Adaptive Coping and Relaxation Skills for Health & Public Health Professionals Series

DAY TWO: SLEEP HYGIENE & PROGRESSIVE MUSCLE RELAXATION

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Agenda

- Check-in and practice review
- Adaptive Coping: Sleep Hygiene
- Relaxation Skill #2: Progressive Muscle Relaxation (PMR)
- Experiential exercise
- Check-in and questions
- Practice guidelines
Poll Question & Check-In

What was the main struggle you encountered when practicing the breathing exercise this past week?
Impact of Pandemic on Sleep

- Most common sleep changes reported:
  - Decreased sleep quantity and/or quality due to sleep difficulties
  - More dreams involving negative emotions and anxiety as well as pandemic-related content
  - Increased sleep quantity due to more available time
- Early studies on HCW indicate ~30-50% report symptoms of insomnia
Stress & Sleep Disruption

- Stress is often accompanied by emotional and physiological arousal
- Emotional arousal prevents sleep onset due to promoting alertness
- Over time, inability to sleep may become a source of stress and result in emotional arousal, thus preventing sleep onset

CARNEY & MANBER, 2009; IMAGE BY FREPIK
Sleep Regulation: How Sleep Works

- Two key physiological systems:
  - “Body Clock”
  - “Sleep Drive”

- Interact with each other to promote sleep and alertness in appropriate amounts at suitable times

- Certain behaviors can impact these underlying processes that control sleep.

CARNEY & MANBER, 2009; IMAGE BY PAVLOFOX FROM PIXABAY
Role of Body Clock

- Circadian sleep regulation
- Sleep-independent system
- Determines timing of when sleep is most likely to occur for an individual
- Influenced by consistency of scheduled daily activities and exposure to light

KUTANA & LAU, 2020; CARNEY & MANBER, 2009; IMAGE BY GERD ALTMANN FROM PIXABAY
Role of Sleep Drive

- Homeostatic sleep regulation
- Sleep-dependent system
- Pressure to sleep produced by the body over a 24-hour period
- Influenced by cumulative time spent awake and activity over the course of a day

KUTANA & LAU, 2020; CARNEY & MANBER, 2009; IMAGE BY RAWPIXEL FROM PIXABAY
Common Sleep Myths

- “If I don’t get at least eight hours sleep, I won’t be able to adequately function.”
- “If I’ve had a good sleep, I’ll wake up feeling rested and revived.”
- “If I awaken a few times, even though I fall back to sleep, it will have a negative impact on me.”

Carney & Manber, 2009; Image by Rawpixel from Freepik
Building Healthy Sleep Habits

- Optimize sleep regulation systems
- Develop strong mental association between bed/bedroom and sleep
- Establish “wind-down” period before bed
- Enhance sleep environment
- Manage diet and exercise
Optimize Sleep Regulation Systems

**BODY CLOCK IMPACT:**

- Maintain consistently scheduled daily activities (e.g., sleep/rise times, meals, exercise, social interactions)
- Ensure adequate light exposure upon waking and during the day:
  - Open window coverings upon rising for immediate light source
  - Take brief outdoor breaks throughout the day
  - Sit by sunny or bright window for brief periods (e.g., eating a meal, phone call, returning emails)
- Reduce bright light exposure close to bed time:
  - Limit screen time with “electronic curfew” of 30 to 60 minutes prior to bed
  - If working nights, consider wearing sunglasses while driving home from work
  - If working nights, consider using eye mask or black out shades to enhance darkness in bedroom during the day

**SLEEP DRIVE IMPACT:**

- Maintain consistent sleep and rise times even on weekends and days off if possible
  - Remember that going to bed early or sleeping late can diminish your sleep drive and make falling asleep difficult
- If not sleepy at bedtime, consider postponing going to bed until feeling sleepy or drowsy
  - Trying to force yourself to sleep is often counterproductive
  - Waiting until you naturally feel drowsy increases chances of falling asleep more easily
- Refrain from napping unless necessary
  - Try to limit to 20-30 minutes and no later than 3:00pm
- Engage in regular daily physical activity or exercise

CARNEY & MANBER, 2009; HARVEY & BUYSSE, 2018; KUTANA & LAU, 2020
BED = SLEEP

- Do NOT remain in bed if unable to fall asleep within 15-20min
  - Strengthens mental association of bed with not sleeping or struggling to sleep

- Leave bedroom and engage in relaxing activity (e.g., reading, music, meditation) until sleepy and then return to bed

- Avoid engaging in wakeful activities in bed/bedroom (with the exception of sex)
  - Strengthens mental association of bed with being awake and alert
Wind-Down Period

- Protected period (at least one hour) before bed to transition from active to restful state
- Avoid activities that are physically or psychologically stimulating or stressful
- Engage in calming activities such as bathing, reading, listening to music, stretching yoga, or relaxation and meditation exercises
Additional Guidelines

SLEEP ENVIRONMENT

- **LIGHT:**
  - Low-level lighting in bedroom (table lamp vs overhead light) or other rooms as needed (e.g., nightlight in bathroom)
  - Minimize other sources of light (e.g., window coverings, electronics off, eye mask) in bedroom

- **TEMPERATURE:**
  - 60-75 degrees
  - Well-ventilated (e.g. fan)

- **SOUND:**
  - Minimize disruptive sounds (e.g., use earplugs or background noise to mask sounds)
  - If you prefer background noise for sleep, consider using fan, white noise machine, or sleep sounds app (e.g., Calm, Headspace)

DIET & EXERCISE

- **REDUCE STIMULANTS:**
  - Caffeine: 4-6hrs before bedtime
  - Nicotine: 2-3hrs before bedtime
  - Alcohol: 3hrs before bedtime

- **MEALS AND FLUIDS:**
  - Stay hydrated but limit fluid intake in evening to avoid frequent urination through the night
  - Eat dinner 2-3 hours before bed time; avoid foods that interfere with sleep (e.g., high sugar, spicy, heavy)

- **TIMING OF EXERCISE:**
  - Exercise early in day or at least 3 hours prior to bedtime to avoid sleep disruption
Professional Assistance

- Potential indicators: excessive symptoms, subjective distress, impaired daily functioning, compromised relationships, and/or safety concerns
- Many evidence-based therapies are available for a range of issues (e.g., anxiety, depression, insomnia)
- *Psychology Today: Find a Therapist*
  https://www.psychologytoday.com/us/therapists
- *National Suicide Prevention Lifeline: 1-800-273-8255*
  https://suicidepreventionlifeline.org/
Mobile Apps

- **Headspace:**
  [https://www.headspace.com/](https://www.headspace.com/)

- **Calm:**
  [https://www.calm.com/](https://www.calm.com/)

- **COVID Coach:**
Online Resources

- Sleep Education (AASM): [http://sleepeducation.org](http://sleepeducation.org)
- American Sleep Association: [https://www.sleepassociation.org](https://www.sleepassociation.org)
- National Sleep Foundation: [https://www.thensf.org](https://www.thensf.org)
The Benefits of Progressive Muscle Relaxation (PMR)

- **Purpose:** reduces physiological tension
- Increases awareness of muscle tension in your body and helps you differentiate between tense and relaxed muscles
- PMR reduces heart rate, breathing rate, and blood pressure
- Effective in treating a range of issues including: anxiety, depression, mild phobias, insomnia, muscle tension, back and neck pain, hypertension and stuttering
- **Goal:** to readily identify muscle tension in the body and easily release it

DAVIS, ESHELMAN & MCKAY, 2019; IMAGE BY STOCKSNAP FROM PIXABAY
PMR Technique

- Progressively tense and release different muscles groups throughout the body
- Tensing individual muscle groups increases focus on those muscles and helps identify where chronic tension may occur (e.g., mild soreness)
- Tensing the muscle fatigues the muscle fibers, thus enhancing the relaxation sensation once released
- “Actively tensing” muscles = enough tension to feel the muscle contract (noticeable tension) but NOT tensing as hard as you can
- When “releasing” immediately let go of the tension versus slowly releasing as this requires sustained tension

DAVIS, ESHELMAN & MCKAY, 2019; IMAGE BY FIZKES FROM ISTOCK
Rate Your Stress Level

- Rating your stress level before and after each relaxation exercise can help you determine its effectiveness.
- Utilize a basic scale of zero to ten (0-10) to rate your stress level:
  - Zero (0) = no distress at all
  - Ten (10) = your maximum level of distress
- Tracking your stress level before and after each relaxation exercise over time can help you determine your proficiency with that skill.
- The more you practice relaxation skills, the better you’ll become at relaxing.

FOA ET AL., 2019
Progressive Muscle Relaxation (PMR): Instructions

- Rate your current stress level (0-10)
- Sit upright in a chair or lie on your back
- Close your eyes if comfortable or find a point in the room to focus upon
- Follow along with the guided PMR exercise:
  - Actively tense each muscle group for 5-10 sec
  - Focus on tension sensation in that area
  - Release tension and remain relaxed for 10-20 sec
  - Focus on relaxation sensations in that area
- Remember to breathe with your abdomen if possible (use diaphragm to contract/expand lungs; stomach rises on inhale and lowers on exhale)
- Upon completion, repeat sequence a second time

- If at any point during the exercise you experience any pain or discomfort, please feel free to pause or discontinue.

- If you have an injury or chronic pain issue, please do not tense this muscle group. If you experience acute pain, please stop tensing this muscle group. Focus on release only for these areas.

- While practicing at home, if you experience any ongoing negative physical side effects, please consider consulting a physician.

DAVIS, ESHELMAN & MCKAY, 2019
How did you respond to the PMR technique?
The Importance of Practice: Building Skills

- **Key:** Consistent practice promotes skills acquisition and better results

- **Week Two: PMR Exercise**
  - Rate your stress level (0-10) before and after each exercise.
  - Try to complete PMR exercise twice a day if possible.
  - Utilize the guided exercise on the YouTube video if helpful.
  - Continue to practice daily breathing exercise.
  - COVID Coach app includes guided deep breathing and PMR exercises (Manage Stress module > Tools)
References


- Association for Behavioral and Cognitive Therapies. Deciding when to seek treatment. https://www.abct.org/Information/?m=mInformation&fa=DecidingWhenToSeek


- Division of Sleep Medicine at Harvard Medical School. Twelve simple steps to improve your sleep. http://healthysleep.med.harvard.edu/healthy/getting/overcoming/tips
References


