United States Department of Agriculture, University of Arkansas, and County Governments Cooperating



Volunteer Leader Training Guide

The Mind-Body Connection

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Introduction

Research shows that the mind and physical body are connected. Chronic emotional and mental stress can increase the risk of many chronic diseases. Stress reduction practices, such as mindfulness, can help change the body's reaction to stress and improve health outcomes.

Target Audience

- EHC leaders and members
- Adult audiences

Objectives

- Participants will increase knowledge of physical symptoms of stress.
- Participants will increase knowledge of ways to reduce the effects of stress.
- Participants will plan to adopt at least one new behavior to manage stress.

Handouts

- Activity 1: Day-to-Day Experiences Questionnaire
- Handout 1: How Stress Affects Your Body
- Handout 2: Mindfulness Activities and Resources

Suggestions for Teaching

- Review the lesson guide and handouts.
- Make copies of handouts and activity.
- Acquire raisins for activity.

A PowerPoint presentation is available for presenting this lesson. Information from the slides and slide notes are included in this guide.

Additional References

- UCLA Mindful Awareness Research Center for free guided meditations and mindfulness resources http://marc.ucla.edu/
- For information on Mindfulness-Based Stress Reduction http://www.mindfullivingprograms.com/
- Center for Mindfulness in Medicine, Health Care and Society http://www.umassmed.edu/cfm/

Discuss the following.

Introduction

We think of stress as a mental or emotional issue – something for the brain to handle. But think about this: When you feel stressed, does it stay "in your head" or does it seep out, affecting you physically? Today's discussion will focus on how the mind and body are connected. Specifically, we'll talk about that connection related to stress – how stress affects the body and how to manage or reduce stress by changing the way you think about it.

Activity: Distribute copies of the **Day-to-Day Experiences Questionnaire**. Allow several minutes for participants to complete.

(**Note to Leader:** Engage participants by asking them to share their perceived level of mindfulness based on the **Day-to-Day Experiences Questionnaire**. Allow a few minutes for participants to share. To start the discussion, be ready to share a few examples of your own.)

Activity: To get started, we are going to do a short activity called "stress barometer." The purpose of this activity is to show how what is stressful to one person is not stressful to another.

Materials Needed:) Two pieces of paper with the words "relaxed, no stress" and "high stress" and 2) tape or pushpins

Directions: Designate one side of the room as "relaxed, no stress" and the other as "high stress." Place a printed sign with these labels on each wall. Ideally, there will be a clear path from "no stress" to "high stress" so participants can form a line by placing themselves as a continuum or "meter" between points.

Ask participants stand up. Explain that the opposing walls represent two ends of a "stress meter." You will a read a stressor from the list, and they will move to a point on the stress meter that represents how they perceive the stressor. For example, if it makes them very stressed, they might go stand near the wall. But if they feel neutral about the stressor, they might stand in the middle.

Stressors:

- Coming to today's meeting
- Going grocery shopping
- Driving in heavy traffic
- Dealing with difficult EHC members
- Presenting this leader lesson to your club
- Dealing with family members
- Going to the doctor
- Sitting in a boring meeting
- Riding a roller coaster
- Dealing with illness of a family member
- Standing in a long check-out line
- Christmas
- (You may add stressors of your own specific to your county or group.)

Debrief: After participants have responded to the list of stressors, discuss how stressors are perceived differently by people.

Ask: Why is it that what causes one person to be stressed-out is no big deal to another person? From this activity, what about the responses surprised you? How might these differences affect how we interact with each other?

As we just saw in the "stress meter" activity, stress is subjective. The term *stress* first came about in 1936 and was defined as "the nonspecific response of the body to any demand for change" (Scientist Hans Selye). Since then, others have come up with their own definitions. There is no single agreed-upon definition for stress. What is stress? It depends. What is stressful to one person may be no big deal to another.

Chronic and Acute Stress

There are two main types of stress: **acute** and **chronic**.

Ask: Who can give me an example of **acute** stress?

(Possible answers: slamming on your brakes to avoid an accident, being chased by a wild animal, a pressing deadline, rushing to the post office before it closes, losing a contract or big sale, burning the turkey at Thanksgiving)

Acute stress is shorter in length and does not have time to do the physical damage that long-term stress does. Acute stress is usually recognized by people and is highly manageable.

Ask: Who can give me an example of **chronic** stress?

(Possible answers: dealing with a serious, long-term personal illness; being primary caregiver for a spouse with dementia or Alzheimer's disease; being trapped in an unhappy marriage; being part of a dysfunctional family; living in poverty; living in an unsafe neighborhood; caring for a child with special needs)

Chronic stress is long-term and often occurs when one does not see an end to an unhappy or unpleasant situation. This type of long-term stress causes physical and mental damage gradually and can cause a person to feel worn-down and result in illness.

How Stress Affects Health

Ask: When you are stressed, do you feel it in your body? How does it feel?

Refer to Handout 1: **How Stress Affects Your Body**. A table listing signs and symptoms of stress is on page 3 of the handout. Review the list and ask participants which symptoms or signs are surprising.

We'll spend just a few minutes talking about the negative effects of stress. Then we'll shift the discussion to ways to manage and reduce stress.

Note: Refer to Handout 1: How Stress Affects Your Body for detailed information.

Nervous System

The body shifts into "fight or flight" when confronted with a threat or sudden stressor. Threats can be physical or psychological and may be real or perceived. The "fight or flight" response causes the body to release adrenaline and cortisol. These hormones make the heart beat faster, raise blood pressure, and increase glucose in the bloodstream. Body systems usually return to normal after the crisis passes.

Musculoskeletal System

Muscles tense up when the body is under stress. Tension headaches, migraines, and other musculoskeletal conditions may be triggered when muscles are contracted or "tense" for a long time.

Respiratory System

Stress can make you breathe harder. Rapid breathing can lead to hyperventilation and trigger panic attacks in some people. Stress can also worsen asthma.

Cardiovascular System

Acute stress increases heart rate and makes the heart work harder. Blood vessels expand to increase blood supply to the heart and large muscles. Arteries that supply blood to the heart can become inflamed when acute stress happens too often. This may lead to a heart attack.

Endocrine System

Stress hormones, cortisol and epinephrine, are released by the adrenal glands when the body is stressed. The liver produces more glucose when cortisol and epinephrine are released. This glucose, or "blood sugar," would provide energy needed to deal with a true "fight or flight" emergency. This is not very useful in situations of chronic stress.

High cortisol can have negative health effects. It can increase blood pressure; increase blood sugar levels, which may affect people with diabetes or a family history of diabetes; lower ability to fight off disease and infections; and causes an increase in fat storage, especially around the abdomen. All of this can contribute to increased chances of heart problems.

Gastrointestinal System

Stress can cause you to eat more or less than usual. Eating more or eating different foods, or increased use of tobacco or alcohol, can cause heartburn or acid reflux. Stress can affect your stomach and cause "butterflies," nausea, or pain. Severe stress can even cause vomiting. Stress can affect digestion and cause diarrhea or constipation. Stress can affect nutrient absorption by the intestines and affect how quickly food moves through the digestive tract.

Reproductive System

For women, stress can cause menstrual cycles to be irregular or stop. It can also cause periods to be more painful and reduce sexual desire. For men, excess cortisol produced while under stress can affect normal functioning of the reproductive system. Chronic stress can impair testosterone and sperm production and cause impotence.

Now that we know about the physical effects of stress, let's discuss measures we can take to reduce or manage stress. This is where the mind can do a whole lot to help the physical body. While there are measures we can take to reduce stress, some level of stress will remain. Stress cannot be completely eliminated. We can learn strategies for managing stress that will change our stress response. One way to better deal with stress that comes your way is through *mindfulness*.

Mindfulness and Mindlessness

While *mindfulness* may be a new term for you, there are several decades of research that support the effectiveness of practicing mindfulness for stress reduction. *Mindfulness* is defined by Dr. Jon Kabat-Zinn, the leading researcher of the mindfulness movement, as "the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment to moment." Another definition of mindfulness is being aware of what's going on in the present moment. When you practice mindfulness, you see life experience clearly, as it happens, without an emotional charge. This means we avoid labeling things as bad or good, positive or negative, and instead experience life as it unfolds.

To help us better understand mindfulness, it may help to talk about mindlessness.

Mindfulness is both a practice and a state of mind. Just like any skill, mindfulness increases with practice. And as you increase mindfulness in many aspects of your life, it will become a state of mind.

Acting mindlessly is characterized by distraction, inattention, and a lack of engagement. Being mindful means being "in the moment," fully present, and engaged. This is hard to do in a world where there are so many distractions.

The practice of mindfulness can be as simple as focusing your attention (not zoning out) when a coworker or family member tells a story for the third time. For many of us, it can be difficult to focus when being told a story for the *first* time. Practicing mindfulness can mean that, instead of pulling a phone out of your purse or pocket to pass time standing in line at the grocery store, you focus your attention on observing the people around you, their interactions, and perhaps interacting with them as well.

Let's look back at your responses on the **Day-to-Day Experiences Questionnaire**. How many of you feel you could benefit from having more mindfulness in your life?

Mindfulness does not necessarily involve meditation, but it can. Mindfulness and meditation are closely related, but they are not exactly the same. There are ways to practice mindfulness that do not involve meditation. Likewise, there are some types of meditation that are not tied to mindfulness.

Paying attention to breath is one of the most basic ways to "tune in" to the connection between our mind and body. We'll talk more about that, and other ways to practice mindfulness, in a few minutes. The main idea is that we can train ourselves to be more mindful, and being more mindful will change the way we respond to stress.

Increasing Mindfulness

There are many ways to increase mindfulness. Several are included in Handout 2.

Activity: The Raisin Meditation

Lead participants through The Raisin Meditation from Handout 2: Mindfulness Activities and Resources.

If time allows, include another activity from Handout 2.

Conclusion

There are many ways to be more mindful in our everyday lives, and not all involve a form of meditation. It has been said that meditation is like training a puppy. The mind wanders away, and we must bring it back over and over again. Over time and with training, the puppy learns to stay when we say "stay." So too will your mind become more focused after weeks and months of practice.

Practicing mindfulness is simple but not easy. I hope you have learned more about mindfulness and how it can improve your physical health.