



**Mental Health, Healthy Lifestyle Behaviors and Organizational Wellness Support  
During the COVID-19 pandemic in Infection Professionals: Implications for Action**

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September 28, 2023

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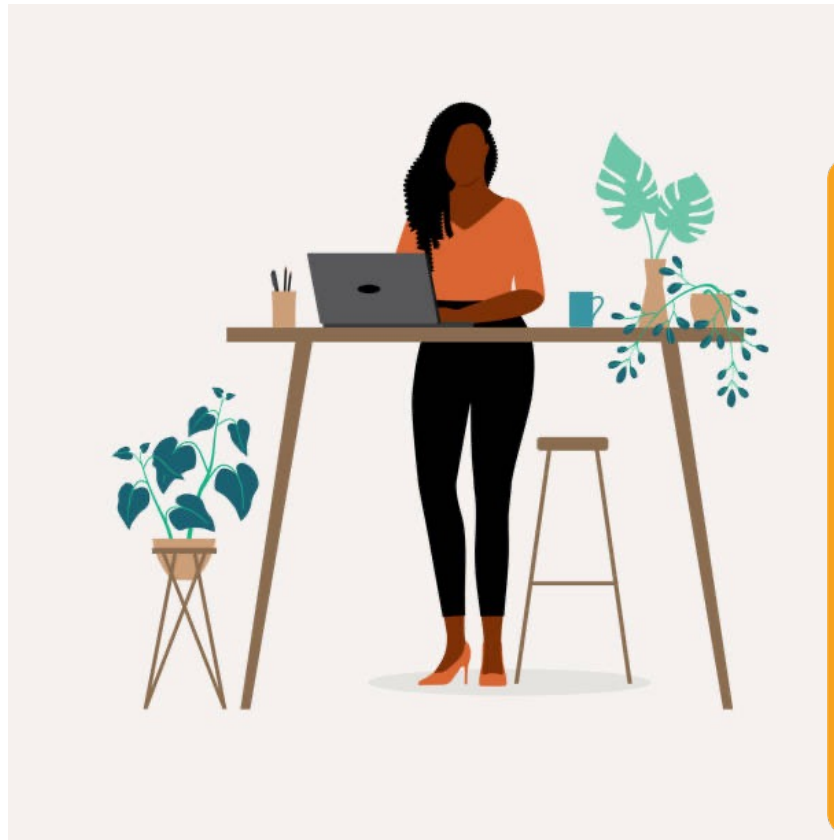
# A Big Dose of Vitamin G to Our Terrific Research Team and To All of You!

- Andreanna Pavan Hsieh
- Kate Gawlik
- Jacqueline Hoying
- Alai Tan
- Jinjian Mu
- Ann Marie Pettis
- Devin Jopp



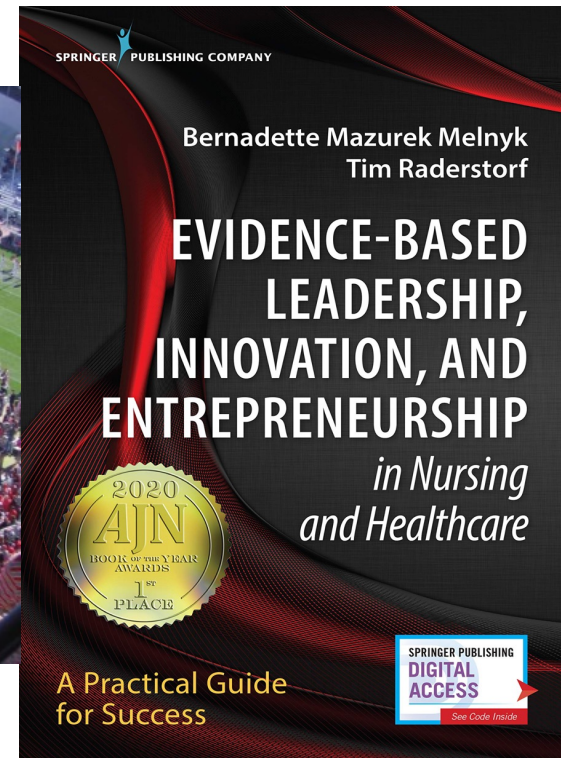
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**To stay alert, have more energy and decrease our cardiac risk, stand more, move more and sit less!**



# From a Small Coal Mining Town

## Chapter 2: My Story



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# EBP + Clinician Well-being + SDH = The Quintuple Aim in Healthcare

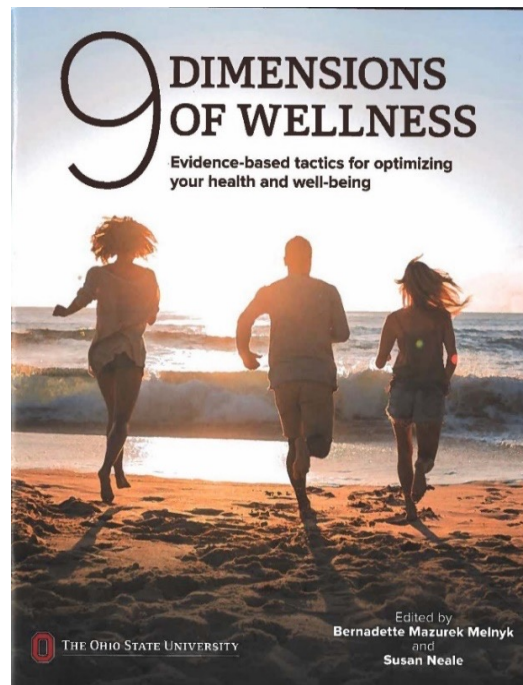
- Enhance the patient experience (includes quality)
- Improve population health
- Decrease costs
- Improve the work life and well-being of healthcare providers
- Advance health equity



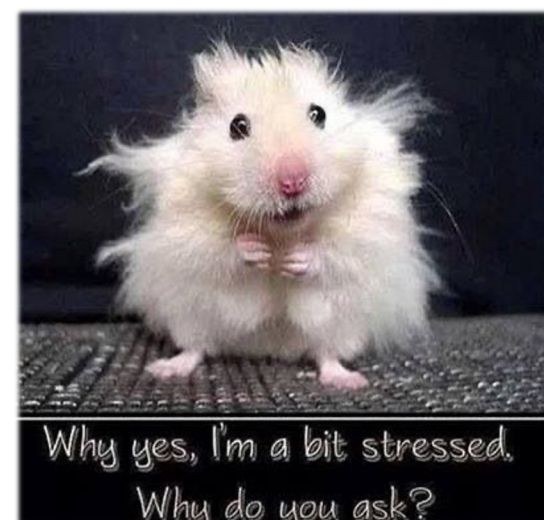
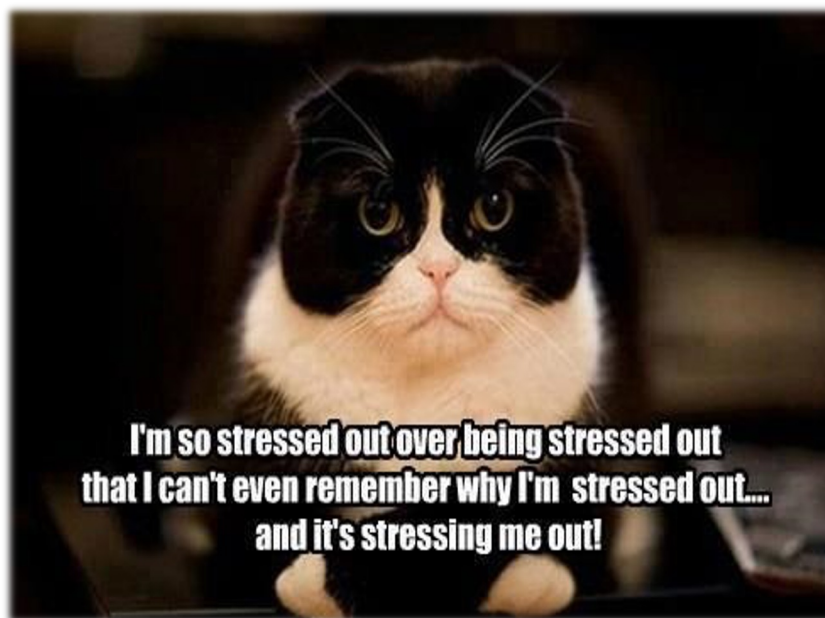
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# Wellness

- The optimal state of living well, regardless of an individual's spectrum of health
- Building strong wellness cultures, fixing system issues that cause burnout, and providing evidence-based wellness programming is not a nicety, ***it is a necessity*** because of the current state of mental health problems and chronic disease across the nation



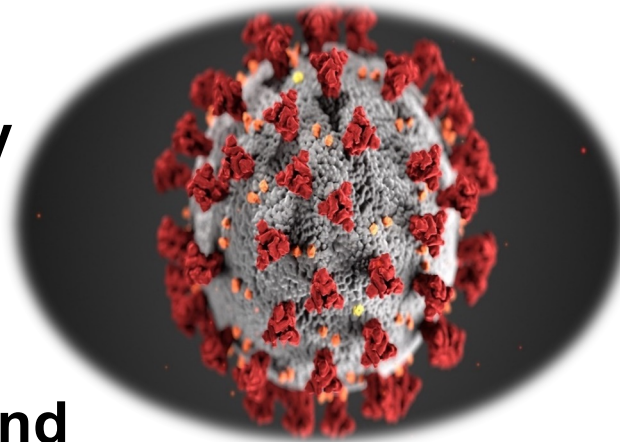
# Burnout, Stress and Depression Were Public Health Epidemics in the U.S. Before The COVID-19 Pandemic



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# COVID-19 Further Triggered Mental Health Problems and Unhealthy Lifestyle Behaviors

- Feelings of **despair**
- **Languishing**
- Fear for **loved ones**
- Decreases in **job security**
- Increases in **loneliness**
- Mindset switch from “**thriving**” to “**survival**”
- **Zoom fatigue, burnout and languishing**
- **Increases in alcohol use**
- **Unhealthy eating patterns**



- Feelings of **hopelessness**
- Increases in **anxiety**
- Decreases in **financial security**
- **Social withdrawal**
- **Sleep disturbances**
- **Declines in Physical Activity**



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# What is Known From Recent National Studies

- Burnout in the workforce is currently as high as 50 to 70% in many organizations
- Healthcare claims for depression and anxiety skyrocketed during the pandemic- 3x higher
- Nearly half of employees feel their job has made their mental health worse since the onset of the pandemic
- 40% of employees feel their employer has not supported their mental health during the pandemic, with the lack of support felt most among mothers
- 66% don't feel comfortable talking about their mental health with their manager
- Lack of recognition and belonging is a major source of stress and depression
- 97% of respondents on a recent Calm business survey said that employers should be working to improve the mental health of their employees
- Burnout is strongly associated with depression and clinical anxiety
- **Mattering to an organization matters** and is associated with less burnout, depression and anxiety
- **Culture matters:** If people perceive their workplace culture as supportive of their well-being, they have better outcomes and were less impacted by the COVID-19 pandemic



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# The Terrible Toos

(Adapted from Allo, 2009)



*Too much stress, Too much work, Too many tasks, Too little time for self-care*

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# Causes of Burnout and Distress in Healthcare Professionals

- Increased clinical demands
- Decreased control
- Poorly functioning teams
- Role ambiguity
- Moral distress
- Reimbursement issues
- Decreased time with patients
- Difficulty balancing personal & professional lives
- Inefficiency of the Electronic Medical Record
- Isolation



# Consequences of Burnout

There are many consequences of burnout:

CLINICIANS AND LEARNERS	HEALTH CARE ORGANIZATIONS
<ul style="list-style-type: none"><li>▪ Occupational injury</li><li>▪ Problematic alcohol use</li><li>▪ Risk of depression and suicide</li><li>▪ Career regret</li><li>▪ Suboptimal professional development</li></ul>	<ul style="list-style-type: none"><li>▪ Fewer available staff (absenteeism and turnover)</li><li>▪ Lower morale and productivity</li><li>▪ Presenteeism (working while sick)</li><li>▪ Threat to organizational reputation</li></ul>

## BURNOUT LOWERS PATIENT CARE QUALITY:

- Resulting staffing challenges decrease patients' access to care.
- High workloads, administrative burdens, and poorly designed technologies divert clinicians' time away from patient care.
- Workplace ethical dilemmas can erode clinician professionalism.
- Barriers to patient-clinician communication adversely affect patient satisfaction and health outcomes.
- Safety incidents, medical errors, and malpractice claims are more likely.

**\$4.6 BILLION**

Estimated societal costs attributable to burnout in the United States each year.

Reference: [www.nam.edu/initiatives/clinician-resilience-and-well-being/](http://www.nam.edu/initiatives/clinician-resilience-and-well-being/)

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# The Business Case for Why Organizations are Investing in Wellness?

- For every dollar invested in wellness, there is typically a return of \$2.00 to \$4.00 in reduced healthcare costs, higher engagement, improved productivity and lower absenteeism/presenteeism



**400**  
physicians commit suicide each year, a rate more than **2X** that of the general population  
*Andrew & Brenner, 2015*



Physician rates of depression remain alarmingly high at

**39%**  
*Shanafelt, 2015*

**23-31%**  
Prevalence of emotional exhaustion among primary care nurses  
*Gomez-Urquiza et al, 2016*

**24%**  
of ICU nurses tested positive for symptoms of post-traumatic stress disorder  
*Mealer et al., 2007*

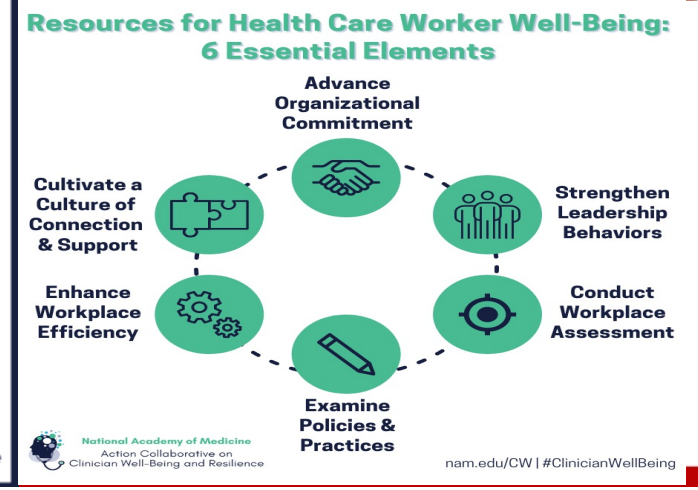
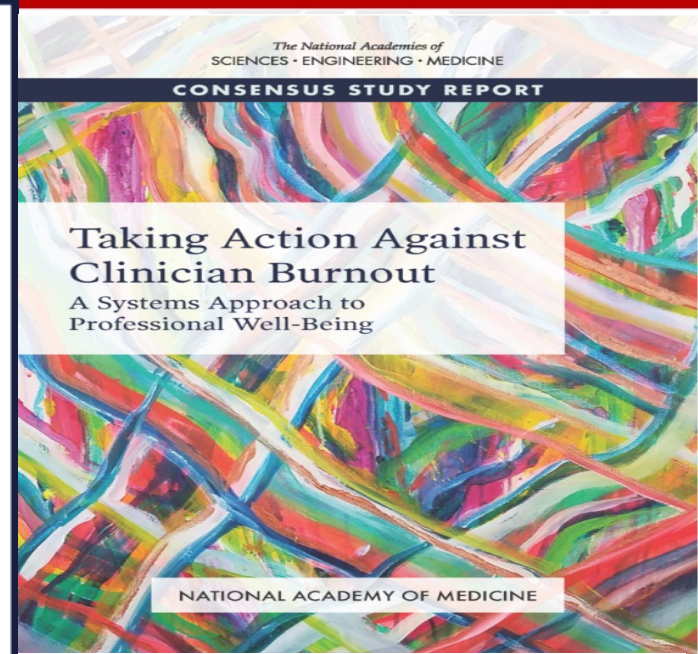
# How can we protect the health of the people who protect our own?



**National Academy of Medicine**  
Action Collaborative on Clinician Well-Being and Resilience

Learn more at [nam.edu/ClinicianWellBeing](http://nam.edu/ClinicianWellBeing)

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National Academy of Medicine  
Action Collaborative on Clinician Well-Being and Resilience

[nam.edu/CW](http://nam.edu/CW) | #ClinicianWellBeing

# National Academy of Medicine

## *The National Plan Priority Areas*

A graphic for the National Plan for Health Workforce Well-Being. It features a dark blue background with a white arrow pointing right. Inside the arrow, there is a colorful geometric pattern of triangles in shades of green, blue, and white. The text "National Plan for Health Workforce Well-Being" is written in bold, dark blue font on the white background of the arrow.

### National Plan for Health Workforce Well-Being

- Create & sustain **positive work** and **learning** environments and culture.
- Invest in measurement & assessment **strategies** and **research**.
- Support mental health & **↓ stigma**.
- Address compliance, regulatory, & policy **barriers for daily work**.
- Engage **effective technology** tools.
- Institutionalize **well-being** as a **long-term value**.
- Recruit and retain a **diverse & inclusive workforce**.

See <https://nam.edu/initiatives/clinician-resilience-and-well-being/national-plan-for-health-workforce-well-being/>

## The National Study Methods

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Melnyk et al., 2023, *American Journal of Infection Control*

A one-time survey administered to members of The Association for Professionals in Infection Control and Epidemiology

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Survey questions asked demographics and assessed mental health, well-being and perceptions of workplace wellness support

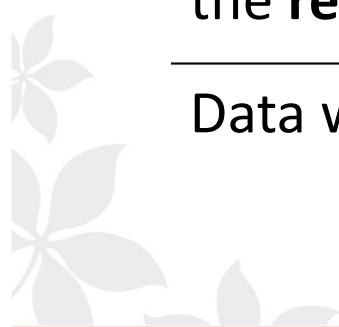
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6,000 members were selected to participate via random sampling, the **response rate was 15.5%** (n = 926)

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Data were collected between May 2021 – July 2021

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# Sample Characteristics

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Female (93.5%)

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Non-Hispanic white (86.8%)

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Married/in a relationship (82.5%)

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Had a bachelor's (41.2%) or Masters (42.3%)

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Between the ages of 35 and 64 (77.1%)

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Worked 9-10 hours/day (58.2%)

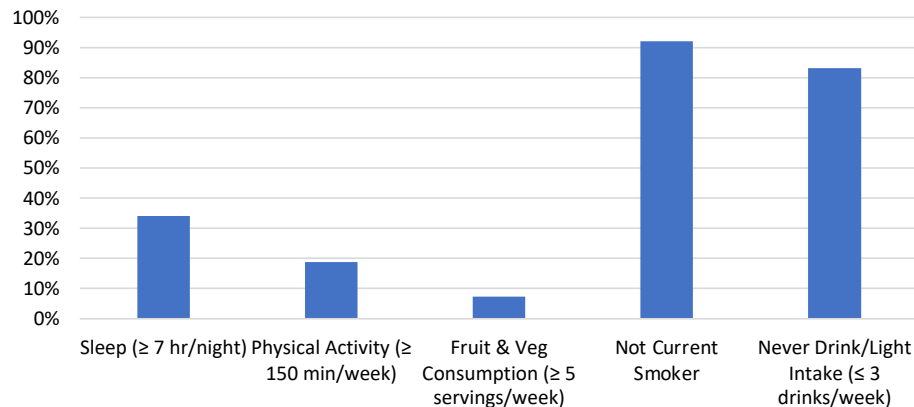
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Worked in an acute care setting (68.1%)

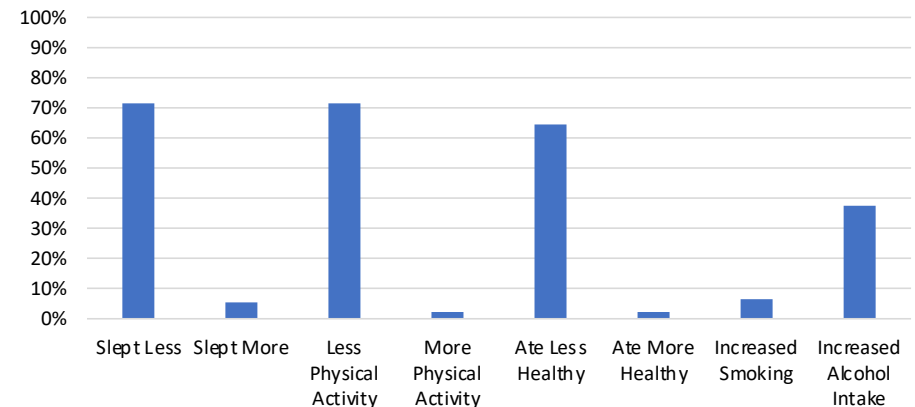


# Healthy Lifestyle Behaviors and Related Changes during the COVID-19 Pandemic

Proportion of Professionals Meeting the CDC Recommended Healthy Lifestyle Behavior Guidelines



Proportion of Professionals Reporting a COVID-19 Impact on Healthy Lifestyle Behaviors

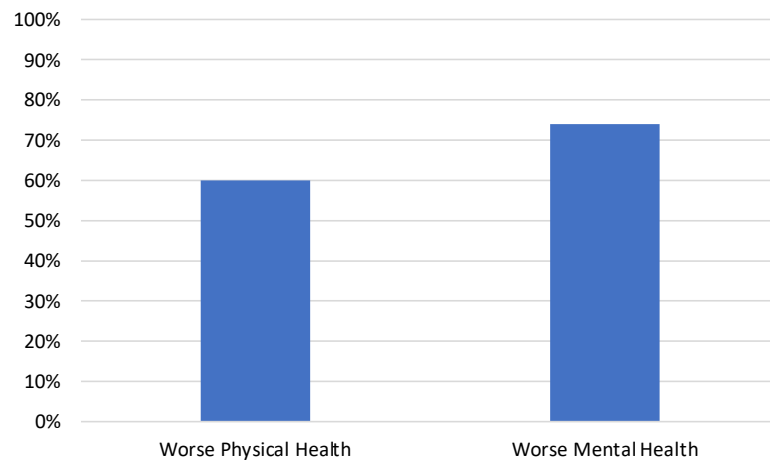


- Only a small proportion of professionals met the guidelines
- **34%** slept ≥ 7hrs/night
- **18.8%** participated in ≥ 150+ min of physical activity/week
- **7.3%** consumed ≥ 5 servings of fruit + veg/day

- COVID-19 resulted in most professionals engaging in less sleep (**71.5%**), less physical activity (**64.5%**), and less healthy eating (**61%**)
- More than a third increased alcohol intake (**37.4%**)

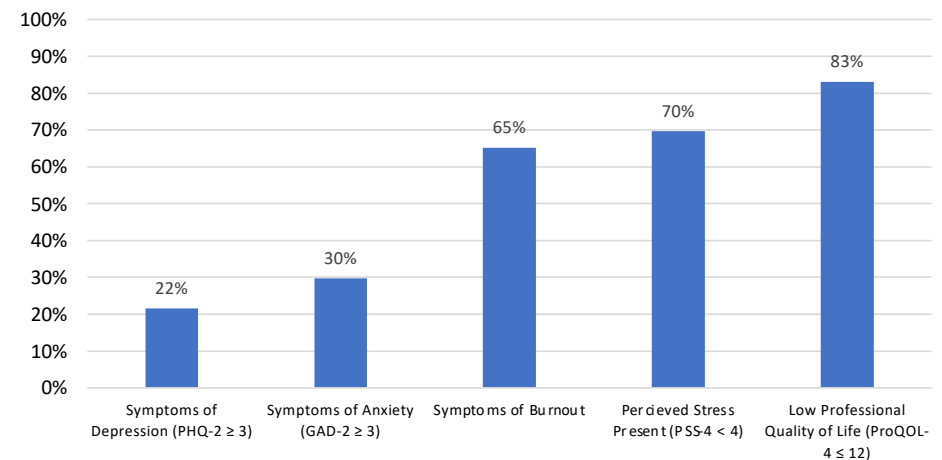
# Mental/Physical Health and the Related Changes during the COVID-19 Pandemic

Proportion of Professionals Reporting Worse Physical and Mental Health due to COVID-19



- **60.0%** reported worsening physical health
- **74%** reported worsening mental health

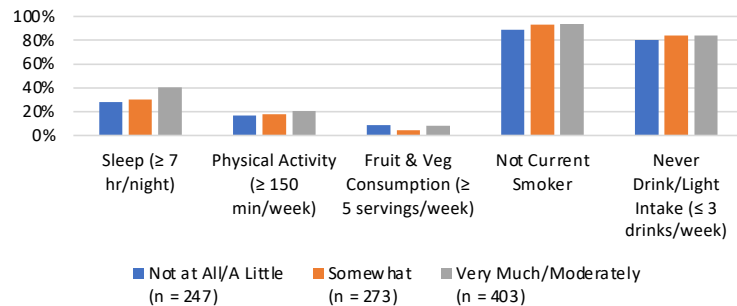
Proportion of Professionals with Depression, Anxiety, Burnout, Stress, and Low Professional Quality of Life



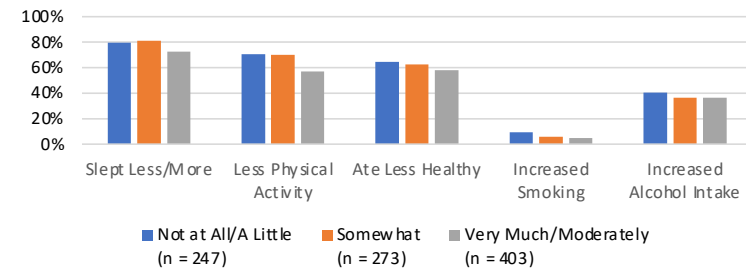
- Rates of burnout (**65%**), stress (**70%**), low ProQOL (**83%**), depression (**22%**) and anxiety (**30%**) were high

# Associations of Workplace Wellness Support with Healthy Lifestyle Behaviors and the Related Changes during COVID-19 Pandemic

Proportion of Professionals Meeting the CDC Recommended Healthy Lifestyle Behavior Guidelines by Perceived Amount of Workplace Wellness Support



Proportion of Professionals Reporting a COVID-19 Impact on Healthy Lifestyle Behaviors by Perceived Amount of Workplace Wellness Support

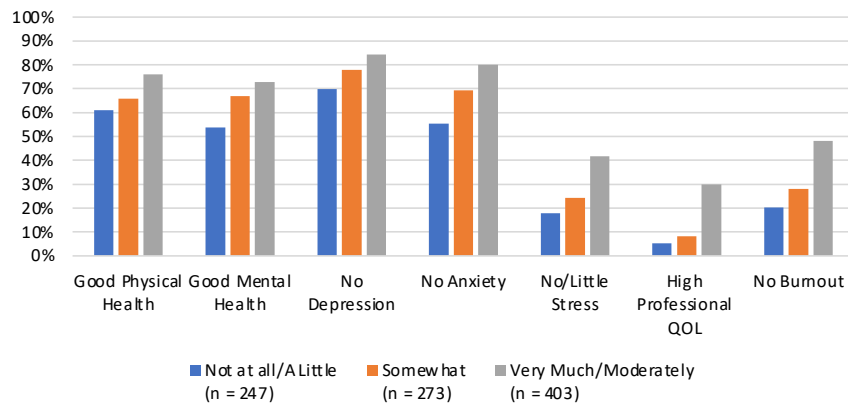


- The **proportion of professionals** who had  $\geq 7$  hrs of sleep,  $\geq 150$  min exercise, and no smoking **increased with higher perceived workplace wellness support**.
- Compared to those whose workplaces provided a little/no support, professionals whose workplaces supported wellness very much/moderately had a **67% higher odds** of obtaining  $\geq 7$  hours of sleep/night .

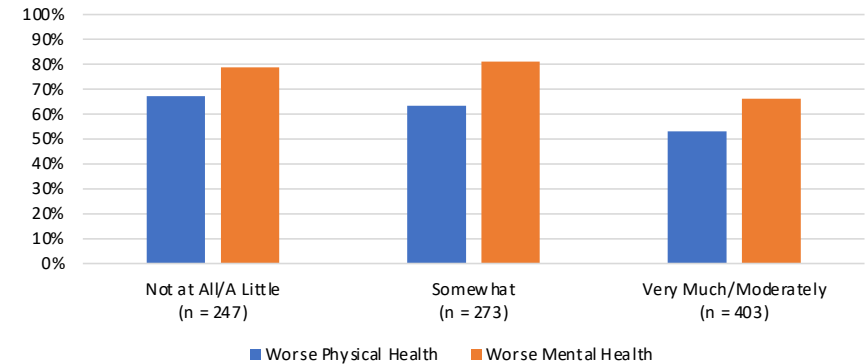
- Professionals with very much/moderate support **were less likely** to report a negative impact of COVID-19 pandemic on their healthy lifestyle behaviors compared to those with a little or no support.
- Those with very much or moderate support had a **35% lower odds** to be impacted in sleep and **43% lower odds** to be impacted in physical activities compared to those with no or a little support.

# Associations of Workplace Wellness Support with Health and the Related Changes during COVID-19

Proportion of Professionals with Good Health By Perceived Amount of Workplace Wellness Support



Proportion of Professionals Reporting Worse Physical and Mental Health due to COVID-19 by Perceived Amount of Workplace Wellness Support

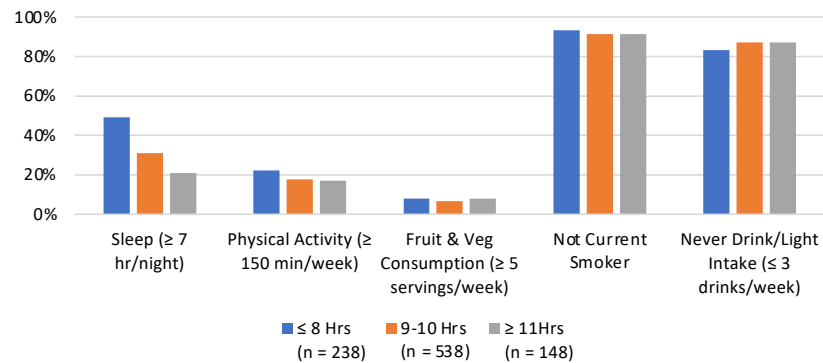


- Professionals whose workplaces provided support “somewhat” were **more likely** to have good mental health, no depression, no anxiety, and no burnout compared to those with no or a little support.
- Professionals whose workplaces supported wellness very much or moderately **had significantly higher odds** in all health indicators compared to those with no or a little support

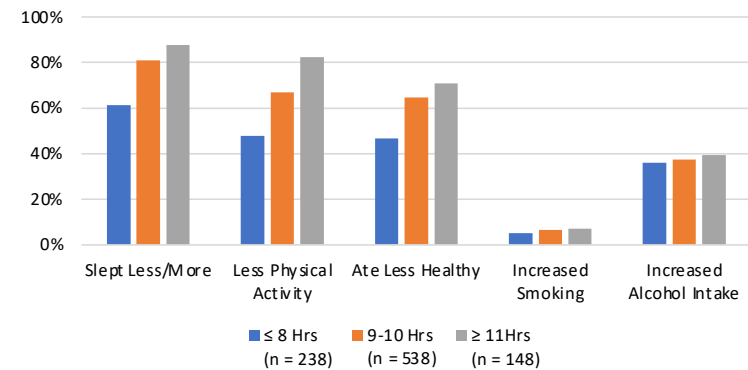
- Professionals with very much or moderate wellness support were **less likely** to report negative impacts of COVID-19 and had **43% lower odds** to having worse physical health and a **49% lower odds** to having worse mental health when compared to those with no or a little support

# Associations of Shift Length with Healthy Lifestyle Behaviors and the Related Changes during COVID-19

Proportion of Professionals Meeting the CDC Recommended Healthy Lifestyle Behavior Guidelines by Shift Length



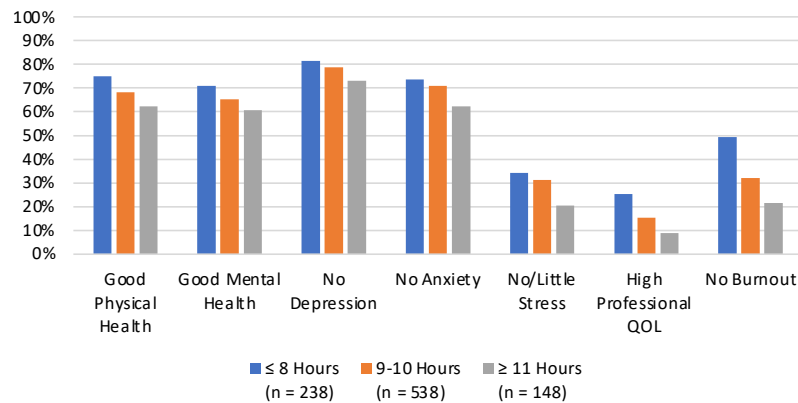
Proportion of Professionals Reporting a Negative COVID-19 Impact on Healthy Lifestyle Behaviors by Shift Length



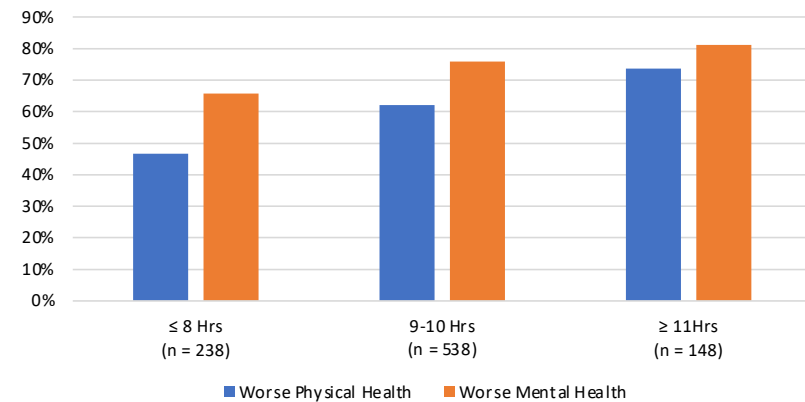
- The proportion of professionals meeting the healthy behaviors of sleep, physical activity, and not smoking decreased with longer work shifts.
- Compared to professionals with workday/shift of ≤8 hours per day, those who worked 9-10 hours or 11+hours per day were **less likely** to sleep ≥ 7 hours per night
- The proportion of professionals whose healthy behaviors were negatively impacted by COVID-19 increased with longer work shifts.
- There was a significant relationship between longer shift length and higher likelihood of negative impact of COVID-19 on sleep, physical activity, and less healthy eating.

# Associations of Shift Length with Health and the Related Changes during COVID-19

Proportion of Professionals with Good Health By Shift Length



Proportion of Professionals Reporting Worse Physical and Mental Health due to COVID-19 by Shift Length

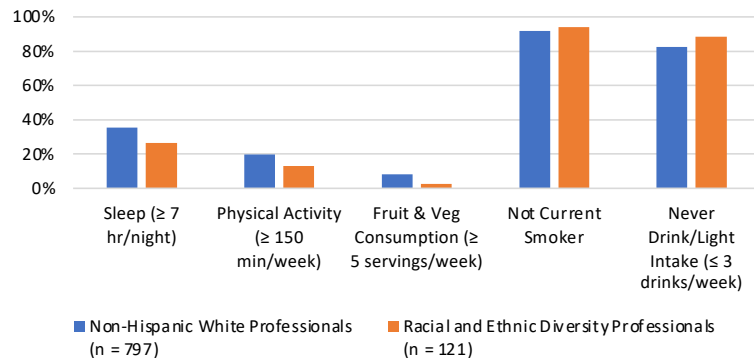


- The proportion of professionals with good health regarding all health indicators **decreased** with longer shift.
- Compared to professionals who worked ≤8 hrs/day, those who worked 9-10 hrs/day were **less likely** to have good physical health and no burnout
- Those who worked 11+hrs/day were **less likely** to have good physical health, good mental health, no anxiety, no/little stress, higher ProQOL, and no burnout

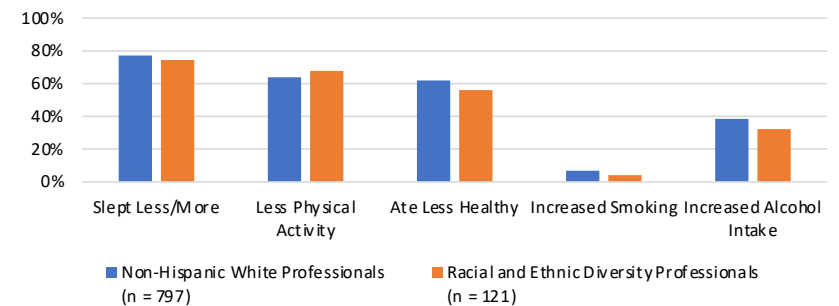
- Professionals who worked 9-10 hours or 11+ hours per day were **more likely** to report worsening physical health and worsening mental health due to the pandemic

# Associations of Race/Ethnicity with Healthy Lifestyle Behaviors and the Related Changes during COVID-19

Proportion of Professionals Meeting the CDC Recommended Healthy Lifestyle Guidelines by Race/Ethnicity



Proportion of Professionals Reporting a Negative COVID-19 Impact on Healthy Lifestyle Behaviors by Shift Length



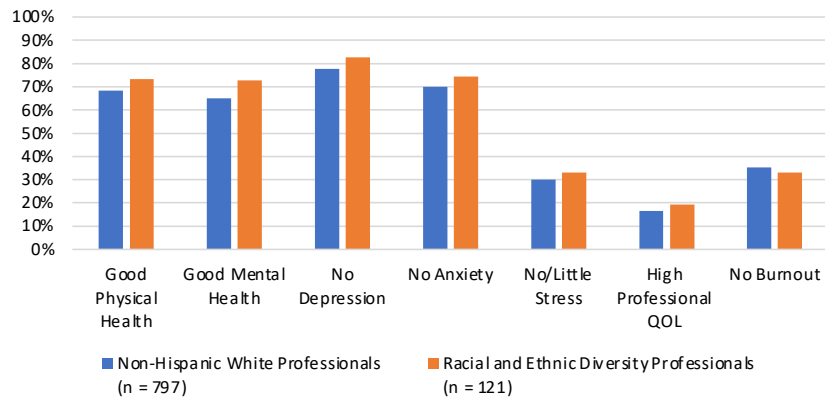
- Proportionally, non-Hispanic White professionals slept  $\geq 7$  hrs, exercised  $\geq 150$  min, and consumed  $\geq 5$  fruit & vegs **more frequently** than Racial and Ethnic Diversity professionals
- Racial and Ethnic Diversity professionals had an **85% higher odds** in no/light alcohol use compared to non-Hispanic White professionals

- There were **no significant differences** in the odds of negative impact of COVID-19 on healthy lifestyle behaviors between non-Hispanic White professionals and Racial and Ethnic Diversity professionals



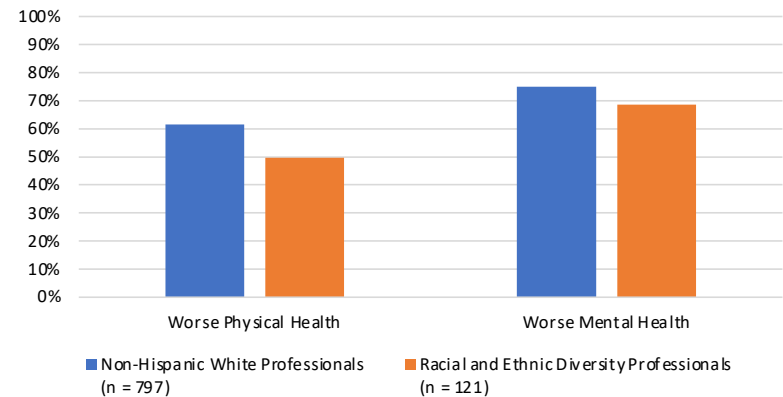
# Associations of Race/Ethnicity with Health and the Related Changes during COVID-19

Proportion of Professionals with Good Health by Race/Ethnicity



- Racial and Ethnic Diversity professionals had **larger proportions** reporting good physical health, good mental health, no depression, no anxiety, no/little stress, and high professional QOL than Non-Hispanic White professionals.

Proportion of Professionals Reporting Worse Physical and Mental Health due to COVID-19 by Shift Length



- Racial and Ethnic Diversity Professionals were **more likely** to have good mental health and **less likely** to be impacted by COVID-19 on physical health than Non-Hispanic White professionals.

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# The Current Research to Practice Time Gap

- Now reduced to 15 years from 2000 when it was 17 years!
- The average time from publication to implementation of five cancer control EBPs (e.g., mammography, colorectal cancer screening)
  - Kahn, Chambers & Neta, 2021
- It will only take a 150 more years to close the gap!
- *The gap between what we know and what we do is lethal!*
- We also need to de-implement what isn't working or based on best evidence



# Interventions to Improve Mental Health, Well-being, Physical Health and Lifestyle Behaviors in Physicians and Nurses: A Systematic Review

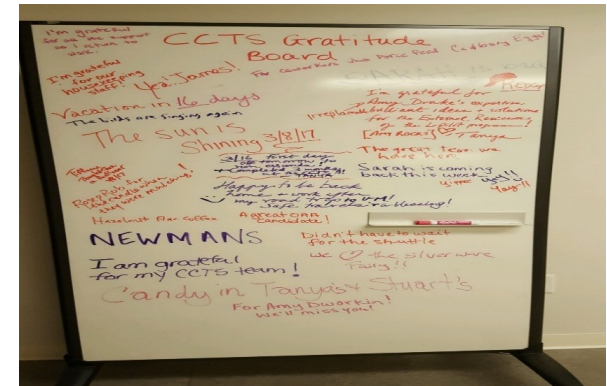
29 studies (2,708 participants)

Melnyk, Kelly, Stephens, Dhakal, McGovern, Tucker, Hoying et al. al., 2020, *American Journal of Health Promotion*

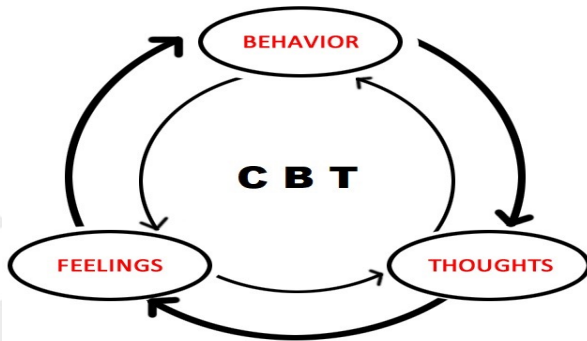


Mindfulness

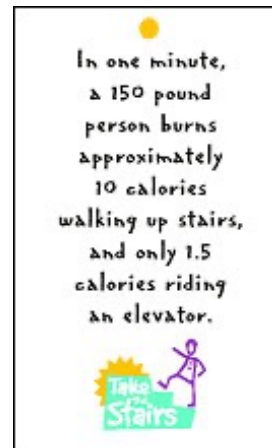
## What Works?



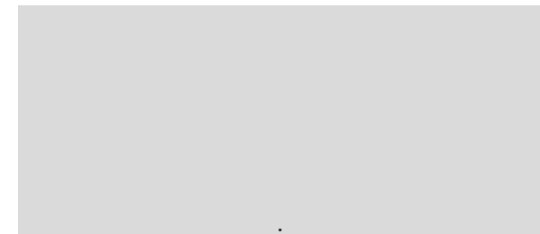
Gratitude



Cognitive-Behavioral Therapy/  
Skills Building



Sync your breathing with  
this



Deep Breathing: See [go.osu.edu/justbreathe](https://go.osu.edu/justbreathe)

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# The Importance of Culture, System-Focused and Individual-Focused Intervention Strategies to Improve Population Health



- Effectiveness  $\uparrow$  when individual, organizational and culture-focused interventions are combined.
- Organizational interventions manifest as work process of practice model changes
- Requires large-scale organizational changes and a commitment to resource reallocation

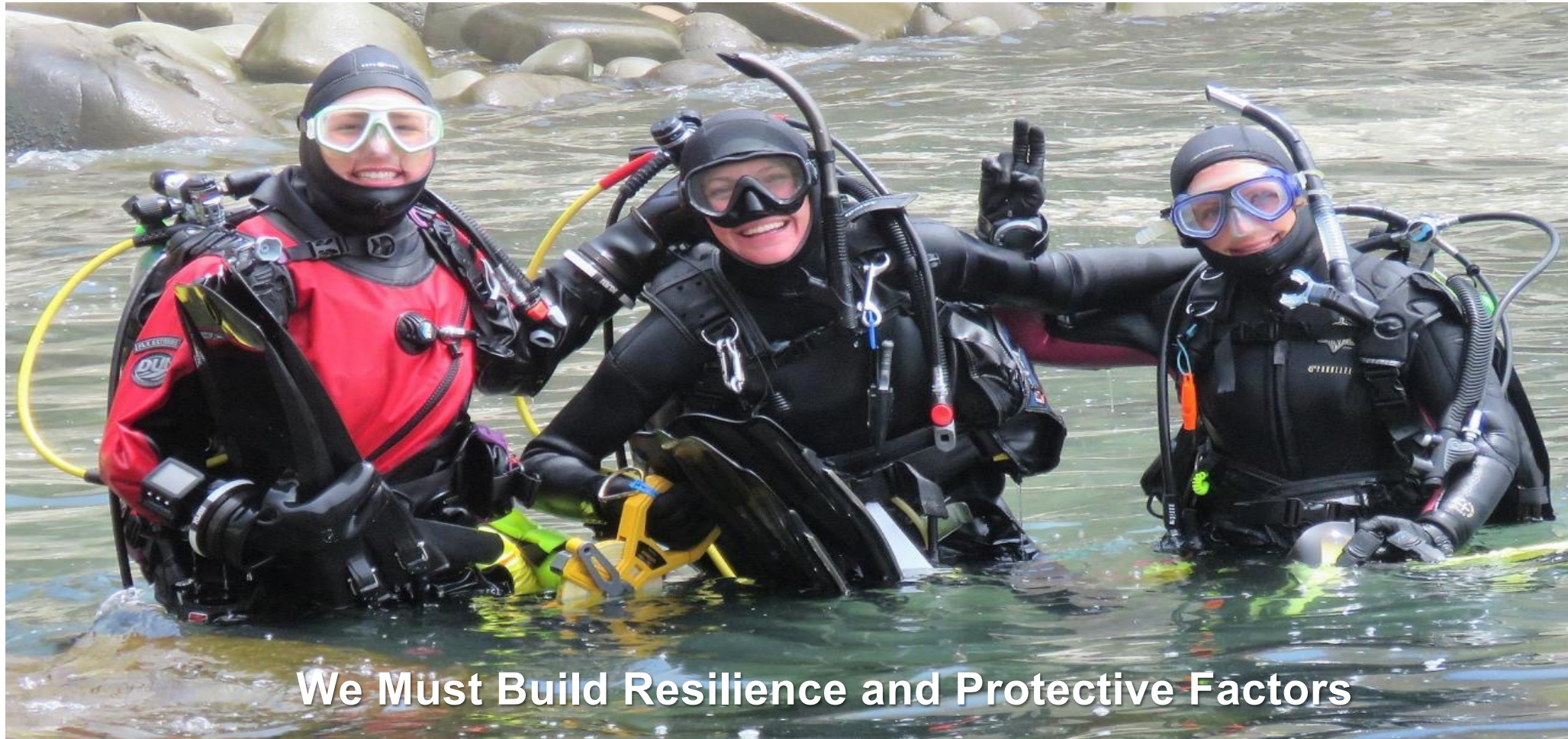
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**A Paradigm Shift is Needed from Crisis/Sick Care to Prevention and Early Evidence-based Intervention**



**“An Ounce of Prevention is Worth a Pound of Cure.”**

**-Benjamin Franklin**



**We Must Build Resilience and Protective Factors**

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**Don't Forget About Prioritizing YOU!**

**Good Self-Care is a Necessity, Not a Nicety**



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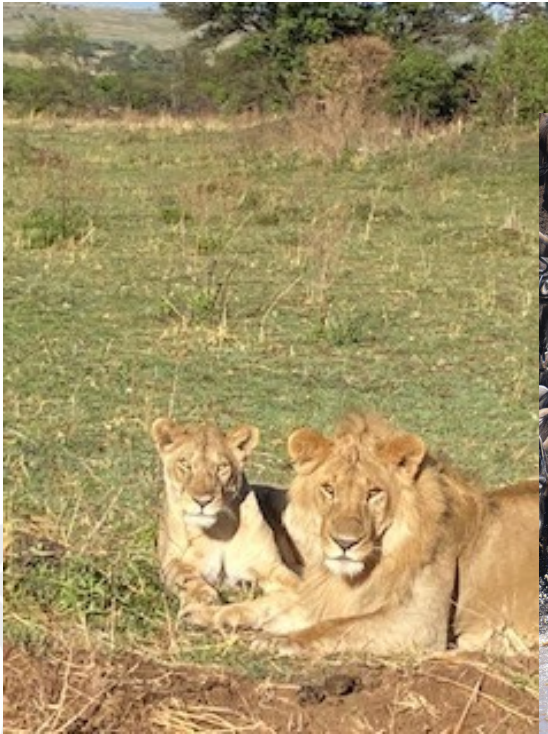
# Be Aware of Your Own Level of Burnout

Based on your definition of burnout, how would you rate your level of burnout?”

- 1 = *“I enjoy my work. I have no symptoms of burnout;”*
  - 2 = *“Occasionally I am under stress, and I don’t always have as much energy as I once did, but I don’t feel burned out;”*
  - 3 = *“I am definitely burning out and have one or more symptoms of burnout, such as physical and emotional exhaustion;”*
  - 4 = *“The symptoms of burnout that I’m experiencing won’t go away. I think about frustration at work a lot;”*
  - 5 = *“I feel completely burned out and often wonder if I can go on. I am at the point where I may need some changes or may need to seek some sort of help.”*
-



# Build in Periodic Activities to Disconnect and Experience Joy to Avoid Burnout



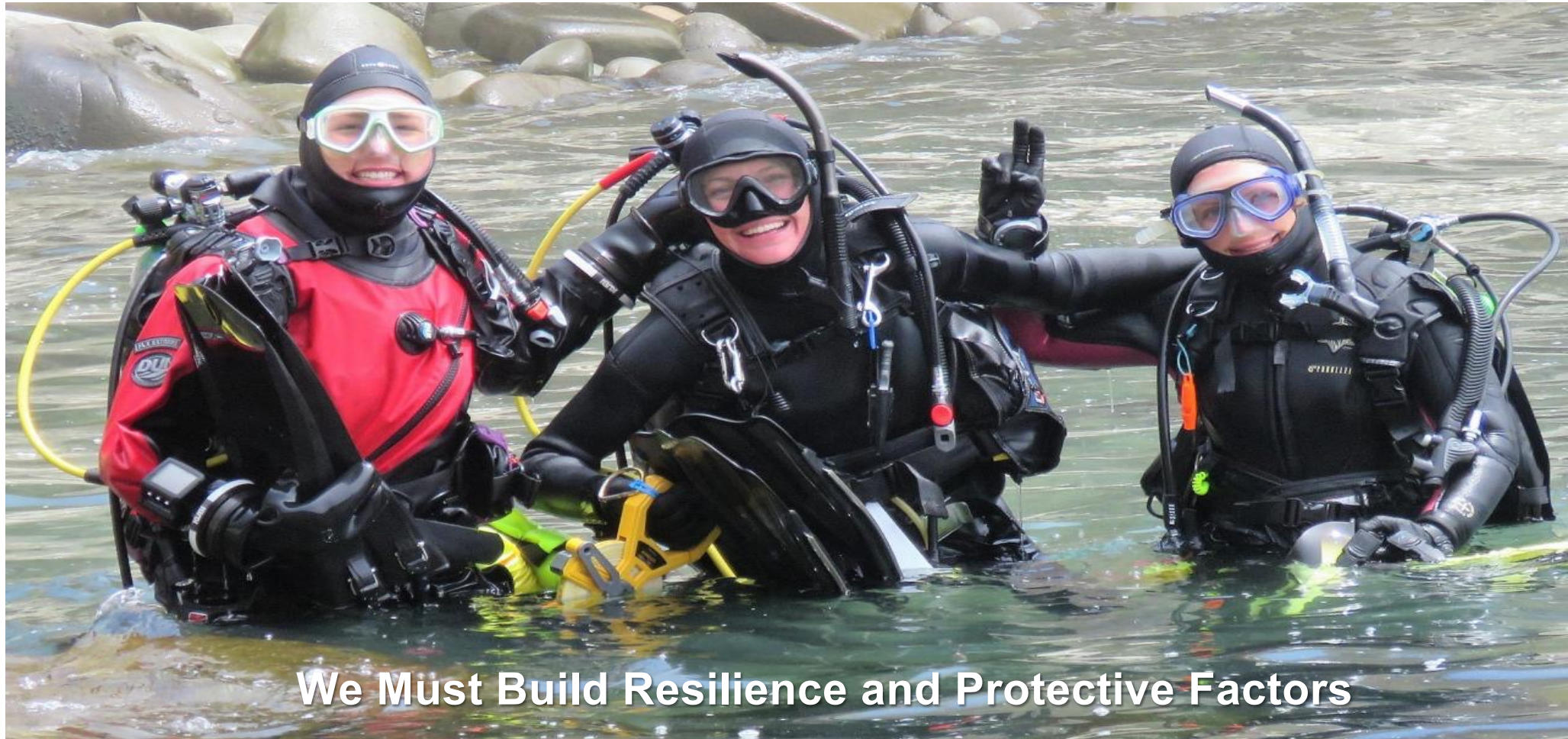
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**A Paradigm Shift is Needed from Crisis/Sick Care to Prevention and Early Evidence-based Intervention**



**“An Ounce of Prevention is Worth a Pound of Cure.”**

**-Benjamin Franklin**



**We Must Build Resilience and Protective Factors**

# Considering all Causes of Morbidity and Mortality, Behaviors are the #1 Killer



CULTURE!



STRATEGY!!!

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# Based on Evidence, What Do We Know?

People who have the following behaviors have 66% less diabetes, 45% less heart disease; 45% less back pain, 93% less depression, and 74% less stress

- **Physical activity** - 30 minutes 5 days per week (Reduce the time of meetings down from 60 to 50 minutes so you will have more time for short recovery breaks!)
- **Healthy eating** - 5 fruits and vegetables per day
- **No smoking**
- **Alcohol in moderation** – no more than 1 standard drink per day for women and men if you drink alcohol

*Getting 7 hours of sleep and regularly engaging in stress reduction will result in even greater reductions in chronic disease.*

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# Micro-Recovery Breaks & Brief Interventions Work

Use the 4-7-8 deep breathing technique



**Reduce meeting times and cancel unnecessary meetings to allow micro-recovery breaks!  
A 40% reduction in meetings increases productivity by 70%**

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# Evidence Plus Emotion = Behavior Change



# We Make Behavioral Choices Every Day





New Year's Resolutions  
for ~~2009~~ ~~2011~~ ~~2012~~ ~~2013~~ ~~2014~~ ~~2015~~

1. Lose <sup>more</sup> weight again
2. Get fit next year
3. Give up ~~alcohol~~ <sup>and cigarettes!</sup> drink less
4. Stand up <sup>find job</sup> to boss
5. Be nicer to my <sup>ex-</sup> wife
6. Sort out junk in <sup>life</sup> shed

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# The Next 30 to 66 days

- Which healthy lifestyle behavior will you commit to improving in the next 30 to 60 days?



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# **Time: A Big Excuse for Falling Off the Wagon with New Year's Resolutions**

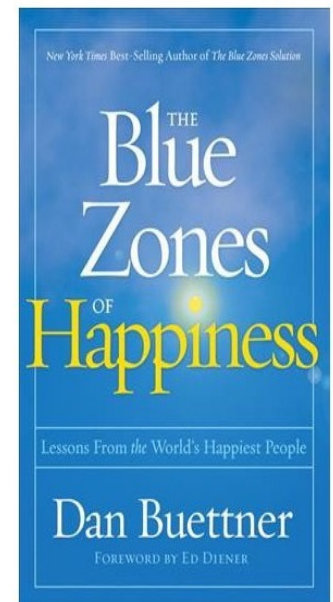


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# Three Keys for Happiness

## *Dreams/Purpose, Passion and Pride*

- To enhance pleasure, look for ways to add fun and joy to your daily routines (e.g., socialize often)
- To enhance purpose, increase opportunities to use your strengths to achieve meaningful goals
  - **Knowing your sense of purpose is worth up to 7 years of extra life expectancy!**
- To enhance pride, look for ways to align your job with your passions; reflect upon your accomplishments (none are too small!)



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# The Next 2-5 Years

What will you do in the next 2 to 5 years if you know that you cannot fail?

Shoot for the moon, even if you miss, you will land amongst the stars

*-Les Brown*

**There Is A Magic In Thinking Big!**



# My Main Reasons for Engaging in Healthy Lifestyle Behaviors: Who are Yours?



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**Now More than Ever, We Need to Keep  
Dreaming, Discovering, Delivering Wellness Cultures  
and Taking Good Self-Care  
Just “Do It!”**



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# Contact Information

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Speaker: **Ann Scheck McAlearney**, Ohio State University College of Medicine

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October 19, 2023

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Speaker: **Prof. Elaine Larson**, CBIC President, 2023

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October 20, 2023

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Speaker: **Prof. Didier Pittet**, University of Geneva, Faculty of Medicine

October 26, 2023

[PULLING THE PLUG ON THE SINK DRAIN](#)

Speaker: **Prof. Jean-Yves Maillard**, Cardiff University

[\(European Teleclass\)](#)

November 7, 2023

[AUDIT TOOLS FOR INFECTION PREVENTION AND CONTROL TEAMS](#)

Speaker: **Dr. Eva Elisa Alvarez**, Canary Health Service, Government of the Autonomous Community of the Canary Islands

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