Is Laughter The Best Medicine?

Laughter is everywhere - in the workplace, at the dinner table, on TV - in fact, the average person laughs 17 times a day (see Figure 1). With humor and laughter playing such a prominent role in our daily lives, and with the inherent ability of laughter to make people "feel" better, it is natural that many people believe laughter can actually improve a person's health.

Figure 1: Laughter

- The average adult laughs 17 times a day
- Laughter is the physiological response to humor
- The sound of laughter can be described as short, vowel-like notes repeated every 210 milliseconds
- Laughter is either a ha-ha-ha type or a ho-ho-ho type, but not a combination of the two
- One theory states that laughter began as a gesture of shared relief when danger had passed
- Many scientists believe that laughter plays a role in developing and strengthening connections between people
- Research has shown that dominant individuals - such as bosses - use humor more than their subordinates
- Gelotology is the physiological study of laughter
- Laughter involves many parts of the brain including both the right and left cortex, the frontal lobe, the occipital lobe, and the motor control sections
- What is funny? There are three main theories:
  - The incongruity theory - we laugh at things that don't normally go together
  - The superiority theory - we laugh at other people's misfortune and mistakes
  - The relief theory - we laugh to release a buildup of tension, like dark humor

Over the past few years, there has been a growing belief that laughter is not only good for the mind and soul, but also for the body. For example, there are many reports that laughter can actually boost a person's immune system. However, a recent review of the medical literature by Dr. Howard Bennett, at George Washington University, shows that the maxim, Laughter Is The Best Medicine, has yet to be proven.

In an article published in the December, 2003 issue of the Southern Medical Journal, Dr. Bennett reviewed the role that humor and laughter play in six areas of healthcare: health, doctor-patient communication, patient care, among medical professionals, in medical training, and in the medical literature itself. What Dr. Bennett found is that there are still many open questions as to the actual health benefits of humor and laughter.

In looking at the role that laughter plays in health, Dr. Bennett focused on the physical benefits only, as the psychological benefits of laughter are well researched and documented. Contrary to popular opinion, Dr. Bennett found that there is very little evidence that humor and laughter can improve health. Most of the studies in this area have failed to find a connection and often are poorly designed, and use too few subjects to draw strong conclusions from.

Bennett did find however that there is evidence that humor can impact people's ability to handle pain. Research has shown that people are both more tolerant of pain, and require less medication, after watching a comedy. One study found that use of pain killers was 60% lower among a group of patients who watched a funny movie, versus a control group who didn't. Interestingly, the benefits of watching the movie only kicked in if the subjects were allowed to pick what they watched. For subjects who weren't allowed to pick what they watched, there was no beneficial effect on their pain control.

In looking at doctor-patient communications, Bennett found that many doctors - especially those dealing with children - feel that humor plays an important role in enhancing their interactions with patients. However, the exact role - and benefits - that humor plays in this setting has not been studied extensively. There is evidence that patients report a higher level of satisfaction when doctor's spend more time with them and are even more likely to follow a doctor's advice if he or she takes the time to connect with them. In addition, one study of primary care doctors found that those with no history of malpractice suits spent more time with their patients, and
employed humor more often, than doctors with a history of malpractice suits.

Finally, Bennett found that humor is prevalent among medical professionals, in their training, and even in the published literature. Like any group in a stressful situation, medical professionals often use humor to let off steam and as a way to cope with what they face. Experts stress however, that medical professionals should not use this type of humor in front of patients or their families, who may think they are being trivialized and have their feelings hurt.

Humor seems to play a strong role in medical education as well. One study found that 75% of professors at a medical school believed in and used humor in their lectures. Another study showed humor and an enthusiastic teaching style improved not only student ratings of the teacher, but actual test scores as well.

It appears that for now, while humor plays a large role in various aspects of healthcare, a number of important questions remain unanswered; the most important of which is does laughter really improve physical health?

The good news is that for Chiari and syringomyelia patients dealing with daily pain, going to the movies, or renting a video, may help provide some relief. I've heard that Shrek 2 is really funny...

--Rick Labuda