

Promoting Well-Being in Healthcare: Mindfulness and Mind-Body Techniques to Manage Stress and Build Resilience

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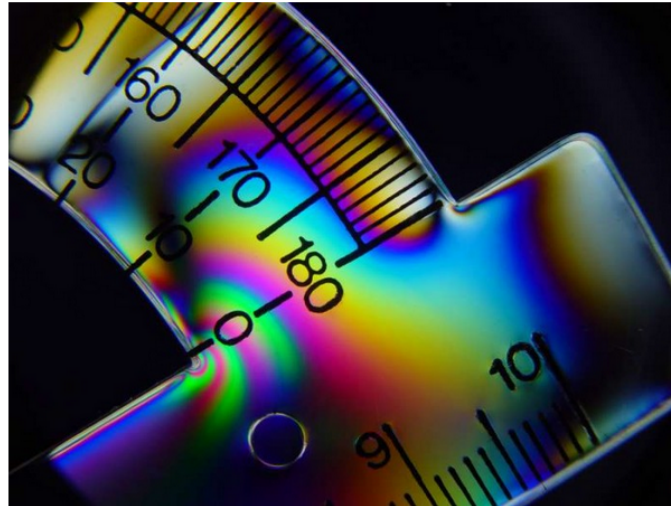
Objectives

- To understand the drivers of burnout and the impact of chronic stress on well-being
- To describe the science behind and evidence for the use of mindfulness and mind-body techniques for improving well-being
- To experientially practice 1-2 techniques as take-way resources for well-being

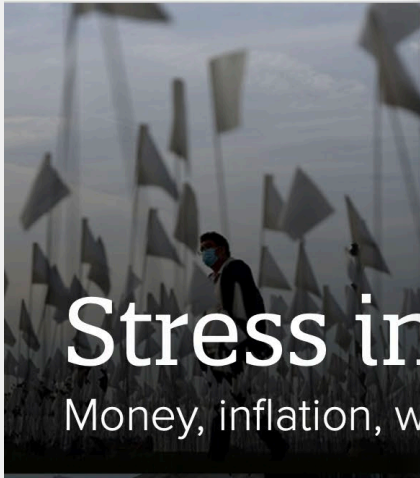


Stress: The Health Epidemic of the 21st Century

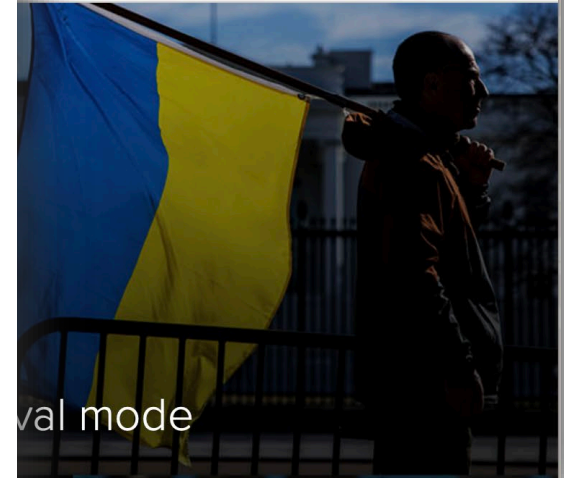
By: George Fink, Posted on: April 26, 2016



“Stress” has been dubbed the “Health Epidemic of the 21st Century” by the World Health Organization and is estimated to cost American businesses up to \$300 billion a year. The effect of stress on our emotional and physical health can be devastating. In a recent USA study, over 50% of individuals felt that stress negatively impacted work productivity. Between 1983 and 2009, Stress levels increased by 10 to 30 percent among all demographic groups in the USA.

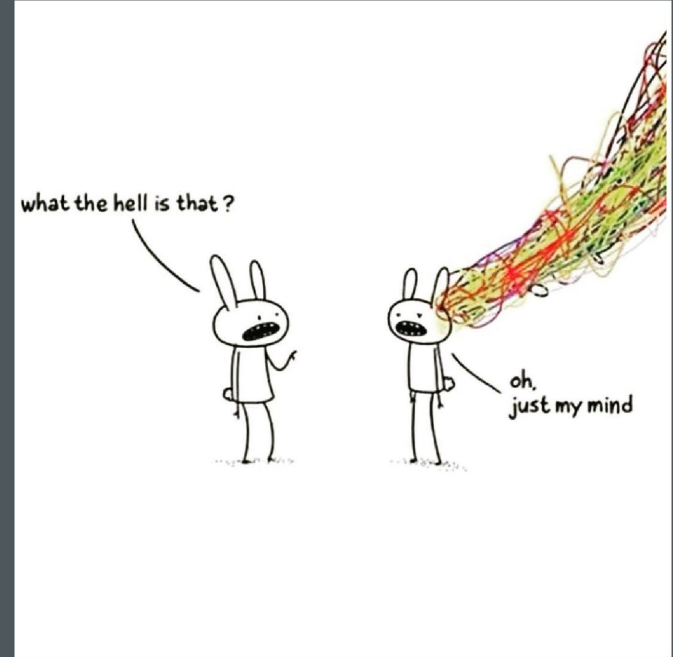


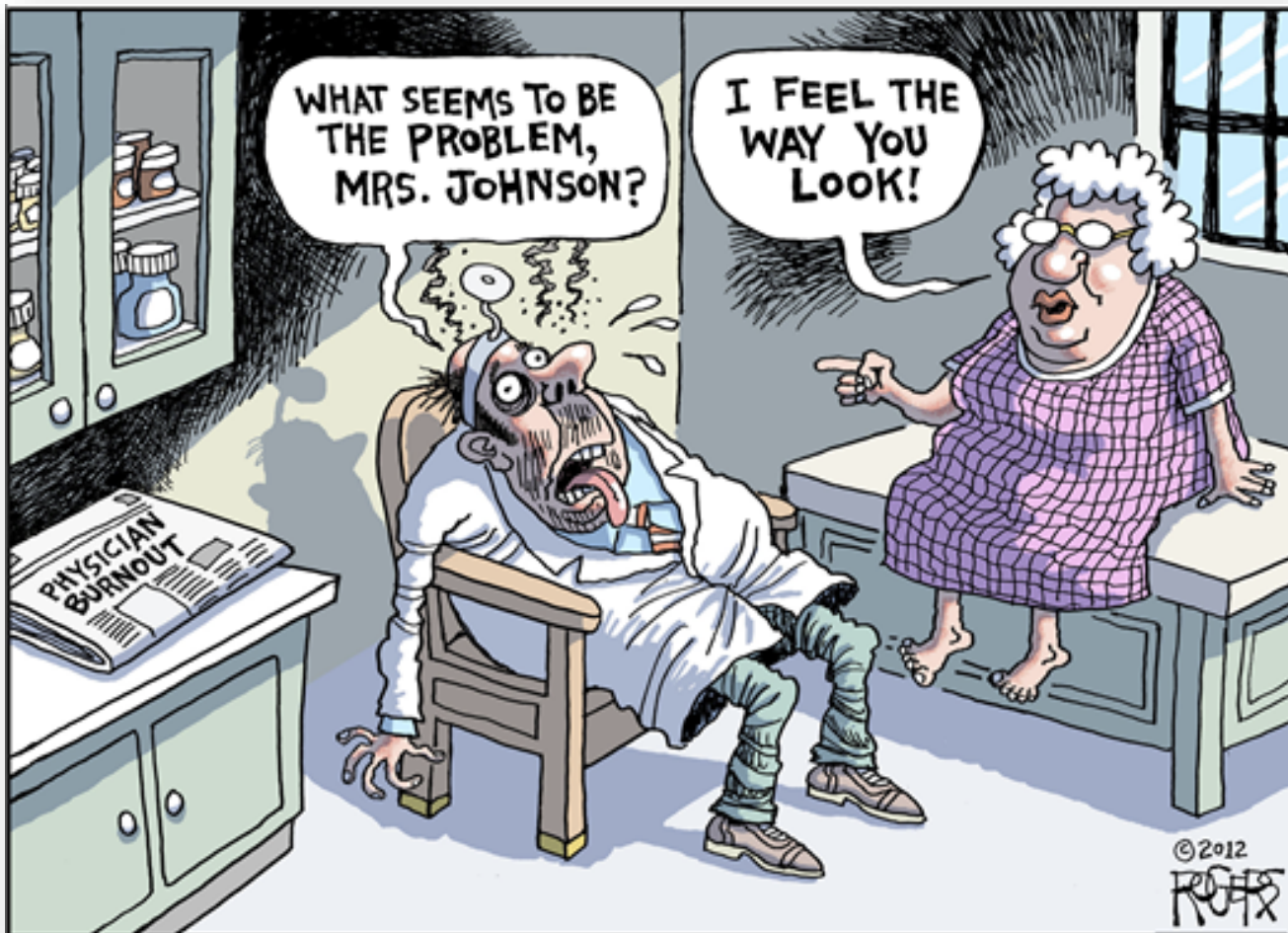
March 11, 2022
World Health Org



demtic declaration by the
l aspects of life have been

Overloaded Frenzied
connected over-scheduled
Busy Distracted
on-the-go
plugged-in Swamped
Frazzled Hectic





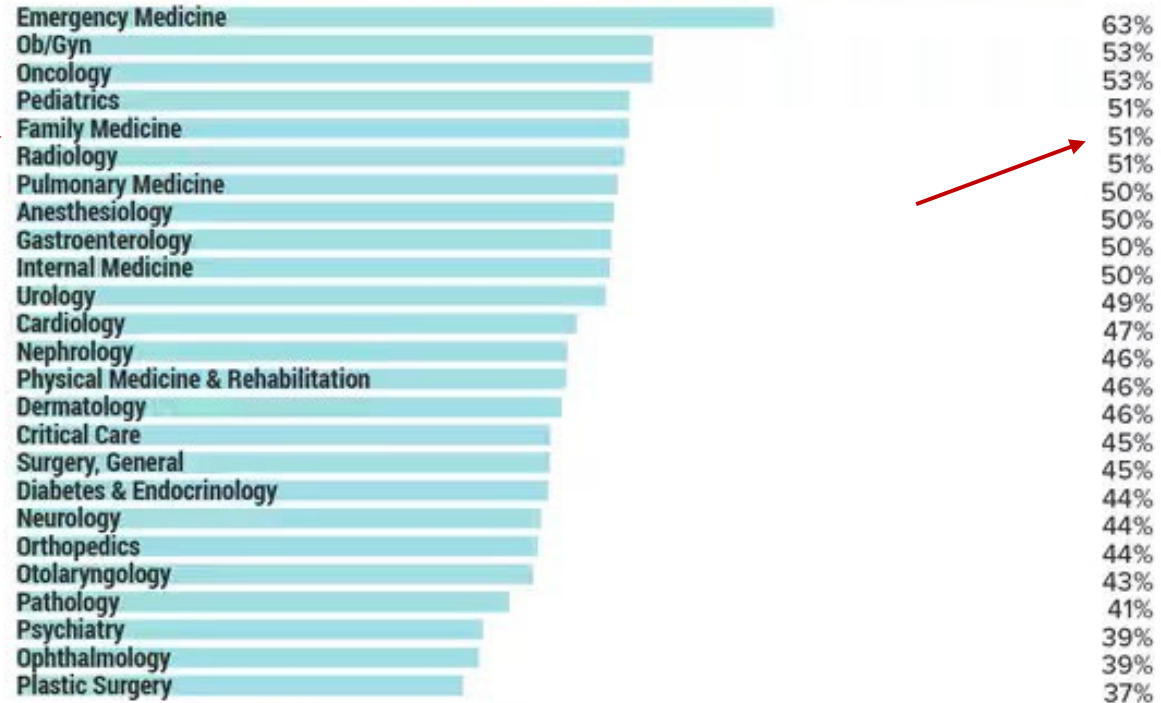
1 in 2 Physicians Experience Burnout

Not just MDs –
all healthcare
professionals



Medscape Physician and Burnout and Depression Report 2024

Which Specialties Have the Greatest Burnout Rates?



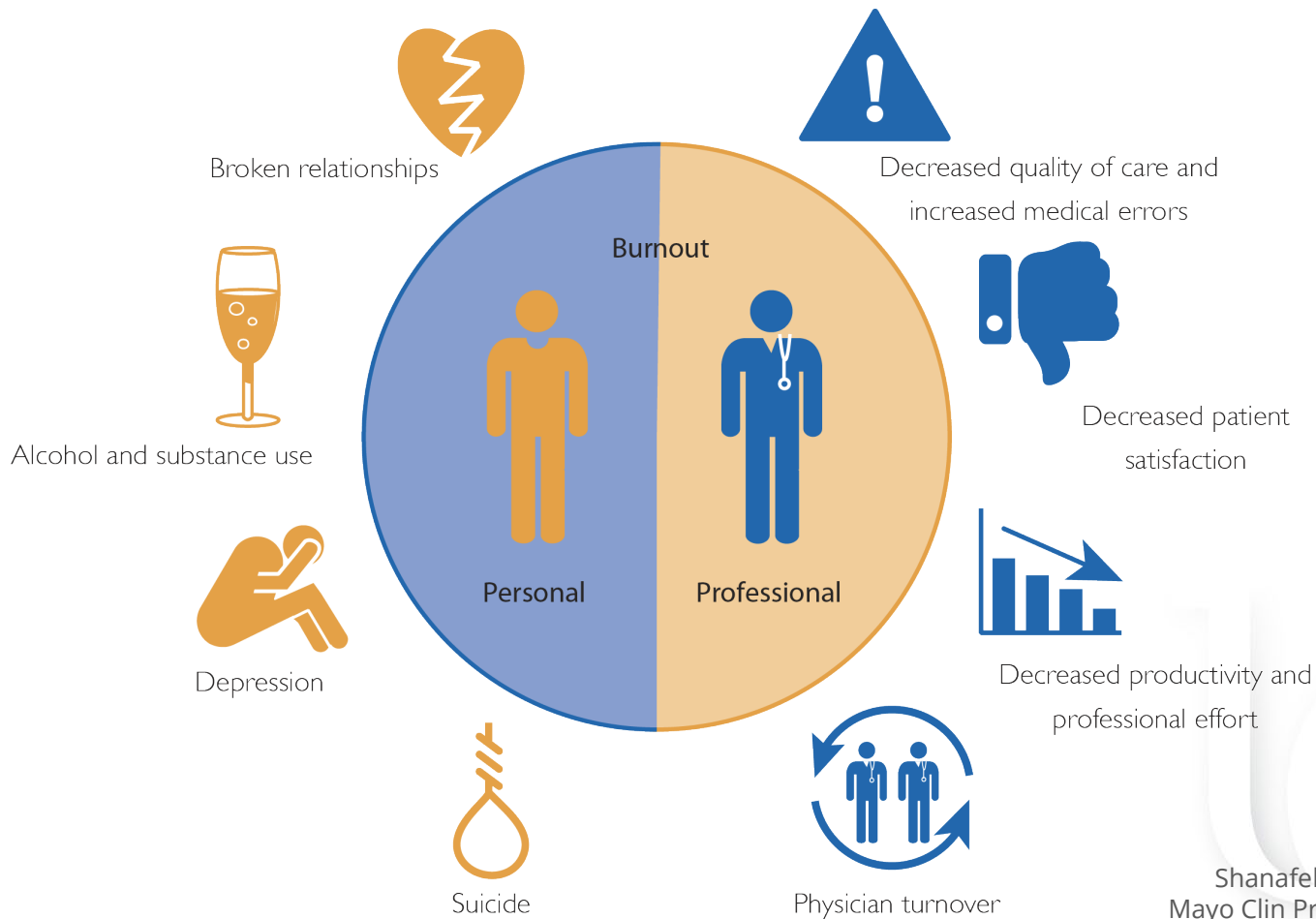
Not all specialties are shown.

“Burnout is a response to chronic stressors that wear on a person over time—not acute ones such as a big event or a big change”

- Christina Maslach, PhD

- 1. Emotional Exhaustion**
- 2. Depersonalization**
- 3. Low Sense of Personal Accomplishment**







Individual factors



Work unit factors



Organization factors



National factors

Driver dimensions



Nine Organizational Strategies to Promote Engagement and Reduce Burnout; Shanafelt TD, Noseworthy JH. Mayo Clin Proc. 2017

The ~~Triple~~ Aim
Quadruple



Patient Experience

Population Health

Reduce Cost

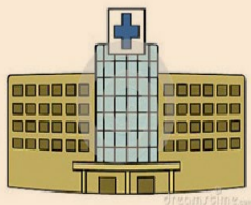
Provider Satisfaction



Individual strategies



Work unit strategies



Organization strategies

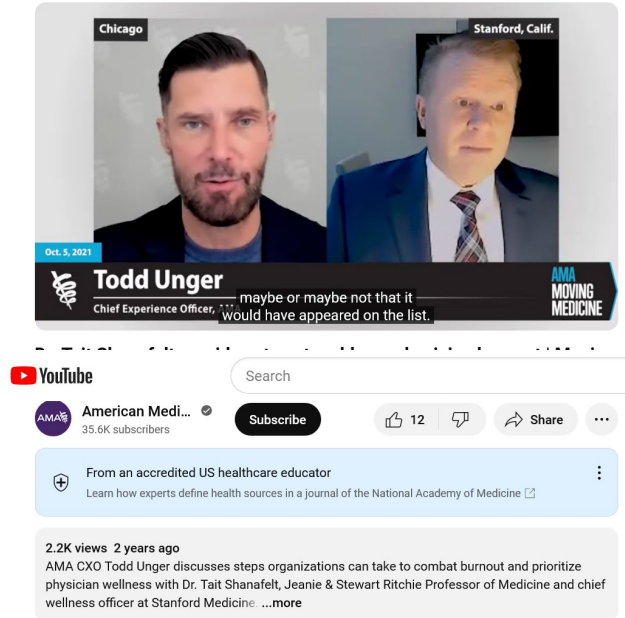


National strategies



Dr. Tait Shanafelt provides steps to address physician burnout | Moving Medicine for Oct. 5, 2021

“80:20 problem”



“We need to not be training physicians to tolerate a broken practice environment”

<https://www.youtube.com/watch?v=W4AKv3Bh1o4>

Stanford Professional Fulfillment Model

The premise that promoting professional fulfillment and mitigating burnout requires organization-wide change.

The Reciprocal Domains of Physician Well-Being

Chart illustrating the 3 domains of physician well-being, with each domain reciprocally influencing the others.



Source: Patty Purpur de Vries

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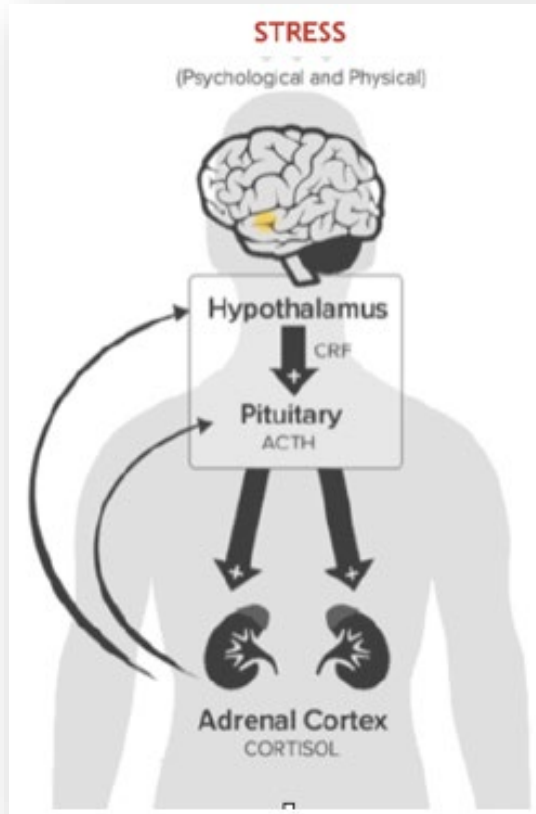




The Science of Resilience

- “The American Psychological Association defines **resilience** as “the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of threat.”
- “Resilience is the ability of an individual to respond to stress in a healthy, adaptive way such that personal goals are achieved at minimal psychological and physical cost; **resilient individuals** not only ‘bounce back’ rapidly after challenges but also **grow stronger in the process.**” Epstein and Krasner
- “Resilience is not limited to an elite few... **anyone can learn to become more resilient.**” Steven Southwick, MD

Stress Response



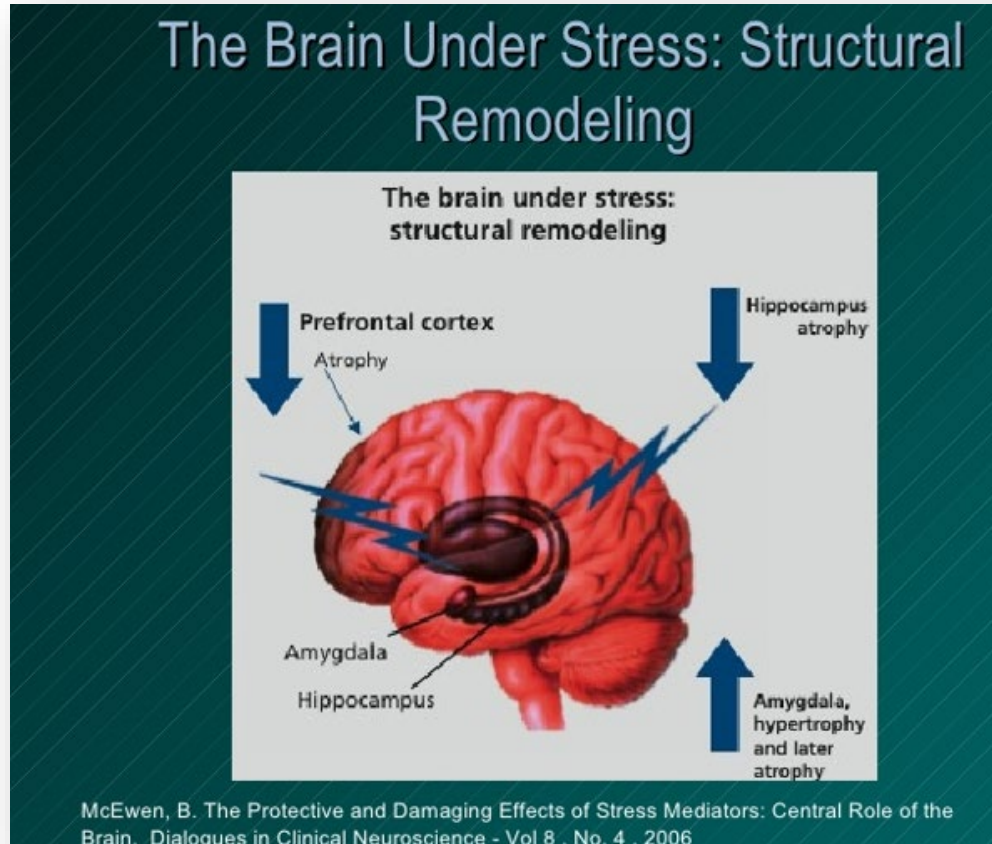
- Effect on the Hypothalamic-Pituitary-Adrenal Axis
- “Fight or Flight” response



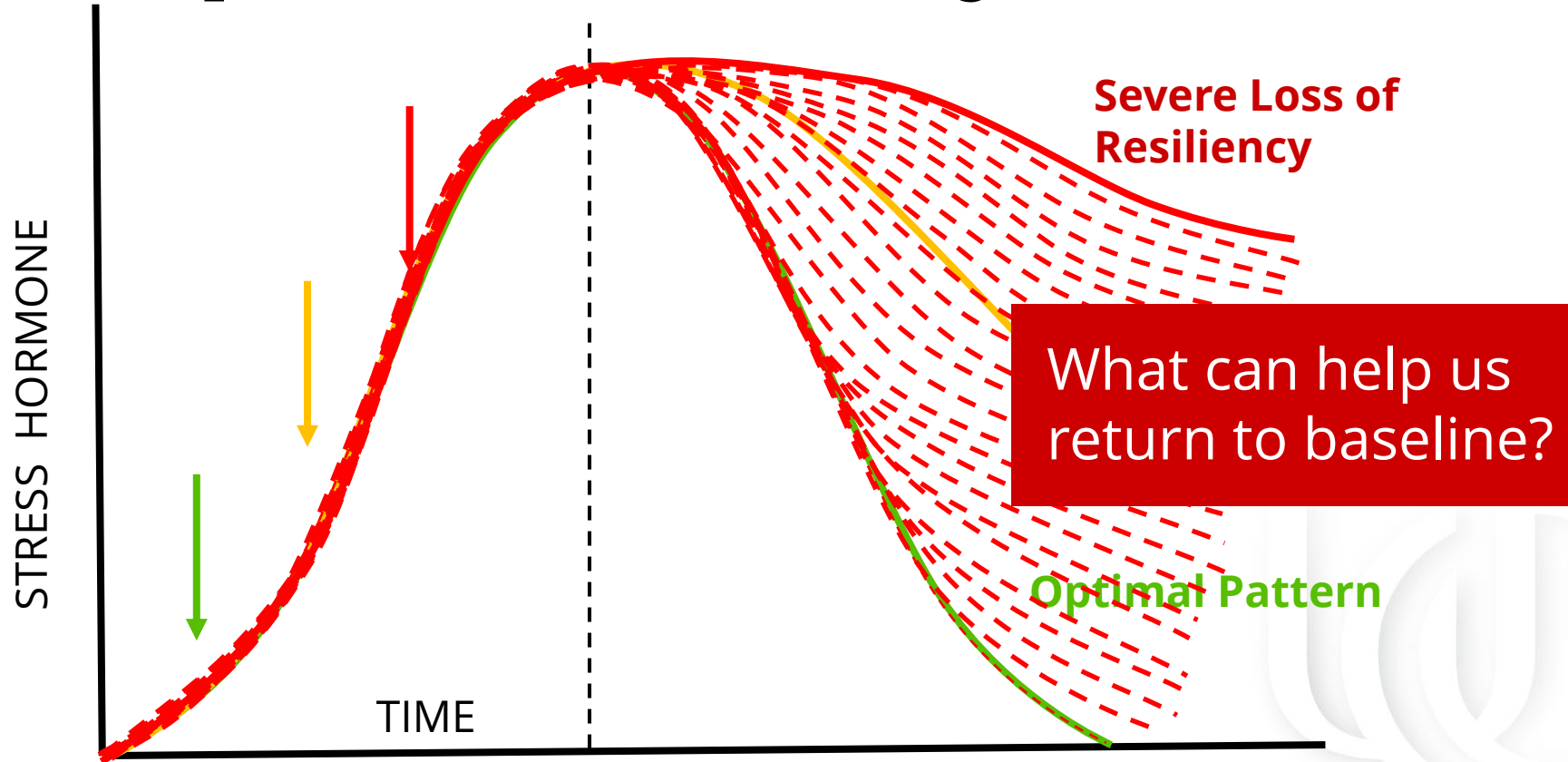
Impact of Chronic Stress

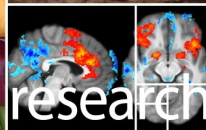
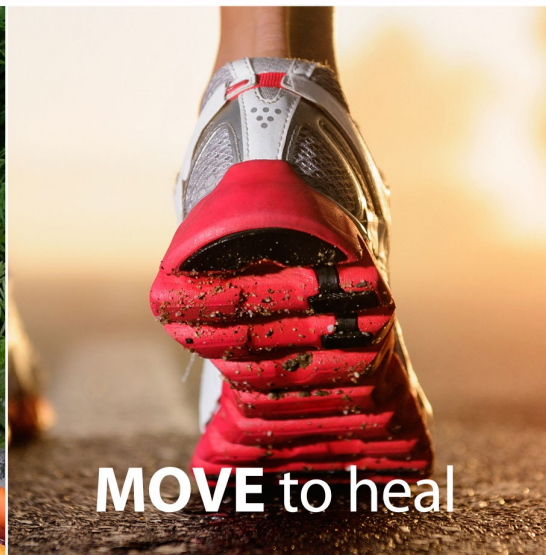
Increased risk for:

- Anxiety.
- Depression.
- Digestive problems.
- Headaches.
- Muscle tension/pain.
- Heart disease, heart attack, high blood pressure and stroke.
- Sleep problems.
- Weight gain.
- Problems with memory and focus.



Importance of Returning to Baseline





med.uc.edu/integrative





Concept of Mind-Body Medicine

- Uses the natural connection between the mind and body to improve physical functioning, reduce stress, and promote health
 - 2,000 year old idea that the mind and body interact and influence one another
- Among the most widely used integrative medicine practices among US adults
- Scientific literature robust: engage parasympathetic nervous system/stress response, blood pressure, pain responses, immune functioning, and self-awareness.

Mind-Body Techniques

- Meditation
- Imagery
- Biofeedback
- Autogenic Training
(self-hypnosis)
- Breathing Techniques
- Exercise/Movement
- Yoga, Tai Chi
- Journaling





National Center for
Complementary and
Integrative Health

NIH... Turning Discovery Into Health

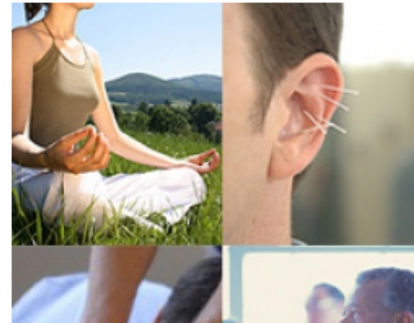
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Mind and Body Practices

Share:



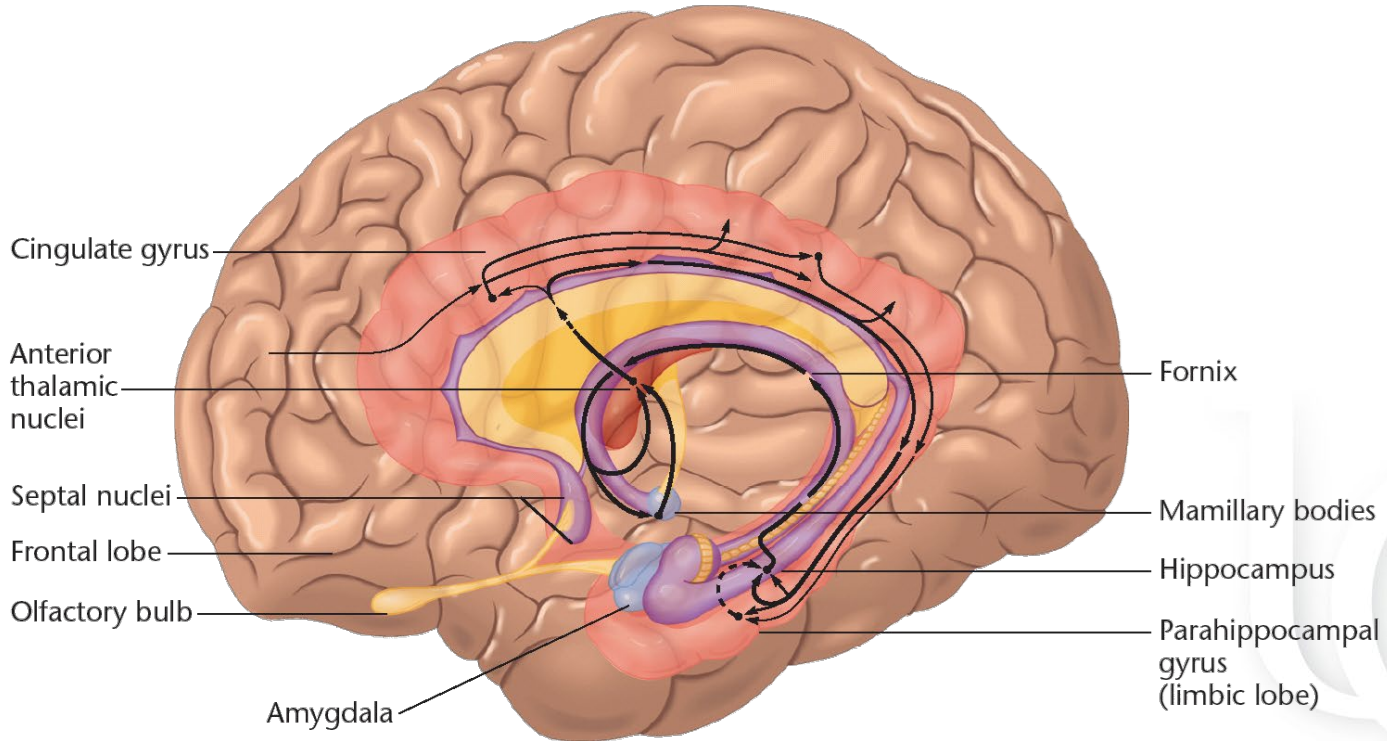
Mind and body practices are a large and diverse group of techniques that are administered or taught to others by a trained practitioner or teacher. Examples include acupuncture, massage therapy, meditation, relaxation techniques, spinal manipulation, and yoga.



<https://www.nccih.nih.gov/>

Neural Connections

Cognitive-Emotional-Autonomic



Structural Changes

- MR images of participants' brain structure were taken two weeks prior to and immediately following an **8-week mindfulness-based stress reduction program**
- **Increased grey-matter density** in the hippocampus, known to be important for learning and memory, and in structures associated with self-awareness, compassion, and introspection. Participant-reported reductions in stress also were correlated with decreased grey-matter density in the amygdala.





**HEALTHY AGING
BEGINS WITH
PROTECTING YOUR
TELOMERES**

Adopting a yoga/mindfulness-based lifestyle approach causes **REVERSAL of markers of aging** – namely oxidative stress, telomerase activity and oxidative DNA damage....
mindfulness meditation INCREASES length of telomeres (which shorten as we age)

Lavretsky H, Epel ES, Siddarth P, et al. A pilot study of yogic meditation for family dementia caregivers with depressive symptoms: effects on mental health, cognition, and telomerase activity. *Int J Geriatr Psychiatry*. 2013;28(1):57-65

What is mindfulness?

“Mindfulness is the awareness that arises through paying attention in a particular way, on purpose, in the present moment, non-judgmentally to the unfolding of experience moment to moment.”



–Jon Kabat Zinn

A wide-angle photograph of a calm lake at dawn or dusk. The water is still, reflecting the soft light of the sky. In the distance, there are forested hills. In the foreground, a wooden pier extends into the water, and two people are standing at its end, looking out over the lake. The overall mood is peaceful and contemplative.

Intention. Attention. Attitude.

Mindfulness is
“The Opposite of Automatic Pilot”



Why Mindfulness and Why Now?

Mindfulness is one mind-body technique that can down-regulate our nervous system, returning us to baseline and, quite literally, can **change the parts of our brain** associated with stress.

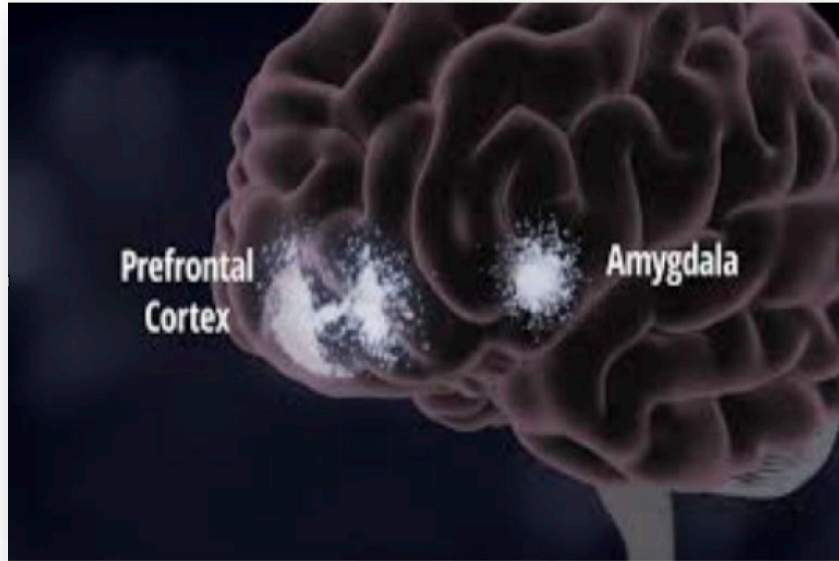




Neuroplasticity

The life-long capacity of the brain to create new connections and cells in response to our behaviors and environment.

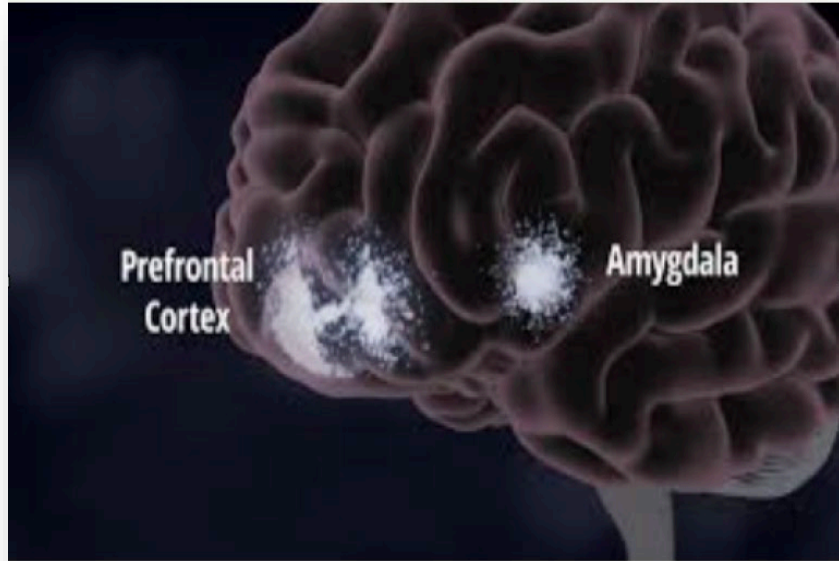


**Prefrontal Cortex:**

The part of the brain associated with higher-order brain functions like awareness, concentration and decision making becomes thicker.

Amygdala:

The brain's fight or flight center, associated with fear and emotion, shrinks after 8-weeks of consistent mindfulness meditation practice.



The functional connectivity between these regions also changes.

The connection between the amygdala and the rest of the brain gets weaker.

The connections between areas associated with attention and concentration get stronger.



Mindfulness
allows us to be
responsive, not reactive.

Benefits of Mindfulness

Improvements in:

- Immune functioning
- Overall well-being
- Working memory and retention
- Awareness and adaptability
- Information processing speed
- Focus and productivity
- Emotional control
- Relationship satisfaction, communication skills, and emotional intelligence
- Problem solving skills and innovation
- Leadership competencies

Decreases in:

- Rumination
- Symptoms of anxiety and depression
- Stress and burnout
- Task effort and cognitive rigidity
- Reactivity



Organizational Benefits



- Enhanced focus as a team
- Decreased workplace conflict
- Self and other awareness
- Mental clarity, insight and understanding
- Response flexibility and resilience
- Creative thinking and innovation
- Effective collaboration and co-creation
- Compassionate leadership
- Decreased health care costs
- Reduced implicit age and race bias



Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis

Colin P West, Liselotte N Dyrbye, Patricia J Erwin, Tait D Shanafelt

Lancet 2016; 388: 2272–81

Published Online
September 28, 2016
[http://dx.doi.org/10.1016/S0140-6736\(16\)31279-X](http://dx.doi.org/10.1016/S0140-6736(16)31279-X)

See Comment page 2216

Division of General Internal Medicine and Division of Biomedical Statistics and Informatics (Prof C P West MD), Division of Primary Care Internal Medicine (Prof L N Dyrbye MD), Medical Library (P J Erwin MLS), and Division of Hematology (Prof T D Shanafelt MD), Mayo Clinic, Rochester, MN, US

Correspondence to: Prof Colin P West, Division of General Internal Medicine and Division of Biomedical Statistics and Informatics, Mayo Clinic,

Summary

Background Physician training and practice, own care and satisfaction, quality and outcomes

Methods In this systematic review, we searched Science, and the Cochrane Library to prevent and reduce physician burnout, provide physicians with alternative sources of evidence, and identify potential eligible studies.

Results We identified 2617 articles, of which 15 randomised trials including 716 physicians and 37 cohort studies including 2914 physicians met inclusion criteria. Overall burnout decreased from 54% to 44% (difference 10% [95% CI 5–14]; $p < 0.0001$; $I^2 = 15\%$; 14 studies), emotional exhaustion score decreased from 23.82 points to 21.17 points (2.65 points [1.67–3.64]; $p < 0.0001$; $I^2 = 87\%$; 40 studies), and depersonalisation score decreased from 9.05 to 8.41

The most commonly studied interventions have involved mindfulness, stress management, and small group discussions, and the results suggest that these strategies can be effective approaches to reduce burnout domain scores.

of both physicians in general, and of those who are at present of the

FO, Scopus, Web of Science, and Embase. We identified 2617 articles, of which 15 randomised trials including 716 physicians and 37 cohort studies including 2914 physicians met inclusion criteria. Overall burnout decreased from 54% to 44% (difference 10% [95% CI 5–14]; $p < 0.0001$; $I^2 = 15\%$; 14 studies), emotional exhaustion score decreased from 23.82 points to 21.17 points (2.65 points [1.67–3.64]; $p < 0.0001$; $I^2 = 87\%$; 40 studies), and depersonalisation score decreased from 9.05 to 8.41

and depersonalisation score decreased from 9.05 to 8.41

ORIGINAL CONTRIBUTION

CLINICIAN'S CORNER

Association of an Educational Program in Mindful Communication With Burnout, Empathy, and Attitudes Among Primary Care Physicians

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Benjamin Chapman, PhD

Christopher J. Mooney, MA

Timothy E. Quill, MD

P RIMARY CARE PHYSICIANS report alarming levels of professional and personal distress. Up to 60% of practicing physicians report symptoms of burnout,¹⁻⁴ defined as emotional exhaustion, deper-

Context Primary care physicians report high levels of distress, which is linked to burnout, attrition, and poorer quality of care. Programs to reduce burnout before it results in impairment are rare; data on these programs are scarce.

Objective To determine whether an intensive educational program in mindfulness, communication, and self-awareness is associated with improvement in primary care physicians' well-being, psychological distress, burnout, and capacity for relating to patients.

Design, Setting, and Participants Before-and-after study of 70 primary care physicians in Rochester, New York, in a continuing medical education (CME) course in 2007-2008. The course included mindfulness meditation, self-awareness exercises, narratives about meaningful clinical experiences, appreciative interviews, didactic material, and discussion. An 8-week intensive phase (2.5 h/wk, 7-hour retreat) was followed by a 10-month maintenance phase (2.5 h/mo).

Main Outcome Measures Mindfulness (2 subscales), burnout (3 subscales), empathy (3 subscales), psychosocial orientation, personality (5 factors), and mood (6 subscales) measured at baseline and at 2, 12, and 15 months.

**Improved well-being and mood;
Improvements in mindfulness associated with
increased empathy and reduced burnout**

among the personal consequences reported.^{4,8-10} Burnout can occur early in the medical educational process. Nearly half of all third-year medical students report burnout¹¹ and there are strong associations between medical student burnout and suicidal ideation.¹²

burnout (emotional exhaustion and personal accomplishment subscales, $r = -0.32$ and 0.33 , respectively; $P < .001$), and personality factors (conscientiousness and emotional stability, $r = 0.29$ and 0.25 , respectively; $P < .001$).

Conclusions Participation in a mindful communication program was associated with short-term and sustained improvements in well-being and attitudes associated with patient-centered care. Because before-and-after designs limit inferences about intervention effects, these findings warrant randomized trials involving a variety of practicing physicians.

JAMA. 2009;302(12):1284-1293

www.jama.com

For editorial comment see p 1338.

CME available online at
www.jamaarchivescme.com
and questions on p 1374.

The consequences of burnout among practicing physicians include not only poorer quality of life and lower quality of care but also a decline in the sta-

Author Affiliations are listed at the end of this article.
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Intervention

An intensive phase (2.5 hr/8 wk)

All day (7 hr) session (week 6-7)

A maintenance phase (10 monthly)

Each Session

15 min didactic material (weekly)
(awareness, burnout, self-care)

Formal mindfulness meditation

Body scan

Sitting meditation

Walking meditation

Mindful movement

Narrative Exercises

Appreciative Inquiry

Abbreviated Mindfulness Intervention for Job Satisfaction, Quality of Life, and Compassion in Primary Care Clinicians: A Pilot Study

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Aleksandra Zisook, MD, PhD¹

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ABSTRACT

PURPOSE Burnout, attrition, and low work satisfaction of primary care physicians are growing concerns and can have a negative influence on health care. Interventions for clinicians that improve work-life balance are few and poorly understood.

...participating in an abbreviated mindfulness training course adapted for primary care clinicians was associated with reductions in indicators of job burnout, depression, anxiety, and stress.

ience, and compassion. We used a linear mixed-effects model analysis to assess changes in outcome measures.



Although the rates of chronic stress and burnout among physicians/providers is very high, practicing *mindfulness* can reduce burnout and increase empathy.





This can be difficult



How To Cultivate & Practice Mindfulness

➤ Formal

- Intentional set aside time to practice or cultivate mindfulness
- Examples: Body Scan, Seated Meditation, Breath Practices

➤ Informal

- Weaving mindfulness into activities of daily living
- Examples: Mindful walking, Mindful movement, Mindful teeth-brushing

Ways to Practice

- Mindfulness can be practiced anywhere
 - In the car, on a bus, in line at the grocery store or bank
- Block in Mindfulness Breaks (even for 1 minute) to breathe
- Lead a “Mindful Minute” before a meeting
- Eat mindfully
- Listen mindfully
- Notice transitions
- Go for a walk mindfully
- Jaw clenching/shoulders raised
- Do mundane tasks with awareness
- Single-task
- Habit chunk



How to Practice Mindfulness Meditation

- Pick a time when you will not be interrupted.
 - If needed, put up a sign on the door
- Be consistent.
 - Meditation is most beneficial when done on a regular basis, so try to dedicate some time every day to your practice.
- Start with just 1-3 minutes a day.
 - Mindfulness meditation can be very effective, even when you have only a few minutes to practice.
- Try another style of meditation if needed.
 - There are many ways to practice mindfulness and it may take time to find the right one for you. **BE GENTLE WITH YOURSELF / NO JUDGEMENT**



Physician, Heal Thyself

Mind-Body Medicine Course/Training





Wellness Resource Room



Interventions to Improve Well-Being of Health Professionals in Learning & Work Environments –

Impact of a University-Wide Interdisciplinary Mind-Body Skills Program on Student Mental and Emotional Well-Being

Brenna K Novak, BS¹ , Anna Gebhardt, BS^{1,2},
Harini Pallerla, MS³, Susan Blocksom McDonald, MA³,
Aviad Haramati, PhD⁴, and Sian Cotton, PhD^{1,3} 

Abstract

Background: Positive effects of mind-body skills programs on participant well-being have been seen with health professions students. The success seen with medical students at this university led to great interest in expanding the mind-body skills program so students in other disciplines could benefit from the program.

- 279 participants & 247 controls completed pre-post survey
- Participants showed significant decreases in stress, negative affect, depression, anxiety, sleep disturbance, and burnout, while positive affect, resilience, mindfulness, and empathy increased significantly ($p < .05$).
- One-year follow-up only mindfulness remained elevated

Faculty Training in Mind-Body Medicine

FACULTY TRAINING IN MIND-BODY MEDICINE

Educating for Enhanced Self-Awareness and Self-Care



Creating a Culture of Mindfulness

This experiential program provides faculty with the training, tools, and strategic thinking necessary to implement mind-body medicine skills groups in their institutions.

During a three-day weekend retreat to Murphin Ridge Inn, faculty will be introduced to meditation, guided imagery, biofeedback, breathing techniques, and other mind-body approaches that can alleviate stress and foster self-awareness and self-care. Participants will experience the power of these approaches first-hand while learning how to lead mind-body groups for students.

The program includes seven group sessions, several individual activities, short didactic presentations, and daily yoga. Participants are provided with all course materials, enabling them to launch similar programs in their institutions after the retreat.

Mar 14-17 2023

Murphin Ridge Inn
West Union, OH

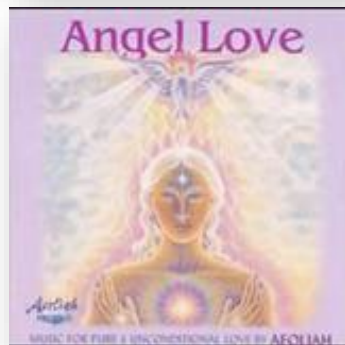
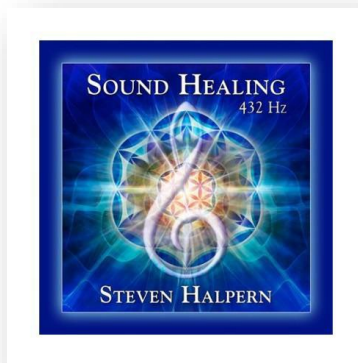
Registration fee includes all training materials, 3 nights lodging, 3 daily health-conscious gourmet meals, and more than 140 acres of trails and ongoing mentorship

Resources

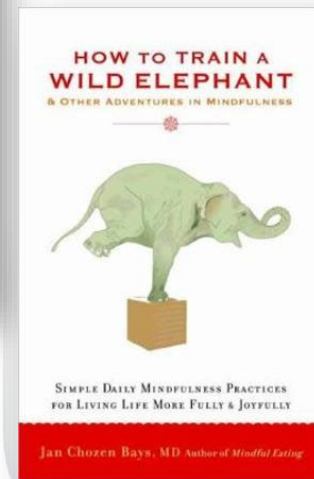
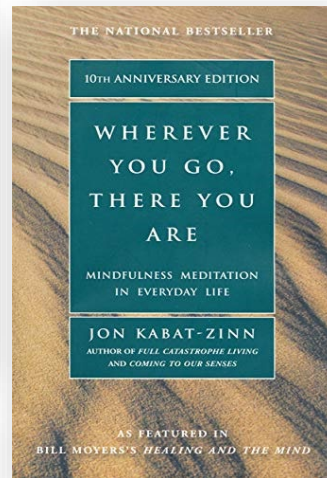
Apps/Websites



Music



Books



mindful.org



Chief Wellness Officer Course

Designing and Leading Well-being at the System Level

Chief Wellness Officer Course and Training Program

Now Accepting Applications for 2025

Tentative Course Dates: July 20-25, 2025 (pending finalization of venue contract)

Location: extended San Francisco Bay Area

Apply Now >

Applications will be reviewed on a rolling basis until the course is full. **Application deadline: January 31, 2025.** If you intend to apply, please send us an introductory email at cwcourse@stanford.edu telling us your name, role, organization, and when we can expect all components of your application.

Program Description

The Stanford Medicine WellMD & WellPhD Chief Wellness Officer (CWO) Course and Training Program is an executive education program and learning community hosted annually for approximately 50 executive leaders with system-wide responsibilities for advancing clinician well-being. Applicants are carefully selected, based on their role and scope, to spend an immersive week with our core faculty and engage in a broader community of program alumni for one year following the onsite course.

Using the Stanford WellMD Professional Fulfillment Model™ and extensive experience of program faculty, the CWO Course and Training Program includes pre-work, lectures, group activities, and faculty office hours designed to help participants cultivate expertise in the principles and applications that contribute to clinician well-being. The program teaches participants how to use influence, relationships, expertise, and data to lead the development of a shared vision for clinician well-being in large, complex organizations. The program equips participants to advance well-being and catalyze progress through data-informed strategic priorities.



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Road mapping drivers of physician burnout and career satisfaction



Defining the prevalence, causes and consequences of physician burnout across the career span, and developing evidence-based interventions that improve the work-lives of physicians and the care they provide to patients.

CONTACT

For information regarding study outcomes, collaboration or opportunities to support our innovative research, contact the Program on Physician Well-Being at Mayo Clinic.

[Contact the Program](#)

RESEARCH

The Mayo Clinic Program on Physician Well-Being evaluates entire spectrum of personal, professional and organizational factors influencing physician satisfaction and productivity.

[About the Program](#)

[Intervention Research](#)

[Epidemiological Research](#)

[Research Translated Into Strata in Practice](#)

[Tracking and Responding to Physician Well-Being Metrics](#)

[Collaborators](#)

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OVERVIEW

The Mayo Clinic Program on Physician Well-Being was established to conduct and promote innovative research focused on physician well-being. Research led by the team has established that physician burnout threatens the quality of patient care, patient satisfaction, access to care and physicians' lives.

For patients to receive excellent care from compassionate, collaborative and competent physicians, strategies are needed to reduce burnout and mitigate it when it does occur. To ensure the health of patients, physicians and the organization, a vigorous discovery science program is necessary to facilitate physician well-being through research, education, and development of individual and organizational approaches to optimize physician satisfaction and performance.

Initially, four platforms of excellence are focusing scientific activities on physician well-being spanning the career cycle. The program establishes new collaborations and teams of investigators to maximize results, disseminate findings and promote translation into practice.

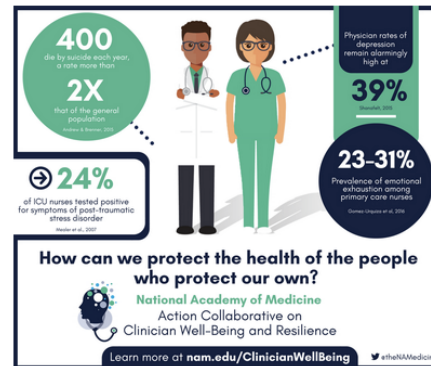
MAYO CLINIC'S APPROACH

Action Collaborative on Clinician Well-Being and Resilience

Every year in the United States, about 400 physicians take their own lives — a rate more than double that of the general population. Physicians experience high rates of depression, burnout, and poor work-life balance. This phenomenon cuts across all ages, stages, and career paths — from trainees to senior practitioners. And these challenges are not unique to physicians. Nurses and other clinicians experience similar effects on performance, health, and well-being.


Bottom line: The people we rely on to keep us healthy may not be healthy themselves. This fact is not only worrying in and of itself — it also has serious implications for patients. Clinician burnout has been linked to increased medical errors and patient dissatisfaction. How can we ensure that our care workforce is healthy, resilient, and functioning at its highest capacity?

About the Initiative



<https://nam.edu/initiatives/clinician-resilience-and-well-being>

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- Managing Talent
- Redesigning Care Delivery
- Transforming Medical Education

Programs by Mission Area

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- Patient Care
- Medical Research
- Diversity and Inclusion

Strategic Priorities

Learn more about the AAMC strategic priorities

[Read more >](#)

Well-being in Academic Medicine

“Our well-being, and the well-being of our teams, ultimately affects the health and well-being of our patients and communities.”

Marsha Rappley, MD
AAMC Chair Elect

Well-being in academic medicine has emerged as a critical issue facing faculty, physicians, researchers, residents, and students. With this in mind, the AAMC dedicated its June 2016 Leadership Forum to a range of topics addressing depression, resilience, burnout, and increased suicide among physicians, residents, and students. The following pages contain resources to help explain and address the challenges.

Please let us know if you have any suggested books, articles, or other resources to share with your colleagues and we will consider including on these pages.

AAMC Leadership Forum


The AAMC's 2016 Leadership Forum, held in Washington, D.C., included about 80 faculty, deans, CEOs, researchers, and others engaged in academic medicine and focused on wellness and resilience. The following are some key resources from the event:

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Journal of Academic Medicine



Academic Medicine, the official monthly, peer-reviewed journal of the AAMC, serves as an



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