Major Models and Evidence for Chronic Pain Management Effectiveness: Integrative Care

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Why Complementary and Integrative Health for Pain?

• High rates of use of some CIH modalities across United States with pain primary health *complaint* for which used

• At least small consistent effects seen for many CIH modalities/pain conditions

• Although data on harms limited; *no evidence suggesting serious harms*

• Focus has evolved from Complementary and *Alternative* Medicine (CAM) to use to Complementary and *Integrative* Health (CIH)

• Some health practices may more fully harness nonspecific (placebo) treatment effects (benefit and historic albatross?)
DeBar et al. Contemporary Clinical Trials, 2018
What CIH Practices Are Most Common?

Trends in Use of Common CIH Practices (NHIS Survey)

- **Yoga**
  - 2012: 10%
  - 2017: 14%
  - Column1: 9%

- **Meditation**
  - 2012: 4%
  - 2017: 14%
  - Column1: 3%

- **Chiropractor**
  - 2012: 8%
  - 2017: 11%
  - Column1: 7%

Clarke et al.; NCHS Data Brief, 11/2018
### Impact of CIH Treatment on Pain and Functioning
1-6 months post treatment, AHRQ CE Review (June 2018)

<table>
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<th>Chronic Low Back Pain</th>
<th>Chronic Neck Pain</th>
<th>Osteoarthritis</th>
<th>Fibromyalgia</th>
<th>Tension Headaches</th>
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<td>Pain</td>
<td>Function</td>
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<td><strong>Mind Body Practices</strong></td>
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<td>Yoga</td>
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<td>MBSR</td>
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<td>Meditation</td>
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<td><strong>Manual Therapies</strong></td>
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<td>Musculoskeletal manipulation</td>
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<td>+* (hip)</td>
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<td>Massage</td>
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<td><strong>Acupuncture</strong></td>
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All compared with usual care, placebo, sham, attention control, or waitlist
+ small ES, ++ moderate ES, * results endured through 6-12 months post treatment
a Alexander Technique, b Qigong & Tai Chi, c Myofascial release, d Laser acupuncture
Digging Deeper
(or what the AHRQ report doesn’t speak to…)

- Chronic pain rarely shows up alone
  - multisite / widespread pain common
  - frequent and exacerbating symptom co-riders (sleep problems, anxiety, depression)*

- Everyday CIH treatment often delivered as more comprehensive package (needling +, spinal manipulation +…other CIH modalities, support for broader lifestyle changes; yoga)

- CIH approaches often disconnected from conventional health care and integration logistically and culturally challenging

* SPADE symptom cluster – Davis, Kroenke et al, Clinical J of Pain, 2015
Mindfulness-Based Stress Reduction (26 weeks)\textsuperscript{d}

NNT: 5-6 for all active txs versus UC

Acupuncture (8 weeks)\textsuperscript{a}

Yoga (12 weeks)\textsuperscript{c}

Massage (10 weeks)\textsuperscript{b}

\textsuperscript{a} Cherkin, Sherman, et al, Arch Intern Med, 2009; \textsuperscript{b} Cherkin, Sherman et al, Arch Intern Med, 2011

\textsuperscript{c} Sherman, Cherkin et al, Arch Intern Med, 2011; \textsuperscript{d} Cherkin, Sherman et al, JAMA, 2016
Implications...

• “The effects of patient and clinician credible CIH interventions may derive more from contextual effects of the care experience (e.g., listening, caring, touching) than from the specific characteristics of the intervention” – Dan Cherkin

• Given similar CIH effects perhaps:
  
  • Giving patients a choice may increase commitment, expectation, & adherence to intervention/concomitant lifestyle change?
  
  • Less concern about geographic variability in available modalities?
  
  • Can we more thoughtfully employ “active” and “passive” CIH (and other nondrug) modalities in our design of clinical trials?
The psychological and social forces of healing are typically viewed as in competition with drug effects in placebo controlled trials (top) but in everyday practice they underlie all treatment effects (bottom).
Harnessing “Mindset” to Improve Outcomes

Alongside advances in drug and surgical trials, improved understanding of the ability of the social context and patients’ mindsets to evoke healing properties in the body can be an extraordinary resource for health and healing.
- Crum, BMJ, 2017, Making Mindset Matter

The most important thing is the initial connection you make with the patient. That connection is critical, because that patient needs to know they have, number one, hope. I sell hope here. I hate to admit this, but that is one thing that Western medicine does really badly.
- Acupuncturist interviewed about working with those with chronic musculoskeletal pain.
Barriers to Integrating CIH Into Clinical Care

• Current clinical, logistical, and cultural divide between conventional health care systems and CIH providers

• CIH care provision often not well aligned with what can be readily reimbursed under public health care systems (CMS-Medicaid)
  • practitioner credentialing issues (yoga practitioners, massage therapists)
  • misalignment between reimbursable / evidence based portion of CIH treatment and current structure of care

• No feedback loop between CIH and conventional medical providers
  • little information about CIH provider quality of care / service provision
  • patient as conduit
CIH Implementation Challenges: Patient at center of navigating and integrating care

Communication flow among patients, PCPs, CAM providers

- Referral Request
- Locate a CAM Provider
- Communication
- Referral Center
- Medical eligibility criteria (diagnoses, reason for referral) electronically transmitted
- Summary of services sent if acupuncturist or chiropractor requesting treatment extension
- Communication (Very infrequent)

Primary Care Physician

CAM Provider

Patient

Penney et al. BMC CAM, 2016
Key Summary Points

• Chronic pain medical problem for which most often CIH used
  • evidence suggests at least modest impact on functioning for several modalities (yoga, massage, chiropractic care, acupuncture, MBSR)
  • little or no adverse effects.

• Increasing emphasis on promoting active treatment/self-care and integrating CIH services with conventional care to do so

• CIH practices may better harness non-specific (placebo) treatment effects than conventional care (and better address multiple chronic conditions? [Multiple overlapping pain conditions? Associated symptoms?])

• Current health care structural system and cultural gaps in integrating CIH with approaches to treating chronic conditions
Acknowledgements

- Dan Cherkin
- Karen Sherman
- Cheryl Ritenbaugh
- Frank Keefe
- Michael Von Korff
- Rick Deyo
- Bob Kerns
- Charles Elder