Minding the Mind: Cultivating Resilience with Mind-Body Medicine to Mitigate Clinician and Caregiver Burnout

Integrative Medicine & Community Nutrition Symposium
Community Healthcare Network
Pooja Amy Shah, M.D.
11.14.2018
Let’s silence all digital devices and arrive into this space.
Let’s go on a quick mind-journey...
POP WORD #1
BURNOUT
Stressors Leading to Burnout are Insidious

• Burnout is "a state of mental and/or physical exhaustion caused by excessive and prolonged stress."

• Research studies suggest that two of the major causes of burnout are bureaucratic atmospheres and overwork.

Burnout Among Health Care Professionals: A Call to Explore and Address This Underrecognized Threat to Safe, High-Quality Care

By Lotte N. Dyrbye, Tait D. Shanafelt, Christine A. Sinsky, Pamela F. Cipriano, Jay Bhatt, Alexander Ommaya, Colin P. West, and David Meyers
July 05, 2017

Between 2011 and 2014, the prevalence of burnout increased by 9% among physicians while remaining stable in other U.S. workers (Dyrbye et al., 2015).

Suicide rates among female physicians are 130% higher than that of other females in the population.

Suicide rates among male physicians are 40% higher than that of other males in the population (Dyrbye et al., 2015).

In a study of 1,171 registered in-patient nurses, 18% had depression versus a national prevalence of approximately 9% (Dyrbye et al., 2015).

Burnout is nearly 2 TIMES as prevalent among physicians as U.S. workers in other fields after controlling for work hours and other factors (Dyrbye et al., 2015).

35% of hospital nurses have a high degree of emotional exhaustion.

Health care professional burnout represents real suffering among people dedicated to preventing and relieving the suffering of others. The high prevalence of burnout among health care professionals is cause for concern because it appears to be affecting quality, safety, and health care system performance. Efforts are needed to address this growing problem.

-Dyrbye et al., 2017
WHY?

Widening GAP between IDEAL + REALITY

Why do we go into medicine?

- Many of our challenges relate to the operations of medicine—managing a growing number of patients, coordinating care across multiple providers, documenting it all

- Study: physicians spent progressively more time on “desktop medicine” / less on face-to-face patient care
  (2011 – 2014: 471 primary care physicians, who collectively worked on 765,129 patients’ EHRs - the physicians logged an average of 3.08 hours on office visits and 3.17 hours on desktop medicine each day - published in Health Affairs 2017)

- Study found that the percentage of physicians reporting burnout increased over the same period -> by 2014, > 50%
Burned-out doctors are more likely to:

- Make medical errors
- Work less efficiently
- Refer their patients to other providers, increasing overall complexity and cost of care

Frandsen BR et al. Care fragmentation, quality, and costs among chronically ill patients. Am J Manag Care. 2015 May;21(5):355-62
**SNEAKY BURNOUT**

GRADUAL PROCESS ... INCREASES OVER TIME

It doesn’t happen from one day to the next.

**Sneaks up on you if you’re not paying attention to the warning signs.**

<table>
<thead>
<tr>
<th>Physical Signs</th>
<th>Emotional Signs</th>
<th>Behavioral Signs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Feeling tired and drained most of the time</td>
<td>• Emotional exhaustion</td>
<td>• Withdrawing from responsibilities</td>
</tr>
<tr>
<td>• Lower immunity, feeling sick more often</td>
<td>• Detachment or de-personalization from patients</td>
<td>• Isolation from others</td>
</tr>
<tr>
<td>• Frequent headaches, back pain, muscle aches</td>
<td>• Sense of failure and self-doubt</td>
<td>• Procrastination</td>
</tr>
<tr>
<td>• Change in appetite or sleep habits</td>
<td>• Feeling helpless, trapped and defeated</td>
<td>• Using food, drugs or alcohol to cope</td>
</tr>
<tr>
<td></td>
<td>• Loss of motivation</td>
<td>• Taking out your frustration on others</td>
</tr>
<tr>
<td></td>
<td>• Increased cynicism</td>
<td>• Skipping work or increased tardiness</td>
</tr>
<tr>
<td></td>
<td>• Decreased sense of accomplishment</td>
<td></td>
</tr>
</tbody>
</table>
3 PHASES OF BURNOUT

Stage 1: Stress Arousal
(Includes any two of the following)

1. Persistent irritability
2. Persistent anxiety
3. Periods of high blood pressure
4. Bruxism (grinding your teeth at night)
5. Insomnia
6. Forgetfulness
7. Heart palpitations
8. Arrhythmias
9. Inability to concentrate
10. Headaches

Stage 2: Energy Conservation
(Includes any two of the following)

1. Lateness for work
2. Procrastination
3. Persistent tiredness in the mornings
4. Turning work in late
5. Social withdrawal (from friends and/or family)
6. Cynical attitudes
7. Resentfulness
8. Increased caffeine &/or alcohol consumption
9. Apathy

Stage 3: Exhaustion
(Includes any two of the following)

1. Chronic sadness or depression
2. Chronic stomach or bowel problems
3. Chronic mental fatigue
4. Chronic physical fatigue
5. Chronic headaches
6. The desire to "drop out" of society
7. The desire to move away from friends, work, and perhaps even family
8. Perhaps the desire to commit suicide

From the Continuing Medical Education website of the Texas Medical Association
http://www.texmed.org/cme/phn/psb/burnout.asp
STRESS

- Immune
- Cardiovascular
- Neurological
- Endocrine
- Respiratory
- Dermatologic
- GI
- MSK
- Psychological
- Inflammation
- Pain

Roz Chast, 2003
Adam Baumgold Gallery
POP WORD #2 RESILIENCE
**RESILIENCE**

re·sil·i·ence
raˈzilyəns/
noun
noun: resiliency
1. the capacity to recover quickly from difficulties; toughness.
2. the ability of a substance or object to spring back into shape; elasticity.

*A human ability to recover quickly from disruptive change, or misfortune without being overwhelmed or acting in dysfunctional or harmful ways.

*Ability to recover from setbacks, adapt well to change, and keep going in the face of adversity.
“More than education, more than experience, more than training, a person’s level of resilience will determine who succeeds and who fails. That’s true in the cancer ward, it’s true in the Olympics, and it’s true in the boardroom.”

- Dean Becker
  president & CEO of Adaptiv Learning Systems, a company that develops and delivers programs about resilience training
WHERE DO YOU GET YOUR RESILIENCE FROM?
Survey responses from 835 British employees.

My organization
The work I do
My relationships
Myself

SOURCE “TOUGH AT THE TOP,” BY SARAH BOND AND GILLIAN SHAPIRO
WHAT’S THE BIGGEST DRAIN ON RESILIENCE AT WORK?
Survey responses from 835 British employees.

- When I am challenged on work matters
- When I am juggling day-to-day working life and family/non-work responsibilities
- When there have been upheavals in my personal life
- When the nature of the work takes me outside my comfort zone
- When I feel I am being criticized personally
- When the volume or pace of work stretches me to my limits
- When I am managing difficult relationships/politics in the workplace

SOURCE “TOUGH AT THE TOP,” BY SARAH BOND AND GILLIAN SHAPIRO
HBR.ORG
JANUARY 05, 2015
OK, fine.

So how can I start decreasing my stress and burnout symptoms & work on increasing my resilience?
Systemic Change is Necessary.

• Better EHRs, dynamic, user-friendly, that help prioritize, share, and act upon that information
• Team approach, including PAs and NPs
• Scribe services
• Practice management systems
• Stanford Med’s “time bank” approach - often-unappreciated work such as mentoring, serving on committees, covering shifts earns credits to use for work or home-related services such as laundry, meal delivery, house-cleaning
The system needs to change, but we also need to take care of ourselves.

• This is why we must increase our personal resilience.
• We simply can't be effective physicians and caregivers if we don't take care of ourselves.
resilience
rəˈzilyəns/
noun
noun: resiliency
1. the capacity to recover quickly from difficulties; toughness.
2. the ability of a substance or object to spring back into shape; elasticity.

*A human ability to recover quickly from disruptive change, or misfortune without being overwhelmed or acting in dysfunctional or harmful ways.

*Ability to recover from setbacks, adapt well to change, and keep going in the face of adversity.
WHERE DO YOU GET YOUR RESILIENCE FROM?
Survey responses from 835 British employees.

My organization
The work I do
My relationships
Myself

SOURCE “TOUGH AT THE TOP,” BY SARAH BOND AND GILLIAN SHAPIRO HBR.ORG
WHAT’S THE BIGGEST DRAIN ON RESILIENCE AT WORK?
Survey responses from 835 British employees.

- When I am challenged on work matters
- When I am juggling day-to-day working life and family/non-work responsibilities
- When there have been upheavals in my personal life
- When the nature of the work takes me outside my comfort zone
- When I feel I am being criticized personally
- When the volume or pace of work stretches me to my limits
- When I am managing difficult relationships/politics in the workplace

SOURCE “TOUGH AT THE TOP,” BY SARAH BOND AND GILLIAN SHAPIRO
HBR.ORG
JANUARY 05, 2015
But while systemic change is slow and often out of your control, personal change is in your control. Mindfulness can help.
Mindfulness in the Media

‘Mindful’ commuters say deep breaths, clear mind keep them calm under stress

TIME Special Edition
MINDFULNESS
THE NEW SCIENCE OF HEALTH AND HAPPINESS
Tune In to Your Body
The Power of Slow Eating
Five-Minute Meditation

The Atlantic
Breathing In vs. Spacing Out

The New York Times Magazine
The explosion in the field over the last few years has led to an overwhelming number of one-off studies about the effects of mindfulness and meditation on just about any health-related issue, many are of poor quality.

According to PubMed, the U.S. National Library of Medicine’s database of biomedical papers, there were fewer than 800 papers on mindfulness or meditation in 2000. Now there are nearly 8,000 papers, more than half of which were published since 2014.
IN DEFENSE OF MINDFULNESS: The strongest evidence was for MBSR, MBCT, and MBI in improving depression, anxiety, and pain.

THE RESEARCH: The authors evaluated the strength of evidence for several different meditation practices in improving a variety of “stress-related outcomes” related to both mental and physical health.

18,753 citations, 47 trials with 3515 participants
More evidence.

- Assessed **142 clinical trials**, with a total of more than 12,000 participants with a variety of mental and behavioral health conditions.
- Reached the same conclusion as previous authors.
- MBIs were generally **just as effective** as standard first-line treatments like cognitive behavioral therapy (CBT) or antidepressants—for people with depression and anxiety, both immediately post-treatment and in follow-ups.
History of Mindfulness in the U.S

• In 1979, Jon Kabat-Zinn developed a program called Mindfulness-Based Stress Reduction (MBSR) at UMMS
  • it helped to bring the principles and practices of mindfulness meditation traditions, largely rooted in the Buddhist Dharma, into a mainstream medical setting for clinical application and scientific study (work that continues today at the school’s Center for Mindfulness.)

• Kabat-Zinn described mindfulness as an “awareness that arises through paying attention, on purpose, in the present moment, nonjudgmentally” – this definition stuck around.

• Mindfulness can be cultivated by activities such as yoga, tai chi, qi gong. Most of the literature has focused on mindfulness that is developed through mindfulness meditation.
Then, what is meditation?

• “Umbrella term that covers a wide array of contemplative practices, many of which are drawn from Buddhist traditions but have often been adapted and secularized for application in Western society,”

  Wendy Hasenkamp, Ph.D.,
  science director at the Mind & Life Institute
  and visiting professor of contemplative sciences
  at the University of Virginia

• “We still don’t have any single authoritative definition or source that defines meditation in a way that’s accepted by all researchers in a contemporary context,”

  - David Vago, Ph.D.,
  research director of the Osher Center for Integrative Medicine
  and director of the Contemplative Neuroscience & Integrative Medicine Laboratory
  at Vanderbilt University Medical Center
Studies show increased resilience takes 1000s of hours to cultivate through mindfulness meditation.

So why bother trying?

- Self-regulation practices that train attention and awareness bringing mental processes under greater voluntary control.

- Fosters general mental well-being and development and specific capacities such as calmness, clarity and concentration. (Walsh & Shapiro, 2006)
Mindfulness is state of being.

• Cultivate by practice = mental-training / mind-training

• Practice of cultivating non-judgmental attention to present thoughts, sensations, emotions, physiological states → leads to emotional well-being, greater access to coping and problem-solving strategies, and optimal performance.

• Practice of attending to the breath, body sensations, thoughts, feelings and even awareness itself. (Susan Smalley, Ph.D., professor emeritus of psychiatry at UCLA & founder of the UCLA Mindful Awareness Research Center)

• Non-judgmental does not mean non-discerning.*
Mindfulness Bases

- **Attention and Concentration** – a wandering mind is an unhappy mind (default mode network), decreased rumination.

- **Clarity of Awareness** – what is actually happening? It is so easy to check-out mentally and emotionally, especially in the age of devices. Less emotional reactivity. Meta-cognitive awareness.

- **Equanimity** – unshakable BALANCE of mind, rooted in insight. It is not detached or passive.

- **Appreciation and Letting Be** – many of us are used to driving ourselves hard. We think of training as a way to try to force change, push, pull, cajole and badger ourselves into becoming something different. Mindfulness training encourages a different approach.

- **Embodiment** – baseline tendency to “live in our heads.” The body senses rather than thinks, so, by allowing body sensations to be felt, we can drop into a fuller sensory palette.
Mindfulness neurophysiology, in a HAND
Simplified Brain Model – Triune Brain

Triune Brain = Neuroscientist
Paul D. MacLean, Ph.D.

Fist Model = Dan Siegel, MD
Evidence that brain develops (and continues to function) from the bottom up

How does this affect Thinking? Emotion? Body Health?
Figure 1. The Stress Response and Development of Allostatic Load.
The perception of stress is influenced by one’s experiences, genetics, and behavior. When the brain perceives an experience as stressful, physiologic and behavioral responses are initiated, leading to allostasis and adaptation. Over time, allostatic load can accumulate, and the overexposure to mediators of neural, endocrine, and immune stress can have adverse effects on various organ systems, leading to disease.
Another side of Meditation: Compassion

Compassion toward self.  

Prosocial behavior.
Interconnection

“The human mind, when it doesn’t do the work of mindfulness, winds up becoming a prisoner of its myopic perspectives that puts ‘me’ above everything else. We are so caught up in the dualistic perspectives of ‘us’ and ‘them’. But ultimately there is no ‘them’. That’s what we need to wake up to...”

- Jon Kabat-Zinn
So how do meditation and resilience connect?

- Resilience
- Outlook
- Attention
- Generosity
• World-renowned neuroscientist Richard Davidson has found evidence that mindfulness does increase resilience, and the more mindfulness meditation you practice, the more resilient your brain becomes.

• “Well-being is fundamentally no different than learning to play the cello.”
Other Interventions to Mitigate Burnout ...

- **Start your day by relaxing.** Don’t just jump out of bed like a scared lemur.

- **Incorporate healthy eating, exercise and sleeping habits.**

- **Set personal boundaries.** Don’t overextend yourself. Learn how to say “no” to certain things. If spending more time with your family is important, then always aim to leave work at a certain time.

- **Take a break from technology.** Set aside a few minutes a day where you completely disconnect from your laptop, cell phone and e-mail.

- **Nurture your creative inclinations.** Start a hobby that has nothing to do with work. Creativity and hobbies can be a powerful ally against burnout.

- **Rediscover the joy of practicing medicine.** Take a moment to reconnect with the reason you got into medicine in the first place. Think back to a moment where you felt happy and appreciated. Write it down and strive to achieve that feeling at least once a day.

- **Take time off.** If burnout seems unavoidable, take a break from work. Go on vacation. Use the time off to recharge and gain perspective on your priorities. The world won’t end. Promise.
“Between stimulus and response there is a space. In that space is our power to choose our response. In our response lies our growth and our freedom.”

- Viktor Frankl
"I'm learning how to relax, doctor —
but I want to relax better and faster!
I want to be on the cutting edge of relaxation!"
Additional References not Directly Cited in the above Slides

11. West CP, Shanafelt TD, Kolars J. Quality of life, burnout, educational debt, and medical knowledge among internal medicine residents. JAMA 2011;306:952-60.