The Effects of Patient Education on Familiarity, Willingness to Try, and Readiness to adopt Nonpharmacological Modalities for Persistent Non-cancer Pain Management: A Quality Improvement Project

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Introduction

Opioid analgesics are commonly used to treat persistent non-cancer pain (PNCP).

While beneficial for acute and subacute pain, long-term use can contribute to misuse, abuse, addictions, and overdose which could lead to unintended death.

Many adult patients with PNCP are unaware about nonpharmacological modalities (NPMs) and its beneficial effects for PNCP.

This lack of familiarity (knowledge) may be a key contributor to NPMs under prescription (by providers) and underutilized (by patients) for persistent pain management.

Barriers to NPMs utilization:

- Lack of familiarity
- Access to NPMs (including financial challenges)
- Patients’ beliefs and attitudes

Purpose

- Implement a structured NPM education program to facilitate the use of these modalities
- The AIMs were to determine the effectiveness of program on patients:
  1. Familiarity with NPMs
  2. Willingness to Try (WTT)
  3. Readiness to Adopt NPMs (RTA)

Methods

- One group pre-test/post-test QI design
- Convenient sample was used which consisted of 22 adult patients with PNCP > 3 months with nociceptive pain, able to understand the English language, receiving care from an interventional pain clinic (See Table 1).
- A 10-week education program featuring 15 NPM classes was implemented on a weekly basis (See Table 2).
- Participation in the classes were voluntary.

Results

Participation and Attendance

- 54% attended only 2 classes, 22% attended 16 classes
- 82% attended manipulation/body classes
- 65% attended mind/body classes
- 32% attended energy/natural/biological classes
- 44% attended spiritual classes

- 1 participant decreased her daily dose of opioids after completing all 15 classes

Conclusion

PNP education can influence patients’ willingness to adopt some modalities for persistent pain management.

PNP education can encourage self-management skills.

Nurses and providers can play a key role in facilitating discussions with patients about their pain management regimen and NPMs that are most appropriate, beneficial, and align with their individual treatment goals.

Providing patient education about NPMs may influence patients overall use of opioid analgesics for PNCP.

Table 2. NPMs Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mind/Body Medicine</td>
<td>Yoga, meditation</td>
</tr>
<tr>
<td>Energy Medicine</td>
<td>Reiki, acupuncture</td>
</tr>
<tr>
<td>Mind-Body Medicine</td>
<td>Mindfulness, CBT</td>
</tr>
<tr>
<td>Natural Biological</td>
<td>Aromatherapy, massage</td>
</tr>
<tr>
<td>Spiritual</td>
<td>Prayer, meditation</td>
</tr>
</tbody>
</table>

Table 3. Participants response to Willingness to Try (WTT) questionnaire Pre-Post Intervention

<table>
<thead>
<tr>
<th>Class</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat/Cold therapy</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Massage therapy</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Chiropractic manipulation</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Mindfulness</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Movement therapy</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Acupuncture</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Energy medicine</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Aromatherapy</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PNE</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: NPM=Nonpharmacological modalities, CBT=Cognitive Behavioral Therapy, PNE=Pain Neuroscience

Key References:


Complementary Therapies in Medicine, 23(6), 621-626.