1. Evidence supports the therapeutic use of humor and laughter

Stages of Laughter (Kuhn, 1994)
1. smirk
2. smile
3. grin
4. snicker
5. giggle
6. chuckle
7. chortle
8. laugh
9. cackle
10. guffaw
11. howl
12. shriek
13. roar
14. convulse
15. die

Challenges to research

“... documentation of the effects of humor on various health related outcomes in healthy populations is still in the infancy stages, and research documenting benefits in a clinical population (such as persons with cancer) is yet to be established.”
(Bennett & Lengacher, 2009, page 164)

• Subjective nature of humor
• Self-report measures of sense of humor are subject to social desirability
• Need universal humor to trigger response
• Need appropriate control group — or groups

Martin (2001) has suggested the need for at least two control groups:
A negative control group, which would watch a video intended to produce emotions such as fear or sadness to control for the possible effects of ‘general emotional arousal’
and a positive control group who would view a video intended to produce positive emotions such as joy or happiness, but not necessarily laughter, to control for the effect of positive emotions.

“People laugh and smile when they are uncomfortable. According to some researchers in the field of communication, “expert power” on the side of the message sender (the doctor) may impair the accuracy of the decoding process by the receiver (the patient).”
(Granek-Catarivas, et al, 2005, page 129)
There are a number of valid and reliable rating scales available for such research. For example, the Physician – Patient Humor Rating Scale (Haskard Zolnierek, et al, 2009). This is a 46-item scale to rate audio taped physician-patient interactions including items such as:
• The doctor used humor to encourage the patient.
• The patient used humor to avoid a serious issue.
• The doctor laughed at the patient.

What we do know

gelotology: the study of humor physiology; the study of events occurring in the body in association with humorous experiences.

The first phase of laughter stimulates
— pulse rate increases
— respiratory rate increases
— catecholamine production increases
— spasmodic skeletal muscle contractions, but muscles not participating in the laughter behavior are generally flaccid
— stimulates both hemispheres of the brain, producing a unique level of consciousness and a high level mode of brain processing

The second phase of laughter relaxes
— muscle relaxation, eases tension
— blood pressure is reduced
— respiration, heart rate and muscle tension return to below normal levels
— oxygen saturation of peripheral blood is not affected
— greater coordination of function between right and left hemispheres of the brain

Physiological benefits of laughter
— Hearty laughter is a total body response that provides some conditioning exercise to those minimally active.
— The muscle relaxation following laughter may ease muscle tension enough to break the spasm-pain cycle seen in neuralgias and rheumatism.
— Aids ventilation.
— Clears mucus plugs.
— Accelerates exchange of residual air, thereby enhances blood oxygen levels.
— Exercises the myocardium.
— Increases arterial and venous circulation.
— Promotes movement of immune elements and phagocytes throughout the system; helps to fight infections.
— Enhances venous return. Reduces vascular stasis and diminishes the risk of thrombus formation.
— Controls pain by (1) distracting attention, (2) reducing tension,
(3) changing expectations and (4) increasing production of endorphins, the body’s natural pain killers.

(Fry, 1992)

“The effect of laughter on the so called ‘stress hormones’ of epinephrine, norepinephrine and cortisol is equivocal, with the few studies conducted thus far demonstrating some conflicting results. This is important because it is theorized that if laughter does, in fact, decrease stress hormones, this would be one mechanism that might explain the proposed connection between laughter and immune function, and from there to improved health outcomes.”

(Bennett & Lengacher, 2008, page 39)

Humor is an adaptive defense style that reduces anxiety and emotional conflict without distorting reality. It reflects the capacity to accept the situation while taking the painful edge off of it.

No articles were found that stated humor should never be used in interactions between health care providers and patients. Clinical observations and limited evidence strongly suggest humor and laughter create a sense of well being and enhance relationships.

“Humor has the potential to relieve stress in patients and medical professionals. Humor gives patients the opportunity to forget about their anxiety and pain, if only for a brief period of time. When doctors share humor with patients, they create lines of communication that encourage patients to discuss difficult issues. In effect, humor can put both parties at ease in a way that more formal types of communication cannot. Medical professionals also use humor to deal with the tension that results from working in the modern medical environment.”

(Bennett, 2003, pages 1259-1260)

McCreaddie & Wiggins (2008) synthesized the current literature on humor across fields relating to health, health care, and nursing. They performed a comprehensive literature search using a number of databases, keywords, manual recursive searching and journal alerts. 1630 papers were identified, with 220 fully sourced and 88 included in the final review. Their conclusions:

• Current research commonly reveals positive aspects of humour with healthy psychology students in either experimental or correlation studies.
• The humour–health link (direct and indirect) may exist but current research is limited in design and results are therefore ambiguous.
• Humour may affect patients’ perceptions of health and symptoms, their ability to cope, propensity to report symptoms or seek health care and their subsequent interaction with healthcare professionals.”

(page 592)
2. There are emotional and physiological risks involved in using humor therapeutically, which can be minimized.

Contraindications to laughter
— A small number of people respond with neurological symptoms, such as seizures and cataplectic or narcoleptic attacks.
— A brief sudden increase in blood pressure accompanying laughter may be associated with cerebrovascular accidents or myocardial infarction in those susceptible.
— Large increases in abdominal and thoracic pressure associated with laughter are reasons to discourage patients from laughing immediately following abdominal or pelvic surgery, after acute rib or shoulder girdle fractures or with acute respiratory disease, such as asthma.
(Fry, 1992)

Risks of humor

The purpose of using humor is to create a sense of well being and enhance relationships. Humor is not therapeutic if it does the opposite. This reference to appropriate or inappropriate humor is not in the context of political correctness, but therapeutic value.

Appropriate Humor
• laughs with people
• is constructive
• is timed appropriately
• is aware of the recipient's ability to receive it
• is aimed at yourself, your foibles or things in the environment
• decreases stress
• decreases anxiety
• promotes hope
• shares frustrations
• puts a problem into perspective
• enhances good feelings
• establishes emotional bonds between people
• brings people closer together
• is therapeutic and healing

Inappropriate Humor
• laughs at people
• is destructive
• is delivered at the wrong time
• is delivered to the wrong people
  (Certain jokes between health care providers can be therapeutic, but if they are shared with patients they could be misunderstood and hurtful.)
• is aimed at other people
• increases stress
• increases anxiety
• decreases hope
• hurts others
• creates problems
• creates communication barriers
• distances people from one another
• is not therapeutic and interferes with healing

Unfortunately, humor is subjective. You may not know the humor is inappropriate until you see the response, such as anxiety. Hence, there is always some risk when using humor. Choosing appropriate humor is a learned skill.

If you are told you have used humor inappropriately, or the response to your humor tells you it was perceived as inappropriate:
— Immediately apologize, briefly and sincerely.
— Identify for yourself why the humor was not therapeutic.
— Maintain awareness of this when using humor in the future.

Life does not cease to be funny when people die any more than it ceases to be serious when people laugh.
— George Bernard Shaw

Mental health is based on your perspective. It all comes down to:
What kind of movie are you living in?
Is your life a tragedy or a comedy?

Pittman (1995) says that until you can laugh at your tragedies, you have not processed the experience. Until you can cry at other people's tragedies, you have not joined the human race.

Horrible things happen to protagonists in tragedies and comedies. It's how you see yourself and your circumstances that makes the difference.

If you see yourself in a tragedy:
You are the hero, you feel unique.
You are surrounded by villains and heroes.
You strive toward the ideal, your ego is huge and you're set for a fall.
You feel, deeply.
You despair the human condition and feel doomed to unhappiness, perhaps by the will of the Gods.
Nothing's your fault and nothing you can do matters.
You are crippled by life and unable to change.
You ultimately die.
If you see yourself in a comedy:
You celebrate being human.
You know you're like everyone else and you're smaller than life.
You accept reality.
You have feelings, but think before you act on them.
Other people humble you and you learn from life.
Instead of thinking it's not your fault, you know you asked for it.
You can change in the nick of time.
You live life.
Being human is good enough.

Mindfulness
Minimize the risks of humor use through mindfulness.
In mindfulness, you observe your thoughts and feelings.
You respond intentionally.

Thus, you avoid the more reflexive or impulsive responses
often detrimental to your health, social relationships, and professional effectiveness.

Take home messages:

• Evidence supports the therapeutic use of humor and laughter to create a sense of well
being and enhance relationships.

• You don’t have to elicit a late stage of laughter to be therapeutic. A smile or grin is fine.

• Minimize the risks of humor use through mindfulness. Props are a low-risk way to
introduce humor. Pay attention and adjust your response. Follow the patient’s lead,
keep the humor spontaneous, and begin within your personal comfort zone.

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