



Humor in Medicine

By Bill Eaton, MD, CCFP, FCFP



“You’re quite good looking.” say I to my 96-year -old patient: the phrase “for your age” left unstated. “I’d be happy,” say I blundering on, “if I was as good looking when I’m 95, or 85, or even 75.”

“Sure doctor,” she oozed, “You’re not that now.”

The practice of medicine involves intense interactions between human beings. The diagnostic process, therapeutic actions and healing intentions all hinge on the doctor-patient relationship. The patient brings to this relationship a personality that uses humor to help cope with life’s difficulties. My advice: listen for (and to) your patient’s humorous statements.

Verbal blunders, such as “high-anal hernia,” while laughable, don’t really demonstrate the patient’s sense of humor. Listening to how people use humor to cope is, for me, more fulfilling than snickering away at miscues verbalised by vulnerable, and often ill, patients. My 95-year-

old patient used humor to counterbalance my paternalism. She saw my illusion of being attractive as just that, and pointed it out in a way that made me laugh.

Tragedy Plus Time Equals Humor

Myocardial infarction, lymphangitis carcinomatosa, inguinal hernia, and ingrown toenails are all tragedies that must be endured or side-stepped. Most humorous comments, jokes, and gags are about tragedy, because when we humans face tragedy we respond within the limited options of: laugh, cry or run away. Anger, denial, and silence are part of the run away option, which leaves true coping with the twin domains of laughter and tears.

By facing their traumas with humor, our patients are trying to chip away at the mound of

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tragedy that has become their life. Our patients often use humor to express their true feelings while protecting their psyches. "If I don't say it with a laugh, I might cry forever." However, humor is not a passive transfer of thoughts and feelings from patient to doctor. The equation needs a response to be complete, doctors need to learn how to "get" our patients' "jokes" and how to see through the humour to understand the real meaning of the jokes.

We could say, "I see you are using humor to cope with your problem," or "Laughing certainly helps doesn't it?" Of course we could always laugh along with our patients, or at least smile as if we meant it. When we humans say something funny, we only think it is funny when somebody else confirms this by laughing or smiling. For its recipient, a smile causes the release of the feel-good hormones (see below). By smiling (or even laughing) in response to a humorous statement, we actually make our patients feel physically better.

Laughter and the Body

A good laugh stimulates the pituitary, in turn, causing the release of (among others) the feel-good hormones: cortisone, oxytocin, thyroxine, sex hormones, and prolactin, which combine with adrenaline and endorphins to give the characteristic flush to the cheeks and the energy



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boost to the entire system. When we are stressed, it is because many of these same hormones have slowly built up to the point where we can't relax. Eventually, we can't function without this chemical rush. Laughter stimulates such a huge dose of these hormones that the system clears itself. After a good laugh, we feel relaxed and can see the world for what it really is.

Meanwhile, as we laugh, we become bodily active. Laughing is akin to physical exercise. Fifteen minutes of continuous laughter has similar aerobic potential as the same time spent on a rowing machine. The dark corners of the peripheral lungs, the bits that never see the light of day, are flooded with life-giving air during laughter. Muscles get a workout, the heart rate goes up, and blood flow increases to the vital organs.

Laughter begins with a sudden expiration of air followed by a series of inspiration/expiration microcycles that is unique to each individual. Your laugh is unique enough to be an emotional thumbprint. Parents can identify their children by their laugh (and cry) long before they can recognise their voices.

Derailment of the Train of Para-Logical Thought

My favorite theory on why we laugh relates to the link between the left and right cerebral hemispheres. The right brain is always trying to discover alternate explanations for observable phenomena: looking for chaos in order. Meanwhile, the left brain is on the lookout for patterns and sequences: order out of chaos. The left brain is logical, the right creative.

Webster's Dictionary defines humor as that quality in a happening, an action, a situation, or expression of ideas, which appeals to the sense of the ludicrous or absurdly incongruous. We

find something funny because of the incongruity between the para-logical conclusion we anticipated (left brain) and the ludicrous alternate explanation of the situation (right brain). My expectation was that my 96-year-old patient would be complimented by my comment, but her quip reminded me that perhaps she wasn't amused about being compared to a less good-looking, if a somewhat younger person.

Neural Mechanisms of Humor

Once the left and right cortexes have completed their incongruity thing, psychic energy is released as the laughter response. I view the brain as a series of inverted mixing bowls, the cortex being the largest with the limbic system being much smaller and just below. The thalamus and hypothalamus are portrayed by the last two of the four mixing bowls. The limbic system is comprised of the amygdala: control central for the fight or flight cascade, energiser of mood, temperament, sleep/awake cycles, and appetite; and the hippocampus: the memory sorter and filter.

Humorous stimuli enter the brain *via* the thalamus and are shunted through the limbic system before reaching the cortex. If you are in a bad mood (amygdala) or can't understand the context or words (hippocampus) you won't laugh. Once the cortex "gets" the joke, impulses begin flowing downwards and the neurotransmitters get larger and more complex, until the pituitary excretes the feel-good hormones.

Laughter can also be forced in that the person consciously decides to respond just to please someone else. Anxiety and certain kinds of brain damage cause their victims to laugh. Then there's always tickling. Many different triggers end in the same laughter response.

So, how does humor fit into the practice of medicine? There are as many answers as there are doctor-patient interactions. Spontaneity, individualisation, openness, and creativity are all part of the process. My opinion is that people use humor to describe and cope with their traumas much more than doctors recognise. Our job, as facilitative communicators and promoters of healing, is to "get" our patients' jokes when they poke fun at their situations; to look behind the banter and discover what our patients are really thinking or feeling; to discover how they are coping.

Laughter is a social lubricant, while humor helps us find alternate meanings to what is happening. Both help patients and doctors deal with the fractures and lacerations of life. Take your job, but not yourself, seriously. [CME](#)

Suggested Readings

1. Allen S, Wollman J: *How to Be Funny*; McGraw-Hill Book Company
2. Robinson V: *Humor and the Health Professions: The Therapeutic Use of Humor in Health Care*; Second edition. Slack Incorporated, Thorofare, NJ, 1991