Objectives:

1. List personal (e.g., chronic pain, anxiety) and relational (e.g., sense of connection and community) issues that can be addressed by mind body interventions.
2. Describe how mind body interventions can be used effectively with survivors of torture.
3. Implement brief meditation, postural awareness, and self-massage techniques which can be used with clients.
Mindfulness

Mindfulness means maintaining a moment-by-moment awareness of our thoughts, feelings, bodily sensations, and surrounding environment. Mindfulness also involves acceptance, meaning that we pay attention to our thoughts and feelings without judging them.

-Greater Good Science Center at the University of California at Berkeley

- Can be practiced at home, in the car, while running errands, at work, etc...
- Awareness of the breath, feelings, body and thoughts in the moment
- Use words and phrases to self soothe, label emotional or mental state
- Helps to mitigate stress reactivity and facilitate emotional equilibrium

Meditation

To engage in mental exercise (such as concentration on one's breathing or repetition of a mantra) for the purpose of reaching a heightened level of spiritual awareness.

- Merriam-Webster Dictionary

- Practice of sitting quietly, focusing on the breath
- Breath is the "anchor" or primary focus
- When mental or physical distractions arise, attention is patiently and gently brought back to the breath
- Attitudes: acceptance, compassion, non-judging
- Posture: practitioner can sit on floor or in chair

― Sharon Salzberg, Lovingkindness: The Revolutionary Art of Happiness

"Buddha first taught metta meditation as an antidote: as a way of surmounting terrible fear when it arises."

— Sharon Salzberg, Lovingkindness: The Revolutionary Art of Happiness
Meditation: Loving Kindness

**Metta Bhavana**: developing loving kindness, friendliness, good will

- **Anchor or primary focus** is on thinking and listening to phrases in the mind without pausing
- **Secondary focus** is awareness of breath
- Use of phrases

Meditation is directed to:
1. Self
2. “Benefactor” someone who has been particularly supportive, or close friend
3. Other friends and family members
4. A neutral person

National Capacity Building Project

Meditation: Walking Meditation

Ancient practice still popular in Thai Buddhist monasteries where some monks practice for several hours a day.

- **Anchor or primary focus** of attention is on the movements of the feet and shifting of balance
- **Secondary focus** on the breath
- Walk is deliberate and slower than normal
- Practiced indoors by walking in a line or outside in nature
- Can be combined with loving kindness meditation

National Capacity Building Project

Benefits of Meditation

**Loving Kindness Meditation**

- Increases level of positive emotion (Fredrickson et al, 2008)
- Compassion (Borland, Jones, and Holland, 2012)
- Increases Empathy (Shaver, Leving, Sarne, and Singer, 2012)
- PTSD and depression (Shaver et al, 2018)
- Increases gray matter in parts of the brain (Leung et al, 2013)

National Capacity Building Project
Loving Kindness Meditation

Additional benefits from practitioners experiences:

- Decreases anxiety and worry
- Decreases anger towards self and others
- Decreases nightmares and helps to improve quality and duration of sleep

Narayan Liebenson, guiding teacher at the Cambridge Insight Meditation Center and Insight Meditation Society

Walking Meditation

Settles and clears the mind and calms uncomfortable or intense thoughts and emotions

Promotes insights into resolving day-to-day and interpersonal problems

Trauma survivors gravitate toward walking meditation due to:

1. Calming effect of slow repetitive motion and focus on breath
2. Sense of embodiment and alertness

Based on personal experience

Ugandan monk, Venerable Buddharkkita, teaches Walking Meditation as the primary form of meditation to survivors of war.

Meditation My Role

My experience facilitating meditation in individual therapy with survivors of torture.

- Emphasis choice and comfort
- Invitatinal language - no commands
- Create an environment where patient feels a sense of agency
- Option for eyes open or closed

Possible Activity

- Offer to lead 3, 5, or 10 minute meditation
  - Client’s choice indicates level of comfort to engage in meditation
  - Offer verbal guidance during the meditation
  - Help patient feel supported and maintain focus
  - Opportunity to insert messages about self compassion and acceptance into meditation

Possible Activity

- Offer to lead 3, 5, or 10 minute meditation
  - Client’s choice indicates level of comfort to engage in meditation
  - Offer verbal guidance during the meditation
  - Help patient feel supported and maintain focus
  - Opportunity to insert messages about self compassion and acceptance into meditation
Meditation: Experience with Clients

1. Introduce clients to different forms of meditation:
   - Mantra-based meditation
   - Metta and compassion meditation
   - Walking meditation
   - Sitting meditations (in chair)

2. Meditate with patients

3. Maintain clear boundaries
   - Promised meditation would last for 5 minutes, stop at exactly 5 minutes.
   - If patient is not ready to stop, ask if the patient would like to continue and reset timer for agreed upon extended practice time.

4. Give patients mantra to take home and continue practicing at home.

Cambodian Meditation Group for Torture Survivors

- Goals
- Recruitment
- Curriculum
- Meditation Practice in Group
- Working with distressed group members
- Evaluation

Resources

Centers
- Center for Mindfulness in Medicine, Healthcare, and Society, UMass Medical School
  - [https://www.umassmed.edu/cfm/]
- The John Main Center for Meditation and Interreligious Dialogue, Georgetown University
  - [https://johnmaincenter.org/]

Books
References

- Boellinghaus, Jones, and Hutton, 2012
- Frederickson et al., 2008
- Kearney et al., 2013
- Kimecki, Leiberg, Lamm, and Singer, 2013
- Leung et al., 2013

What is Trauma

- Trauma is not caused by the event itself
  - Incomplete response or impulse
- “Any experience that the system does not have the resources to integrate, or that overwhelms the being”
- Trauma is systematic and associated with zip code

Polyvagal Theory/ANS

- The vagal circuits activate in a hierarchical order, from newest to oldest. Each system can override other systems.
- A human being will employ:
  - Ventral Vagal: social engagement
  - Sympathetic Nervous System: “fight or flight”
  - Dorsal Vagal: freeze
Freezing and Re-Freezing

- Freezing is implemented as a last defense to prevent system overload, or as a protection mechanism to avoid pain, or death.
- Involuntary
- When a being begins to thaw, all the energy present before freezing emerges. I.E. being is primed for an all-out attack or to flee.
- Often there is no healthy way to discharge this energy. Survivors are often unconsciously afraid of directing the rage or terror toward another or themselves.
- Refreeze occurs/Response can become patterned

Discharge

- Antelope/flight/freeze/thaw – discharge (flight and shake)
- Deer/orienting – discharge (ear twitch)
- Opossum/freeze/thaw – discharge (running)

Trauma Symptoms

- De-pathologize/steaming from the nervous system attempting to regulate
- T symptoms are like a release valve/an attempt to regulate a dysregulated nervous system
- Reptilian brain regulates autonomic functions (like mating, eating, etc.). Rich ground for T symptoms: eating disorders, insomnia, promiscuous behavior, addiction.
Trauma Informed Yoga

• This intervention is:
  – Empowering, offers agency
  – Sensory motor, interoceptive, proprioceptive rich
  – External presentation is not evaluated
  – Increases window of tolerance/heart rate variability/vagal tone
  – Uncouples DMN
  – Promotes social engagement
  – In a safe, predictable, controlled environment

Default Mode Network

• This network was found accidentally/test subjects brain was quite active when in “resting state”.
• Large scale brain network connecting several regions
• Task negative network/daydreaming/thinking of the future/planning/ruminating/autopilot/negative self-referential
• Associated with chronic pain and depression
  – In fact the negative self-evaluation aspect of the DMN is so strong it can predict relapse in depression.
  – Every time you have physical experience and a judgement the two areas are wired together.
  – Tracking or searching for pain leads to more pain.

Default Mode Network (Cont.)

• Activated in 5-7 seconds. Even in long-term meditators. Long-term meditators have the skills to shift out of auto pilot and back into contact with present moment reality.
• Mindfulness/present moment awareness of the body without judgement/curiosity/interoception/practices of compassion for self and others can shift the wiring of this network/TIY uncouples this network.
**Interoception**

- Sensations in the body like full bladder/heartbeat/breeze on skin.
- Demonstrated to reduce inflammation markers
- Tracking sensations in parts of the body that do not have pain
  - Increases window of tolerance and capacity to be with present reality
  - Decreases default mode tendency to search for pain/creates changes in the brain

For more information, listen to Bo Forbes and Brooke Thomas on the Liberated Body Podcast. Link included in additional resources post-webinar.

**TIY Increases Heart Rate Variability**

- HRV is the amount of time between the heartbeats/not static
- Demonstrates how a being returns to baseline after a perceived external threat
- As we grow older it becomes more fixed
- How we measure vagal tone
  - We can have them hold a pose and then drop into a more restorative pose demonstrating increased HRV.

**TIY Increases Vagal Tone**

- We measure this through HRV
- Low Vagal tone is associated with: Cardiovascular Condition/Stroke/Depression/Cognitive Impairment/Inflammatory Conditions (including autoimmune)
- Vagal tone is thought to be associated with sudden death (Mark Rosenburg, UCLA-study not yet published)
- Vagal tone is increased through: Slow Rhythmic Breathing/Meditation/Balancing Gut Microbiome/Humming or Speaking/Cold Water on the face
TIY in Practice

- Patient sits with one foot on the floor and the other on the carpet
- Notice how body organizes to lift an arm or leg
- Body scans/menu of sensation
- Link simple breath with movement
- Languaging: empowering, offer choice, invitational

Works Cited and Suggested Continued Reading

- Interoception Practice with Bo Forbes (LBP 053) [Link]
- Yoga and Post-Traumatic Stress Disorder: An Interview with Bessel van der Kolk, MD (2009). Integral Yoga Magazine Special Section I: Yoga & the Emotional Body
- Dr. Peter Levine: Waking the Tiger: Healing Trauma. July 7, 1997. by Peter A. Levine, Ann Frederick (Contributor)
- Firefly International [Link]

Trauma-informed physiotherapy

- Mind-body connection
- Teach about breathing, grounding, interplay between emotions and pain/posture/movements
- Body awareness and self-regulation
- Reconnection in positive way with body
- Pain education as form of treatment for clients who have chronic pain concerns
Chronic pain among torture survivors

- Danish study 80-100% of traumatized refugees have significant pain issues, even 10-20 years after torture (Buhmann, C.B.)
- Norwegian study of 61 refugees - 66% had clinical levels of chronic pain. 88% of refugees with PTSD had severe chronic pain (Teodorescu, D.S., et al)
- Ugandan study of 92 tortured clients showed that all 92 had significant musculoskeletal issues (Mayanja, F.)

Possible reasons for high prevalence of chronic pain in torture survivors

- Pain is direct result of pain-inflicting experiences (suspension leads to pain in neck and shoulders, falanga torture leads to foot pain)
- Pain is due to traumatic experiences—survivors live with persistent state of high arousal. Increased muscle tension and heart rate, respiratory rate
- Health status of tortured refugees influenced by stressors such as living in exile, poverty, in unsafe environments without social support

Possible reasons for high prevalence of chronic pain in torture survivors (cont.)

- Many of the survivors have had no or minimal medical attention (Liedl, A., Knaevelsrud, C.)
- Often, torturers told victims of torture that they would always have the pain as a memory of the torture (Olsen, D.R., et al)
PTSD and chronic pain issues

- Chronic pain is prevalent in patients with PTSD and depression (Buhmann, D.B.)
- Traumatized refugee subjects with PTSD had higher rates of severe pain than those without PTSD (Liedl, A., Knaevelsrud, C.)
- Study showed less improvement in PTSD symptoms when patients reported pain in upper extremities (Morasco, B.J. et al)

---

Hypothesis is that somatic complaints are an integrated part of trauma-related disorders and that the suggested neurobiology of chronic pain conditions and PTSD are similar (Morasco, B.J., et al)
- There is graded relationship between trauma exposure, PTSD, and majority of chronic medical conditions (Sledjeski, E. M., et al)

---

Acute versus chronic pain
(teaching clients about this is a form of treatment and leads to pain going down on average 3 points on 1-10 scale)
When Pain Persists (Louw A, et al, 2016)

Pillars of reducing pain

1) Pain education
2) Sleep (improving quality and quantity)
3) Goal setting and attainment
4) Aerobic exercise (endorphins, decrease avoidance for movement due to fear of pain and injury, regain functional mobility)
5) For many, any form of mindfulness activity which the client enjoys

Body Image Drawings pre-therapy

Rough sketches representing those of three different clients. From Berlin, 1992
References


National Capacity Building Project