Body Awareness and the Practice of Yoga or Meditation in 443 Primary Care Patients with Past or Current Low Back Pain

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**BACKGROUND**

**Low back pain** (LBP) is the most common reason for patients to seek integrative medicine care. Neurologically, perceived pain is an element of interoceptive body awareness.

**Body awareness** (BA) describes how we attend to our body and to pain.

**Yoga and meditation** may help pain patients through improved BA, but BA has rarely been assessed in this population.

**OBJECTIVE**

- to provide the first quantitative data on Body Awareness in primary care patients with past or current LBP,
- to compare those who practiced yoga and/or meditation with those who did not.

**METHODS**

**Design:** 2-year observational cohort study; secondary data analysis.

**Setting:** large health care system: Kaiser Permanente, Northern California.

**Subjects:** 435 primary care patients, who had acute LBP at inception.

**Measures:** the Multidimensional Assessment of Interoceptive Awareness (MAIA) questionnaire assesses 8 dimensions of BA: noticing, distracting, worrying, attention regulation, emotional awareness, self-regulation, body-listening, and trusting.

**Analysis:** At follow-up, we compared rates of non-recovery (chronic pain) and MAIA scores between those who practiced a form of mind-body therapy and those who did not.

**RESULTS**

at 2-Year Follow-Up (N = 443)

- **Persistent/recurrent LBP:** 82 (18.5%)
- **Experience with yoga:** 80 (18.5%)
- **Experience with meditation:** 144 (33.3%)
- **Experience with yoga and meditation:** 52 (12.0%)
- **Experience with any kind of mind-body approach:** 184 (41.5%)

"1 more than a taste of …"

Higher levels of yoga and meditation experience [4 levels] were associated with higher Body Awareness scores (MAIA). The risk of having chronic pain 2 years after a first episode of acute low back pain was reduced by 38% (p=.041) in those who reported more than a “taste” of meditation experience and by 35% (p=.047) reporting any type of mind-body therapy experience.

**Table 2:** Self-Reported Interoceptive Awareness in a Cohort of Acute Low Back Pain Patients at 2-Year Follow-Up

<table>
<thead>
<tr>
<th>Dimension</th>
<th>n = 62</th>
<th>n = 85</th>
<th>n = 144</th>
<th>n = 52</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noticing</td>
<td>3.29 ± 1.37</td>
<td>3.89 ± 0.90</td>
<td>3.82 ± 0.98</td>
<td>3.96 ± 0.95</td>
</tr>
<tr>
<td>Non-Distracting</td>
<td>2.30 ± 0.97</td>
<td>2.1 ± 0.81</td>
<td>2.06 ± 0.87</td>
<td>2.12 ± 0.87</td>
</tr>
<tr>
<td>Non-Worrying</td>
<td>2.89 ± 1.13</td>
<td>3.04 ± 1.10</td>
<td>3.03 ± 1.10</td>
<td>3.12 ± 1.12</td>
</tr>
<tr>
<td>Attention Regulation</td>
<td>3.09 ± 1.18</td>
<td>3.22 ± 1.04</td>
<td>3.31 ± 0.94***</td>
<td>3.50 ± 0.97***</td>
</tr>
<tr>
<td>Emotional Awareness</td>
<td>3.00 ± 1.55</td>
<td>3.70 ± 1.00</td>
<td>3.81 ± 0.92***</td>
<td>4.01 ± 0.78**</td>
</tr>
<tr>
<td>Self-Regulation</td>
<td>2.44 ± 1.32</td>
<td>3.35 ± 1.12**</td>
<td>3.50 ± 1.00***</td>
<td>3.70 ± 0.91***</td>
</tr>
<tr>
<td>Body Listening</td>
<td>2.02 ± 1.40</td>
<td>2.91 ± 1.18*</td>
<td>2.99 ± 1.13***</td>
<td>3.21 ± 1.16***</td>
</tr>
<tr>
<td>Trust</td>
<td>3.80 ± 0.80</td>
<td>4.08 ± 0.84</td>
<td>4.00 ± 0.91</td>
<td>4.20 ± 0.87</td>
</tr>
</tbody>
</table>

**Table 3:** Proportion of Chronic Pain at 2 Years

- Yoga 19.2
- Meditation 21.7
- Mind-Body 21.4

**CONCLUSIONS**

- Primary care patients with **Acute Low Back Pain** were followed for 2 years. Those who reported having experience with **yoga** and/or **meditation** also reported higher levels of **Body Awareness** compared to those without such experience.
- Patients with mind-body experience reportedly (1) used more **Self-Regulation**, i.e. calming oneself by focusing attention on breath and body sensations when overwhelmed or distressed, and (2) **listened more to the body**.
- Mind-body therapies were associated with **better recovery from acute low back pain**.