Mindfulness Practice for Managers, Medical, Nursing Staff and Residents in a Health System: Creating a Culture and Process to Prevent Burnout and Promote Physical and Mental Health

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Mindfulness Practice for a Health System: Leadership, Culture Change & Process to Prevent Burnout & Promote Physical & Mental Health

Berkshire Health Systems (BHS), a full continuum community health system with 4,500 employees and residency training programs in medicine, surgery, psychiatry and dentistry, has achieved success in clinical quality measured by Health Grades, Care Chex (including top 100 hospitals in the country and number 1 in MA), Leapfrog (including an A rating every year since 2012--one of only 63 hospitals in the US) and CMS Patient Safety (number 1 in the country as measured by PSI 90). Yet, five years ago BHS identified burnout, compassion fatigue and secondary stress as significant workforce health issues. To address this, BHS, with an academic partner and the Kripalu Yoga-Meditation Center designed and conducted a randomized trial of Kripalu Yoga-Meditation versus CBT to mitigate burnout, compassion fatigue and secondary stress. The randomized trial was encouraging, and BHS implemented a 10-week yoga-mindfulness program and other mindfulness training opportunities for physicians, nurses, managers, residents and other staff. More than 200 physician and nursing leaders and managers have participated in at least one of the 10-week training programs, and more than 500 employees have participated in one or more of the retreats or focused workshops. A recent survey of managers indicated that more than 70 percent identified the use of their breath training when facing highly stressful situations. Measures of burnout, compassion fatigue and secondary stress have also improved. The panel will present the strategies for culture change, the programs that have been implemented, the randomized trial and will lead a brief mindfulness, gentle yoga experience for the participants that will give a feel for the training experience being offered for physicians, nurses, managers, residents and other staff at BHS. The audience participants will then be able to discuss with the panel the various elements of the program that are of interest to them.

**Presenters:**
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Burnout in Healthcare

2016

Controlled Interventions to Reduce Burnout in Physicians
A Systematic Review and Meta-analysis

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2017

Addressing Physician Burnout
The Way Forward

The US health care delivery system and the field of medicine have experienced tremendous change over the last decade. At the system level, narrowing of insurance networks, employed physicians, and financial pressures have resulted in greater expectations regarding productivity, increased workload, and reduced physician autonomy. Physicians also have to navigate a rapidly expanding medical knowledge base, more onerous maintenance of certification requirements, increased clerical burden associated with the introduction of electronic health records (EHRs) and patient portals, new regulatory requirements (meaningful use, e-prescribing, medication reconciliation), and an unprecedented level of scrutiny (quality metrics, patient satisfaction scores, measures of cost).

These challenges have taken a toll on US physicians. Burnout is a syndrome of exhaustion, cynicism, and decreased effectiveness at work. The burnout syndrome, first described in 1974, can affect workers in all fields, particularly those whose work involves an intense interaction with people (e.g., teachers, social workers, police officers, health care workers). The first large, national study of burnout among US physicians across all specialties did not occur until 2011. That study of 7288 participating physicians documented that approximately 45% of respondents reported errors, turnover, and higher mortality rates in hospitalized patients. Indeed, studies suggest a link between burnout and a reduction in the amount of time physicians devote to providing clinical care to patients. Given the particularly high rates of burnout in some primary care disciplines (e.g., family medicine and general internal medicine), burnout could amplify workforce shortages and affect access to care. Therefore, the high rates of burnout reported in US physicians can be considered both a marker of dysfunction in the health care delivery system and a factor contributing to dysfunction. To improve population health as well as the patient experience and to reduce the cost of care in the United States, it will be necessary to improve the work life of physicians and other health care professionals.

Although the problem of physician burnout has now been widely recognized, there is less information on how to address this problem. A recent systematic review and meta-analysis found that both individual and organizational interventions can make a difference. The evidence indicates that actions at the organization and individual level can counter a national problem. Substantive progress, however, is unlikely to occur until there is a coordinated effort to address this issue at the national and institutional levels.

IMPORTANT: Burnout is prevalent in physicians and can have a negative influence on performance, career continuation, and patient care. Existing evidence does not allow clear recommendations for the management of burnout in physicians.

OBJECTIVE: To evaluate the effectiveness of interventions to reduce burnout in physicians and whether different types of interventions (physician-directed or organization-directed interventions), physician characteristics (length of experience), and health care setting characteristics (primary or secondary care) were associated with improved effects.

DATA SOURCES: MEDLINE, Embase, PsycINFO, CINAHL, and Cochrane Register of Controlled Trials were searched from inception to May 31, 2016. The reference lists of eligible studies and other relevant systematic reviews were hand searched.

STUDY SELECTION: Randomized clinical trials and controlled before-after studies of interventions targeting burnout in physicians.

DATA EXTRACTION AND SYNTHESIS: Two independent reviewers extracted data and assessed the risk of bias. The main meta-analysis was followed by a number of prespecified subgroup and sensitivity analyses. All analyses were performed using random-effects models and
Burnout Defined as...

- Emotional exhaustion
- Depersonalization
- A low sense of accomplishment
- Compassion fatigue
- Secondary trauma


(Krasner MS et al: Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. JAMA 2009;302(12):1284-1293)

(Shanafelt TD: Enhancing meaning in work: A prescription for preventing physician burnout and promoting patient-centered care. JAMA 2009.)
Burnout and satisfaction with work life balance in US physicians deteriorated from 2011 to 2014.

- >50% of US physicians are now experiencing professional burnout
- 34% of all nurses
- 57-87% of trainees
- >60% of all health care workers


Burnout linked to…

- Poorer quality of patient care
- Lower adherence to recommended therapy
- Reduced productivity
- Lower work satisfaction
- Higher turnover and early retirement
- Increased substance use, depression, suicide
- Increase of medical errors

Krasner MS et al: Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. JAMA 2009;302(12):1284-1293

Our interest in evidence-based methods to mitigate stress and perhaps prevent burnout

- Collaboration of BMC with Kripalu to study effective stress reduction
- Positive results in randomized trial: 2013
- Waiting for right moment to implement
Chief Operating Officer’s Perspective:

The Why:

Caring for the caregiver is no longer the soft stuff.....
Quadruple Aim

Adapted from:

Bodenheimer T, Sinsky C. From Triple to Quadruple Aim: Care of the Patient Requires Care of the Provider. Ann Fam Med, November/December 2014 vol. 12 no. 6 573-576.
Value Proposition:

**Employees will have:**
• More energy, resiliency, and coping skills as they face the normal stressors of work and life
• More focus, clarity, creativity and compassion: **performance**
• Better health and sense of **wellbeing**
• Less resources spent on sickness, chronic disease
• Less distracted coworkers

**BHS will have:**
• Improved results and performance for the triple aim
• Best workforce, workplace and improved recruitment and retention

**Patients will have:**
• More engaged partners for their health
• Role models for health
• More support for their mind-body-spirit needs

**Community will have:**
• Ripple effect from the energy and knowledge emanating from the BHS community
Leadership

Mindfulness for Physician and Management

- Yoga and Meditation classes
- Full day mindfulness leadership retreat in June
- Increasing practice and incorporation
  - Management meetings and workshops
  - Incorporate into initiatives
  - Toolkit

- Metrics

HOW we lead
Mindfulness Yoga
Just Start, But Start With Leaders
Mindfulness Yoga
Administration & Physician Leaders
Eighty Five Managers @ Berkshire
Management Survey: With increased exposure to the mindfulness in leadership philosophy, what tools and techniques have you added to your leadership toolbox?

- Deep breathing: 71.02%
- Pause: 59.09%
- Reflection: 54.55%
- Greater self-awareness: 51.52%
- More patience: 50.00%
- Less reactive: 48.48%
- Slower pace: 6.06%
Developing a more mindful nursing practice

While being more mindful is a lifelong process, you can begin to explore the effects of mindfulness now with a few simple practices.

**Feeling your breath**
Set aside 10 minutes a day (or just a few minutes, if your time is very limited) to focus on your breathing. Notice the sensations of the breath as it travels in and out of your body. Don’t try to make the breath happen in any particular way; just notice your breathing as it’s happening. Of course, your mind will get caught up in other mental events, such as planning or daydreaming. But mindfulness simply invites your attention back to the breath without criticizing or judging the mind’s wandering. This “awareness of breath” meditation helps slow your mental activity and builds the capacity to stay focused. Taking a few slow, mindful breaths before entering a patient’s room can activate the parasympathetic nervous system, causing the “relaxation response,” which helps you feel more centered and more fully present with the patient.

**Tuning into your body**
If your mind becomes agitated with self-criticism, worry, and negative thinking, bring your attention to the physical sensations of your feet as they rest against the floor or other touchpoints of the body where it contacts other surfaces. You can practice this attention to body sensations virtually anywhere to help settle your distracted mind.

**Using movement**
Bringing awareness to moving your body mindfully can include gentle stretches in the morning during a break in your day or walking down the hallway to a patient’s room. Notice the physical sensations of your body moving, or the connection of your soles as your feet plant and lift from the floor. Be aware of the intricate interplay of nerves, muscles, tendons, and bones that allow movement to happen. Mindful movement can slow down the busy mind and increase your sense of feeling grounded.

**Practicing mindfulness in daily life**
You can bring greater attention to routine activities, such as brushing your teeth, taking a shower, or walking the dog. Try to notice and bring curiosity to the routine activity as if you were doing it for the first time, exploring it with all senses (sight, smell, sound, touch, or taste). You may discover something new.
• Created Self Care Committee
  ◦ Nursing staff / Supported by the wellness department
    • Created Meditation Rooms on the Unit
    • Take a Break Campaign
    • Emphasized rest and mindfulness improves the their practice
  ◦ Annual Education
    • Devoted to the topic of self care “Birch Tree Program”
Staff

- Employee Forums
- Department meetings and retreats
- Engagement and empowerment
- Wellness programs
  - Resilience, kindness, gratitude
  - Acupuncture, Yoga, meditation
  - Exercise, nutrition, sleep, IH, etc
- CME and development
Finding and empowering champions

• Canyon Ranch Institute Life Enhancement Program
• Cancer Center Integrative Health Center
• PCP Integrative Medicine
• Osteopathic Manipulation and Rehab
• Pain school
• Patient Stress Management Group
• Capitalize on leadership with special interests:
  • VP, Ruth Blodgett—Duke’s Integrative Medicine Program
  • DIO, Population Health, Mark Pettus, MD in integrative medicine
  • Chair of Behavioral Sciences, Alex Sabo, MD—Kripalu Yoga
Linkages support embedding this into your culture, and makes it affordable

- Patient Safety
- Crew Resource Management
- Employee Opinion Survey
- Wellness/Mindfulness
Could Yoga Help?

- Yoga is a mind/body practice which includes postures, breathing techniques, deep relaxation and meditation aimed at releasing stress and promoting well-being. When practiced mindfully, yoga can also improve self-awareness and help students learn to better tolerate uncomfortable feelings and practice self-soothing. These skills which are first learned on the yoga mat, can then be translated into daily life tools of resilience.
Scientific Benefits of Yoga: Physical Health

- **Improves:**
  - Flexibility
  - Balance
  - Spinal movement
  - Strength

- **Decreases:**
  - Systolic and diastolic blood pressure
  - Fall risk
  - Use of pain medication
  - Disability
  - Chronic pain

Scientific Benefits of Yoga: Mental Health

- **Decreases symptoms of:**
  - Depression
  - Anxiety
  - PTSD
  - Stress

- **Increases:**
  - Wellbeing
  - Self acceptance
  - Body acceptance
  - Emotional regulation

*(Clinical Practice Guidelines, Soc of Integrative Oncology)*
*(Streeter et al, 2012)*;
*(Field, 2011)* & *(Khalsa, 2004)*
Potential self-regulatory mechanisms of yoga for psychological health

Research suggesting the beneficial effects of yoga on myriad aspects of psychological health has proliferated in recent years, yet there is currently no overarching framework by which to understand yoga’s potential beneficial effects. Here we provide a theoretical framework and systems-based network model of yoga that focuses on integration of top-down and bottom-up forms of self-regulation. We begin by contextualizing yoga in historical and contemporary settings, and then detail how specific components of yoga practice may affect cognitive, emotional, behavioral, and autonomic output under stress through an emphasis on interoception and bottom-up input, resulting in physical and psychological health. The model describes yoga practice as a comprehensive skillset of synergistic process tools that facilitate bidirectional feedback and integration between high- and low-level brain networks, and afferent and re-afferent input from interoceptive processes (somatosensory, viscerosensory, chemosensory). From a predictive coding perspective we propose a shift to perceptual inference for stress modulation and optimal...
Yoga Enhances Mental, Emotional, Physical, and Behavioral Regulation/Resiliency

Top Down Mental Training

- Direct Physiological Impact
- Bottom Up

Diagram showing the relationship between yoga output and stress response, with top-down mental training and bottom-up physiological impact.
Can Yoga Reduce Burnout in Berkshire Medical Healthcare Workers?

Improving physical and mental health in frontline mental health care providers: Yoga-based stress management versus cognitive behavioral stress management

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Method

- Two group (YBSM, CBSM) randomized controlled trial of 40 BMC mental health care and emergency center employees.
  - Participants assigned unique IDs and randomly assigned to groups

- Groups =
  - Yoga (YBSM)
  - Cognitive Behavioral Stress Management (CBSM)

- 8 week intervention for each group, one hour per week
  - Plus home practice

- 2 rounds of the intervention (YBSM vs CBSM)

- 4 data collection time points
  - Time 1 = One week pre-intervention
  - Time 2 = Immediately post-intervention
  - Time 3 = 2 months post-intervention
  - Time 4 = 6 months post-intervention

- Data collected at each time point:
  - Physical data: heart rate, blood pressure, weight and height
  - Survey data: online physical and mental wellbeing self report via Qualtrics online survey software (secure, provide unique ID, 30 minutes)

Kripalu Yoga Intervention

Yoga for Resiliency

- Postures
- Meditation/Breath Practice
- Didactic Learning
- Partner Sharing
Measures

- Physical Measures
  - Heart Rate
  - Blood Pressure
  - Weight & Height

- Survey Measures
  - Diet: Fruit, Vegetable, Fat Intake
  - Physical Activity: Paffenbarger Physical Activity Questionnaire, PAFF, Paffenbarger et al., 1978
  - Alcohol Use: Quantity, Frequency, Number Binge Episodes:
  - Tobacco Use: Cigarettes per day, Lifetime years of smoking: Welte et al., 2011
  - Sleep: NIH PROMIS

- Survey Measures (cont’d)
  - Health-Related Quality of Life: SF-12:
  - Measure of Coping Skills Subscales: MOCS:
    - Carver, 2006
  - Depression: PHQ-9:
  - Distress: Depression, Anxiety, and Stress Scales:
    - Lovibond & Lovibond, 1995
  - Professional Quality of Life Subscales: PROQOL:
Changes in Both Groups

- Wide variety of positive changes!

- INCREASE:
  - MOCS Relaxation, Awareness
  - ProQOL Compassion Satisfaction
  - Fruit Intake
  - Vegetable Intake
Changes in Both Groups

● DECREASE:
  ◦ ProQOL Burnout
  ◦ Depression (DASS dep & PHQ)
  ◦ Stress
  ◦ Heart Rate
  ◦ Alcohol (binging & how often consume)
MOCS: Coping Confidence

PAFF: Physical Activity
No Changes

- Sleep quality (PROMIS)
- BMI
- Anxiety (DASS)
- Tobacco use
  - Such a low baseline that changes would be hard to detect
  - 2 smokers in the sample
- Physical health (SF36 PCS)
Summary of Results

- YBSM & CBSM are both useful in a number of ways
  - **Physical**
    - Fruit & Vegetable Intake
    - Physical Health
    - Alcohol
    - Heart Rate
  - **Mental**
    - Relaxation & Awareness
    - Professional Quality of Life
      - Compassion satisfaction
      - Burnout
    - Depression
    - Stress
Summary of Results

- CBSM is more useful for:
  - Increasing coping skills specifically

- YSBM is more useful for:
  - Increasing physical activity
  - Increasing overall mental health
  - Decreasing secondary traumatic stress
Comments from our staff…

- “I am more able to relax during the day, take a few breaths.“

- "I use the breathing throughout the day, especially when I find myself alone in my office, I also feel like I have been able to translate concepts from a previous session that when I take time for myself, I will be less reactive with my kids."

- “I find myself pausing for deep breaths when I might previously have jumped into response that may not have been a productive response.”

- “This program taught me that I don’t always put myself first but I am learning that without self-care as a priority all other priorities suffer”

- "I had a stressful event occur and I realized I was holding my breath. Being aware of my body and breath helped me take breaths and calm stress"
Comments from our staff...

• "I have been meditating before bed which has improved my sleep from an average 5-6 hours to 7 hours (according to fitbit)."

• "I used loving-kindness practice to help me be less angry and reactive to a co-worker in that it helped me slow down and hear her side more."

• "I am learning to stretch time between emotions and action and am better able to handle conflict"

• “All of those techniques help me get out of that negative, critical, angry, hating mind into a more accepting, calm and loving mind. It just takes practice to remember to give myself loving-kindness.”
The Ripple Continues…

Since the first program we have:

◦ Trained over 100 other staff in mindfulness and yoga-based tools
◦ Reached many different departments
◦ Woven in consistent yoga classes for staff
◦ Encouraged mindfulness in staff meetings (ie 3 minute centering to start)
Sample brief version (10 min) workshop session for managers
Selected references


Additional references of interest:


Presenters’ Biosketches
Diane Kelly, DNP, MBA, RN, Chief Operating Officer, Berkshire Medical Center

- Prior to her appointment as Chief Operating Officer in 2008, Diane Kelly, DNP, MBA, RN, had served as Vice President of Quality and Safety for Berkshire Medical Center since 2002. She received her Doctorate in Nurse Practice from the University of San Francisco, with an emphasis on leadership and population health. A graduate of Western New England College with a Master's degree in Business Administration, Kelly also earned a Bachelor of Science degree in Nursing from the University of Massachusetts at Amherst.

- She holds a certification as Nurse Executive (CENP), and is a member of Sigma Theta Tau International. Sigma Theta Tau membership is by invitation only to those who demonstrate excellence in scholarship, and exceptional achievements in nursing.

- Kelly joined Berkshire Medical Center in 1985 as a staff nurse and has since held various positions, including the development of the Patient Safety Program at Berkshire Medical Center.
Angela Wilson, MA, LMHC, RYT 500, is a Kripalu Yoga and meditation teacher who has spent the last several years developing and implementing a yoga and mindfulness based program to reduce burnout and improve leadership potential at Berkshire Medical Center. Angela has conducted research on the scientific benefits of yoga and coauthored a well-cited scientific theory paper entitled, “Potential Self-Regulatory Mechanisms of Yoga for Psychological Health.” She currently serves as the Wellness Coordinator at Berkshire Medical Center, and she has contributed to Yoga International and Yoga Therapy Today, writing about the intersection between yoga and Western psychology.
Alex N. Sabo, MD, Chair & Program Director, Department of Psychiatry & Behavioral Sciences, Berkshire Medical Center

- Alex N. Sabo, MD, a Kripalu-trained yoga teacher, is Department Chair of Behavioral Sciences and Training Director of the Psychiatry Residency Program at BMC, Clinical Associate Professor of Psychiatry at the University of Massachusetts Medical School, Past President of the Massachusetts Psychiatric Society, Distinguished Life Fellow of the American Psychiatric Association, Co-Editor and contributing author to *The Real World Guide to Psychotherapy Practice*, co-author of recent publications on a root cause analysis of prescription opioid overdoses and a randomized trial of CBT vs Kripalu-yoga to improve mental and physical health in mental health providers.