

Stress Management: Part 1 – Stress and Health

Emily K. Porensky, PhD
Assistant Professor,
Department of Psychiatry and Behavioral Health
Department of Psychology
The Ohio State University Wexner Medical Center

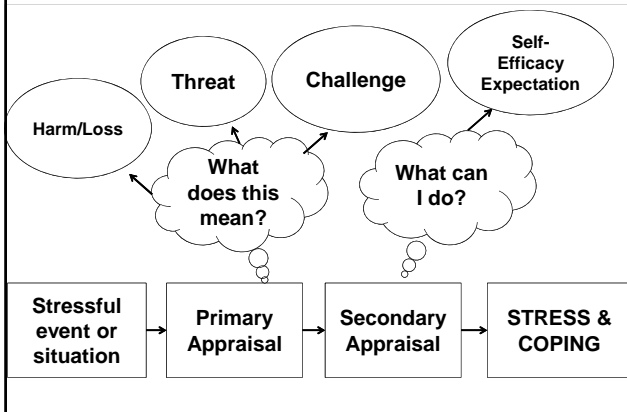
What is stress?

“Stress arises when individuals perceive that they cannot adequately cope with the demands being made on them or with threats to their well-being.”



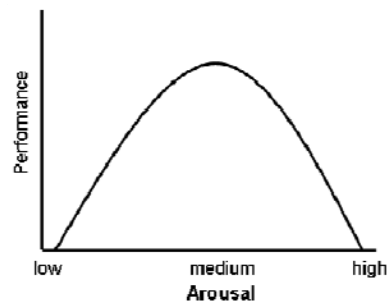
Lazarus, R.S. (1966).

The Stress Process



Is all stress bad?

The Yerkes-Dodson Law



Author: Vaughan

Common Life Stressors

- Death
- Divorce
- Loss of a job
- Starting a new job
- Finances
- Getting married
- Moving
- Chronic illness or injury
- Interpersonal conflict
- Taking care of an elderly or sick family member



Work-Related Stressors

- Being unhappy in your job
- Having a heavy workload or too much responsibility
- Working long hours
- Unclear expectations or no say in decision-making
- Working in dangerous conditions
- Insecurity about advancement or risk of termination
- Having to give speeches in front of colleagues
- Facing discrimination or harassment

Impact of Stress

- 60-80% of outpatient visits may be related to stress (Rosch, 1991; Avey, Matheny, Robbins, & Jacobson, 2003)
- Linked to all leading physical causes of death - heart disease, cancer, stroke (Cohen, Janicki-Deverts, & Miller, 2007)
- Associated with development of most major mental health problems – depression, PTSD, pathologic aging (Marin et al., 2011)

Impact of Stress

- Affects fetal development & outcomes (Kinsella & Monk, 2009)



CDC/ Jim Gathany

- Predicts negative health behaviors and relapses – smoking, alcohol abuse, illicit substance use, sleeplessness (Kassel, Paronis, Stroud, 2003; Herman, 2012; Ellis, et al., 2012)



CDC/ Debora Cartagena

Primary Care: Stress Management Counseling

- National study suggests that only 3% office visits included stress management counseling by primary care physicians
(Nerurkar, 2012; *JAMA – Internal Medicine*)
- 42% report receiving no instruction regarding stress and health outcomes in medical education
- 76% lacked confidence in their ability to counsel patients about stress
- 49% indicated a lack of referral sources
(Avey, Matheny, Robbins, & Jacobson, 2003)

Do as I say...Not as I do...

- 57% of outpatient medical clinic providers (physicians, residents, NP's, and PA's) report "rarely" or "never" practicing stress reduction techniques themselves
- Those who do practice use the following:
 - exercise (70%)
 - meditation (32%)
 - imagery (26%)
 - deep breathing (21%)
 - mindfulness(16%)
 - PMR (16%)

(Avey, Matheny, Robbins, & Jacobson, 2003)

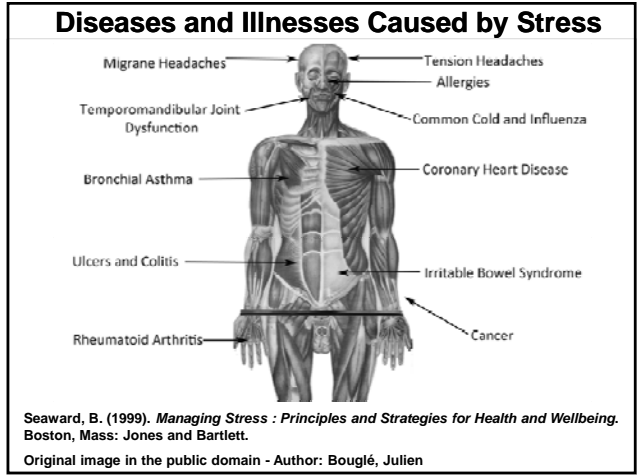
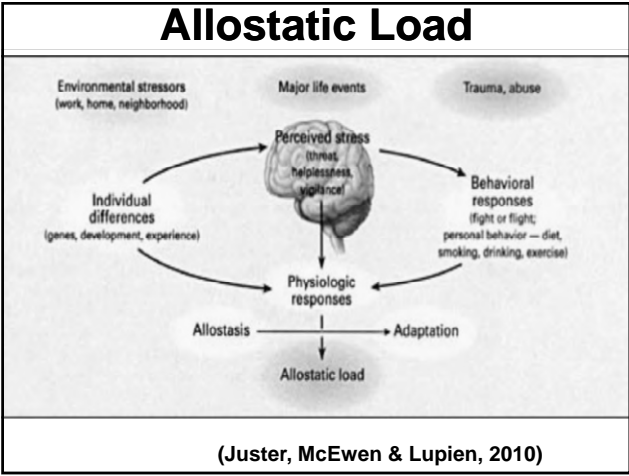
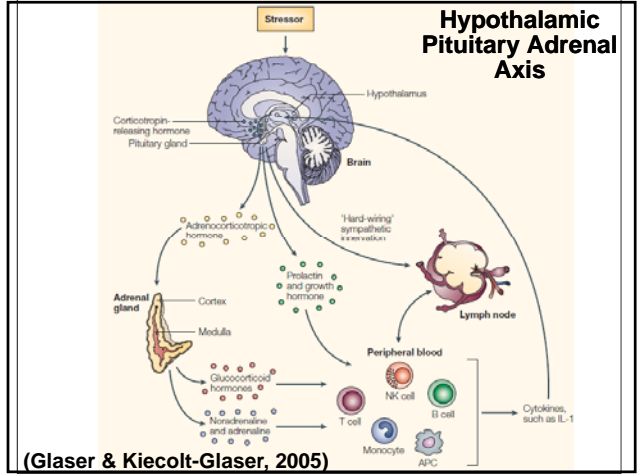
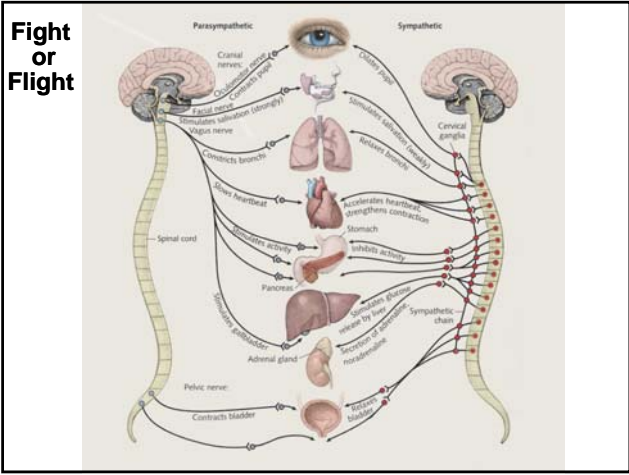
Stress Management: Part 1 – Stress and Health

Sharla Wells-Di Gregorio, PhD
Assistant Professor of Psychiatry and Behavioral Health,
Psychology & Internal Medicine
Clinical Psychologist, Psychosocial Oncology
Director, Psychosocial Oncology Fellowship Program
The Ohio State University Wexner Medical Center

How does stress get under the skin?

- Fight or Flight responses: SAM activation
- HPA activation
- Allostatic load





Benefits of Stress Reduction

- Better concentration/focus
- More stable moods
- Improved communication/relationships
- Better physical health
- Increased sense of control of time and activity



CDC/Amanda Mills

References

- Avey, H., Matheny, K. B., Robbins, A., & Jacobson, T. A. (2003). Health care providers' training, perceptions, and practices regarding stress and health outcomes. *Journal of the National Medical Association*, 95(9), 833.
- Cohen, S., Janicki-Deverts, D., & Miller, G.E. (2007). Psychological stress and disease. *JAMA*, 298, 1685-1687.
- Ellis, J.G., Gehrman, P., Espie, C.A., Riemann, D., & Perlis, M.L. (2012). Acute insomnia: Current conceptualizations and future directions. *Sleep Medicine Reviews*, 16, 5-14.
- Glaser, R., & Kiecolt-Glaser (2005). Stress-induced immune dysfunction: Implications for health. *Nature Reviews: Immunology*, 5, 243-251.
- Herman, J.P. (2012). Neural pathways of stress integration: Relevance to alcohol abuse. *Alcohol Research: Current Reviews*, 441-447.
- Kassel, J.D., Paronis, C.A. & Stroud, L.R. (2003). Smoking, stress and negative affect: Correlation, causation, and context across stages of smoking. *Psychological Bulletin*, 129, 270-304.
- Kinsella, M.T. & Monk, C. (2009). Impact of maternal stress, depression, and anxiety on fetal neurobehavioral development. *Clinical Obstetrics & Gynecology*, 52, 425-440.
- Lazarus, R.S. (1966). *Psychological stress and the coping process*. New York: McGraw-Hill.
- Marin, M-F., Lord, C., Andrews, J., Juster, R-P., Sindi, S., Arseneault-Lapierre, G., Fiocco, A.J., & Lupien, S.J. (2011). Chronic stress, cognitive functioning, and mental health. *Neurobiology of Learning and Memory*, 96, 583-595.
- Nerurkar, A., Bitton, A., Davis, R. B., Phillips, R. S., & Yeh, G. (2013). When Physicians Counsel About Stress: Results of a National Study. *JAMA internal medicine*, 173(1), 76-77.
- Rosch, P. J. (1991). Job stress: America's leading adult health problem. *USA Magazine*, 2.
- Yerkes, R.M. & Dodson, J.D. (1908). The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology & Psychology*, 18, 459-482.

Stress Management: Part 2 – Interventions

Sharla Wells-Di Gregorio, PhD
 Assistant Professor of Psychiatry and Behavioral Health,
 Psychology & Internal Medicine
 Clinical Psychologist, Psychosocial Oncology
 Director, Psychosocial Oncology Fellowship Program
 The Ohio State University Wexner Medical Center

Strategies that DO NOT work

- “Try to be more positive.”
- “Everything will be okay.”
- “Just stop worrying.”
(i.e., Don't worry, be happy.)
- Thought stopping (Wegner, 1994)
- Avoidance & numbing
 - Alcohol or drug use
 - Distraction & procrastination
- Anxiolytics
- 77% of the chronically anxious can improve with cognitive (thought) and behavioral (action) strategies



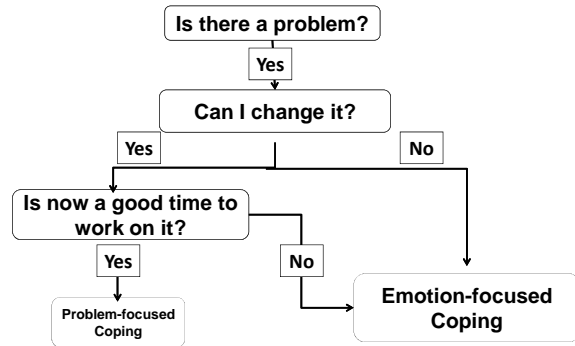
CDC/Deborá Cartagena

Cognitive Behavioral Therapy (CBT)

- Structured, brief and time-limited therapy
- Focused on current behavior
- Empirically-supported to treat a range of clinical problems, including:
 - Anxiety disorders and insomnia
 - Depression
 - Eating disorders
 - Chronic pain

Butler, Chapman, Forman & Beck, 2006

Problem vs. Emotion-Focused Coping



Problem-focused Coping

- Problem-solving
- Getting organized
- Time-management
- Assertive communication to manage interpersonal stressors
- Obtaining instrumental social support

Emotion-focused Coping

- Distraction with pleasurable activities
- Talking with a friend
- Diaphragmatic breathing
- Relaxation
- Mindfulness
- Obtaining emotional support

Problem-Solving

Step 1	• Define the problem.
Step 2	• Brainstorm solutions.
Step 3	• Weigh alternatives.
Step 4	• Select best alternative.
Step 5	• Implement strategy.
Step 6	• Monitor progress.
Step 7	• Go to Step 1 if needed.

Handout:
<http://www.cci.health.wa.gov.au/resources/docs/Info-Problem%20Solving.pdf>

Time Management

- 168 hours in a week: Keep a time diary (Vanderkam, 2010)
 - How do you spend your time?
 - What things do you do that you are good at?
 - What things do others do better than you?
 - When do you tend to waste time?
 - What brings you meaning in life?
 - Is your time focused on what you value most (and are best at)?
 - Learn to say “no” and delegate



Other Tips for Managing Time

- Clarify and set “SMART” goals.

S	• Specific
M	• Measurable
A	• Achievable
R	• Relevant
T	• Time-based

- Monitor progress
- Celebrate successes and examine failures

Managing Email & Smartphone Stress

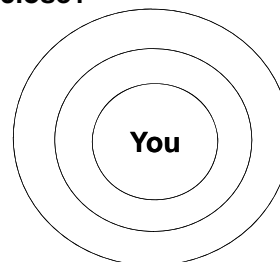
- Check email only at scheduled times
 - Start your day with the most stressful task
 - Save email checking for later in the day
 - Turn off audible alerts
- Have separate work and personal accounts
 - Remove yourself from listservs
- Block time to not answer your phone
 - Especially before bed!

Seek Social Support

- Who?
 - Family, friends, neighbors, clergy, professionals
- How close?



Author: Rhoda Baer



Monitor Expectations

- Listens to your problems & cares about your feelings

Emotional Support

- Helps get things done (e.g., mow the lawn, babysitting, chores)

Practical Support

Information Support

Companionship Support

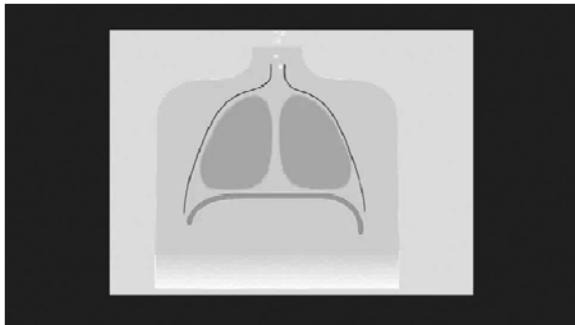
- Gives advice or information

- Does things together with you for fun

Stress Management: Part 2 – Interventions

Emily K. Porensky, PhD
Assistant Professor,
Department of Psychiatry and Behavioral Health
Department of Psychology
The Ohio State University Wexner Medical Center

Diaphragmatic Breathing



CC0 1.0 Universal Public Domain Dedication
Author: John Pierce

Teach Diaphragmatic Breathing

- Get into a comfortable position; eyes closed
- Place one hand on your chest, one hand on your abdomen
- Breathe in 1-2-3-4-5; breathing out 1-2-3-4-5
- Practice for 5 to 10 minutes

Progressive Muscle Relaxation

- Systematic tensing & relaxing of muscle groups (usually 14 or less)
- Produces relaxation response via:
 - ↑ awareness of muscle tension
 - Monitoring & ↓ muscle tension
- Taught by trained clinician
 - Practiced at home in 10-15 minutes daily

Benefits of PMR

- Decreased pain
- Improved sleep
- Increased energy/decreased fatigue
- Decreased perceived stress & anxiety
- Improved relaxation
- Decreased physiologic indices of stress
 - Lower heart rate & salivary cortisol

McCallie & Blum, 2006; Parlow & Jones, 2002

Mindfulness

- Being fully aware in the present moment, non-judgmentally
 - Opposite of auto-pilot or multi-tasking
 - Allows us to be aware of actions and emotions
 - Increases our ability to prioritize, focus, and make life choices that are consistent with our values
- Associated with decreased stress and improved mental & physical health

Brown & Ryan, 2003; Grossman, Niemann, Schmidt & Walach, 2004; Hoffman, Sawyer, Witt, & Oh, 2010; Klatt, Buckworth & Malarkey, 2008

Practicing Mindfulness

- Mindfulness Meditation
 - Mindfulness of breath
- Body Scan
- Yoga
- Mindfulness-Based Stress Reduction (Kabat-Zinn, 2003)
- “*Wherever you Go, There you Are: Mindfulness Meditation in Everyday Life*” by Jon Kabat-Zinn
- *Mind the Moment (free online course)*
www.harvardpilgrim.org/mindfulness

Not Enough Time?

Ask: "What is most stressful in your life right now?"
AND
Educate the patient about the importance/benefits of stress management
THEN

1. Hire a psychologist to work as part of your multidisciplinary team
2. Refer patients to a counselor for Cognitive Behavioral Therapy via:
 - Employee Assistance Programs
 - Ohio Psychological Association: www.ohpsych.org/referral/
 - The internet: www.therapists.psychologytoday.com
 - Community Mental Health Centers: mha.ohio.gov/
3. Recommend classes in relaxation, mindfulness, or meditation:
 - At Ohio State - http://medicalcenter.osu.edu/patientcare/healthcare_services/integrative_medicine/clinical-services/Pages/Mind-Body-Therapies.aspx
 - At local YMCAs and health centers
4. Recommend an online stress management workshop:
 - http://hillsborough.ifas.ufl.edu/family_life/stress_management.shtml

Do as I say....AND as I do...

References

- Brown, K.W. & Ryan, R.M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822-848
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research*, 57, 35-43.
- Hoffman, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 78, 169-183.
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10, 144-156.
- Klatt, M. D., Buckworth, J., Malarkey, W. B. (2008). Effects of Low-Dose Mindfulness-Based Stress Reduction (MBSR-ld) on Working Adults. *Health Education & Behavior*, 36, 601 - 661.
- McCallie, M.S., Blum, C.M., & Hood, C.J. (2006). Progressive Muscle Relaxation. *Journal of Human Behavior & Social Environment*, 13, 51-66.
- Parlow, L.A., 7 Jones, G.E. (2002). The impact of abbreviated progressive muscle relaxation on salivary cortisol. *Biological Psychology*, 60, 1-16.
- Butler, A.C., Chapman, J.E., Forman, E.M., & Beck, A.T. (2006). The empirical status of cognitive-behavioral therapy: A review of meta-analyses. *Clinical Psychology Review*, 26, 17-31.