Mindfulness-Based Stress Reduction for Health Care Professionals

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Objectives

- Complete Self-Assessment and gain better understanding of stress and psychological changes that occur
- Identify the benefits of MBSR, learn two simple skills and experience through practice which you can immediately use in your life
- Describe the role of MBSR in chronic disease management; application to healthcare reform and one health care systems experience with MBSR implementation
Who Are We?

- Founded in 1910
- Affiliated Rockford Health System 1997
- Volunteer community board of directors
- Services:
  - Home Health ADC: 280 patients
  - Hospice and Palliative Care: 65 patients
  - Infusion
  - Home Medical Equipment
    - 400+ Oxygen patients per month
    - 1200+ Rental/Sales per month
  - Older adult care: 2800 clients ADC in a federally funded program for 2 counties to support these patients to live in their homes.
  - 300 bed acute care hospital
  - 170+ physician group

Acknowledgments

- Rockford Health System Contemplative Care Team
- UPAYA Institute...Abbot Roshi Joan Halifax, Ph.D and founder; Contemplative Practice.....“Being With Dying”, & Resiliency training; C.R.A.C.E. ....Santa Fe, NM
Stress Assessment

- Identify an item (on left column) that is occurring in your life
- If it is occurring now or in the last 6 - 12 months, simply transfer the listed “Point Value” for that item over to the “Your Score” column

<table>
<thead>
<tr>
<th>LIFE EVENT</th>
<th>POINT VALUE</th>
<th>YOUR SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Death of spouse</td>
<td>100</td>
<td></td>
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<tr>
<td>2. Divorce</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>3. Marital separation</td>
<td>65</td>
<td></td>
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<tr>
<td>4. Divorce in peer or other institution</td>
<td>65</td>
<td></td>
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<tr>
<td>5. Death of a close family member</td>
<td>65</td>
<td></td>
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<tr>
<td>6. Major personal injury or illness</td>
<td>33</td>
<td></td>
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<tr>
<td>7. Marriage</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>8. Fired at work</td>
<td>47</td>
<td></td>
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<tr>
<td>9. Marital reconciliation</td>
<td>45</td>
<td></td>
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<tr>
<td>10. Retirement</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>11. Major change in the health, behavior of a family member</td>
<td>44</td>
<td></td>
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<tr>
<td>12. Pregnancy</td>
<td>46</td>
<td></td>
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<tr>
<td>13. Sexual difficulties</td>
<td>36</td>
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<tr>
<td>14. Gain of a new family member (e.g., birth, adoption, mother moving in, etc.)</td>
<td>36</td>
<td></td>
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<tr>
<td>15. Major business combination (e.g., merger, reorganization, bankruptcy, etc.)</td>
<td>38</td>
<td></td>
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<tr>
<td>16. Major change in financial status (e.g., a lot worse off than expected)</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>17. Death of a close friend or family member (other than spouse)</td>
<td>37</td>
<td></td>
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<tr>
<td>18. Change in a regular or long-term work</td>
<td>55</td>
<td></td>
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<tr>
<td>19. Major change in the number of automobiles with spouse (e.g., a lot more than usual regarding driving, personal habits, etc.)</td>
<td>55</td>
<td></td>
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<tr>
<td>20. Taking out a mortgage/loan for a major purchase (e.g., home, business, etc.)</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>21. Foreclosure of on mortgage/loan</td>
<td>36</td>
<td></td>
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<tr>
<td>22. Major change in responsibilities at work (e.g., punishment, demotion, lateral move, etc.)</td>
<td>25</td>
<td></td>
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<tr>
<td>23. Son or daughter leaving home (e.g., through marriage, finishing college, etc.)</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>24. Trouble with a friend</td>
<td>29</td>
<td></td>
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<tr>
<td>25. Outstanding personal achievement</td>
<td>28</td>
<td></td>
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</tbody>
</table>
What Your Score Means?

- Near 150 points = 30% chance of experiencing a significant health problem in the near future
- 150-300 points = 50% chance of getting sick
- >300 points, 80% chance of something significant soon

Adapted from Holmes, TH and Rahe, RH: The Social Readjustment Rating Scale
Badge of Honor

Definition of Stress
A mentally or emotionally disruptive or upsetting condition occurring in response to adverse external influences and capable of affecting physical health, usually characterized by increased heart rate, a rise in blood pressure, muscular tension, irritability and depression.
What is Stress?

- Physical, emotional and/or mental tension or strain that can result from a REACTION to a situation in which a person feels threatened, an urgent need, pressured, etc.

THE DELICATE BALANCE

- Optimum Stress
- Low self esteem
- Low performance
- Boredom
- Level of stress
- Failure, broken relationships, helplessness, loss, health problems
- Worry, low performance, loss of self esteem, insomnia, confusion, unhappiness, withdrawal, illness
- Mistakes, frustration, irritability, tension, physical symptoms, tiredness
- Burnout, breakdown
- Area of best performance
Neuroscience:

- The study of the nervous system, emotion and behavior.
- How the nervous system develops, matures and maintains itself throughout life.

The role of the nervous system in stress response—molecular, cellular, developmental, structural, functional, evolutionary, computational

The Brain
Most complex software on earth
Weighs about 2 pounds
An organ of rational thought
Creates a memory template of how to respond.

Produces potent hormones called neurotransmitters

Manufactures complex chemical production
The chemical messengers:

**Neurotransmitters**

- **Autonomic Nervous System**
  - **Parasympathetic NS**
    - Prepares for Rest
    - Controls the body during rest
    - Breathing Rate
    - Heart Rate
    - Pupils
    - Blood Pressure
    - Sweating
    - Stress Hormone
    - Digestion/Saliva
  - **Sympathetic NS**
    - Prepares for Action
    - Controls the body during stress
    - Breathing Rate
    - Heart Rate
    - Pupils
    - Blood Pressure
    - Sweating
    - Stress Hormone
    - Digestion/Saliva

**Note:**
- **Cl  h  b  d  d i**
- **Breathing Rate**
- **Heart Rate**
- **Pupils**
- **Blood Pressure**
- **Sweating**
- **Stress Hormone**
- **Digestion/Saliva**
The two responses our autonomic nervous system can produce.

- Sympathetic – “Fight of Flight”
  - Contractions of muscles

- Parasympathetic – “Rest and Digest”

**Neuroplasticity**

- The brain’s ability to reorganize neural pathways based on a different experience

- The brain’s ability to change with learning or new information

*Sharon Begley*- “Train the Mind, Change the Brain” (forward by Daniel Coleman and the Dalai Lama).

The co-author of *The Mind and the Brain*
Contemplative Neuroscience:
- Neuro-scientific study of the impact of contemplative practices.
  - This includes research on the brain mechanisms that underlie contemplative practices, ...

Source: http://www.investigatinghealthyminds.org/cihmFaqs.html

Contemplative Neuroscience:
- Studies of transformations of brain function and structure as a consequence of contemplative practice - and -
  - Research on the peripheral correlates of neural changes induced by contemplative practice.

Source: http://www.investigatinghealthyminds.org/cihmFaqs.html
Contemplative Neuroscience:

In this latter domain we seek to understand how changes in the brain impact bodily processes and how such neural changes may affect physical health and illness.

Source: http://www.investigatinghealthyminds.org/cihmFaqs.html

Stress Response:

Two brain structures, the amygdala and hippocampus, play key roles in interpreting what is stressful and determining appropriate responses.

The Amygdala is centered next to the temporal lobes and is linked with compassion, empathy, and well-being.

Hippocampus is linked to long term memory formation and emotion.
So what does it all mean?

How to manage stress?
How to manage stress?

Foundational ways to deal with stress:

- Exercise: 3 – 6 times a week for at least 30 minutes
- Eat Well i.e. “Eat for Life” challenge
- Get enough rest: Minimum of 7 hrs.
- Leisure activities

• Mindfulness

What is “Mindfulness”

“...paying attention in a particular way; on purpose; from moment to moment; and non-judgmentally

“This sounds simple enough in definition – and it is, but it may be the hardest thing you have ever done”

John Kabat-Zinn
Mindfulness & Emotions

- Pay attention to your thoughts and how you become engaged with them
- How we engage with our thoughts creates our suffering
- We are able to change our relationship with our thoughts and are then less trapped by them
What is “Mindfulness”

- Mindfulness is a consciousness discipline (meditation) revolving around a particular way of paying attention in one’s life

- It can be most simply described as the intentional cultivation of nonjudgmental moment-to-moment awareness.
Mindfulness Meditation

- Three Key Components:
  - Intentionality
  - Present Centeredness
  - Absence of Judgment

Meditation is not secular; it is not Buddhism; it is just a particular way of paying attention. It is a way of looking deeply into oneself. It is not dependent on any belief system or ideology. It is universal. Jon Kabat-Zinn, Ph.D.; Full Catastrophe Living.

The Beginner’s Mind

“… in the beginner’s mind there are many possibilities. In the expert’s mind there are few…”
EXERCISE – Mindfulness Eating

“The Raison”
Centering Exercise

- Set a timer if you wish
- Find a comfortable sitting position
- Imagine a “plum line” from head through your spine to the seat
- Put your feet flat on the floor
- Rest your hands comfortably on your lap
- Take 3 deep breaths, then just breathe

Centering Exercise

- Just breathe in and out, noticing your breath
- Notice any thoughts and sensations and let them pass through
- Return to your breath, breathing in and breathing out
- Do not place any judgment on yourself
- Just breathe in and breathe out.
Creating “The Pause”

“Between a stimulus and response there is a space. In that space is our power to chose our response. In our response lies our growth and our freedom.”

Victor Frankl, Psychiatrist/Holocaust survivor
**Are You a Mindful Worker or a Mindless Worker?**

Has work become an invisible hand that leads you around like a chinstrap, causing you to be at odds with who you are? Or do you mindfully attend to your needs throughout the week, protecting your personal and emotional well-being by putting the job aside when necessary? Grade yourself on your mindful practices by answering yes or no to the following questions regarding your typical workday:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>1. Do you constantly feel driven to work with anxiety and worry?</td>
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<td>2. Is your mind preoccupied with what's important or relevant at work?</td>
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<td>3. Do you feel drained and drained when you do behind the scenes?</td>
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<td>4. Does working too much every day interfere with your personal relationships?</td>
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<td>5. Are you able to slow down and enjoy your life away from the workplace?</td>
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<td>6. Is your mind more focused on the past or future than in the present when you are working?</td>
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<td>7. Do you read and write memos in your diary or before going to work?</td>
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<td>8. Do you work projects more because they are not getting done fast enough to suit you?</td>
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<td>9. Do you see more potential in the finished product than in what's happening on the inside of you?</td>
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<td>10. Do you need and demand a higher level of personal attention to physical and emotional needs?</td>
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<td>11. Are you more compassionate than irritated with yourself when things fall apart?</td>
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<td>12. Do you maintain a satisfying connection with yourself and others while working?</td>
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<td>13. Do you have an easy time of being creative and expressing yourself freely at work?</td>
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<td>14. Do you make friends more often than you work?</td>
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<td>15. Does your creativity give you the ability to judge and shape yourself for others when mistakes are made?</td>
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<td>16. Are you the one in control and in charge of your work rather than the other way around?</td>
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<td>17. Are you happy as long as the work is meaningful and is achieved?</td>
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<tr>
<td>18. Do you enjoy the process of your work as much as reaching the final outcome?</td>
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<tr>
<td>19. Do you protect your time by preventing wireless devices from interfering with personal relationships?</td>
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<tr>
<td>20. Are you able to things happen at a reasonable pace instead of making them happen?</td>
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Rockford Health System’s Journey

• **Recognition of need:**
  - Patient Satisfaction Scores not improving
  - Morale could be better
  - Self-care poor (employee health markers poor)
  - Task driven care

• **Proposal concept & training:**
  - December 2009
  - “Contemplative Care Giving” – “Relationship-Centered Care”

Proposal Problem

• **Problem:** Healthcare has become deplete in the art of caring – *Compassion deficit* - Healthcare professionals are very busy focused on tasks, technology, and have forgotten how to listen, be in the moment, at the bedside, in the present, when delivering care/services.

  - As Mother Theresa so noted “*America has many riches, but poverty of spirit*”. How did we loose this art of caring? More importantly how do we return to radical loving care at the bedside?
Proposal Premise:

- **Premise:** “it is not possible for a clinician to care compassionately for others unless they are able to care compassionately for themselves.” (American Nurses Association 2009; Reich, 1989; Rushton, 1992; Rushton, 2004; Rushton et al., 2006). Compassion fatigue exists in health care - physician and staff burn-out.

“The qualities developed by mindfulness practice—self reflection, deep listening, and moment to moment presence—are foundational to relationship centered care, a core element of compassionate care” (Connelly, 1999; Connelly, 2005; Epstein, 1999).
What do we hope to gain for RHS patients, staff, and community?

**Vision:** Rockford Health System – Superior Care, Every Day, For All Our Patients – transcended through giving of thoughtful, mindful, “compassionate” care by all.

1) Greater compassion in delivery of care/services throughout RHS, thus greater patient/family satisfaction.

2) A healthier team of care providers – emotionally and physically, thus greater employee satisfaction with their job.

3) Community vision: RHS as the leader in delivering compassionate care and regional leader in training in the art of caring.

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**Rockford Health Systems Core Contemplative Team**

**Study Material** – Books *(Being With Dying, Neuroscience Brain Functioning?)* UPAYA Website video’s (prepared to go)
**What we have done:**

- Weekly Still Point Sessions
- Incorporate into Executive and leadership retreats “mindfulness moment”
- Curriculum Developed – six week course
- Three pilots with evaluation
- Approval for 300 Humana Vitality points
- Intranet access for employees - CD’s composed for mindfulness meditation

- Incorporated meditative practice into Nursing Managers’ retreat
- Incorporation of “pause / breathe” practice in the work days of individuals as well as in meetings (after a code blue; death; etc.)
- Become aware of the pain and suffering of caregivers and respond with compassion
- Decrease noise levels, create a quieter and less bustling environment; less interruptions at night
- Taught breathing and simple stretching to nursing aides who use these techniques with patients
- In-services, book reviews
- Incorporated into EPIC conversion......go live.....
Pilot Results

- Percentage participation
- Comments from Evaluations:
  - "Very beneficial for me to have tools and resources to help me reduce my stress level."
  - "I have a greater understanding of how stress affects the body and beginning steps on how to relieve this stress."
  - "I have already been using it to help family and friends learn to relax."
  - "I am sure going to miss the class."
Future for Rockford Health System

- **“Mindful/Awake at Work”** *(Awake At Work with Michael Carroll & Associates)*
  - Foundation funding
  - Target audience: direct caregivers, physicians, leaders, support staff employees

- **“G.R.A.C.E.”** Training in Compassion-based Interactions in the Clinician/Patient Encounter; UPAYA Institute; Joan Halifax Roshi

Application of “Mindfulness” Healthcare Reform
The Role of Stress in Disease

- Increase inflammation
- Autoimmune Diseases
- Diabetes....
- Obesity
- Atherosclerosis
- Degenerative Joint Disease
- Arthritis

Psychoneuroimmunology

- Growing research that seeks to map the biomechanical pathways associated with the mind-body connection.
- Our thoughts and emotions can influence our immune systems...how we perceive daily life experiences (over-whelmed; threatening) can lead to chronic psychological stress
- Chronic Stress....direct cause and effect relationship to overall immune system and the homeostatic regulation of body
Health Benefits of Meditative practices

- Health Benefits reported (research):
  - Help prevent and treat depression and anxiety; PTSD
  - Normalizing B/P
  - Enhanced neuroendocrine and immune system function
  - Decreased perception of pain/increased ability to tolerate pain
  - Moves individuals from self-destructive to self-supportive behaviors
    - Reduce alcohol and substance abuse
    - Quit smoking
    - Eliminate/reduce binge eating
  - Altered gene expression (1500 genes)
  - Improved vision
  - Improved chronological age (improved joint flexibility, etc.)
  - Better adherence to medical treatments
  - Etc. etc. etc. etc. etc.

Healthcare Reform

Population Health - Prevention

- Leveraging Preventive Medicine...to reduce the demand and cost of healthcare.

"An ounce of prevention is worth a pound of cure”

“The Role of Mindfulness in Healthcare Reform: A Policy Paper
EXPLORE Nov/Dec 2009, Vol. 5, No.6
Healthcare Reform: Prevention

- Look inside not outside ourselves for answers such as technology, pharmaceutical:

<table>
<thead>
<tr>
<th>Outside</th>
<th>Inside – Mind-Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology – heart transplants</td>
<td>Stress management; guided imagery; MBSR; massage; yoga; tai chi; biofeedback</td>
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<tr>
<td>pharmaceuticals</td>
<td>Healthy eating; mindful eating</td>
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<td></td>
<td>Exercise</td>
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Cardiovascular Disease

NO BRAINER??????

Future


Several of the world’s foremost thinkers joined the Dalai Lama in Madison to discuss how neuroscience, environments, economics, and healthcare can combine to make the world a healthier, happier place.
Future Continued:

Mindfulness Education in Healthcare Education System.

- Health Professions training will integrate concepts and techniques of mindfulness into existing professionalism and humanism curricula, diminishing burnout, reducing clinical errors, and enhancing patient care.


Future Continued:

CURE summer 2013; “Mind over Matters”; Don Vaughn....Studies suggest mind-body surgery prep may reduce anxiety and help healing.

- Presurgery anxiety trigger release of stress hormones, cortisol, norepinephrine....adversely affects immunity and healing.
- Mind-Body Prep

- Telemedicine – Mindfulness Teachers in virtual classrooms accessible through clinics
- Mindfulness Meditation...a key component in Self Care for health promotion
Bibliography

- **Jon Kabat-Zinn, PH.D.** – founder of the Stress Reduction Clinic At the University of Massachusetts Medical Center and author of “Full Catastrophe Living” & “Wherever You Go There You Are”
- **Richard J. Davidson**, Ph.D, founder of UW-Madison’s Center for Investigating Healthy Minds at the Waisman Center
- **Sharon Begley** - “Train the Mind, Change the Brain” (forward by Daniel Coleman and the Dalai Lama)...how a new science reveals our extraordinary potential to transform ourselves (2008)

Bibliography (cont.)

- Additional Books
  - *Awake at Work*; Michael Carroll
  - *Calming Your Anxious Mind*; Jeffrey Brantley, MD
  - *God Makes the Rivers to Flow*; Eknath Easwaran
  - *How to Train a Wild Elephant*; Jan Chozen Bays, MD
  - *Insight Meditation – The Practice of Freedom*; Joseph Goldstein
  - *Returning to Your Senses*; Jon Kabat-Zinn
  - *Mindful Eating*; Jan Chozen Bays, MD
  - *Mindfulness in Plain English*; Bante Henepola Gunaratana
  - *The Mindful Leader*; Michael Carroll
  - *Wake Up To Your Life*; Den McLeod
**Articles & Video:**

- *The Art of Now: Six Steps to Living in the Moment,* Jay Dixit
- *Meditation: A simple, fast way to reduce stress,* Mayo Clinic staff.
- “*Nurse take steps to battle compassion fatigue*”; stltoday.com; Cynthia Billhartz Gregorian
- “*Physicians mindfulness kills can improve care for patient and provider*”; Academic Medicine; University of Rochester Medical Center.
- “*Mindfulness training as evidenced-based approach to reducing stress and promoting well-being among human services professionals*”; Poulin, Mackenzie, Soloway, Karayolas; University of Manitoba & University of Toronto.
- “*Retraining the brain...Meditation alters the circuits, mainly the negative ones*”; Elizabeth Bromstein
- “*Mindfulness Meditation: An Unlikely Flu Treatment*”; Ruth Buczynski, PhD 8 Comments.
- *Evidence Supports Health Benefits of ‘Mindfulness-Based Practices’*; Science Daily; Wolters Kluwer Health: Lippincott Williams & Wilkins

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**“Your Future”**

Consider:

*Reinvent the Body:*

Deepak Chopra

Visiting Nurses Association/Rockford Health System