a group of patients with cancer. An eight-hour training session was held for the nurse facilitators. Rationale for the principles included in the intervention were discussed and practiced.

Table 2. Strategies Used in the Storytelling Intervention

Strategy	Definition
Searching for the personal narrative	Participants are taught how to form, tell, and retell stories of their illness.
Caring	A community is created where one can care and expect to be cared for by sharing personal stories.
Equalizing the power of participants	The facilitator is a contributing group member and joins participants in activities.
Building community by guiding	Story is used as a metaphor for community, and participants are guided by listening to stories.
Building community through respect	Personal stories are respected as true and whole and not dissected or analyzed. Stories are vehicles for individuals to make meaning from the experience, as they see it.
Building community by listening (being a witness)	Listening nonjudgmentally and bearing witness to stories is actively helping (i.e., doing something).
Community-centered practices	Norms, rules, and community values emerge. Control over illness, desire for positive outcomes, and relationships with others help identify meaning in the illness experience and clarify future life directions.
Helping meaning to emerge	Creating a community in which storytelling can be used to discover meaning can help the cancer experience.

Methods

Design

A randomized design with repeated measures, also called a pretest/post-test control group design, was used for the pilot study. The original intent was to recruit 25–50 subjects so statistical power would be sufficient to detect medium to large effect sizes for time trends and differences between the control and storytelling groups. Unfortunately, apprehension was encountered in the local healthcare community about the vagueness of the Health Insurance and Portability Act regulations. Despite that barrier, the study was approved by the Washington State University and Spokane institutional review boards and intensive recruitment efforts began. However, the final sample contained only 10 participants who completed the pretest and 7 who completed the post-test, providing insufficient statistical power to detect a large effect size.

Participants signed consents and were randomly assigned to either the storytelling group (facilitated by a nurse trained in the use of the tool kit) or the control group focusing on educational issues (facilitated by a hospital social worker skilled in group process and counseling). Because researchers recognized that negative effects of self-help groups have been reported (Caserta & Lund, 1993), participants experiencing difficulties would have been referred to another support group or a counselor and a report would have been submitted to the institutional review boards. Following extensive discussions with nurse leaders in the cancer treatment and research program and an oncologist specializing in the psychosocial care of patients with cancer, the researchers determined that the potential for negative effects was minimal.

Based on Caserta and Lund's (1993) findings, a longer study (12 weeks compared to 8) was believed necessary to provide increased opportunity for participants with high self-expressive and social skills to move through any depressive elements prior to study completion, and that the group would fill a void

in social support for those with lower interpersonal skills. Additionally, those with higher social skills could establish strong relationships with other group members through participant interaction, rather than through nursing leadership.

Sample

Participants' ethnicity, gender, cancer type, time of diagnosis, or treatment type did not exclude them from the study, but they were required to speak English, be willing to share information in a group, be 18 years or older, and receive care from a physician who, along with the patient, agreed to allow access to medical records. Exclusion criteria for this convenience sample included current (a) psychotherapy or existence of a diagnosed psychiatric disorder, (b) use of psychotropic medications that could interfere with symptom report, and (c) inability to comply with study protocol, such as regular attendance at sessions. Recruitment occurred through a letter distributed by physicians associated with a local regional medical center. Potential participants contacted the center for screening.

Data Collection Schedule and Procedures

Demographic data were obtained from participants during instrument administration before intervention. Six self-report and observational instruments and a symptom assessment using a standardized form for patient visits to the oncology clinic at the medical center were completed by researchers with both groups before and after the intervention. A protocol nurse later completed a retrospective physician chart review of mood assessment, stress level, and coping.

The tool kit focus was used only in the storytelling group. The nurse facilitator guided participants in 12 1.5-hour storytelling sessions, but the participants selected content and group activity. Participants used storytelling as a health promotion and healing technique (Koithan, 1994). They discussed the loss of control in their lives, their hopes for positive outcomes, and their relationships with others that were changed.

Although most cancer support groups provide opportunities to tell stories about illness and therapy, control group content was spontaneous, random, and unsystematic compared to the storytelling group. However, storytelling in the control group was considered a threat to the internal validity of the intervention; in an attempt to control this, facilitators were instructed not to discuss their experiences with one another and each facilitator was required to complete a debriefing questionnaire after each session concerning issues of general group process. The questionnaires differentiated the occurrence and use of story between groups by describing group process, identifying specific facilitator techniques, evaluating group response to the session, and assessing the level of interaction between participants and facilitators.

Instruments

The 25-item **Index of Clinical Stress** (Abell, 1991) measured the magnitude of subjective stress levels in participants. The index has excellent internal consistency with an alpha of 0.96, good content, and concurrent, factorial, discriminant, and construct validity. A result is formulated by reverse-scoring three items, adding the items and the remaining scores, subtracting the number of completed items, multiplying this figure by 100, and dividing the number of items completed by 6. This produces a score ranging from 0–100, with higher scores indicating greater severity of stress.

Cantril's Ladder (Kilpatrick & Cantril, 1960), a four-item subjective measure, was used as a global quality-of-life indicator. Participants were asked to describe the most effective and ineffective coping methods using a ladder, with 10 being the best score. Content validity for the instrument was determined by the questions used. Test-retest and reproducibility have not been reported, and internal consistency is not applicable to a single-item scale, but the instrument displayed a test-retest reliability of 1.00 in the pilot study.

The 21-item **McGill Pain Questionnaire** (Melzack, 1975) provided a quantitative measure of complex qualitative pain experiences using a pain rating index and overall pain intensity score. Widely used in cancer research, it has strong reliability and validity and is sensitive to changes from pain management. To increase the pain rating distinction between two groups, a weighted rank can be assigned to pain descriptors selected by the participants in each set and for the sum of the first 20 items. The overall intensity of pain is reported in item 21.

The five-item **Satisfaction With Life Scale** (Diener et al., 1985) measures an individual's quality of life and has clinical use with a wide range of participants. An internal consistency alpha of 0.87 and test-retest reliability of 0.82 for a two-month period were reported by Diener et al. Each item is ranked from 1 (strongly disagree) to 7 (strongly agree). Item scores are added together for a total, ranging from 5–35. Higher scores reflect more satisfaction with life.

The 22-item **Physical Self-Efficacy Scale** (Ryckman, Robbins, Thornton, & Cantrell, 1982) is based on assumptions that expectations about self-efficacy have notable effects on cognitive, affective, and behavioral patterns and that individuals must achieve physical competence to feel efficacious. The scale has two subscales, perceived physical ability (PPA) and physical self-presentation confidence (PSPC). The scale has an overall alpha of 0.81 (0.84 for the PPA, 0.74 for the PSPC) and is very stable with six-week correlations of 0.80 as a whole. The scale has good internal consistency and predictive validity. Scoring is done by reverse-scoring selected items, adding the scores within each factor for the subscales, and then adding the two subscale scores. Higher scores indicate greater self-efficacy, relevant for adjustment to a cancer diagnosis (Beckman, Burker, Lytle, Feldman, & Costakis, 1997).

The eight-item **Brief Depression Rating Scale** (Kellner, 1986), which measures depression by clinical observation, consists of a rating scale completed after participant observation. Although some subjectivity is associated with the assessment, the scale is considered substantially less subjective than self-reports. The scale displays excellent interobserver reliability, with correlations ranging from 0.91–0.94, and concurrent validity, correlating at 0.83 with the **Hamilton Depression Scale** (Kellner), the standard for measuring depression. The Brief Depression Rating Scale is recommended for its brevity, ease of use, and sensitivity to changes in depression and small differences in the effectiveness of different treatments. The Brief Depression Rating Scale is scored by adding individual items.

Standardized Symptom Assessment

Symptom assessments, using a standardized form for patient visits to the oncology clinic, were completed before and after the control and storytelling group sessions. The forms asked

participants to rate issues with fatigue, pain, elimination, appetite and weight loss, activity, sleep or rest, and anxiety on a 10-point Likert scale (10 being the worst).

Retrospective Chart Review

Participant charts kept in physicians' offices were reviewed after the sessions were complete. A protocol nurse examined the 12-week period for evidence that the healthcare providers addressed psychosocial issues.

Data Analysis

Statistical concerns about the small number of participants in this pilot study were addressed. A parametric repeated measures analysis of variance (RM-ANOVA) was used because the residuals in the analysis of variance were distributed normally, according to the Shapiro-Wilk test ($p > 0.05$). For completeness, a nonparametric equivalent test was used by computing the before and after differences and using a Wilcoxon rank sum test to compare score changes in the groups. Pearson and Spearman correlations between chosen scales were attended by plots, which showed linearity. P values for correlations were only approximate because repeated observations on the same subjects were combined over time. Spearman correlations were chosen as a more conservative assessment of the significance even though the bivariate plots indicated that the linearity assumption was tenable. Computations were primarily obtained using SAS® software version 8.2 (SAS Institute).

Results

Sample

Nine women and one man began the study. All participants were considered to be in remission when the study commenced, with the exception of one individual who was undergoing radiation therapy but felt well enough to participate. One woman withdrew from the control group prior to the first session because of family illness, and two withdrew from the intervention group after the first session for personal reasons. The age range of the remaining seven participants was 48–74 years. No other patients were available to replace the three participants. Toward the end of the 12-week period, one participant in the control group was diagnosed with recurrent lymphoma, but treatment had not begun by the time the study ended. Although pain increased in both the storytelling and control groups, only the participant with recurrent lymphoma had a documented change in disease status.

Instruments

Complete data for the six primary response variables were available for all four control group participants, but data for the three participants in the storytelling group were not collected after the intervention. The analysis was run with and without the three subjects who dropped out, and the results were very similar (identical results for the nonparametric analysis).

Although the sample for the study was small, RM-ANOVA comparing changes in the groups' mean scores revealed significant ($p < 0.05$) differences in the Index of Clinical Stress, despite an increase in pain in both groups over the course of the 12-week study (possibly as a result of disease progression), with a proportionately greater increase in the storytelling group (see Table 3). However, the storytelling group tended to feel less stressed over time (index scores decreased from 40.2 to 21.6) whereas the control group appeared to feel greater stress (index scores increased from 21.3 to 28.0). Some differences were noted in the other instruments, but they were small considering

Table 3. Instrument Change Scores

		Pretest		Post-Test			
Instrument and Group	**N**	$\bar{X}$	**SD**	$\bar{X}$	**SD**	**F**	**Chi Square**
Index of Clinical Stress						12.2*	4.5*
Control	4	21.3	8.7	28.0	6.2		
Story	3	40.2	8.6	21.6	9.9		
Physical Self-Efficacy Scale						0.02	0.00
Control	4	77.5	14.6	76.3	7.9		
Story	3	75.7	17.2	76.0	7.2		
Cantril's Ladder						1.1	0.29
Control	4	7.0	2.6	7.8	0.9		
Story	3	4.8	3.2	7.7	1.0		
Brief Depression Rating Scale						0.93	0.50
Control	4	20.9	4.1	23.8	5.0		
Story	3	26.5	2.6	25.3	4.2		
Satisfaction With Life Scale						0.61	0.03
Control	4	25.0	6.7	24.8	7.1		
Story	3	16.0	4.0	19.3	6.0		
McGill Pain Questionnaire						0.58	0.13
Control	4	5.8	7.4	8.6	17.3		
Story	3	10.5	11.8	27.0	16.1		

* The F statistic is associated with the group by time interaction, assessing whether the change from pretest to post-test is different for the two groups. The F value exceeding 6.61 is significant ($p < 0.05$). The chi-square statistic is obtained by computing the change scores for each group and then comparing the change scores by Wilcoxon's rank sum test. A chi-square value exceeding 3.84 is significant ($p < 0.05$).

the large standard deviations and small sample sizes. Because three participants dropped out of the study, RM-ANOVA was performed only on the seven participants who completed both the pre- and postintervention instruments.

Descriptive statistics and selected Spearman correlations between the standardized symptom assessment items and the primary instrument scales and subscales for the Physical Self-Efficacy Scale are shown in Table 4. Results from the Index of Clinical Stress appear to confirm what is already known about the relationship between anxiety and stress levels, and the PPA subscale of the Physical Self-Efficacy Scale seems to confirm the relationship between increasing anxiety and decreasing self-efficacy.

Symptom Assessment

Because no significant group or time effects emerged in the RM-ANOVA, symptom assessment data were combined over group and time. As the level of anxiety increased, the level of stress increased and self-efficacy decreased. Other differences in results were small considering the large standard deviations and the small sample sizes.

Retrospective Chart Review

A retrospective review of patient charts in physicians' offices by a protocol nurse at the end of the group sessions showed that physician documentation of psychosocial issues was infrequent. In the storytelling group, physicians made one baseline entry in regard to anxiety and depression with no documentation of psychosocial issues at the end of the study; one note regarding preexisting anxiety and depression, but no baseline entry despite two appointments (no appointment at end of study); and one chart in which no psychosocial entries were made despite the patient undergoing radiation therapy during the course of the group sessions. Noted physical changes included fatigue and pain related to skin burns from radiation therapy. Control group chart reviews were similar, with no references to anxiety, depression, or other psychosocial issues, despite fatigue and gastroesophageal reflux symptoms, a recurrence of lymphoma, and bilateral mastectomies in one participant.

Discussion

Despite a small sample, storytelling group participants demonstrated significant decreases in stress. This was reflected in reduced levels of anxiety, panic, tension, feeling stretched to the breaking point, losing control, and feeling angry. The findings may be related to Watson's (1985) carative factors of establishing a helping-trusting relationship with promotion and acceptance of feelings. Participants worked to solve day-to-day issues associated with treatment or recovery, not in a scientific manner, but by finding meaning in the cancer experience.

Interpersonal teaching and learning were evident as group members worked to interpret stories of their cancer experiences and seek healing in their relationships. Whereas pain levels increased over the course of the study, stress and anxiety decreased, reflecting the provision of Watson's (1985) supportive environment in group intervention. Carative factors are available to nurses in ordinary nurse-patient relationships but may be strengthened and focused through a storytelling group that sets aside time to emphasize the spiritual journey of a cancer diagnosis.

In terms of a standard nursing assessment of fatigue, pain, elimination, appetite and weight loss, activity, sleep or rest, and anxiety, combined group data confirmed that anxiety and stress increase concurrently, with increased anxiety resulting in decreased feelings of self-efficacy. Because illness perception can affect the level of distress associated with the disease, interventions that minimize anxiety and stress, particularly those that are noninvasive, are inexpensive, and carry little patient risk, are clinically useful in nursing practice. Watson's (2002) theories would be supported if such interventions can provide mental, physical, spiritual, and sociocultural support; help patients accept their disease process; and prepare them for death through caring-healing connections with the nurse.

The retrospective physician chart review pointed to the difficulties in assessing the worth of behavioral or psychosocial interventions. Suffering cannot be assumed to be present or absent in any given clinical condition. Sources of suffering are countless and suffering is an experience that many patients with cancer undergo (Steeves, 1992, 1996), yet

Table 4. Descriptive Statistics for the Supplementary Questionnaire

Item	Observations[a]	$\bar{X}$	SD	Range	Significant Instrument Correlations[b]
Fatigue	17	4.2	2.4	0–9	BDRS[c], MPQ[c]
Pain	17	3.1	3.0	0–9	PPA[d], MPQ[c]
Elimination	17	2.8	2.3	0–8	–
Appetite and weight loss	17	2.2	2.9	0–9	–
Activity	17	3.9	2.2	0–8	BDRS[e], MPQ[c]
Sleep or rest	17	3.2	2.2	0–7	–
Anxiety	17	3.2	2.5	0–10	ICS[c], PPA[d]
Other	7	6.0	3.7	0–10	–

[a] Based on the original sample with 10 participants for the pretest and seven participants for the post-test; the number reflects observations, not number of participants.

[b] Based on Spearman correlation with each table item and the primary instrument scales and subscales ($p < 0.10$)

[c] Spearman correlations were all positive and ranged from 0.42–0.48 ($p < 0.10$).

[d] PPA correlations were –0.51 for pain ($p < 0.05$) and –0.61 for anxiety ($p < 0.01$).

[e] BDRS versus activity correlation of 0.64 ($p < 0.01$) may be spurious because it was nonsignificant before intervention but highly significant after intervention.

BDRS—Brief Depression Rating Scale; ICS—Index of Clinical Stress; MPQ—McGill Pain Questionnaire; PPA—perceived physical ability

physicians did not provide written evidence that they attended to psychosocial or mental status of the patients in this study. Psychosocial assessment and referral to professionally led groups or individual counseling should be an integral part of medical management (Cunningham, 2000), but the researchers had to rely on standardized symptom assessment by nurses before and after intervention. If this is reflective of usual medical practice, then nurses rather than physicians could use a storytelling intervention as part of their care. Nurses who acknowledge patient suffering can help transform pain into an understanding of life's journey.

Limitations

The findings of this pilot study must be viewed with caution because the sample is smaller than desired and significant differences could be a function of regression toward the mean or unequal groups at baseline. The small sample also precluded establishing reliability on the population of this study. Results can be viewed only in the context of a feasibility study and are not generalizable.

Recruitment issues are not uncommon, but uncertainty about healthcare regulations had a dramatic effect on the study. Additionally, the 12-week intervention, once viewed as optimal, may have been too lengthy a commitment for participants.

Conclusion

The nurse facilitator was able to learn and implement the components of the tool kit, including strategies reflecting Watson's (1985) carative factors. Participants demonstrated decreased stress over the course of the storytelling intervention.

The study demonstrated that a larger randomized clinical trial of a nurse-led storytelling intervention is feasible. The tool kit may be useful in storytelling groups for patients with cancer or for individuals who are uncomfortable in, or have no access to, storytelling groups. Perhaps even sections of the intervention, applied when the opportunity arises, could be helpful. However, this possibility is open to investigation.

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