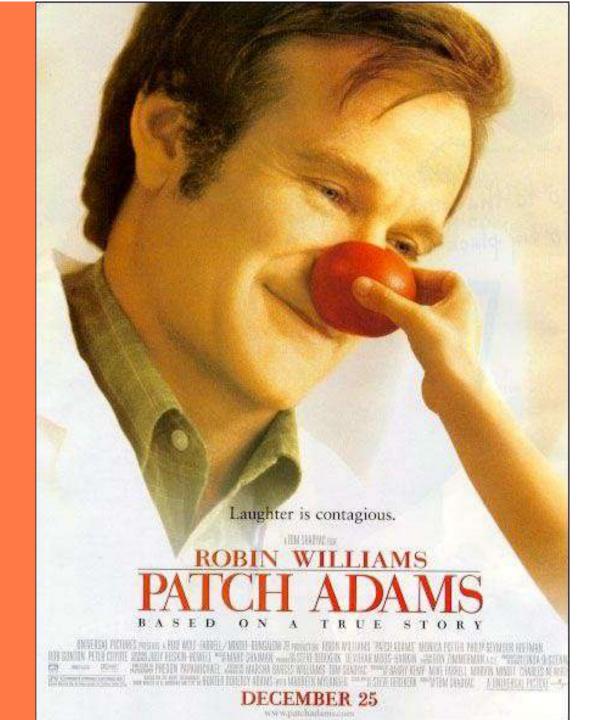
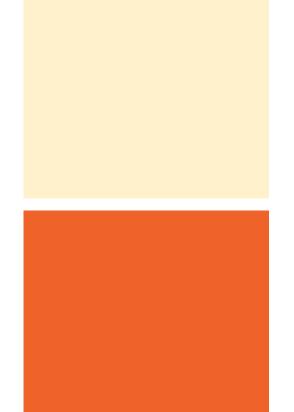
Laughter as Medicine

The Benefits of Therapeutic Health Care Clowning Room Circus Medical Clowning • Where Humor and the Healing Arts Meet



The movie





The real life Patch Adams





Patch Adams at work Michael Christiansen, Doctor Stubbs

Co-founder of the Big Apple Circus

Founder of Clown Care and professional Health Care Clowning





Meet our professional team

Performed in 30 states & 8 countries

Worked with Patch Adams in Russia Multiple award-winning musician

Appeared with Jay Leno on the Tonight Show 7 times

The Impact of Laughter

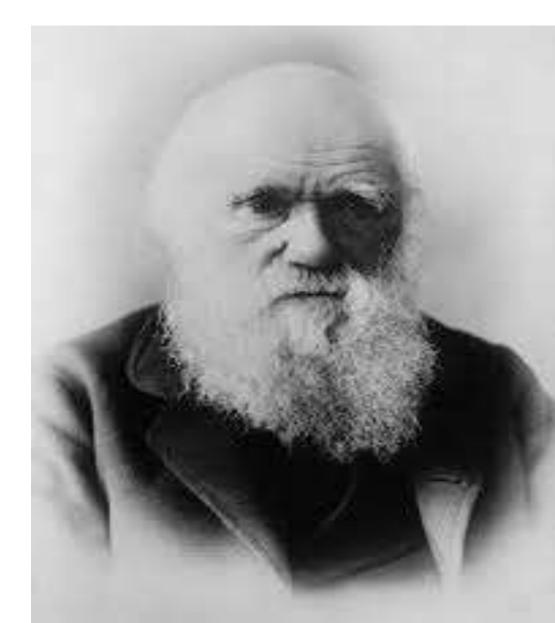
- Involuntary laughter is a response to a "sudden, unexpected change in events that is perceived to be at once not serious and in a social context"
- Such laughter is emotionally driven and spontaneous
- It is a basic part of our biology that activates specific areas of the brain

Laughter decreases stress hormones, cortisol, and epinephrine



CHARLES DARWIN'S OBSERVATIONS OF HIS SON'S LAUGHTER WHILE PLAYING PEEK-A-BOO WHEN HIS SON WAS 110 DAYS OLD- 1877

• "When 110 days old he was exceedingly amused by a pinafore being thrown over his face and then suddenly withdrawn; and so he was when I suddenly uncovered my own face and approached his. He then uttered a little noise which was an incipient laugh. Here surprise was the chief cause of the amusement, as is the case to a large extent with the wit of grown-up persons. "



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Laughter is Social



- Laughter says "This is play; we are not fighting"
- Laughter helps create solidarity of the group. It elicits connectedness and trust
- Laughter can be "contagious"
- Laughter is 30 times more likely to occur in a social context compared to being alone

Which brings us to Health Care Clowns...



Who Are Health Care Clowns?

- Professional health care clown programs employ experienced performers, who bring laughter to hospitalized children and their families through:
 - Improvisation
 - Physical Comedy
 - Specialty Skills: magic, juggling, music, puppetry

Who are Health Care Clowns?

- Health care clowns are chosen for their sensitivity and ability to adapt their skills to the physical and emotional state of each patient. They do not enter a patient's room without the patient's permission.
- They are trained in infection control, hygiene, confidentiality and hospital protocol.
- Typically, each clown has a doctor persona and name



How does Health Care Clowning work?



- Health Care clowns use a variety of comic conventions:
 - Incongruity
 - Contradiction
 - Status Reversal
 - Mishap
 - Parody





How does Health Care Clowning work?



- Clown doctors respectfully engage by following the patient's lead, evoking humor through:
 - Imagination
 - Empowerment
 - Authentic Connection
 - Trust

Clinical benefits of Health Care **Clowning on children**



2013 Israel

Children ages 4-7 facing intravenous access in Pediatric ER. With clowns: less pain in children and significantly less parental anxiety. Procedure was a success in 100% of clown group, 90% of

control group

Wolyniez I, Rimon A, Scolnik D, Gruber A, Tavor O, Haviv E, and Glatstein M. The Effect of a Medical Clown on Pain During Intravenous Access in the Pediatric Emergency Department: A Randomized Prospective Pilot Study. Clinical Pediatrics 2013 52 (12) 1168-1172.

2011 Italy

Children with respiratory illnesses. With clowns: earlier disappearance of symptoms, lower blood pressure, respiration, and temperatures.

Bertini M, Isola E, Paolone G, Curcio G. Clowns benefit children hospitalized for respiratory pathologies. Evidence-Based, Complementary & Alternative Medicine 2011; 2011:879125.

1998 US

The study showed that the clowns had an overall positive effect on mood and well-being, even on profoundly disabled children. Kingsnorth S, Blain S, McKeever P. Psychological and Emotional Responses of Disabled Children to Therapeutic Clowns: A Pilot Study. Evidence-Based, Complementary & Alternative Medicine Volume 2011: 732394.



Medical Clowning INCREASES:



Immune function Coping skills Endorphins Empowerment



Medical Clowning DECREASES:



Stress Pain Anxiety Recovery time Agitation Cost

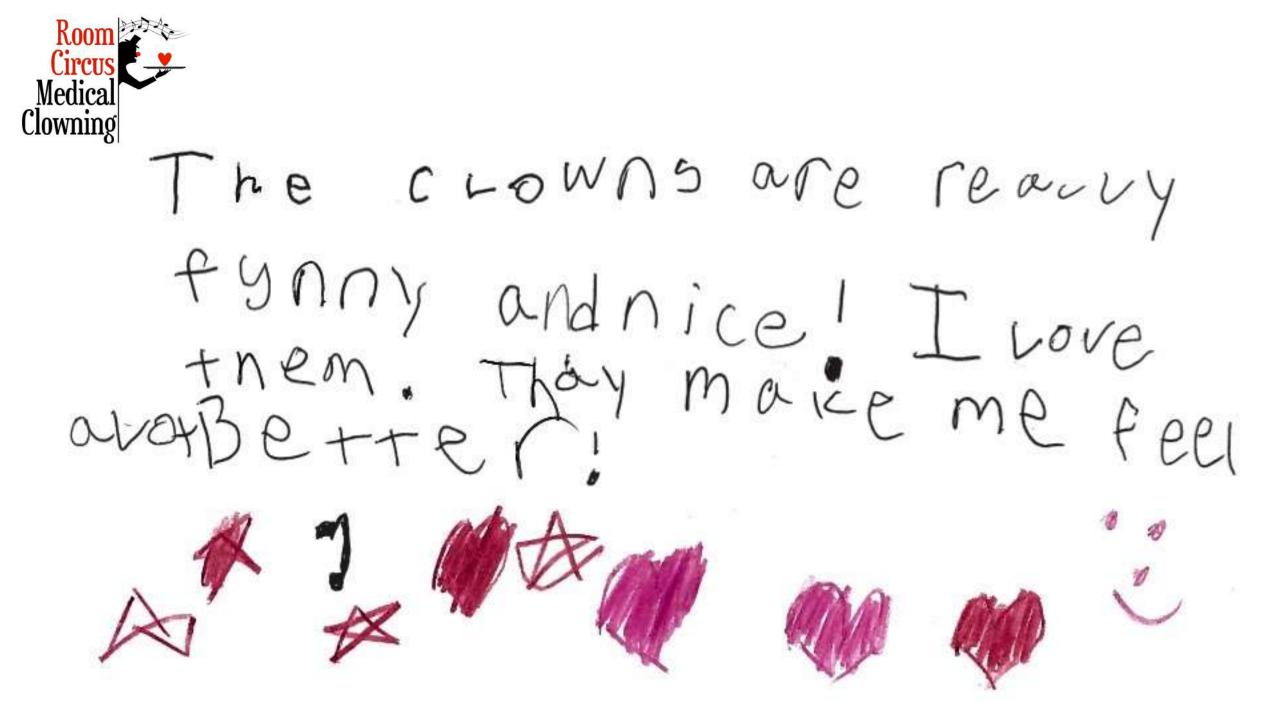




"That's the first time my child has smiled in months." –*Parent*

"I want you to know that what you do is really meaningful." – *Mother of a cancer patient who passed away*

"These folks are essential for patient emotional and mental care while at the hospital! They can decrease pain." – *Nurse*



"This is the best medicine he's had all day!" Mother of 2 yr. old



Clinical benefits of Health Care Clowning on adults

A study was done that examined whether interaction with medical clowns would improve the pregnancy rates of women undergoing in vitro fertilization and embryo transfer treatment.

The theory was that stress reduction might improve fertility. The sample included 219 patients: 110 who interacted with medical clowns and 109 who did not. The pregnancy rate in the clown group was 36.4% compared with 20.2% in the control group. Using a multivariable analysis, the clown group had a 2.67 higher odds of pregnancy.

Friedler S, Glasser S, Azani L, Freedman L, Raziel A, Strassburger D, Ron-El R, Lerner-Geva L. The effect of medical clowning on pregnancy rates after in vitro fertilization and embryo transfer (IVF-ET). Fertility and Sterility, 2011; 95:2127-30...

USA: 25 Canada: 45 Israel: 29 Argentina & Chile: 150 (2,000 clowns)

Buenos Aires adopts world's first clown law to cheer sick kids

All public hospitals in the province that have pediatric services are required to work jointly with specially trained **clowns**. The project is "complementary medicine to bring joy to sick children in hospitals, **their** families and the **medical and** non-medical personnel," according to the **Argentine**Senate.

Switzerland: 34 hospitals and 20 specialized centers UK: 21

Red Noses Doctors International, based in Austria: 10 countries, 346 clowns, 790 med. & social institutions, 707,900 patients visited per year

Taiwan, Japan, Russia...

Israeli Clown Doctor in Haiti following the 2010 earthquake.



Elder Clowning for adults with Alzheimer's and dementia





Impact of Health Care Clowning on Alzheimer's and dementia patients

It showed that even individuals with severe dementia both responded to and initiated playful and imaginative interactions with the clowns.

Kontos P, Miller K-L, Mitchell GJ, Stirling-Twist, J. Presence redefined: The reciprocal nature of engagement between elder clowns and persons with dementia. Dementia 2017; Vol. 16(1) 46-66.

The study found that the clown visits reduced moderate to severe behavioral and psychological symptoms of Alzheimer's patients and reduced outbursts. Kontos P, Miller KL, Colobong R, Palma Lazgare LI, Binns M, Low LF, Surr C, Naglie G. Elder-Clowning in Long- Term Dementia Care: Results of a Pilot Study. J. Am Geriatric Soc., 2016 Feb; 64(2): 347-53

There was a 20% overall reduction in agitation among the patients that lasted for months after the sessions. The effect on agitation was on par with that brought about by psychotropic drugs. The boost in happiness and positive behaviors seen during the program, however, faded after the program ended, showing the benefits of ongoing clown programming. "Laughter Might Be Good Medicine for Alzheimer's Patients" by Alan Mozes, HealthDay. www.medicinenet.com (September 30, 2011); University of New South Wales, "Humor as effective as medication in treating agitation in dementia." ScienceDaily, 23 September 2011.



Alzheimer's Disease and Dementia are fast-growing problems

100,000+ people living with Alzheimer's Disease & Dementia (2016)



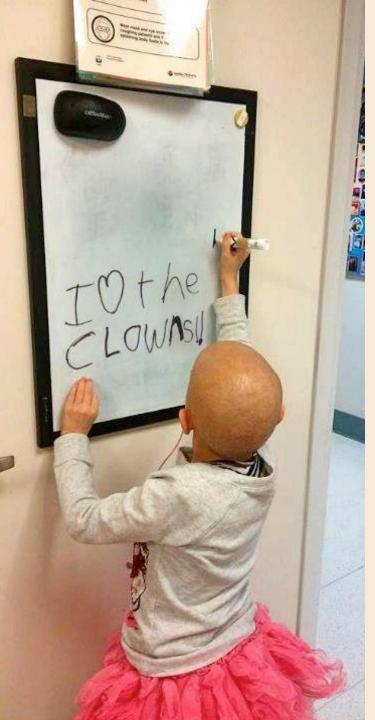
The problem:



The solution:







"Best doctor visit ever!" – 15 year old girl with cancer

"It made a huge difference, absolutely huge." – Dialysis nurse

"These amazing clowns are angels walking among us." Mother of a 7 year old girl with cancer

"You are the only one who got through to that patient." – Pediatric Oncologist Physician

"These people change lives on a daily basis." Mother of a 14 year old girl, after her 39th surgery

"You guys are life savers. That was perfect timing." – Infusion Unit nurse

"My heart soars when I see you in the hospital." - Mother of a cancer patie

"Thank you. You guys are hilarious!" - Doctor

"I love you guys!" – Charles Cowen, MD

The Bottom Line

Scientific Studies, Patient Testimonials, Narrative Examples and

Medical Staff Observations show that Health Care Clowns

are not just a distraction or a nice "extra."

They play a vital role in the treatment of children, adults, and elders who are hospitalized and help both them, their families, and hospital staff.





Thank you!

Linda Severt,

Co-Founder, Program Director & Clown-in-Chief

Room Circus

www.roomcircus.org