CAN DO Multiple® Sclerosis PRESENTS:

WEBINAR WEDNESDAYS

Stress Management in MS

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NOVEMBER PROGRAMS

JUMPSTART – Nov 6
Communicating Together

COACHING – Nov 10
Supporting Ourselves and Each Other

COACHING – Nov 16
Your Questions, Answered: Stress

JUMPSTART – Nov 18
Preparing For The Holidays

CanDo-MS.org

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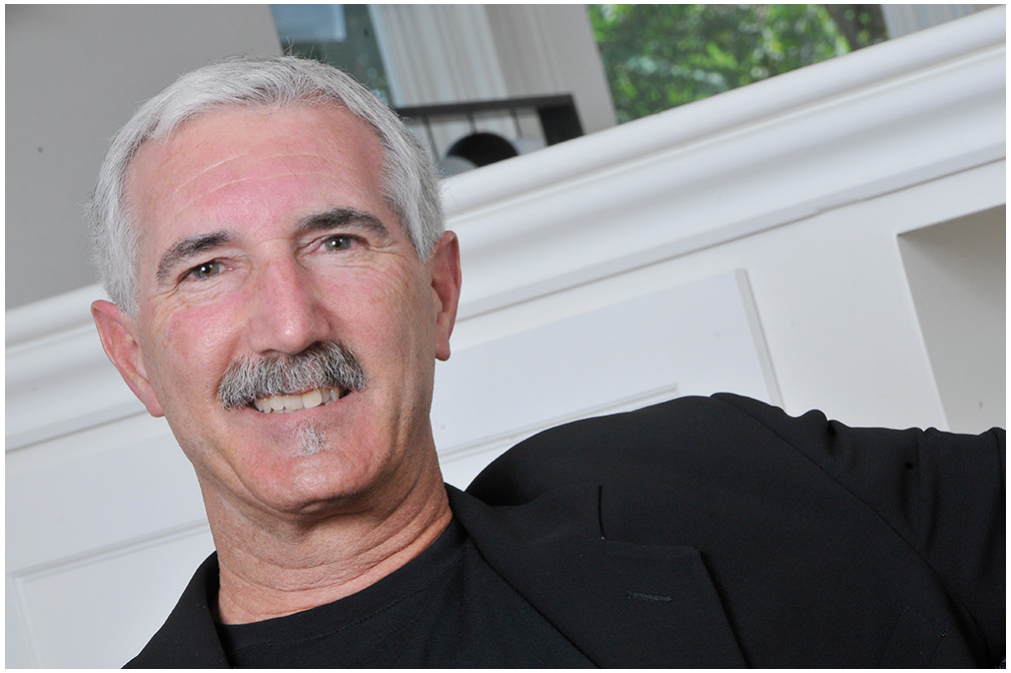
Ken Nowack, PhD



Psychologist

Santa Monica, CA

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Lindie Schreiner, PTA

Physical Therapist Assistant

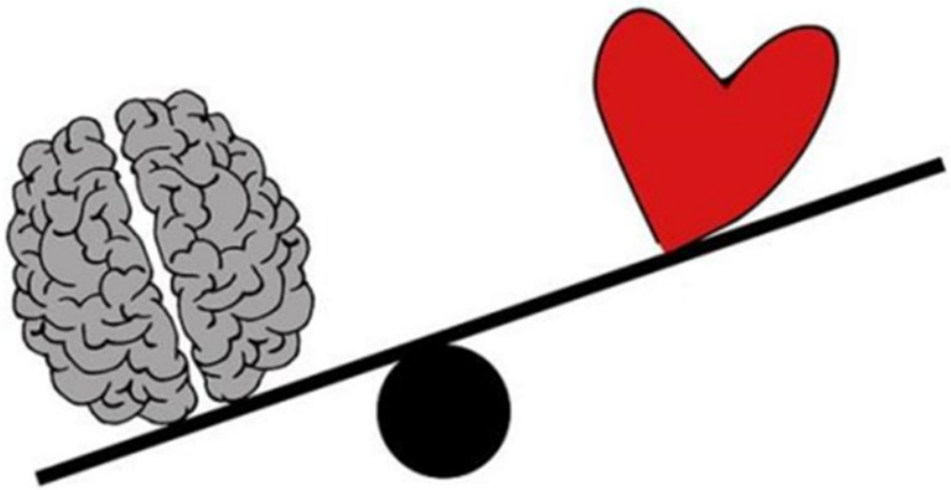
Omaha, NE

Learning Objectives

1. Define the interrelationship between stress and MS
2. Identify your personal stressors and those unique to support partners
3. Discuss how individual and shared physical activity can reduce stress


Stress & MS

Our Stress Response



Activating the primary threat and reward circuitry takes 1/5th of a second (we respond before we think 80 – 100 x faster)

Hambley, C. (2020). CONNECT©: A brain-friendly model for leaders and organizations. *Consulting Psychology Journal: Practice and Research, 72(3)*, 168–197

Stress and MS

- 121 patients with MS followed for 48 weeks (MRI scans every 8 weeks)
- Measures of stressful life events were used to predict gadolinium-enhancing (Gd+) and T2 lesions on MRI scans 29-62 days later
- **Negative stress** = threat type of issues, challenges and concerns
- Positive stressful events predicted reduced risk for subsequent Gd+ lesions and **negative events** predicted **new and enlarged** lesions

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Article

A randomized trial of stress management for the prevention of new brain lesions in MS

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+ SHOW AFFILIATIONS | + SHOW FULL DISCLOSURES
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Neurology WNL.0b013e3182616ff9

Abstract | Full Text (PDF)
Also available: PODCAST | Accompanying Editorial | Argentine Translation

ABSTRACT

Objectives: This trial examined the efficacy of a stress management program in reducing neuroimaging markers multiple sclerosis (MS) disease activity.

Methods: A total of 121 patients with relapsing forms of MS were randomized to receive stress management therapy for MS (SMT-MS) or a wait-list control condition. SMT-MS provided 16 individual treatment sessions over 24 week followed by a 24-week post-treatment follow-up. The primary outcome was the cumulative number of new gadolinium enhancing (Gd+) brain lesions on MRI at weeks 8, 16, and 24. Secondary outcomes included new or enlarging MRI lesions, brain volume change, clinical exacerbation, and stress.

Results: SMT-MS resulted in a reduction in cumulative Gd+ lesions ($p = 0.04$) and greater numbers of participa remained free of Gd+ lesions during the treatment (76.8% vs 54.7%, $p = 0.02$), compared to participants receiving th control treatment. SMT-MS also resulted in significantly reduced numbers of cumulative new T2 lesions ($p = 0.0$ and a greater number of participants remaining free of new T2 lesions (69.5% vs 42.7%, $p = 0.006$). These effect were no longer detectable during the 24-week post-treatment follow-up period.

Conclusions: This trial indicates that SMT-MS may be useful in reducing the development of new MRI brain lesi while patients are in treatment.

Classification of evidence: This study provides Class I evidence that SMT-MS, a manualized stress manageme therapy program, reduced the number of Gd+ lesions in patients with MS during a 24-week treatment period. Thi benefit was not sustained beyond 24 weeks, and there were no clinical benefits.

Trial registration: ClinicalTrials.gov, number NCT00147446.

Received August 11, 2011.

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Three Paths in the Face of Stress, Adversity & Challenge

Harm

Trauma: Tragic events (e.g., school shootings, chronic stress of long-term care giving, sexual abuse) can leave a "long trail" of psychological scars including *post-traumatic stress* (Mazzei & Jordan, 2019)

In two studies, people who experienced childhood adversity have a *blunted physiological response* (cardiac reactivity), which is associated with inflammation and poorer health (Bourassa, et al. (2021)

Loss: Catastrophic events can have a deep, lasting & emotional impact such as lingering pain of a child's death (Li et al., 2005)

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Three Paths in the Face of Stress, Adversity & Challenge

- **Stability of Subjective Well-Being:** Most people recover from romantic breakups, job loss (Gilbert et al., 1998)

- **Coping with Disabilities**: After suffering disabilities or illness and about 2 out of 3 people regain near-normal life satisfaction (Giesser et al., 2013)

- **Hardiness of Trauma Survivors**: About 25% experience a "recovery trajectory" from brief bouts of PTSD, stress, or depression (Bonanno, 2012)

Resilience

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Three Paths in the Face of Stress, Adversity & Challenge

Growth

- **Challenges Strengthen Coping Skills**: *Moderate levels* of hardship boosts mental toughness (Seery, 2012)

- **Cancer Survivors Gain New Perspective**: A brush with death leaves many survivors with altered priorities, richer spirituality, stronger relationships and appreciation of each day (Tedeschi & Calhoun, 2004)

Our Own Post-Traumatic Growth Research

National Multiple Sclerosis Society
Southern California & Nevada Chapter

The Marilyn Hilton MS Achievement Center at UCLA

- **12-Week Living Well with MS Program** (Giesser et al., 2013)
- **Components:** Stress Management; Symptom Management; Eating/Nutrition; Exercise & Spirituality
- Results: Significant change from pre-post compared to waiting list control with greatest effect sizes for:
  - Confidence in Managing & Knowledge about MS
  - Current Health Status
  - Perceived Stress
  - Psychological Well-being
  - Sleep
  - Exercise Activity
  - Spirituality Index

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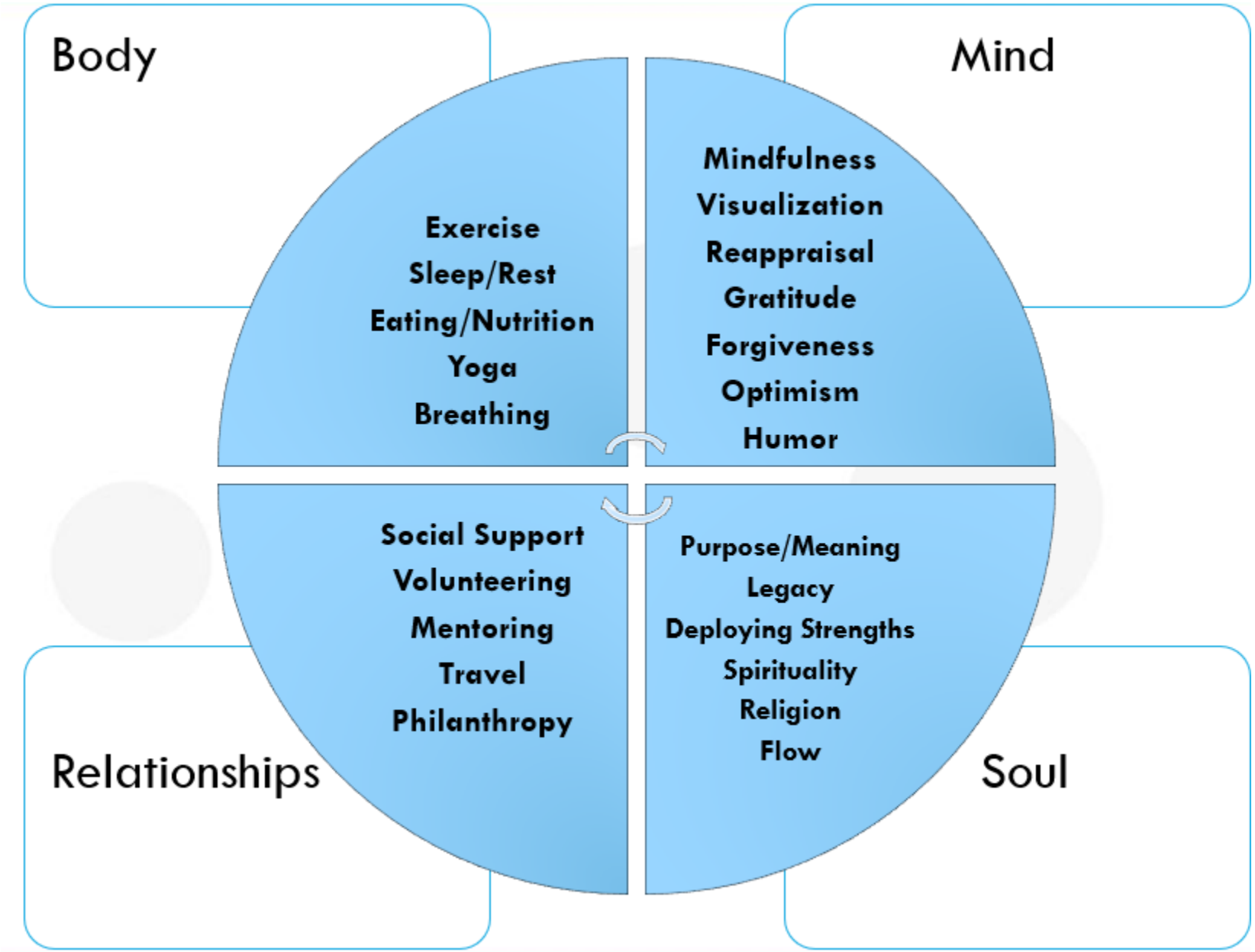
Body
Mind
Exercise
Sleep/Rest
Eating/Nutrition
Yoga
Breathing
Mindfulness
Visualization
Reappraisal
Gratitude
Forgiveness
Optimism
Humor
Social Support
Volunteering
Mentoring
Travel
Philanthropy
Purpose/Meaning
Legacy
Deploying Strengths
Spirituality
Religion
Flow
Relationships
Soul

5 Most Common Regrets in Life

- I wish I pursued my dreams and aspirations, and not the life others expected of me
- I wish I didn't work so hard
- I wish I had the courage to express my feelings and speak my mind
- I wish I had stayed in touch with my friends
- I wish I had let myself be happier
- Ware, B. (2012). The Top Five Regrets of the Dying: A Life Transformed by the Dearly Departing. Hay House

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Get Moving

The Power of Exercise and Physical Activity in Managing Stress

Building Resilience: Physical Activity/Exercise

- Research strongly supports a clear association between chronic exercise, cardiovascular health, immunity, and longevity (Sellami et al, 2018; Nieman & Wentz, 2019)

- Strong evidence supports an inverse **dose-response relationship** between physical activity levels and mortality (e.g., walking for 30 minutes a day can lower mortality risk by 17%; Dietz et al., 2019)

- A meta-analysis of 29 studies links the role of exercise with an increase in BDNF (Szuhany et al., 2014). BDNF is associated with **learning, memory and thinking** (Voss et al., 2013; Gomez-Padilla, 2008)

Importance of Exercise

- Research supports physical activity/exercise lifts mood
- Overall healthier self
- Flexibility – find a mode of exercise that YOU love!

What modes of exercise are out there?

- Aerobics
- Aquatic
- Yoga
- Tai Chi
- Pilates
- Strength training
- Zumba
- Ballroom dancing

Reducing Anxiety

- Exercise to elevate your endorphins
  - Parasympathetic vs Sympathetic
- Choose a mode that works for you
  - Research indicates flexibility with your type
- Exercise is not a cure for anxiety
  - For mild or moderate depression
  - Pairs nicely with another mode of management, if needed
- Active people are less depressed than inactive people

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Building Resilience: Outdoors

- Exposure to nature (**in person or via video**) is associated with increased happiness, positive affect, meaning/purpose and **decreases in mental distress** (Science Advances, Vol 5, 2019)

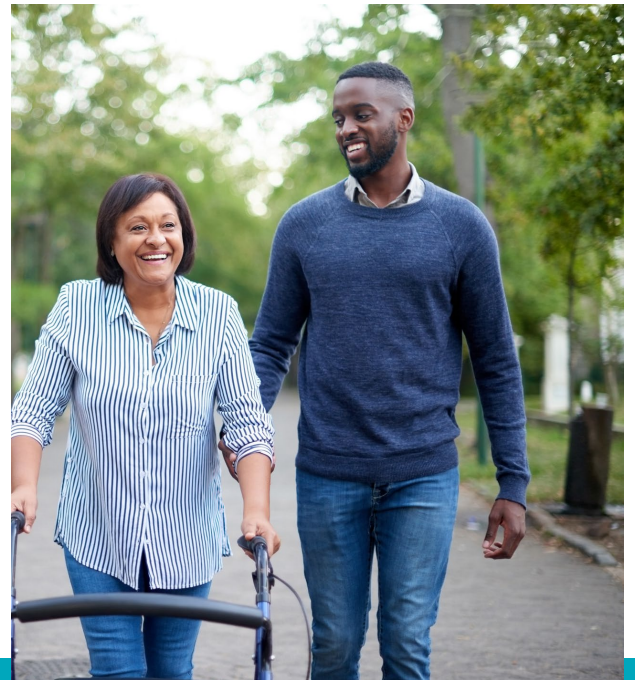
- **Two-hours a week** (either at one time or spread out over) is associated with *significant grater health* and well-being (Scientific Reports, Vol. 9, 2019)

Get Outdoors!

- Looking for an outdoor or nature experience for the weekend?
- “Yonder.com”
- Great for people with MS and support partners! Outdoor exposure is linked to improvement in overall mental and physical health!

Outdoor Options are Endless!

- Hiking
- Kayaking
- Skiing
- Horseback riding
- Picnics
- Reading outdoors
- Walks



What Actions Will You Take Today?

Q & A

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WEBINAR WEDNESDAYS

Emerging Wellness Research: Key Takeaways and Ideas for You

Wednesday, December 1 at 8pm ET

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