

# Laughter is the Best Medicine

And it's a great adjunct in the treatment of patients with cancer.

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he mere mention of cancer can inspire dread. The grief, anger, fear, anxiety, and depression that commonly beset cancer patients and their families can further erode health and well-being. However, there is a favorable aspect to cancer. A person who has been diagnosed with it, defined as a survivor, will often lead a fuller, more meaningful life. Survivors may have a greater appreciation of being alive, a diminished fear of death, a more optimistic outlook, and a deeper faith in God. They have described the experience as life changing "from black and white to full color"2 and one expressed his spiritual renewal in these terms: "I savor and cherish every moment. I smell the grass when I cut it, bask in the feel of the sun on my face, and watch ants and clouds go by."2

Harold Benjamin, PhD, and founder of the Wellness Community, a support program for those fighting for recovery from cancer, once said, "The more laughter there is, the higher the quality-of-life, and the higher the quality-of-life, the greater the will to live." This article explores the effects of therapeutic humor and an optimistic perspective on the quality of the lives of cancer survivors.

### TREATING THE SPIRIT

Socrates said, "As it is not proper to cure the eyes without the head, nor the head without the body, so neither is it proper to cure the body without the soul." Cancer affects the mind, body, and spirit. In the way a tumor invades the body, the psychological toll of cancer can be likened to an evil that spreads to destroy the mind and spirit. No matter what the prognosis, the mind, body, and spirit must all be healthy for a survivor to live and not just survive.

Quality of life has become a recognized health care goal. In 1990, The National Cancer Institute recommended that it be an outcome variable in all the clinical trials it sponsors and was identified by the Oncology Nursing Society as its highest research priority in 1991.<sup>5</sup> Quality of life is perceived according to individual conception and is best evaluated by the patient rather than by others. It is the condition of one's being, reflected in the ability to perform everyday activities, as assessed according to physical, psychological, spiritual, and social dimensions. Among oncology patients, the quality of life is reflected in satisfaction with levels of functioning and control of the symptoms of both disease and treatment.<sup>6</sup>

Oncology nurses understand the value of the quality as well as the quantity of life<sup>6</sup>; the former transcends physical health, clinical symptoms, and functional ability. Betty R. Ferrell, PhD, RN, FAAN, a research scientist at the City of Hope National Medical Center in Los Angeles, has devised a model that incorporates the four dimensions of the quality of life: physical, psychological, social, and spiritual.<sup>1,6</sup> Much attention has been given to the body in terms of symptom management, functional ability, and the use of technology in treatment. But spiritual and social well-being are equally important and deserving of attention. Consideration of the psychological aspect of the quality of life brings us to the subject of humor and how it can enhance well-being.

The American Association for Therapeutic Humor (AATH) defines therapeutic humor 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. This intervention may enhance health or be used as a complementary treatment of illness to facilitate healing or coping, whether physical, emotional, cognitive, social, or spiritual."

## **HUMOR HELPS THE MEDICINE GO DOWN**

Humor used therapeutically can enhance a patient's well-being.<sup>8,9</sup> Norman Cousins, a patient diagnosed with ankylosing spondylitis in 1964, was the first to formally study how it affects the quality of life. Aware that adverse thoughts can worsen one's health, Cousins wondered whether

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the opposite is true, whether laughter can heal. <sup>10</sup> He developed his own therapy program including humor to treat himself when suffering with pain. He discovered a cumulative decrease in his sedimentation rate, indicating a reversal of inflammation. Further, he found he could enjoy two hours of pain-free sleep after ten minutes of sustained laughter. After his recovery, Cousins joined the staff at UCLA Medical School to establish a Humor Research Task Force to pursue clinical research on humor. <sup>10</sup>

Like pain, humor is subjective and perceived variously. What one person finds humorous, another may find dull, unaffecting, or even offensive. Steve Sultanoff, PhD, president of AATH, identifies three components of humor; wit (the cognitive experience of it), mirth (the emotional), and laughter (the physiologic). Thus, humor involves the mind, body, and spirit—the total person.

It is a challenge to quantify humor's effect on recovery, because humor is difficult to define, not strictly a physical response, and has a different meaning for each person. Furthermore, research is relatively scant, as there seems to be a widespread, perhaps tacit, opinion that the pursuit of joy is not a respectable subject for academic study.<sup>11</sup>

## LAUGHTER, THE INTERNAL PHARMACY

The appreciation of humor is a perception to which laughter is the behavioral response.<sup>4</sup> Most research on humor focuses on the physical effects of laughter, noting physiologic changes such as increases in heart rate and blood pressure, followed by relaxation and a decrease in blood pressure. Stimulation of the circulation enhances metabolic and immune responses, and laughter is believed to improve digestion and reduce muscle tension. Laughter's effects have been described as an "internal jogging," as it also helps clear the lungs and airways with a deep exhalation and inhalation, and acting as a stimulation of cough.<sup>8</sup>

Laughter has been shown to increase the tolerance of pain, and although unsubstantiated, it is commonly held that laughter releases endorphins, the body's natural analgesic. Psychologically, at least, laughter serves as a distraction from pain, and one survey of the nonpharmaceutical management of pain rated laughter as the most effective means of coping with it.<sup>12</sup> Moreover, laughter has a lasting effect. After it has subsided, the good feeling that lingers is one not ordinarily felt after other distractions from pain have abated.

Adverse emotions tend to depress the immune response, while favorable ones strengthen immunity. After a spate of laughter, there is a decrease in the level of stress hormones cortisol and epinephrine, which are immunosuppressive and become elevated in the response to stress. Thus, the decrease in these hormone levels in response to humor can enhance the immune system.<sup>4,9</sup>

The physiologic benefits of laughter may include the initiation of the spontaneous blastogenesis of lymphocytes, increased numbers and activity of natural killer cells, and increased numbers of cytotoxic and helper T cells, as well as B cells. Natural killer cells are lymphocytes that engage in cytolytic activity against tumor cells, and B and T cells are essential to the immune response.<sup>4,8</sup>

Studies have shown that levels of salivary IgA, an antibody that helps fight upper respiratory disease, were elevated after the subjects had watched a humorous film.<sup>4,8</sup> Humor and laughter also raise levels of the antibodies IgM and IgG, and of complement C3, all of which enhance the inflammation, chemotaxis, and lysis of target cells. Laughter increases levels of interferon gamma, which inhibits virus replication, promotes

antigen processing, and activates macrophages.<sup>8</sup> Thus, an immune system that has been weakened by disease and its treatment, and burdened with adverse emotions, may be somewhat renewed in laughter.

And simply, laughter is a pleasure. At least momentarily, it eases fear and anger, inducing both a sense of control and hope.<sup>4,8</sup> A study of adolescent oncology patients revealed that in a case in which a nurse initiated humor, the reality of the illness was not minimized, but, rather, her belief in the patient's ability to cope with it was emphasized.<sup>13</sup> Life's circumstances often are beyond our control, but we can control our responses to them.<sup>4,8</sup> Laughter is a socially acceptable outlet for pent-up emotions, and is almost always beneficial. (It can, of course, cause harm when used inappropriately.) <sup>13</sup> Relieving stress conserves the body's energy, which also promotes healing. <sup>14</sup>

Humor is an effective educational tool in general, and is especially recommended in patient education. The use of humor in the didactic context enhances recall, improves understanding, increases attention, and stimulates creative and flexible thinking.<sup>4, 9, 13</sup> Shared laughter helps establish therapeutic relationships by reducing fears and anxiety that can inhibit the learning process, and by engendering trust.<sup>4, 11</sup>

For humor to be most effective in healing, it must be valued and cultivated by the nurse herself. A nurse who is happy brings joy to the patient.



# **Humor Resources Web Sites**

American Association for Therapeutic Humor http://www.aath.org 623-934-6068

The HUMOR Project, Inc. http://www.humorproject.com 518-587-8770

Jest for the Health of It http://www.jesthealth.com 831-460-1600

Laughter Remedy http://www.laughterremedy.com 973-783-8383

Humor Rx http://www.humorrx.com 800-848-6679

Humor Matters http://www.humormatters.com 949-551-8839

Allen Klein, Jollytologist http://www.allenklein.com

## Magazines and Newsletters

The Cancer Club http://www.cancerclub.com 612-944-0639

Coping with Cancer http://www.copingmag.com 615-791-3859

Supplies Choose Hope, Inc. http://www.choosehope.com. 1-888-348-HOPE

Oriental Trading Company http://www.oriental.com 1-800-228-2269

For example, when administering an injection, light joking can help the patient to relax rather than stiffen with uncertainty and fear. The more the patient understands his care and participates in it, the keener his sense of control and independence, and the more likely he is to comply from an optimistic perspective.

The quality of life is the focus of every intervention in palliative care, and humor has an even more vital role in the terminal phase of disease than it does during illness. Even in death and dying, humor lifts the spirit. Often, end-of-life humor primarily

comes from the staff and patients, rarely from the family. But it's essential, it diverts attention, relieves stress, and brings a fresh perspective and power to the situation. The terminally ill patient does not want to be treated as if he were already dead, but as a person who can still enjoy life.<sup>15</sup>

One study found that 85% of 14 terminally ill patients believed that humor would help them connect with others, experience joy, hope, and pleasure, and facilitate coping. Good feelings allowed patients to ask questions they might not have been able to otherwise, and better equipped them to handle difficult news.<sup>15</sup>

## **BRINGING JOY TO THE PATIENT**

Among all health care providers, nurses spend the most time with the patients. They are in an ideal position to assess the patient's quality of life and intervene effectively. For humor to be most effective in healing, it must be valued and cultivated by the nurse herself.<sup>11</sup> A nurse who is happy brings joy to the patient.<sup>8</sup>

First, ask yourself if you want to heighten the joy in your own life. Consider whom you laugh with, what you find funny, and where and when you feel most happy. Then expose yourself to the things you find humorous. These may include books, movies, sitcoms, comediennes, cartoons, bumper stickers, buttons, and friends. Share jokes and heartwarming stories with an Internet community. Share your humor with others. Interact; humor thrives on reciprocal relationships.<sup>7, 9, 14</sup>

The patient will be more comfortable with jocularity once the nurse has established her competence and sincere commitment to his care. Establish a rapport with the patient before introducing humor into the relationship, which, in any event, should not be present during times of medical, emotional, or spiritual crisis, such as moderate to severe pain, acute vomiting, or immediately after receiving upsetting information.<sup>11, 13, 14</sup>

There are many ways of judging the patient's sense of humor. Some nurses do a formal humor assessment to establish the "who, what, when, and where" in the incidence of the patient's laughter. Others question the family about the patient's values. The type of greeting cards, flowers, and gifts that a patient receives, what he reads or watches on television, and how he responds to visitors may indicate what he finds funny.<sup>11, 13</sup>

The smile has been described as "a light on your face to let someone know that you are at home." <sup>15</sup> The gentlest form of humor and one of the earliest forms of communication is the smile. <sup>16</sup> Start with a gentle intervention and evaluate how it is received.



A smile can convey warmth, joy, sympathy, and compassion as well as humor. Sharing humorous or joyful proverbs and stories from the Bible can also uplift a patient's spirit.<sup>11</sup>

Encourage patients and staff to express themselves optimistically. For example, when assessing treatment-related side effects encourage the patient to say, perhaps, "No, I don't have a sore mouth," rather than, "I don't have a sore mouth yet." Make an effort to use medical jargon in a optimistic light. Dr. Benjamin refers to patients as "victors" rather than "survivors." Norman Cousins wrote of an overheard conversation between two oncologists discussing their protocols. One used the acronym EPOH (etoposide, Platinol, Oncovin, and hydroxyurea), and had a 22% response rate. His colleague, using the same drugs, emphasized the chance of success by naming his protocol HOPE. He had a 74% response rate.<sup>17</sup>

Celebrate holidays, great and small. Seldomobserved or even made-up holidays can be great fun.<sup>13</sup> Celebrate the birthday of Dr. Seuss, March 2nd, by eating green eggs and ham, reading his books, and watching a Seuss movie. Noah Webster's birthday, October 16th, could be commemorated by a game of Scrabble and a bowl of alphabet soup. Perform harmless tricks on April Fool's Day; pinch those who don't wear green on St. Patrick's Day; and watch the film Groundhog Day on February 2nd.

There are many excellent resources providing detailed information on establishing formal structured humor programs. Humor rooms, carts, and baskets can be wonderful humor facilitators. Humor rooms are permanent locations where patients and staff can relax and play. Humor carts are mobile units that deliver humorous props to the bedside. Humor baskets are smaller versions of the carts that serve as a good introductory program. At minimal expense, scrapbooks of cartoons, funny sayings, or stories, and joke books can be provided for the patient's amusement. Funny buttons, books, videos, cassettes, CDs, games, puzzles, puppets, and small toys can be shared among patients and staff.<sup>9,16</sup>

Humor should not be directed at a particular sex, race, ethnic group, or culture. It's also important to avoid humorous reference to conditions having to do with bodily functions and to physical loss (hair, breast, etc.), unless initiated by the patient. It is permissible to laugh at oneself, but not at someone else; it is lovely to laugh with someone, but never at someone. The patient must always be included in the laughter response if humor is to

be therapeutic.<sup>7, 11, 13</sup> Do not try to force humor, as some patients are simply not receptive to it. It must be the patient's choice to participate. But do encourage patients to live each moment and each day to the fullest. Those who aren't as receptive to humor may be more open to the idea of joy and may be uplifted by watching the sunrise, sunset, clouds, rain, and birds.

While humor and laughter cannot cure cancer, they are a sure means of alleviating fear, distress, and anxiety, and they enhance the patient's quality of life. Introducing humor into a patient's life is a legitimate facet of caring. To do this, however, nurses must find joy and humor in their own lives. Sometimes it's a challenge to find these things, but when they are cultivated—whether by simply watching a funny movie, or by pursuing a more spiritual life—daily frustrations come into perspective.

### **REFERENCES**

- 1. Dow KH, et al. The meaning of quality of life in cancer survivorship. *Oncol Nurs Forum* 1999;26(3):519-28.
- 2. Gullo S, Glass E, editors. Silver linings: the other side of cancer. Pittsburgh (PA): Oncology Nursing Press; 1997.
- 3. Benjamin HH. From victim to victor: the wellness community guide to fighting for recovery for cancer patients and their families. Los Angeles: J.P. Tarcher; 1987.
- 4. Wooten P. Laughter as therapy for patient and caregiver [online]. 2000. http://www.jesthealth.com/ch\_pulm.html.
- Rieger PT. Fighting fatigue: resolving issues for the cancer patient. Beachwood (OH): Pro Ed Communications; 1997.
- 6. Ferrans CE. Quality of life as an outcome of cancer care. In: Yarbro CH, et al, editors. *Cancer nursing: principles and practice.* 5th ed, Sudbury, Mass.: Jones and Bartlett; 2000
- 7. American Association for Therapeutic Humor. [Web site]. 2000. http://aath.org/home\_1.html.
- 8. McGhee P. Rx: laughter. RN 1998;61(7):50-3.
- Buxman K, LeMoine A, editors. Nursing perspectives on humor. Staten Island (NY): Power Publications; 1995.
- 10. Wooten P. Humor: an antidote for stress. *Holist Nurs Pract* 1996;10(2):49-56.
- Bellert JL. Humor. A therapeutic approach in oncology nursing. Cancer Nurs 1989;12(2):65-70.
- 12. Pasero CL. "Laughter the Best Medicine?" *American Journal of Nursing* 1998;98(12):12-4.
- 13. Dean RA. Humor and laughter in palliative care. *J Palliat Care* 1997;13(1):34-9.
- 14. Simon JM. Humor techniques for oncology nurses. Oncol Nurs Forum 1989;16(5):667-70.
- Klein A. The courage to laugh: humor, hope, and healing in the face of death and dying. New York: J.P. Tarcher/Putnam: 1998.
- 16. Wooten P. Compassionate laughter: jest for your health. Salt Lake City (UT): Commune-A-Key; 1996.
- 17. Cousins N. Head first: the biology of hope. New York: Dutton; 1989.