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Attitudes towards Complementary Medicine in Patients with Musculoskeletal Pain

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Attitudes towards Complementary Medicine in Patients with Musculoskeletal Pain

Caroline Vines
Community Health Centers of Burlington | October 2018
Project Mentors | Heather Stein, MD
The Problem

- Epidemic of opiate use-related deaths has become a **public health crisis** and has highlighted the potentially lethal effects of opiates.

- In 2016, there were 20 drug-related deaths per 100,000 people in the state of Vermont, versus 19.6 per 100,000 nationally (amfAR, 2018).

- Patients with chronic pain, co-occurring substance abuse disorders, or mental illness are at higher risk for misuse of prescription opioids (Bolden et al., 2017).

- Call to health professionals to **reduce prescription of opiates**, however many patients with chronic pain have been managed with these drugs for years.

- Even in patients who use opiates for chronic pain management, not recreationally, high doses are associated with adverse health outcomes such as constipation, dependence and risk of overdose.

- At CHCB, providers can have a difficult time decreasing dosages of opiates for patients who have been on the medications for years:
  - Some patients are reluctant to try non-pharmacologic methods for pain management.
  - Insurance doesn’t always pay for complementary or alternative medicine.
Public Health and Community Cost

- In 2015, Vermont providers wrote 62.0 opioid prescriptions per 100 persons - approximately 388,100 opioid prescriptions – compared to 70 per 100 persons nationally (NIH, 2018)

- Vermont established new guidelines for prescribing opiates to patients beginning July 1, 2017

- Study by Blue Cross showed a 41% reduction in opiate prescriptions in the state of Vermont between 2013 and 2017, compared with a 29% decline nationally

- While new guidelines and prescribing practices have changed, some chronic pain patients are unwilling to use alternative or complementary methods for pain management

- In 2016, the Vermont legislature commissioned study to assess acupuncture for Medicaid patients with chronic pain (Davis et al., 2018)
  - Patients offered up to 12 treatments within 60 day period by certified acupuncturists
  - Results showed improvements in group mean pain intensity, pain interference, physical function, fatigue, anxiety, depression, sleep disturbance, and social isolation as assessed

Top: Number of opiate prescriptions per 100 persons by state. Darker color indicates higher number. Bottom: National rate of opiate prescriptions per 100 persons by year.
Community Perspective

Sam Russo, ND
Provider at CHCB Winooski

How can naturopathic medicine be used in the treatment of musculoskeletal pain?

- Acupuncture and naturopathic manipulation can be used to treat most tendinopathies, low grade ligament sprains, neuromuscular imbalances leading to repetitive stress injuries, pain management for OA and spinal stenosis
- Acupuncture can also be used for treatment of mononeuropathies like cubital tunnel syndrome and sciatica

What are the barriers to using complementary medicine for pain management?

- Accessibility, cost, and dissuasion by providers against naturopathic medicine are barriers to complementary treatments
- There needs to be a paradigm shift and increase in accessibility in order for patients to use complementary medicine for chronic pain

How can NDs and complementary medicine play a greater role in the treatment of chronic pain patients who are currently using opiates to manage symptoms?

- NDs bring knowledge of diet, appropriate use of nutritional and botanical medicines, naturopathic manipulative treatment and other physical medicine modalities and behavioral health strategies
- Should integrate complementary medicine into a pain management program

Erika Brown
Finance/Billing at CHCB

What complementary services are covered by insurance?

- Insurance pays for PT, but there is often a copay
- Very few plans cover acupuncture – some Blue Cross plans might cover
- Massage can sometimes be covered if it is integrated into a PT practice
- Medicare covers chiropractic visits, but does not cover anything “experimental” – most naturopathic medicine falls under that umbrella

What barriers exist to getting insurance coverage for complementary medicine?

- Medicare does not recognize NDs or LACs as providers, thus their services are never covered
- Regardless, some practices, like that of Sam Russo, offer a sliding scale fee scale to help mitigate some of the cost barrier
Intervention and Methodology

- **5 question survey** of patients at CHCB with acute (<1 month), subacute (1-3 months), or chronic (>3 months) musculoskeletal complaints with qualitative discussion

- Questions asked about:
  - Current pain treatment including pharmacologic and complementary methods
  - Past experience using complementary medicine for musculoskeletal pain (not specific to current chief complaint)
  - Likelihood of using complementary methods in the future on 10 point scale, with higher scores correlating with higher interest
  - Barriers to using complementary medicine

- **Complementary methods included:** Physical Therapy, Chiropractic Manipulation, Massage, Acupuncture, Meditation, Yoga, Psychotherapy
9 responses: 5 chronic pain, 1 subacute pain, 3 acute pain patients

Insurance: 4 Medicaid, 3 Medicare, 1 Vermont Exchange, 1 Private

Past use of complementary therapy for pain management:
- 9/9 used PT
- 3/9 used acupuncture
- 3/9 used chiropractic manipulation
- 1/9 used yoga + massage
- No participants had used meditation or psychotherapy specifically for pain management

Current methods of pain control
- NSAIDs only: 3/9
- Opiates: 3/9
- Gabapentin: 1/9
- Physical therapy: 1/9
- Chiropractor: 1/9
- Massage: 1/9
- Yoga: 1/9
- Heat/ice: 2/9

2/3 patients currently using opiates were patients with chronic pain
Participants expressed most interest in using chiropractic manipulation, massage, and acupuncture for future pain relief.

Patients who had used complementary methods in the past seemed to be more open to using these methods in the future.

Patients using opiates to manage chronic musculoskeletal pain were not as open to complementary therapy as patients with acute or subacute complaints.

**Barriers to Using Complementary Medicine:**

- All participants said they didn’t know enough about certain methods to use them.
- Participants who used PT in the past without success were less willing to use it in the future.
- 2 participants said they wouldn’t use acupuncture because of “fear of needles”.
- **Time and cost** were the most commonly cited barriers.
- No participants had heard of meditation or psychotherapy being used for pain management.

**Interest in Complementary Therapy for Pain Management (n=9)**

<table>
<thead>
<tr>
<th>Therapy</th>
<th>Likelihood of Future Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychotherapy</td>
<td>1</td>
</tr>
<tr>
<td>Meditation</td>
<td>2</td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>3</td>
</tr>
<tr>
<td>Yoga</td>
<td>4</td>
</tr>
<tr>
<td>Acupuncture</td>
<td>5</td>
</tr>
<tr>
<td>Massage</td>
<td>6</td>
</tr>
<tr>
<td>Chiropractic manipulation</td>
<td>7</td>
</tr>
</tbody>
</table>
**Evaluation**

### Discussion

- Across all groups of patients there was a lack of knowledge about how complementary methods could help with musculoskeletal or neuropathic pain.
- Past experience with services, such as PT or chiropractics, seemed to influence patient willingness to use these services in the future, even if their chief complaint was different.
- Patients perceive scheduling and time to be a barrier to using services.
- Services that require effort on the patient’s end (i.e. PT, yoga, meditation) seem to be less popular than passive treatment (i.e. chiropractics, acupuncture, massage).

### Limitations

- Small sample size (n=9).
- Did not evaluate patient’s knowledge of complementary medicine, or give a tutorial on what some of the services entailed.
- Did not evaluate willingness to decrease opiate use in conjunction with starting complementary methods for pain management.
Recommendations: Current Suggestions for Intervention

- **Initiating discussion about complementary medicine early** in the course of care for musculoskeletal complaints could increase likelihood of use

- Patients and providers need to be **better educated** about the potential benefits of methods like acupuncture, chiropractics, meditation, and psychotherapy, particularly for the management of chronic pain
  - **Seminar for providers** about the benefits of complementary medicine and what services are available in the area
  - **Flyers or handouts** could be helpful in educating patients about complementary medicine, including cost of these services at local establishment

- Providers should highlight the long-term importance of **physical therapy and daily exercise/activity** in treating and preventing future musculoskeletal injury
Recommendations

Future Projects

• Depending on funding and space, CHCB could initiate **free yoga classes or massage sessions** led by local yoga or massage students

• Providers could **educate patients** about the relationship between mental health and chronic pain
  • Providers could suggest **mindfulness apps** like Calm, Headspace or Insight Timer with the goal of helping patients cope with chronic pain

• The medical community and patients need to **advocate for increased insurance coverage** of complementary therapy, including PT, chiropractic services, and acupuncture

• **Future projects** could investigate self-reported musculoskeletal pain before and after treatments with alternative methods


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Heather Stein, MD
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