Yoga for Active Self Care and Pain Management

World Spine Care Yoga Project

May 2018, Presenter: Erin Moon, Co-director of WSCYP
Yoga

Mindfulness

Breathing

Postures
Why Yoga for Chronic Low Back Pain?

Therapies addressing physical, psychosocial, and emotional dimensions may be more helpful than treatments addressing only one dimension

A biopsychosocial longitudinal self-care strategy

Physical activity has known benefits for cLBP (Hayden et al., 2005)

Reduces maladaptive movements/postures and assist soft tissue remodelling (Langevin et al., 2006)
RCTs for non specified cLBP were reviewed
- 6 large RCTs (N=90-313)
- 6 smaller RCTs (N= 12-80)

5 Reviews (1 Meta analyses)

At least 3 large studies in progress (in 2016) 2 with veterans

Recommendations for cLBP in 2 Guidelines (Chou 2007; Nice 2009)

At least 1 meta analyses/review for Mindfulness and Meditation for Chronic Pain (Lara Hilton et al; 2016)

<table>
<thead>
<tr>
<th>Intervention Category*</th>
<th>Intervention</th>
<th>Acute &lt; 4 Weeks</th>
<th>Subacute &amp; Chronic &gt; 4 Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-care</td>
<td>Advice to remain active</td>
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<td>Books, handout</td>
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<td>Application of superficial heat</td>
<td>●</td>
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<tr>
<td>Nonpharmacologic therapy</td>
<td>Spinal manipulation</td>
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<td>Exercise therapy</td>
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<td></td>
<td>Massage</td>
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<td></td>
<td>Acupuncture</td>
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<td>Yoga</td>
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<td>Cognitive-behavioral therapy</td>
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<td>Progressive relaxation</td>
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<td>Pharmacologic therapy</td>
<td>Acetaminophen</td>
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<td>NSAIDs</td>
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<td>Skeletal muscle relaxants</td>
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<td></td>
<td>Antidepressants (TCA)</td>
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<td></td>
<td>Benzodiazepines**</td>
<td>●(▲)</td>
<td>●(▲)</td>
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<tr>
<td></td>
<td>Tramadol, opioids**</td>
<td>●(▲)</td>
<td>●(▲)</td>
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<tr>
<td>Interdisciplinary therapy</td>
<td>Intensive interdisciplinary rehabilitation</td>
<td>●</td>
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Cramer Review

In the short term, strong evidence that yoga:
- Reduced pain
- Improved back-related functional disability
- Improved QOL

At longer-term follow-ups, moderate evidence that yoga:
- Reduced pain
- Improved back-related functional disability
Several RCTs of patients with chronic LBP found that the yoga group showed improvements in:

- **Mood** (Williams et al., 2009; Tekur et al., 2012)
- **Self-efficacy** (Tilbrook et al., 2011, Sherman et al., 2013)

Tekur et al (2008, 2010) reported increased **active and passive range of motion** when assessing lumbar spine flexibility and straight leg raise test, respectively.
Relief of physical & mental stress

- Evidence of effectiveness for:
  - Stress and Anxiety (Vollestad et al. 2012)
  - Depression (Balasubramaniam et al., 2012)
  - Insomnia (Afonso et al., 2012; Khalsa, 2004)

- Thickening of areas of the brain associated with pain tolerance (Villamure et al. 2013)

- Increases in levels of GABA, the main inhibitory neurotransmitter of the brain (Streeter et al., 2007, 2010, 2012)

- Improvement in:
  - Pain
  - Depression
  - QOL
  (Mindfulness and Meditation for Chronic Pain Lara Hilton et al., 2016)

World Spine Care
Overall Conclusions

- These studies strongly suggest that Yoga has an important role to play in management of nonspecific cLBP for adults who are willing to practice yoga (primarily pain, function).

- There is limited evidence for acute back pain or specific causes of back pain such as that related to stenosis, disc herniation or LBP related to special populations (e.g. during pregnancy).

- For patients: practice Yoga 1x a week may be enough to provide relief from cLBP (Saper et al., 2013).

- Strong evidence for Yoga and improved QOL, decreased insomnia, depression, stress and anxiety.
Hypothetical Model

Yoga → Mindfulness → Breath → Postures → 

Increased physical activity
Increased ROM
Improved mood
Decreased stress/anxiety
Improved self care
Improved sleep habits → Decreased back pain
World Spine Care Yoga Project
What is the WSC Yoga Project?

**Mission**
To support the global mission of World Spine Care by empowering individuals to share the practices of Yoga.

**Vision**
Everyone, everywhere has access to the practices of Yoga as a tool for active self-care and pain management.
Level 1
Lower mobility/higher potential for chronic pain
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Teachers Name</th>
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</thead>
<tbody>
<tr>
<td>Thurs 3rd</td>
<td>Standing Yoga</td>
<td>Ookeditse</td>
</tr>
<tr>
<td>Mon 7th</td>
<td>Standing Yoga</td>
<td>Bareedi</td>
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<tr>
<td>Thurs 10</td>
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<td>Mon 14th</td>
<td>7.30am</td>
<td>Oki</td>
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<td>Thurs 17th</td>
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<td>Mosedi</td>
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<tr>
<td>Mon 21st</td>
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<td>Gloria</td>
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<td>Thurs 24th</td>
<td>7.30am</td>
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<td>Mon 28th</td>
<td>7.30am</td>
<td>Bareedi</td>
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<tr>
<td>Thurs 31st</td>
<td>7.30am</td>
<td>Oki</td>
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Mosedi will teach the first lesson of June
Level 2 Higher mobility lower chronic pain
Why is it unique?

- Capacity building
- Building from the ground up addressing unique requirements
- Direct measurable outcomes
- In collaboration with a major health care organization
- One of the only training programs of its kind around the world

This model is continuing to expand in the hopes of reaching millions of people worldwide, old, young, rich and poor who are suffering from musculoskeletal pain and limited mobility.
At 7am we hope to see you at our morning yoga class to experience an example of what the Yoga Project is offering to patients today. As per our mission it will be accessible to all levels of mobility.

Tomorrow at 10:45-12pm we will be offering breakout session teaching practical application of Breath, Mindfulness and Movement exercises you can offer your patients. 

Yoga interventions for pain management and active self care within the clinical setting.