The Impact of Humor on Patients With Cancer

Wanda Christie, MNSc, RN, OCN®, and Carole Moore, BSN, RN, CEN

Humor can be a therapeutic experience for patients. Therapeutic humor was defined by the Association for Applied and Therapeutic Humor (2004) as “any intervention that promotes health and wellness by stimulating a playful discovery, expression, or appreciation of the absurdity or incongruity of life’s situations...[and can] be used as a complementary treatment of illness to facilitate healing or coping, whether physical, emotional, cognitive, social, or spiritual.” Fry (1992) referred to laughter as an internal jogging mechanism because it stimulates all physiologic systems. Laughter is a healthy way to reduce stress, provide a sense of control, and help the body relax (McGhee, 1998). People feel good when they share a laugh, which often results in an increased sense of belonging and friendship (Bloch, Browning, & McGrath, 1983).

Nurses spend more time than any other healthcare worker with patients. Humor can be an effective tool for nurses, but only in conjunction with their competence and commitment to patient care. Nightingale (1946) referred to the value of laughter for a patient when she wrote, “It is a matter of painful wonder to the sick themselves how much painful ideas predominate over pleasurable ones in their impression... The fact that these painful impressions are far better dismissed by a real laugh, if you can excite one by books or conversation, than by any direct reasoning; or if the patient is too weak to laugh, some impression from nature is what he wants. I have mentioned the cruelty of letting him stare at a dead wall (p. 34).

Most nurses working with patients with cancer realize that humor is an important coping tool for people in crisis; therefore, the authors decided to explore the therapeutic use of humor as an intervention for patients with cancer. The Stetler (2001) model of research utilization, which focuses on the use of research findings to change critical thinking and practice, guided the analysis. The Stetler model involves five phases: (a) preparation, (b) validation, (c) comparative evaluation and decision making, (d) translation and application, and (e) evaluation.

Using the Stetler model, in-depth literature reviews were performed that demonstrated a positive correlation between humor and comfort levels in patients with cancer. Humor frequently was used for relaxation and as a coping mechanism that aided in promoting general wellness. The literature indicated that various types of humorous material lessened anxiety and discomfort, which allowed for patients’ concerns and fears to be discussed openly. The literature also showed that humor had a positive effect on the immune system. Improvements in pain thresholds and elevations in natural killer cell activity consistently appeared in quantitative experimental studies. In addition, measurements of specific neuroendocrine and stress hormone levels revealed biochemical changes that suggested improved physical stress responses and increased feelings of well-being after humorous interventions. This article has implications for nurses because humor can be an effective intervention that impacts the health and well-being of patients with cancer.

Preparation: Literature Search Strategies and Review Method

In the first phase of the Stetler model, the purpose of the literature review is determined. A literature search was undertaken to examine the evidence for the use of humor as a coping tool for patients with cancer. The authors included studies that used humor as an intervention and were available at the university library at the authors’ institution or through interlibrary loan. Because the use of humor as an intervention has not been researched frequently, the studies were not limited to randomized controlled trials (RCTs). In addition, the insight provided by non-RCT studies was deemed valuable. The following study types were excluded: (a) non-English articles; (b) nonresearch articles; (c) review and/or meta-analysis articles; (d) abstracts, editorials, opinion pieces, position statements, case studies, dissertations, and models; (e) research articles with inadequate descriptions of participants, intervention(s), outcome measures, or research methods; and (f) articles published prior to 1985.

Searching for relevant articles pertaining to humor interventions involved several sequential steps. Initially, the authors identified appropriate search terms and key words,
such as “cancer,” “humor,” “laugh,” “laughing,” “laughter,” “oncology,” “pain,” and “wit.” Then, electronic databases, including MEDLINE®, Cumulative Index of Nursing and Health Literature®, Evidence Based Medicine, and PsycINFO, were searched. The authors performed independent, comprehensive searches and reviewed reference lists in an attempt to identify other articles. Thirty articles were identified as relevant to the research question, of which 20 were accepted for use in the review and 10 were eliminated based on the exclusion criteria.

Validation: Review for Scientific Soundness

The second phase of the Stetler model guided the process of validation, or assessment of the scientific soundness of each article or study. Each reviewer independently reviewed and extracted data from the studies. Data of interest in the extraction process included (a) the research question or purpose, (b) the study design, (c) conditions of interest, (d) interventions, (e) the setting, (f) the population, and (g) pertinent outcomes and findings. Data were placed in tabular format in an effort to enhance comparison and synthesis (see Table 1). Each reviewer assessed the study findings for credibility, clinical significance, and applicability. The findings were considered in terms that allowed them to be used in daily activities when interacting with patients (Stetler, 2001).

Comparative Evaluation and Decision Making

This phase of the model guides a nurse in deciding whether the findings from the literature review should be used, rejected, or delayed until further research is available. Comparative evaluation requires that each study be assessed for its fit in a particular setting, including the risks and feasibility of the intervention (Stetler, 2001). Each study also should be evaluated for credibility, or strength of empirical evidence. Four of the studies reviewed specifically sampled patients with cancer, 4 involved medical personnel, and 12 focused on healthy volunteers. Sample sizes ranged from 8–584 participants. Kamei, Kumano, and Masumura (1997) stated that they lacked confidence in their results because of a small sample size (eight males); however, their results corresponded with similar studies with larger samples (Berk, Felten, Tan, Bittman, & Westengard, 2001; Takahashi et al., 2001).

Studies should provide more potential benefits than risks to subjects. Risk factors were nominal in all of the studies reviewed and included venipunctures and pain resulting from blood pressure cuff inflation, cold water immersion, and transcutaneous electrical nerve stimulation (TENS) unit use. Overall, the studies compared favorably to the research question with a reasonable fit.

To synthesize the findings into a meaningful format (Stetler, 2001), a database was developed to compare information. The validity of each study and the possibility of integrating the findings into the patient care setting were considered. The Stetler model allows for the inclusion of supplemental types of evidence (e.g., consensus, local, affirmed experiences) when interpreting results.

Of the 20 studies identified for in-depth evaluation, nine were qualitative, nonexperimental, descriptive, or correlational in design. Of 11 studies that were quantitative, 8 were quasi-experimental and 3 were experimental. Recently, studies have begun focusing on the impact of humor as an alternative modality in medical management. In the mid-1990s, researchers began to have an increasing interest in humor as an intervention; however, humor rarely was the main focus of their research. More recently, RCTs have appeared that include objective measurement of humor and outcomes.

Olsson, Backe, Sorensen, and Kock (2002), as well as Parse (1993), sought to identify the components of humor. Using an exploratory design, Olsson et al. asked subjects, “What does humor mean to you?” Several themes emerged that categorized humor as a means to bridge or bond with others as well as to divide or react to others. Laughter is a universal form of communication. Parse also recognized the importance of laughter in the human experience and provided a structural definition for humor. Johnson (2002) explored the use of humor in coping and spirituality and found that women identified humor as an element of spiritual coping and demonstrated the power of humor when coping with a breast cancer diagnosis.

Astedt-Kurki and Isola (2001) explored humor in the workplace. Through purposeful sampling, 17 nurses were asked to record incidents of humor. The use of humor between nurses and patients enabled both to cope with unpleasant procedures and face difficult or embarrassing situations. Humor among staff helped nurses to cope with their work and created a more positive atmosphere. Humor also was found to impact health by reducing anxiety and stress, thereby improving coping (Carroll & Schmidt, 1992; Kash et al., 2000). Carroll and Schmidt found that people who used humor for coping rated their perceived physical health higher than those who did not. Among several relaxation methods identified by healthcare providers, humor scored high as an intervention in both studies.

Although some studies did not specifically target humor as a primary variable, it emerged as a major theme in the final analysis. Humor was identified as an active component of outcome measures in the final analyses of studies about methods of pain management (Ferrell, Taylor, Grant, Fowler, & Corbisiero, 1993), the use of complementary therapies (Bennett & Lengacher, 1999), and benefits of self-help groups (Gray, Fitch, Davis, & Phillips, 1997). Using a nurse-patient-caregiver triad as the evaluative tool, pain management coupled with humor was found to be more effective than pain management alone (Ferrell et al.). Rural patients with cancer also identified humor as a beneficial tool in improving mental and physical well-being (Bennett & Lengacher).

Martin and Dobbin (1988) sought to determine whether a correlation existed among stress, humor, and immunoglobulins. The authors evaluated participants’ saliva samples in correlation to their identification of “hassles” and rated their humor scale score based on a Daily Hassles Scale questionnaire completed by subjects. Participants with low humor scale scores also depicted a negative relationship between hassles and secretory immunoglobulin A as opposed to those with high humor scale scores. These results show a relationship between the body’s reaction to stress and participants’ ability to decrease stress through the use of humor. Later studies had similar outcome measures in experimental designs (Berk et al., 1989, 2001; Kamei et al., 1997; Takahashi et al., 2001) and tested variables such as immunoglobulin and immunoregulatory cells (Berk et al., 2001; Kamei et al.; Takahashi et al.), neuroendocrine and stress hormones (Berk et al., 1989), responses to questionnaires (Carroll et al., 2000), and stated discomfort thresholds (Cogan, Cogan, Waltz, & McCue, 1987; Hudak, Dale, Hudak, & DeGood, 1991; Mahoney, Burroughs, & Hiatt, 2001; Weisenberg, Raz, & Hener, 1998; Zillman, Rockwell, Schweitzer, & Sundar, 1993).

Berk et al. (2001) found that laughter caused increased natural killer cell (NK) activity and increased immunoglobulin G and immunoglobulin M levels for as many as 12 hours. The researchers concluded that
TABLE 1. REVIEW OF HUMOR AS AN INTERVENTION

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<tr>
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<tbody>
<tr>
<td>Astedt-Kurki &amp; Isola, 2001</td>
<td>What are the effects of humor between the nurse and patient and among staff?</td>
<td>Nature of humor and how it occurs as experienced and described by professional nurses</td>
<td>Participants were asked to record incidents involving humor in the workplace for one week</td>
<td>17 nurses working in different fields and chosen for the study through purposeful sampling</td>
<td>17 nurses working in different fields and chosen for the study through purposeful sampling</td>
<td>The use of humor between nurses and patients enabled both to cope with unpleasant procedures and face difficult or embarrassing situations. Humor among staff helped nurses cope with their work and created a more positive atmosphere.</td>
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<tr>
<td>Bennett &amp; Lengacher, 1999</td>
<td>Which complementary therapies are rural patients with cancer currently using?</td>
<td>Complementary Therapy Rating Scale; descriptive, cross-sectional review</td>
<td>Three cancer treatment clinics and one support group in the rural midwestern United States</td>
<td>Patients with cancer</td>
<td>10 healthy men, 5 in a control group and 5 in an experimental group</td>
<td>Researchers found a decrease in cortisol and growth hormone with laughter. Epinephrine was lower in the experimental group. Prolactin, norepinephrine, and beta-endorphin did not increase significantly.</td>
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<td>Berk et al., 1999</td>
<td>Are changes quantifiable in endocrine and stress hormones in response to laughter?</td>
<td>Stress hormonal response to laughter</td>
<td>Participants viewed 60-minute humorous videos versus quiet time and were evaluated before, during, and 30 minutes after the intervention.</td>
<td>Location not clearly identified</td>
<td>52 healthy men, mean age 27 (SD = 3.2 years)</td>
<td>Increases were found in natural killer cell activity (NKCA) and immunoglobulins G, A, and M, with several immunoglobulin effects lasting 12 hours after the initiation of the intervention. Functional phenotypic markers for leukocyte subsets also demonstrated increased effects lasting 12 hours, with some effects occurring within 90 minutes.</td>
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<td>berk et al., 2001</td>
<td>What is the efficacy of mirthful laughter to modulate neuroimmune parameters in healthy subjects?</td>
<td>Humor therapy and the related mirthful laughter are suggested to have preventive and healing effects.</td>
<td>Humorous video viewed for one hour; blood samples taken 10 minutes before, 30 minutes into, and 30 minutes and 12 hours after the intervention. Participants fasted on the day of the experiment.</td>
<td>The schools of medicine and public health at Loma Linda University, CA</td>
<td>Random sample of 1,460 family physicians; 911 responded, and 584 completed the study</td>
<td>Physicians were more positive toward SHGs after being exposed to the educational packet.</td>
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<tr>
<td>Carroll et al., 2000</td>
<td>Does education or research intervention change physicians’ attitudes toward self help groups (SHGs)?</td>
<td>Physicians’ attitudes toward SHGs</td>
<td>Educational packet related to cancer SHGs</td>
<td>Ontario, Canada</td>
<td>51 Caucasian college students from middle-class homes; 9 men and 42 women</td>
<td>People who used humor as a coping strategy reported having fewer health problems than those who did not.</td>
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<tr>
<td>Carroll &amp; Schmidt, 1992</td>
<td>Does the use of humor help people cope with stress and/or anxiety?</td>
<td>Use of humor when dealing with anxiety-evoking events</td>
<td>Situational Humor Response Questionnaire</td>
<td>Introductory Psychology course at a mid-sized midwestern university in the United States</td>
<td>51 Caucasian college students from middle-class homes; 9 men and 42 women</td>
<td>People who used humor as a coping strategy reported having fewer health problems than those who did not.</td>
</tr>
<tr>
<td>Cogan et al., 1987</td>
<td>Does laughter increase pain thresholds?</td>
<td>Effects of laughter on pain</td>
<td>Twenty-minute audiotape to generate laughter</td>
<td>Location not clearly identified</td>
<td>Healthy undergraduates; 20 males and 20 females in the first study; 40 females in the second</td>
<td>Laughter significantly increased participants’ pain thresholds and therefore was considered to be as effective as relaxation.</td>
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<td>Ferrell et al., 1993</td>
<td>What are the problems associated with pain management at home as identified by patients, caregivers, and nurses?</td>
<td>Pain management</td>
<td>Recordings and analysis of one-to-two-hour in-depth interviews; exploratory study using qualitative techniques</td>
<td>Home health setting in California</td>
<td>Patients with cancer, their family caregiver(s), and homecare nurse(s); study consisted of 10 patient-caregiver-nurse trials</td>
<td>Patients use resources from themselves and others to control physiologic discomfort and pain, largely through psychological coping. Caregivers see themselves as active participants in pain management, which involves some personal sacrifice.</td>
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### Table 1. Review of Humor as an Intervention (Continued)

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<tr>
<td>Gray et al., 1997</td>
<td>How does humor affect women with breast cancer?</td>
<td>Benefits and limitations of SHGs, including strengths and weaknesses</td>
<td>Interviews using open-ended questions lasting 60–90 minutes</td>
<td>Members of SHGs in four communities in Ontario, Canada</td>
<td>24 predominantly middle class and well-educated Caucasian women aged 33–73</td>
<td>Women identified the importance of laughter during the group's meetings.</td>
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<tr>
<td>Hudak et al., 1991</td>
<td>Will subjects with a strong sense of humor have a greater increase in discomfort thresholds than those with a weaker one?</td>
<td>Change in discomfort levels with transcutaneous electrical nerve stimulation (TENS) before and during a humorous or nonhumorous condition</td>
<td>Subjects were tested individually for discomfort thresholds (via TENS unit) before and during viewing of a video. Subjects' facial muscle activity was monitored, and pain was assessed every five minutes; the TENS unit was adjusted to increase voltage based on the subject's response.</td>
<td>Undergraduates in a college setting</td>
<td>31 undergraduates who scored high or low on Martin and Lefcourt's questionnaire; they were randomly assigned into two groups—17 to a humor group and 14 to a nonhumor group.</td>
<td>The subjects viewing the humorous videotape had significantly higher thresholds for discomfort than those viewing the nonhumorous videotape.</td>
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<td>Johnson, 2002</td>
<td>Does the use of humor in patients with breast cancer increase their coping skills and spirituality?</td>
<td>Coping and spirituality in women with breast cancer</td>
<td>Explored the use of humor in coping, by nurses, and in spirituality</td>
<td>Community-based breast cancer support groups in Texas</td>
<td>Female survivors of breast cancer</td>
<td>Women identified humor as an element of spiritual coping. The study demonstrated how the use of humor is powerful in coping with a breast cancer diagnosis.</td>
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<td>Kamei et al., 1997</td>
<td>What are the effects of stress and humor on immune responses in the same subjects?</td>
<td>Percent changes of T-cell subsets, including helper/inducer cells (CD4), suppressor/cytotoxic cells (CD8), and NKCA</td>
<td>Leukocyte analysis of blood at three intervals and at the same time of day: two hours before a physics examination, one week after the examination, and before and after watching a comedy video.</td>
<td>Medical school</td>
<td>8 male medical students</td>
<td>CD4 and CD8 ratios were not affected significantly either by the examination or the video. NKCA was weaker after watching the video.</td>
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<tr>
<td>Kash et al., 2000</td>
<td>What are the effects of stress and personality on burnout scores?</td>
<td>Impact of burnout on the ability of nurses and doctors to be sensitive to patients' needs and deliver compassionate care</td>
<td>Nurses and doctors completed questionnaires that measured burnout, psychological distress, and physical symptoms.</td>
<td>Memorial Sloan-Kettering Cancer Center and an outpatient oncology clinic in New York, NY</td>
<td>83 nurses, 76 house staff, and 74 medical oncologists</td>
<td>The four most frequent methods of relaxing were talking to friends, using humor, drinking coffee or eating, and watching television.</td>
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<td>Mahoney et al., 2001</td>
<td>Does the expectation of laughter increase discomfort thresholds?</td>
<td>Discomfort thresholds</td>
<td>Sense of humor questionnaire and instructional sets given to create an expectation of increased or decreased discomfort while viewing a comedy or relaxing video.</td>
<td>Undergraduate college</td>
<td>50 male and 84 female undergraduate students</td>
<td>Humor and relaxation videos increased patients' discomfort level thresholds, the effects of which were enhanced by the expectation of improved pain. Participants with a humorous personality trait did not moderate this effect.</td>
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### Table 1. Review of Humor as an Intervention (Continued)

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<tr>
<td>Martin &amp; Dobbin, 1988</td>
<td>What are the effects of humor on the immune system?</td>
<td>The moderating effect of the sense of humor on the relationship between stressors and secretory immunoglobulin A</td>
<td>Daily Hassles Scale compared to saliva specimens</td>
<td>University of Western Ontario</td>
<td>18 males and 22 females enrolled in introductory psychology courses were recruited through the subject pool.</td>
<td>Subjects with low scores on the humor scales revealed a stronger negative relationship between hassles and secretory immunoglobulin A than did those with high humor scores.</td>
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<td>Olsson et al., 2002</td>
<td>How is humor defined, and what categories are included in humor?</td>
<td>Categories included in humor</td>
<td>Survey that asked, “What does humor mean to you?” Data were based on 20 interviews.</td>
<td>Location not clearly identified</td>
<td>9 women and 11 men aged 17–75</td>
<td>Laughter as a result of humor was identified as being able to create closeness or distance between individuals.</td>
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<td>Parse, 1993</td>
<td>What is the structural definition of laughter in people older than age 65?</td>
<td>The effect of the laugh experience as it transforms the moment and lingers, creating a happy feeling and prompting a sense of oneness and contentment, often reflected in personal descriptions of health</td>
<td>Thirty subjects participated in interviews. Data were analyzed through processes of intuiting, analyzing, and describing using the six operations of scientific explication (van Kaam, 1966). Subjects were asked to write a description of a “situation where you laughed your heart out” and share all thoughts and feelings about the situation.</td>
<td>United States</td>
<td>30 men and women older than 65 years</td>
<td>The four elements common to the experience of laughter were buoyant immersion, harmonious integrity, contemplative visioning, and unanticipated glimpsing.</td>
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<td>Takahashi et al., 2001</td>
<td>What effect does laughter have on NKCA?</td>
<td>NKCA elevation in laughter</td>
<td>Crossover design; randomized groups watched a comic and documentary video for 75 minutes each in two sittings no more than four weeks apart. Response measurements evaluated with Profile of Mood States (POMS) questionnaire, blood sampling, electromyography, galvanic skin response, fingertip plethysmogram, pneumogram, and body movements.</td>
<td>Outpatient university setting</td>
<td>21 healthy male subjects aged 18–26</td>
<td>Participants’ NKCA increased with laughter and remained the same when watching the control video. The comic video significantly improved negative moods such as tension, anxiety, depression, anger, hostility, and confusion.</td>
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<td>Weisenberg et al., 1998</td>
<td>What are the effects on pain perception of video-induced mood as a function of video type and length?</td>
<td>Mood induced by videos</td>
<td>Subjects recruited by poster viewed one of three videos (i.e., humorous, Holocaust, or neutral) while placing an arm in cold water, and then were asked to rate pain.</td>
<td>Laboratory in the United Kingdom</td>
<td>100 female and 100 male paid volunteers, ages 18–36, median age 23, randomly assigned into groups</td>
<td>Results showed significant increases in pain tolerance after viewing the humorous video for 30 minutes. The control group that did not watch a humorous video showed lower tolerance and gave higher pain ratings.</td>
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<td>Zillman et al., 1993</td>
<td>Does humor facilitate coping with physical discomfort?</td>
<td>The effects of humor on discomfort thresholds</td>
<td>Discomfort thresholds were measured in relation to the program viewed (i.e., stand up comedy, situation comedy, drama, instruction [neutral], tragedy) by applying pressure with a blood pressure cuff, and participant perceptions were obtained.</td>
<td>Introductory college classes who received credit for participating; 50 females and 50 males randomly assigned into groups of 10 males and 10 females for each condition</td>
<td>Exposure to comedy elevates the threshold for physical discomfort. Those in the control situation did not experience any change. The threshold for physical discomfort increased after exposure to tragedy.</td>
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these elevations following either laughter or other humorous encounters may provide beneficial health effects. An earlier study by Berk et al. (1989) found that laughter causes biochemical changes, including reductions in cortisol, growth hormones, and epinephrine. Takahashi et al. (2001) also demonstrated elevations in NKC activity in their crossover design study. Kamei et al. (1997) identified changes in immunoregulatory cells associated with stress and humor. Contrary to the findings of Berk et al. (2001) and Takahashi et al., Kamei et al. found that humor decreased NKC activity.

The use of humor consistently demonstrated improvements in pain thresholds (Cogan et al., 1987; Hudak et al., 1991; Mahoney et al., 2001; Weisenberg et al., 1998; Zillman et al., 1993). Cogan et al. conducted two RCTs using pressure-induced discomfort with interventions that included listening to a laughter-inducing audiotape, a relaxation-inducing audiotape, a dull narrative audiotape, or no audiotape. Both experiments demonstrated increased pain thresholds with the laughter-inducing audiotape. Mahoney et al. and Zillman et al. used a similar design with comparable results. Mahoney et al. also investigated the impact of a humorous personality trait, which did not appear to moderate the outcome.

Other methods of initiating discomfort included the use of a TENS unit (Hudak et al., 1991) and immersing an arm in cold water (Weisenberg et al., 1998). The participants in the Hudak et al. study watched either a humorous or nonhumorous video while the testers increased the voltage of the TENS unit and assessed pain every five minutes. Those watching the humorous video demonstrated higher pain thresholds. Weisenberg et al. considered the impact of mood on pain threshold by showing participants a humorous, neutral, or Holocaust video. Participants’ pain thresholds increased after viewing the humorous film for a minimum of 30 minutes, whereas the control group that did not watch the humorous video experienced lower tolerance. One of the quasi-experimental design studies (Carroll et al., 2000) focused on changing attitudes, but in the process, reinforced earlier studies identifying humor as beneficial to coping.

**Translation and Application**

The fourth phase of the Stetler model focuses on how to implement the findings and recommendations into action terms. The studies in this review suggest that humor can reduce the incidence of negative health phenomena. In addition, humor has a positive effect on the immune system by enhancing immunoglobulins and NKC activity. Humor also serves as a coping factor that effectively aids in the promotion of general wellness. Humor has been shown to be effective in decreasing anxiety, increasing coping, and allowing open discussion of concerns and fears. This effect, in theory, can lead to a decrease in discomfort by increasing discomfort thresholds. The beneficial effects of humor appear in numerous environments and scenarios, providing potential help to patients living with chronic or severe cancer pain, acute surgical pain, or anxiety and depression. Studies addressing neurochemical measurements show that a chemical reaction occurs at the cellular level, where humor harnesses biochemical reactions (Berk et al., 1989, 2001; Kamei et al., 1997; Martin & Dobbins, 1988; Takahashi et al., 2001).

Laughter is a coping mechanism (Johnson, 2002) that promotes relaxation (Kash et al., 2000) and healing (Gray et al., 1997). Humor was recognized as one of the four most common methods of relaxing in studies by Bennett and Lengacher (1999) and Kash et al. These findings promote the importance of humor when dealing with stressful situations and the idea that the appropriate use of humor often serves to diffuse a tense situation. For some patients, just seeing a nurse enter their room with a smile lightened their day and made them smile in return.

Staff members should take time to identify the methods they use to relax and promote humor among their patients. Observing what makes others laugh or smile also is important to the process. The way in which humor commonly is used in interactions among patients and their support system can be a clue to appropriate types of humor. Many ways of generating humor exist (see Figure 1), such as watching humorous videos, listening to humorous audiotapes, and recalling humorous events. Additional techniques may include such basic human interactions as telling a joke, looking at a funny picture, or being exposed to happy people. These methods of using humor in patient care allow for individualized nursing interventions. A library of comedic movies and audiotapes would be an appropriate addition to a nursing unit. Workshops are available to discuss how humor can be used and developed in the nurse-patient relationship. At the authors’ institution, staff are encouraged to attend workshops or lectures to develop their skills in the therapeutic use of humor. Healthcare facilities may find that an evaluation form may be valuable in allowing patients and caregivers to give feedback regarding the types, feelings, and appropriateness of therapeutic humor when used in conjunction with the care they receive. A questionnaire of this type could be completed on a random basis or at discharge.

As with any concept, humor as an intervention requires additional empirical support to justify substantial changes in practice; therefore, research studies involving other populations, specifically the chronically ill, are essential. Despite the scarcity of evidence and RCTs found in this literature review, the available evidence is indicative of judicious implementation of changes in practice. Prediction of individual actions and responses to humorous interventions remain ambiguous; thus, such interventions must be implemented cautiously and with consideration of the individual’s perception of humor. Staff must recognize cultural diversity and perceptions when attempting to intervene with humor. Only appropriate humor guided by professionalism should be used in interactions between nurses and patients. Meanwhile, additional studies are necessary to identify easy, effective ways to use humor in accordance with the individual and the setting.

**Evaluation**

Evaluation is an essential nursing process, the foundation of which is the clarification of expected outcomes, a dynamic, ongoing process that begins in the initial preparation phase. Clarifying expected outcomes requires acquiring additional practical infor-
mation through observing results, obtaining a consensus, or conducting an action test of the findings (Stelter, 2001). As previously indicated, various methods exist for documenting the objective outcomes of humorous interventions and should be explored and fine-tuned to validate the benefits of humor (see Figure 2).

Humor as an intervention still is relatively unexplored and must be researched further to provide stronger evidence of the effect of laughter in connection with the care of patients with cancer. The development of appropriate and effective humorous interventions also is required. Mahoney et al. (2001) suggested that the “interaction of existing beliefs about the value of humor and laughter and the potentiating messages, either stated or implied by the very existence of the intervention” (p. 222) may contribute to success. Finally, the settings in which humor promotes beneficial outcomes need to be identified. Several variables impact quality of life, including, but not limited to, stress, anxiety, depression, functional capacity, pain, and discomfort. How humor and laughter can mitigate the negative impacts of these variables and promote positive outcomes remains a focus of contemporary research.

Once additional RCTs addressing these issues are complete, closer scrutiny and evaluation of humor as an intervention must occur. A change in practice certainly is justified; however, current research lacks substantial evidence to guide the methods and manners for such a change. As nurses seek to implement humor into their practice, observation and evaluation of their efforts are essential to fine-tune the art of therapeutic humor. The study of the use of humor as a therapeutic intervention may never be complete.

Summary

The synthesis of these 20 research studies demonstrates that humor is an effective intervention with a potentially enormous impact on the health and well-being of patients in numerous settings. Unfortunately, this concept lacks supporting evidence and requires further research to uncover all of the potential benefits and methods of delivery before substantial changes can be made in practice. “The use of laughter as an antidote to pain has long been recommended by folk wisdom. According to a Jewish proverb, ‘When you’re hungry, sing; when you’re hurt, laugh.’ Empirical research has provided some support for popular beliefs” (Mahoney et al., 2001, p. 217), including those involving laughter. Thus, existing studies justify undertaking additional in-depth research to discover the peculiarities of humor and how humanity may harness its vitality and enjoy its benefit.

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Author Contact: Wanda Christie, MNSc, RN, OCN®, can be reached at gchristie@centurytel.net, with copy to editor at CJONeditor@jsobel.com.

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Rapid Recap

The Impact of Humor on Patients With Cancer

- Humor has been recognized as a viable tool in therapeutic patient interventions.
- Patients with cancer have identified humor as helpful in decreasing their anxiety and discomfort.
- The effect of humor as an intervention has been explored in research projects, although very little before 1990.
- Concrete methods for testing the effects of humor have been developed and used in research activities.
- Research indicates that humor is an effective intervention in the care of patients with cancer; however, continued research in this area is needed.


