

Laughter as Medicine

Laughter is an uncommon but normal part of our behavior. It has been given short shrift by medicine and physicians. Laughter as a positive force in healing has been part of our folk lore for millennia. “Laughter is the best medicine,” is part of everyone’s vocabulary of well worn phrases; and usually is said with a smile and for reassurance to the person who is suffering with some malady. Laughter as a medicine, as a tool to help someone recover from an illness, is almost never used by physicians.

The best *medical* example of the use of laughter as a tonic, as a method of controlling pain, is the saga of Norman Cousins and his bout with a collagen disease called ankylosing spondylitis. Norman Cousins, a writer and the editor of the “Saturday Review,” was very unhappy, anxious, and sick with this crippling and usually, irreversible, disorder. The chances for remission of his disease, ankylosing spondylitis, was estimated by one specialist at one chance in 500. At the low point of his illness, he wrote: “I had considerable difficulty in moving my limbs and even in turning over in bed. Nodules appeared on my body, gravel-like substances under the skin, indicating the systemic nature of the disease. At the low point of my illness, my jaws were almost locked.”¹

Norman Cousins theorized that he became sick because he was over stressed with travel and work and was in a state of adrenal exhaustion. He had read Dr. Hans Selye’s classic book, “The Stress of Life.” He believed that Dr. Selye’s studies clearly showed that adrenal exhaustion could be, “Caused by emotional tension, such as frustration or suppressed rage.” His illness was then probably due to the negative effects of negative emotions on his body chemistry. If negative emotions caused illness he asked himself, “Is it possible that love, hope, faith, laughter, confidence and the will to live have therapeutic value?”

Norman Cousins, in partnership with his physician, gradually stopped his medications, added large doses of intravenous (IV) Vitamin C, and began a program of laughter. Allen Funt, producer of the television show “Candid Camera,” sent him films of this TV series along with a motion-picture projector for his laughter therapy. Mr. Cousins found that, “It worked. I made the joyous discovery that 10 minutes of genuine belly laughter had an anesthetic effect and would give me at least two hours of pain-free sleep.” Norman Cousins laughed his way out of a crippling, arthritic disease. His illness occurred in 1964, he wrote about it in 1976; the devastating disease never came back.

In 1978, Mr. Cousins left the “Saturday Review,” and went to UCLA as Adjunct Professor of Medical Humanities. At UCLA he conducted studies with patients on the effect of emotions on the immune system. He worked with patients who had cancer. He attempted to develop in these patients more positive attitudes, emotions, and the will to live. Medical treatment for the patients was continued, a control group has the same medical treatment but no positive emotional counseling. Mr Cousins was asked about his laughter therapy in conquering his disabling arthritic disease. He said, “Laughter was important but it really was a metaphor for the full range of positive emotions: love, hope, faith, will to live, festivity, purpose, determination.”²

Appropriate laughter can be evoked by: (1) a triumph, (2) any surprise, (3) tickling, (4) a funny story, (5) incongruous situations, (6) a sense of well being associated with good health; and finally, (7) a person sometime laughs voluntarily to cover up for shyness or in an attempt to conceal thoughts.³ Laughter is more common with other people, it can be contagious, and is a very primitive social experience, “Shared laughter not only diverts aggression but also produces a feeling of social unity.”³ As a society we don’t laugh enough; we often laugh at someone else’s problems. Those who provide us with public humor to induce laughter usually ridicule others. Think of a Johnny Carson’s monologue, remember Don Rickles, and don’t forget Joan Rivers. It’s not known if *what* you laugh at is as important as the laughter itself. Norman Cousins laughed his way to health watching “Candid Camera” TV programs with unsuspecting dupes acting out Allen Funt’s little dramas. It is probably not important what produces the laughter, but the laughter itself.

Laughter starts with a smile; the upper lip is raised and the teeth are partially uncovered. Creases appear under and at the corner of the eyes, the cheeks puff or round out, and the eyes undergo a general change which can best be described as “bright and sparkling.” The sound of the laugh itself is produced by deep inspirations of air followed by short, interrupted, spasmodic contractions of the chest and especially the diaphragm; leading to expiration of air and sound. Charles Darwin studied laughter and wrote in 1872: “During excessive laughter, the whole body is often thrown backwards and shaken, or almost as often, convulsed; respirations is much disturbed, the head and the face became engorged with blood, with veins distended; the orbicular muscles [eye muscles] are spasmodically contracted...to protect the eyes. Tears are freely shed.”⁴

Laughter is more than the sight and sound of mirth, for it is accompanied by a variety of physiological changes. Laughter causes spasmodic skeletal muscle contractions followed by post laughter muscular relaxation. The muscles are relaxed and may even become flaccid. The pulse races, the mind seems clearer, the amount of adrenalin (epinephrine) is probably increased; hormonal and neuronal activity increases in the hypothalamic-pituitary-adrenal axis. Laughing releases tensions, has adaptive and social values, and has cathartic qualities. Laughter, like chocolate and exercise, causes an improved sense of well being.

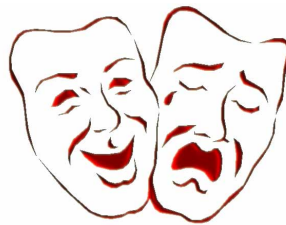
There is no known “laugh center” in the brain. The nerve pathways for laughter are still in the speculative sphere of medical investigation. The limbic system, the old brain, is highly involved. Laughter is a primitive emotion; Darwin believed that laughter appeared earlier in man than the smile. Laughter and smiling appears in infants as early as five to nine weeks of age. In fact, laughter is probably the only emotional expression that occurs uniquely in man, the laughing hyena not excepted. That dog, ma’am, is just barking. The sound of laughter is clearly distinguished from the screams and cries of distress and serves as an auditory hand shake or embrace to all that hear the laugh. Laughter makes other people laugh or smile.

Medicine the art and medicine the science needs more laughter. There is enough to be grim and uptight about in life without relegating laughter to the waiting room of medicine because it seems to be undignified and frivolous. “And how are you today Mrs. Hoppe, the cat got your tongue?”

"Oh, doctor don’t tease me today, I don’t feel too well.” But she smiles. “Velma, if you don’t need a laugh, I know I do, it can’t be all that bad, or is it?” It’s nothing new but the same old hell

of being 72 and coming in three times a week for hemodialysis. Velma chuckles, “Oh, go on with you.” I move off to the next sourpuss. Nothing great has happened, but we are both a little better off for the tiniest bit of humor exchange. Laughter in medicine is needed by the patients as a part of their therapy, especially therapy of patients with chronic illnesses and diseases when hope sometimes flags, and the going gets tougher. Laughter is a medicine that physicians hardly ever use to its full potential. Is anybody doing laugh therapy to treat arthritis, or any other chronic or acute illness? Was Norman Cousins’ experience unique or due to the placebo effect of vitamin C and planned laughter?

Laughter as a medicine is inexpensive but it takes skill and time to develop the art of what makes one person laugh and what may upset someone else. Since everyone has a little different sense of humor, to make someone laugh is a difficult communicating skill. To teach laughter, start with yourself, smile. The smile is the beginning of a laugh, is also contagious, and sets the mood. If you can’t get them to laugh, leave them smiling. Laughter makes everyone feel a little better, a little more sociable, and more relaxed. Practice on your friends, everyone has their own comic flair. Joel used to do voice impersonations while he did patient care. David labeled all the dialysis machines with names like “Sleepy,” “Doc,” “Sneezy,” “Snow White,” and handed out paper tickets to the “Dialysis Disneyland of Glendale.” The nurses did skits at Christmas time to the “Twelve Days of Christmas” song but substituted appropriate dialysis work, “Twelve bags of saline hanging, eleven syringes squirting, ten techs a leaping...” Everyone had a good laugh. Healing is a serious business and laughter is a part of that serious business. My fellow physician and friend, David David (sic) commenting on what was the purpose of the physician’s visit said: “If you didn’t make them feel better, what was the purpose of the visit?” I think it is the same message, when you see a patient, make them feel better, and that includes making them laugh.



REFERENCES

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