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Anaheim
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TQIP

Annual Scientific
Meeting and
Training

ACS
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TRAUMA
QUALITY
IMPROVEMENT
PROGRAM

A QUALITY PROGRAM
of the AMERICAN COLLEGE
OF SURGEONS

PTSD and Second and Third Victims

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Disclosure

I AM HUMAN



Our Ability to Impact Others

“In everyone's life, at some time, our inner fire goes out. It is then burst into flame by an encounter with another human being. We should all be thankful for those people who rekindle the inner spirit.”

[Albert Schweitzer](#)

Definition

- First victim – the injured
- Second victim – the care provider
- Third victim – other patients and families of providers

The Scarce Resource

[Today]—after 500 years or so—the scarcest, most valuable resource in business is no longer financial capital. It's talent.

—Geoffrey Colvin, senior editor at large,
Fortune Magazine

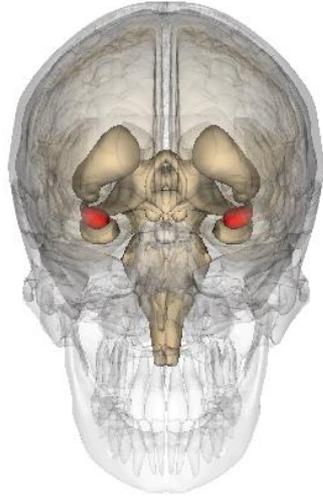
Why Do We Choose This Path?

“...the challenge, excitement, and opportunity of being a part of a trauma team.... where people can exploit their great talents in a crucible where there is an immediacy and a compelling need to apply the best of what is currently known to a dangerous and fluid environment in order to distill new approaches to the care of the wounded. . . DUTY”

James Peake (LTG, USA, retired)

Exposure to the severe stresses of disaster, war and trauma can produce unseen wounds for which we are all at risk.

Neurobiology of Trauma



Amygdala



Hypothalamus



Pituitary



Adrenal



Fight or Flight

Physiologic Response

Upregulation

- Vasoconstriction
- Increase BP
- Increase HR
- Increased respirations
- Glucose from liver

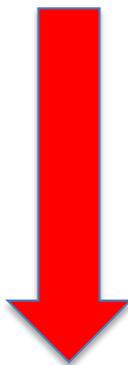
Downregulation

- Hunger
- Digestion
- Sleep
- Sexual drive
- Any system not immediately needed for survival

Primordial Lizard Brain

Spectrum

Compassion Fatigue



PTSD

Compassion Fatigue

- Pattern of negative affective responses that reduces job satisfaction, productivity and job performance
 - Emotional exhaustion
 - Depersonalization
 - Decreased sense of personal accomplishment
- May be an indicator of a more serious problem: post-traumatic stress disorder (PTSD)

Risk by Specialty

- Emergency Department Nursing
- Emergency Medicine
- Surgeons
 - Trauma
 - Urology
 - ENT
 - Vascular
 - General Surgery

Positive and Negative Factors of Physician Well Being

Wallace and Lemaire 2007

- Work overload
- Negative patient interactions
- Emotional Demands at work
- Work hours
- Work – Family conflicts
- Co-worker support
- Spousal support
- Positive patient interactions

Coping Mechanisms Associated with **Less** Emotional Exhaustion

Wallace and Lemaire 2010

1. Set aside quiet time outside of work ($r = -.22$; $p < .0001$)
2. Find time to exercise ($r = -.21$; $p < .0001$)
3. Spend time with family outside of work ($r = -.19$; $p < .0001$)
4. Take a time out ($r = -.18$; $p < .0001$)
5. Leave work at work ($r = -.17$; $p < .0001$)
6. Use humor to lighten the situation ($r = -.11$; $p < .0001$)
7. Talk it over with colleagues ($r = -.11$; $p < .0001$)
8. Make a plan of action ($r = -.10$; $p = .001$)
9. Talk about stress with spouse ($r = -.06$; $p = .001$)

Associated with **More** Emotional Exhaustion

Wallace and Lemaire 2010

- Keep stress to myself ($p < 0.0001$)
- Concentrate on what to do next ($p < 0.0001$)
- Go on as if nothing happened ($p < 0.0001$)

Figure 2a Physicians' coping strategies while at work

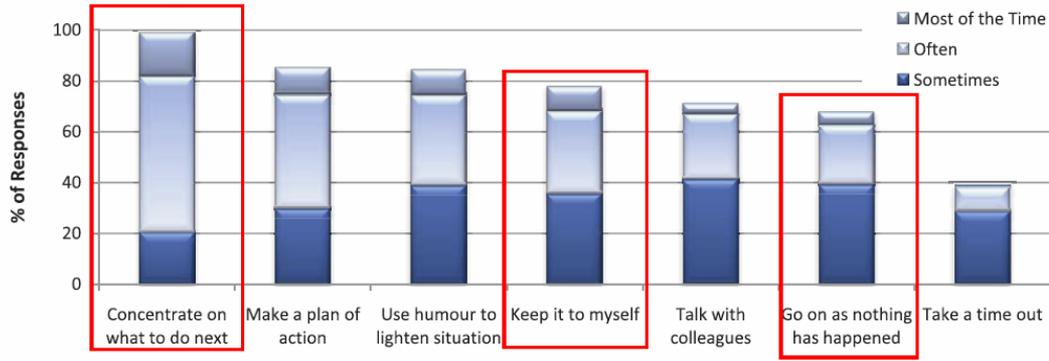


Figure 2b Physicians' coping strategies after leaving work

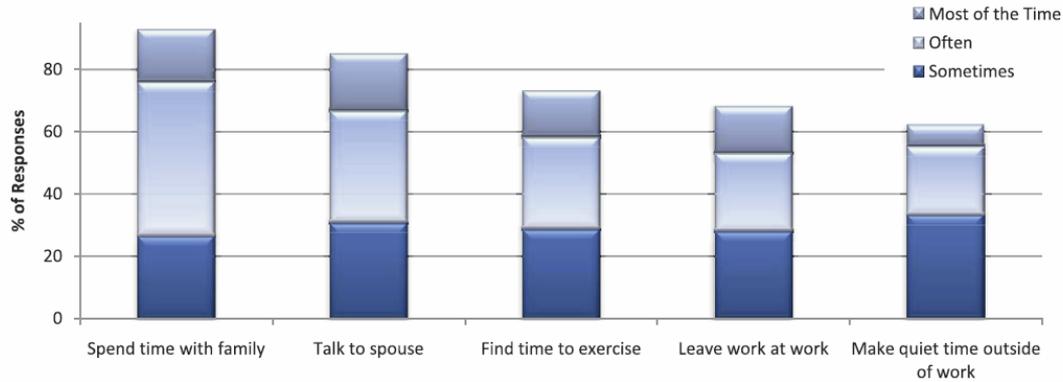


Figure 2 Frequency of use of physicians' coping strategies (n = 1151).

Prevention

- Regular exercise
- Interests outside of medicine
- Good nutrition (relaxed meals)
- Manage sleep deficit
- Time with family/friends
- Humor
- Gratitude
- Prayer and meditation
- Use of support structures
- Recognize and **celebrate** the differences made by you and your team

Brandt ML. The Claude Organ Memorial Lecture: the practice of surgery: surgery as practice. Am J Surg 2009;198:742–7.

Cultivating Resistance to Compassion Fatigue

- *Clear, uplifting and personally meaningful vision centered around service to others or a higher cause*
- *Periodic maintenance and reassessment*
 - *Requires time*
 - *Introspection*

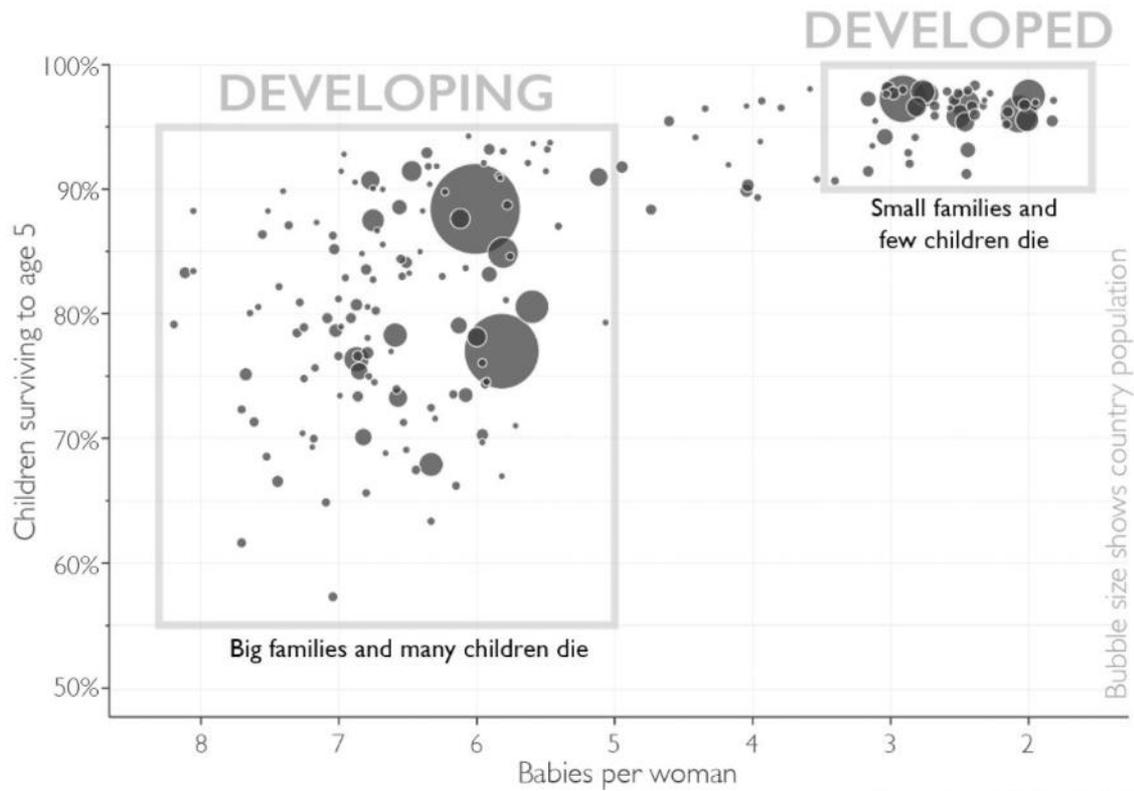
Immunizing Against Compassion Fatigue

Personal Mission Centered on Service

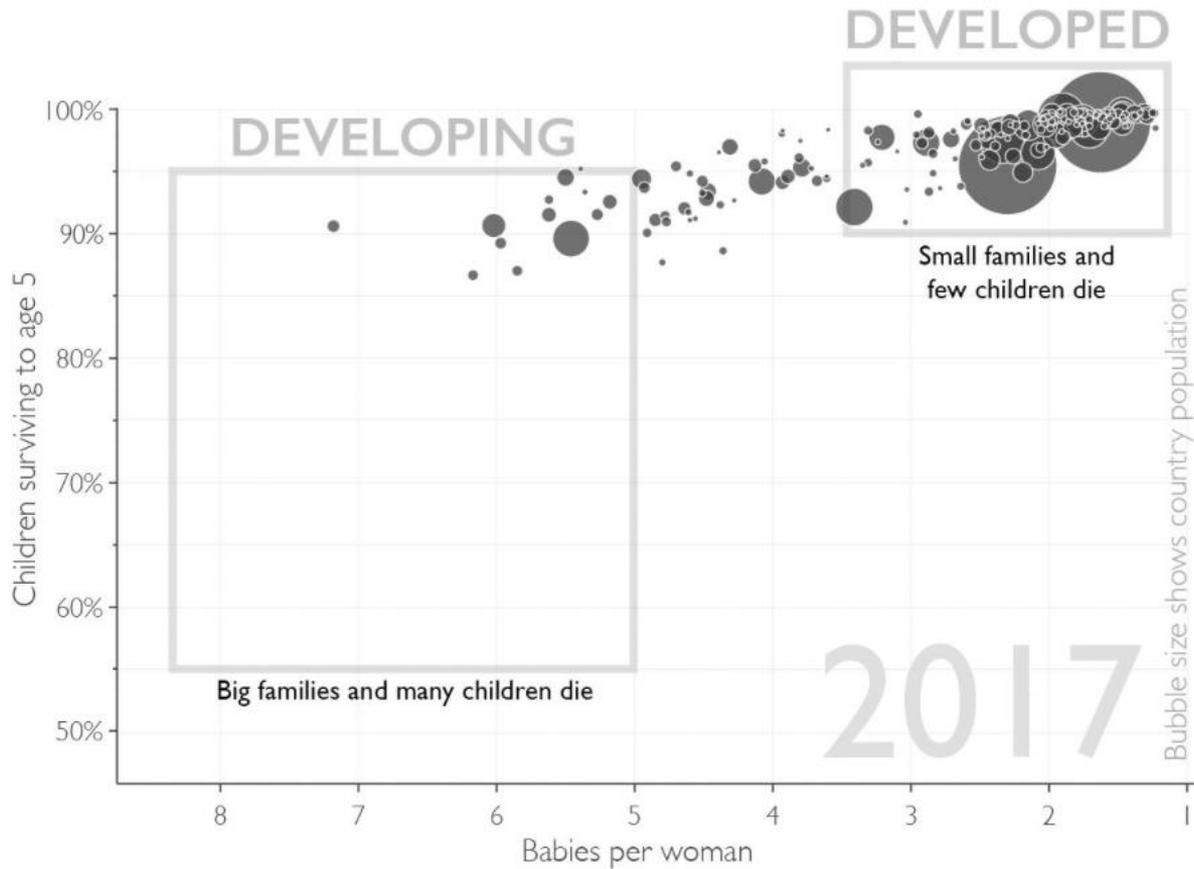
- *Clear, uplifting and personally meaningful vision leads to resistance and resilience*
- *Profoundly* focused on the long-term goals:
 - *Service to family*
 - *Service to the patient*
 - *Service to society*
- Requires active maintenance
- Maintenance requires time and some periodic introspection

Inappropriately Negative World View?

- The world is not as good as it should be
- But...
- It is much better now than it has been by most every measure



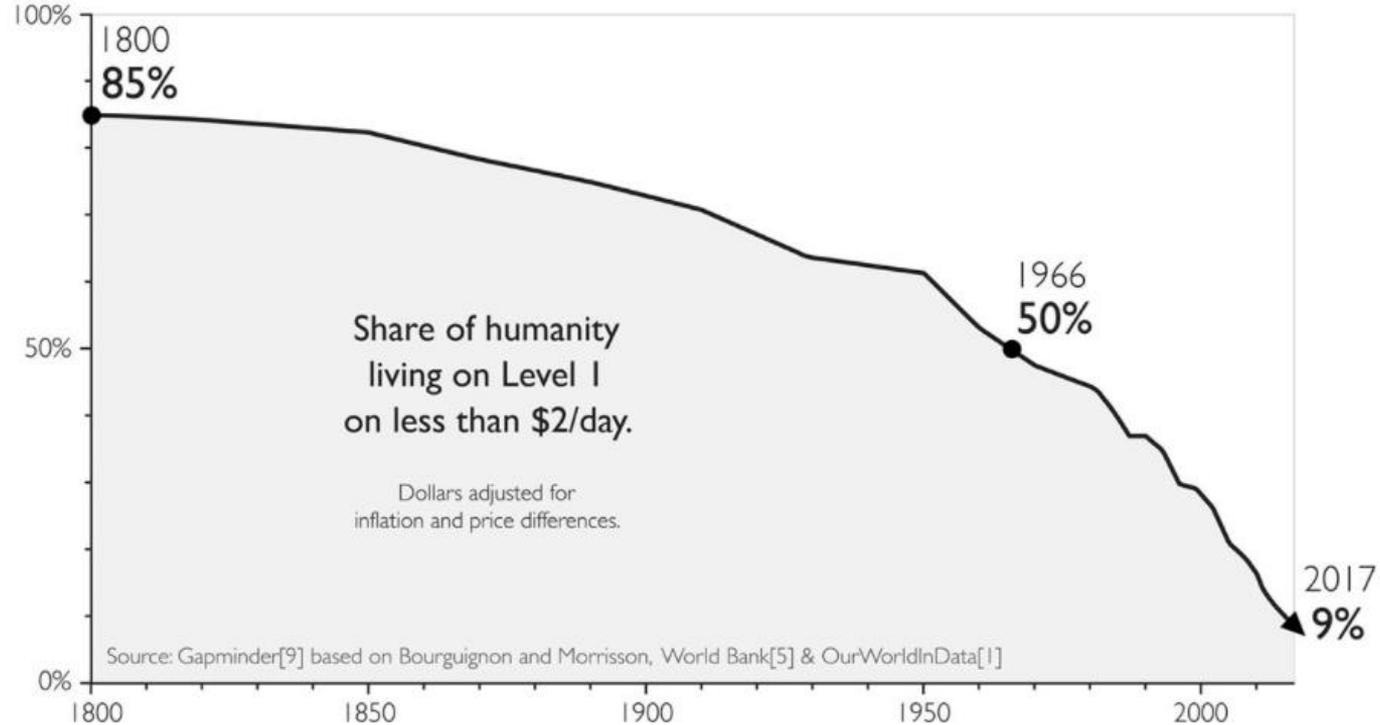
Sources: UN-IGME & UN-Pop[1,3]



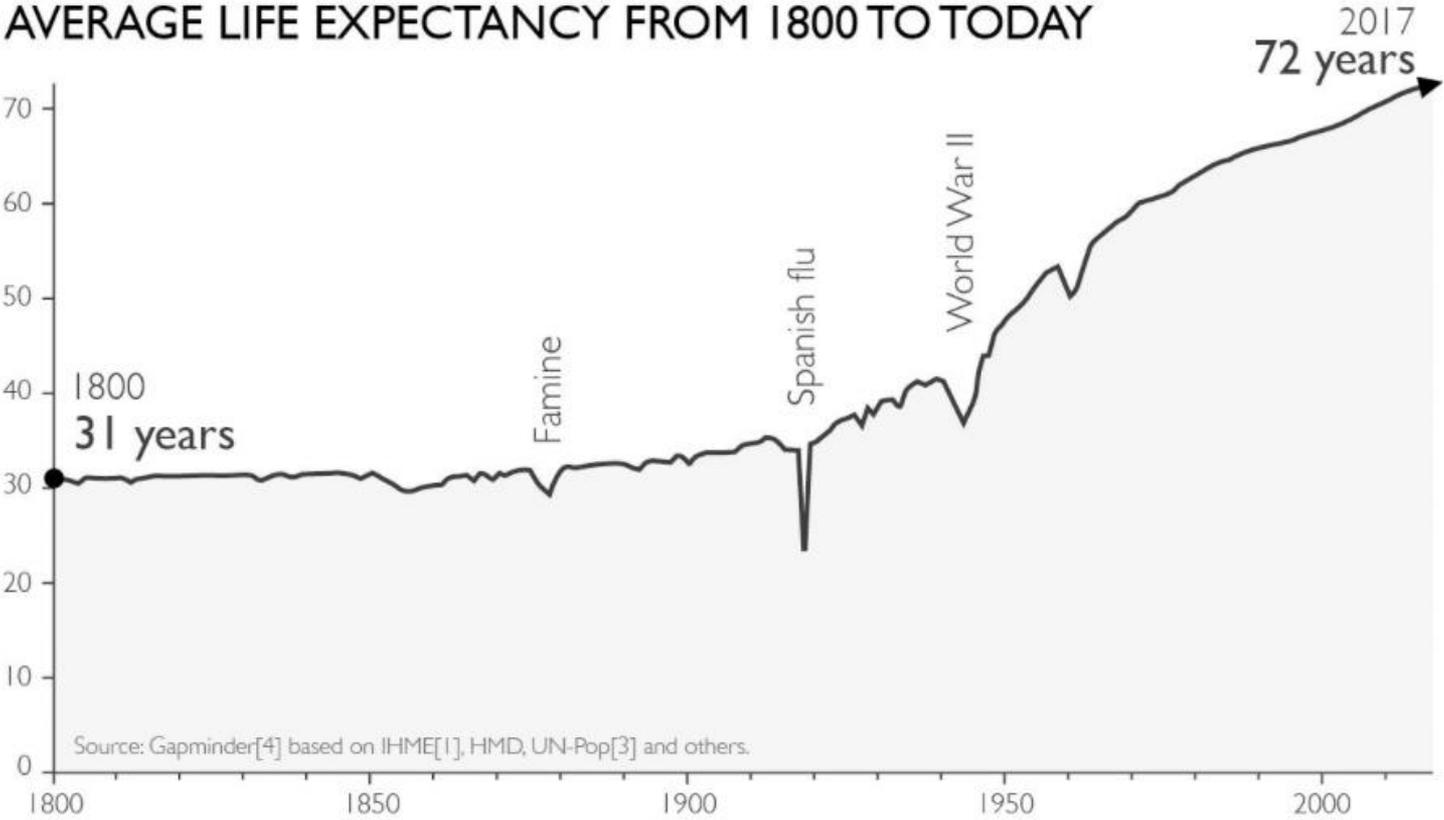
Sources: UN-IGME, UN-Pop[1,3] & Gapminder[6]



EXTREME POVERTY RATE FROM 1800 TO TODAY

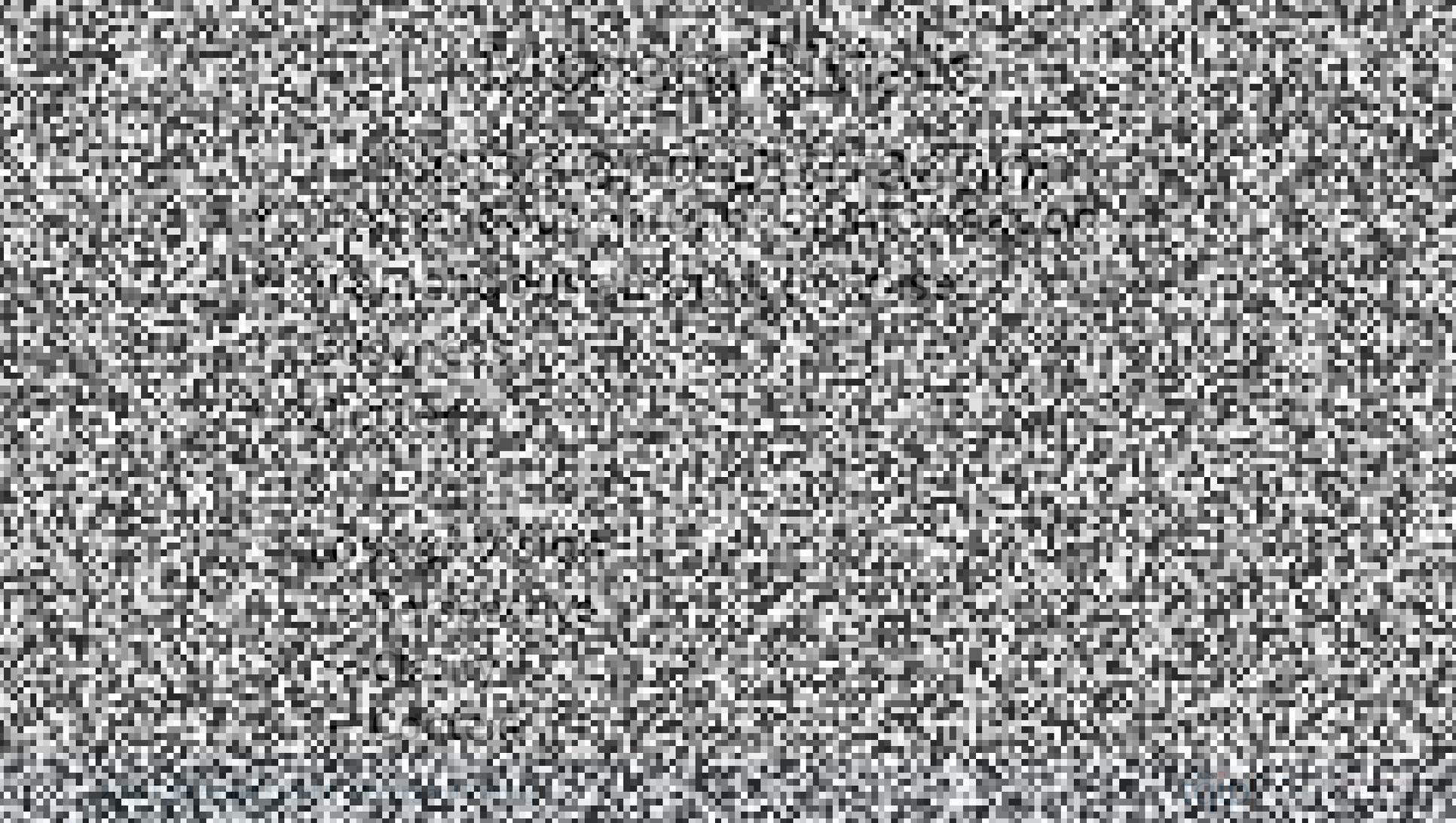


AVERAGE LIFE EXPECTANCY FROM 1800 TO TODAY



Source: Gapminder[4] based on IHME[1], HMD, UN-Pop[3] and others.





Modern Pitfalls

Noise and Distraction

- Tremendous amount of information
- Tremendous amount of noise
- Busyness
- Clutter
- Drama

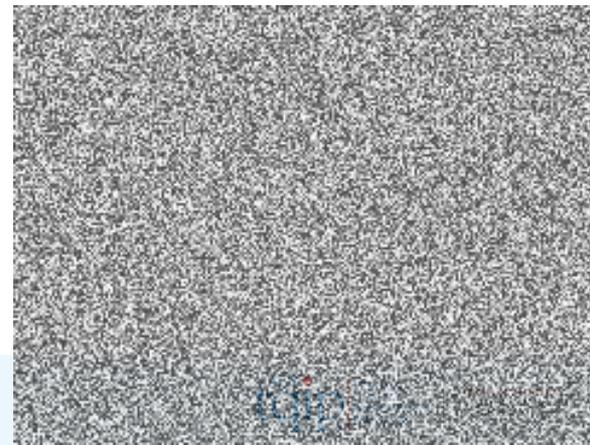
- Loss of Vision
 - Perspective
 - Clarity
 - Context

Modern Pitfalls

Noise and Distraction

- Tremendous amount of information
- Tremendous amount of noise
- Busyness
- Clutter
- **Drama**

- Loss of Vision
 - Perspective
 - Clarity
 - Context



Loss of Vision

- Perspective
- Vision
- Context



Consequences

Preventing Toxic Thoughts

Dr. Wayne Meredith, TQIP 2016

Ronald Stewart @Stewartr84 · Nov 5

#TQIP2016 **Wayne Meredith:** "Daily, look for 6 GOOD things to say to the people working on our teams for each problem identified: 6:1 ratio!"

↩ 1 ↻ 8 ❤ 9 📊 ⋮

Ronald Stewart @Stewartr84 · Nov 5

#TQIP2016 **Wayne Meredith:** Things that would change our world: "Presumption of virtuous intent."@ACSTrauma

↩ ↻ 10 ❤ 12 📊 ⋮

Ronald Stewart @Stewartr84 · Nov 5

@ACSTrauma **Wayne Meredith:** What you are doing is important. This commitment is making a difference. #TQIP2016

↩ ↻ 5 ❤ 7 📊 ⋮



PTSD DSM 5

- Exposure to a traumatic event (death, threatened death, actual or threatened serious injury) with symptoms from each of four symptom clusters for over 1 month:
 - Intrusion
 - Avoidance
 - Negative alterations in cognitions and mood
 - Alterations in arousal and reactivity.

Types PTSD Symptoms

- Reliving the event (Re-experiencing symptoms)
 - Nightmares
 - Flashbacks
 - Triggers
- Avoiding situations that remind you of the event
- Negative changes in beliefs and feelings
- Hypervigilance

Psychological Issues in Rescue Workers Following Disaster Event

- Emotional reactions: temporary (i.e., for several days or a couple of weeks) feelings of shock, fear, grief, anger, resentment, guilt, shame, helplessness, hopelessness, or emotional numbness (difficulty feeling love and intimacy or difficulty taking interest and pleasure in day-to-day activities)
- Cognitive reactions: confusion, disorientation, indecisiveness, worry, shortened attention span, difficulty concentrating, memory loss, unwanted memories, self-blame
- Physical reactions: tension, fatigue, edginess, difficulty sleeping, bodily aches or pain, startling easily, racing heartbeat, nausea, change in appetite, change in sex drive
- Interpersonal reactions in relationships at school, work, in friendships, in marriage, or as a parent: distrust; irritability; conflict; withdrawal; isolation; feeling rejected or abandoned; being distant, judgmental, or over-controlling

Guilt

- My experience: Almost universal after death, adverse events and injury...even when all was done correctly
- Why?
- *I'd rather feel guilty, than helpless-Elaine Pagels*



The Elephant

Culture of our profession of emergency healthcare exudes confidence, leadership, stoicism, competence, and the reflexive capacity to manage life and death circumstances

...but this culture potentiates the effects of post-traumatic stress and compartmentalizes it as an issue no one wants to discuss.

Importance to You

- EMS PTSD
 - 10% EMS with clinical diagnosis PTSD
 - 40% EMS PTSD if military deployed to battlefield
- “Work-Related Stress and Posttraumatic Stress in Emergency Medical Services” 2012
- Trauma nurses PTSD 7-10%
 - Trauma surgeons PTSD 15%
 - Disaster relief workers 7-15%
 - Higher rates of depression, anxiety, and suicide

Trauma Surgeons

- PTSD symptoms associated with following:
 - Male sex (OR, 2; P = .04)
 - >7 call duties/month (OR, 2.6; P = .001)
 - >15 operative cases/month (OR, 3; P = .001)
 - <4 hours of daily relaxation (OR, 7; P = .01)
 - <2 weeks of vacation/year (OR, 2: P = .02)

Intrusion

- **Intrusive thoughts**
- **Decreased attention span**
- **Thoughts of harm to self or others**
- **Reduced sense of safety**
- **Suspiciousness**

Behavior

- Appetite changes
- Anxiety/Fear
- Anger/Irritability
- Numbness
- Decreased sense of hope/purpose
- Loss of faith
- Loss of compassion\
- Guilt



Behavioral Family

- Decreased interest in intimacy
- Mistrust/Isolation
- Overprotection as a parent
- Interpersonal conflicts

Arousal

- HYPERVIGILANT
- Aches and pains
- Dizziness
- Exhaustion
 - Poor sleep



Avoidance

- Avoiding triggers
 - Self-medicating
 - Numbing emotions
 - **Can't numb negative emotions without numbing the positive emotions.**
Brene Brown



Complications

Addiction

Anxiety

Depression

Death

Resilience

- **Even in the darkest of circumstances, provider stress can be:**
 - **Natural**
 - **Predictable**
 - **Manageable**
 - **Treatable**



Resiliency

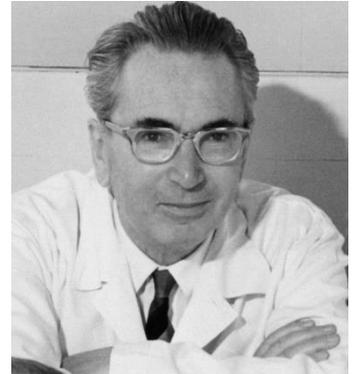
What is Resiliency?

- **Resiliency is the ability to:**
 - Sustain good health and well-being in stressful conditions
 - Bounce-back easily from setbacks
 - Cope well with non-stop change
 - Overcome adversity
 - Convert misfortune into good luck
 - Become stronger and better year after year

Siebert, 2005

Resilience

“It did not really matter what we expected from life, but rather what life expected from us. We needed to stop asking about the meaning of life, and instead to think of ourselves as those who were being questioned by life”



Victor Frankl, Man's Search for Meaning

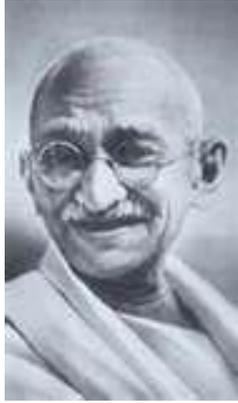
Provider Resiliency Training Concepts and Definitions

Resiliency:

- Resiliency grows through healthy responses to stressors
- Resiliency, for most, is a learned trait



Resilient Role Models



Resiliency Building Through Self-Care

Physical

- Through nutrition
- Through exercise
- Through good sleep routine

Resiliency Building Through Self-Care

Mental

- Relaxation techniques (meditation, yoga, music, deep breathing)
- Hobbies/leisure activities
- Through setting goals and making plans of actions

Resiliency Building Through Self-Care

Emotional

- Personal journal writing
- Alone time
- Acceptance of difficult situations
- Finding time for humor



Resiliency Building Through Connectedness

Social

- Increase activities with family and friends
- Join a new group activity (through church, intramural sports, etc.)
- Find a way to become involved in community programs

The Elephant

Culture of our profession of emergency healthcare exudes confidence, leadership, stoicism, competence, and the reflexive capacity to manage life and death circumstances

...but this culture potentiates the effects of post-traumatic stress and compartmentalizes it as an issue no one wants to discuss.

Brené Brown

Vulnerability-Shame-Fear



- Those with Connectedness
 - Courage to be vulnerable
 - Compassion to be kind to themselves
 - Willing to let go of who they thought they should be to be who they are
 - Fully embraced vulnerability as necessary
- Control and Predict vs Living with vulnerability

Brené Brown

Vulnerability-Shame-Fear

- Vulnerable world
- Response to a vulnerable world – Numb vulnerability
- We Blame – a way to discharge pain and discomfort
- We try to perfect—we are wired for struggle
- We pretend what we do doesn't impact others



Brené Brown

- Let ourselves be vulnerably seen
- Love with our whole hearts even when no guarantee
- Practice gratitude and joy
- Believe we are enough – you are enough



Resiliency Building Through Self-Care

Spiritual

- Through prayer
- Through reading inspirational/ devotional material
- Through fellowship
- Through forgiveness
- Professionally– Forgive and remember

Management of Stress During a Disaster Operation

- Develop a "buddy" system with a coworker.
- Encourage and support your coworkers.
- Take care of yourself physically by exercising regularly and eating small quantities of food frequently.
- Take a break when you feel your stamina, coordination, or tolerance for irritation diminishing.
- Stay in touch with family and friends—when you feel like you need to withdraw—do the opposite reach out
- Defuse briefly whenever you experience troubling incidents and after each work shift

Courage is whole heartedness

Courage to be imperfect

Leads to compassion and
connection

Brené Brown



Thank You!

References

- US Army Provider Resiliency Course
- VA.GOV
- Brené Brown
- Dr Brian Eastridge