Developing a Treatment Plan Using the 5 Key Domains of Best Practice Pain Care

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Disclosures

• The authors have nothing to disclose.
Changing the Conversation about Pain: Pain Care is Everyone’s Job

Oregon Pain Management Commission (OPMC)
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Objectives

- Use consistent messaging explain pain processing
- Identify 5 key domains of pain care
- Understand how shared decision-making improves treatment planning
- Recognize features of complex pain in a patient presentation
Pain Care is Everyone’s Job
Mary: Initial Visit

- Reason for visit: left knee pain x 8 weeks
- History: Gradual onset, no known injury
- Pain: Verbal analog scale (VAS) = 7/10

Orders:
- X-ray
- Physical Therapy
- Hydrocodone- Acetaminophen PRN
Mary: Follow-up Visit

- Pain is no better; pain score= 7/10
- Hydrocodone (60 MED)
- Physical therapy caused more pain
- X-ray Results:
  - Moderate/severe osteoarthritis
Mary: Follow-up Visit

- Pain is no better; pain score = 7/10
- Hydrocodone (60 MED)
- Physical therapy caused more pain
- X-ray Results:
  - Moderate/severe osteoarthritis

Orders:
- Physical therapy discontinued
- Change medications to a long acting formula of oxycodone
Mary: Today

- Pain persists
- Joint Injections x 2
- **Surgery: Total Knee Replacement**
- Medication daily dose is now 250 MED
- Pain spreading throughout left leg as well as in right knee, and in the low back, thoracic spine and neck
Old Model \implies \text{Pain} = \text{Tissue Damage}
Leads to:

• External locus of control
• Perception that pain is mysterious and unmanageable
• Surgeries and injections that do not change the pain experience
Pain always results from bodily damage?
Pain always results from bodily damage?
How Pain Works

https://www.youtube.com/watch?v=MqoS7RUrUqg
The brain changes automatically in response to input.

- Occurs with all pain
- Pain can be reversible
New Understanding Neuroplasticity

<table>
<thead>
<tr>
<th>Brain functions frequently associated with pain processing</th>
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<tbody>
<tr>
<td>Pre motor planning</td>
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<tr>
<td>Problem solving</td>
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<td>Memory</td>
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<td>Visual information</td>
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<td>Spatial orientation</td>
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<td>Sensory input regarding body part specificity</td>
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<tr>
<td>Expectation</td>
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<tr>
<td>Stress</td>
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<tr>
<td>Fear</td>
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Repetition reinforces the strengthening of brain pathways.

The brain changes:

- Pathways are strengthened
- More brain functions involved
Neuroplasticity can work FOR us by flooding the brain with healthy input using:

- Senses
- Thoughts
- Beliefs
- Memories
- Emotions
- Movement
- Activity
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Key Points

• Pain is a multi-dimensional experience

• All pain is real pain

• Nociception is neither necessary nor sufficient for pain

• PAIN ≠ HARM

Adapted from material from G. Lorimer Moseley: Understand and Explain Pain course material 2010
Pain Education As A Treatment Intervention


Decrease in utilization of services postoperatively  (Adriaan Louw, PhD, PT, et SPINE Volume 39, #18)


Increase in mobility  (Moseley and Hodges, Clin J Pain, 2004 Louw et al Physiotherapy J, 2011)
What We Say Matters! Danger & Threat

MRI and X-Ray results

THREAT!

Fear of movement

Struggles in living with pain

Medication is the only thing that can help me

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Talking about pain changes beliefs

Click to add text
Changing beliefs changes threat value

Changing threat value changes the pain experience
What We Say Matters: Safety & Hope

Understand pain

Quiet your worry

Normal age-related changes

Sore, but safe

Bring some FUN back in your life!

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Motivational Interviewing Skills

- Express Empathy
- Avoid argumentation
- Roll with Resistance
- Support self-efficacy
- Develop discrepancy
Key Domains: Knowledge of Pain

- Knowledge of pain
- Sleep
- Nutrition
- Mood
- Activity
"We now understand some things about pain differently. And we know that when a person understands pain better, it can actually help in several ways. You may already know a great deal, but would you be willing to watch a video for a few minutes so that we can talk about it and build a plan together?"

See Resources or visit the Oregon Pain Management Commission (OPMC) for the Pain Care Toolbox.
Shared Decision Making:

- Helps determine where to begin
- Encourages active participation
- Identifies motivation
- Requires permission

Available on the Oregon Pain Management Commission (OPMC) website or in Resources. Select for the Providence Persistent Pain Toolkit.
Key Domains: Activity and Pacing

- Knowledge of pain
- Sleep
- Nutrition
- Mood
- Activity
Fear Avoidance

Avoidance of activities associated with pain due to beliefs that the pain itself is harmful
Activity and Pacing: Key Concepts

Return to activity:

- Reverses deconditioning
- Improves sleep
- Healthy input to the brain

Expect it to be a gradual process:

- Encourage your patient that they are safe to move
- Avoid flareups

You're an important coach!

See Resources or visit the Oregon Pain Management Commission (OPMC) for the Pain Care Toolbox.
Activity and Pacing: Strategies

- Pacing to Return to Activity:
  - Get support and encouragement
  - With a professional, community group, or a friend

- Doing more is more important than "exercising"

- Normalize discomfort

- Ideas:
  - Aquatic exercise
  - Gentle therapeutic yoga
  - Tai Chi
  - Simple whole body movement, focusing on breathing comfortably

See Resources or visit the Oregon Pain Management Commission (OPMC) for the Pain Care Toolbox.
About Pacing

Pain Response – With Persistent Pain

New Potential Injury

Flare Up

New Pain Response

https://www.youtube.com/watch?v=hjenuiXDUZg
"In this situation, the things we do in everyday life aren’t making our condition worse, even if what we are doing causes discomfort. As you begin to increase your activity and your body adapts to new challenges, you will probably feel sore and stiff, which is completely normal. Gentle movement will ease the soreness, over time."

See Resources or visit the Oregon Pain Management Commission (OPMC) for the Pain Care Toolbox.
Key Domains: Sleep

- Sleep
- Knowledge of pain
- Nutrition
- Mood
- Activity
Sleep: Key Concepts

- Sleep/wake cycle is often disrupted
- Fatigue exacerbates chronic pain
- Rest is essential to rejuvenate and repair tissues
- Calming the nervous system can promote rest

See Resources or visit the Oregon Pain Management Commission (OPMC) for the Pain Care Toolbox.
Sleep: Strategies

- Improve sleep with sleep hygiene principles:
  - Consistent sleep/wake cycle
  - Paced exercise and limited napping
  - Relaxation/mindfulness training


- Address sleep apnea

See Resources or visit the Oregon Pain Management Commission (OPMC) for the [Pain Care Toolbox](http://www.cbtforinsomnia.com/).
Connecting with patient

"One of the most important things you can do to decrease pain is to improve your sleep. Would you like to hear more?"

"As little as 10 minutes of aerobic exercise, such as walking or cycling, can significantly improve nighttime sleep quality, mood, and energy level."
Key Domains: Mood

- Knowledge of pain
- Sleep
- Nutrition
- Activity
- Mood
Mood impacts pain. Factors impacting pain:

- History of trauma
- PTSD
- Depression
- Anxiety
- Isolation
- Ongoing stress

Pain is a stressor which results in chemical changes such as the release of cortisol and proinflammatory cytokines affecting tissue regeneration, immune function and metabolic controls which in turn increases pain.

Decreasing pleasurable activities increase the focus on pain.
Mood: Strategies

- Engaging in pleasurable and social activities
- Meditation/mindfulness/relaxation
- Consider referral to behavioral health for:
  - Cognitive Behavioral Therapy
  - Acceptance and Commitment Therapy

See Resources or visit the Oregon Pain Management Commission (OPMC) for the Pain Care Toolbox.
Lowering your stress response to pain will reduce your pain. Here is how:

The same parts of our system that work hard when we feel stress also work hard when we feel pain.

That’s because both feelings are part of our Emergency Response System. When our brain senses danger, it activates this system. Stress doesn’t directly care pain. But stress can make pain worse and
Diet increases pain by:

- Prostaglandin -2 is a compound that produces inflammation increasing pain globally.
- Processed foods and animal fats found in a Standard American Diet promote prostaglandin -2.

Diet decreases pain by:

- Prostaglandins 1 and 3 are compounds that decrease inflammation, thereby decreasing pain.
- These are found in colorful vegetables and lean proteins in the Mediterranean Diet.

See Resources or visit the Oregon Pain Management Commission (OPMC) for the Pain Care Toolbox.
Understanding barriers to better eating

- Access to grocery stores
- Lack of money
- Fatigue

Explore knowledge of healthy eating and cooking; assistance with

- Food security
- Transportation
- Cooking classes

A dietary log can be useful

See Resources or visit the Oregon Pain Management Commission (OPMC) for the Pain Care Toolbox.
"If you think of pain like a fire, a bad diet pours gasoline on the fire, and the good diet pours water on the fire. There are foods we often eat that actually increase our pain through inflammation, like processed foods. And, there are also foods that decrease inflammation and pain such as fresh vegetables."

See Resources or visit the Oregon Pain Management Commission (OPMC) for the Pain Care Toolbox.
Pain Story: Mary - What Did We Miss?

Additional Assessment

History: pain onset, gradual following unexpected death of mother.

Knowledge of pain and beliefs:

- STarT Back Assessment Tool: "It's not safe for a person with a condition like mine to be physically active."
- Believes medication is the only thing helping her.
Additional Assessment

Sleep:
- 4 hours per night maximum
- Naps frequently during the day

Mood:
- PHQ 4 = mod/severe psychological distress
- History of childhood trauma, depression and anxiety
Additional Assessment

Activity:
- Unemployed
- PEG Pain Screening = pain significantly interferes
- Oswestry Disability Index = severe disability
- No energy for hobbies

Nutrition:
- Convenience foods as she does not have energy to cook, difficulty in the kitchen
- Minimal consumption of fruits and vegetables
Questions and discussion
Rethinking Pain

Understanding pain
With knowledge comes power

Did you know?
- There's a lot you can do to ease your pain.
- When people understand their pain, it decreases.
- All pain comes from your brain. That doesn't mean it's "in your head." It means the brain puts together information and forms a pain response.
- Pain doesn't always equal damage. Your brain may have become so good at producing pain that it doesn't stop—even when you've recovered from an injury or illness. In a situation like this, don't waste movement rehab can make your pain worse.
- Stress and pain are closely related. Focus on reducing stress, and the way you respond to stress.

Your relationship with pain

- Acute pain occurs as a direct result of an injury. The pain sends a signal that something is wrong and produces pain so you can be aware of it. This is a very useful response.
- Persistent pain exists after the danger has passed. The danger signal has "gone off" in the brain and it's no longer useful.

For help:
- No one wants to feel pain. Whether you stub your toe or bang your finger with a hammer, your body's natural reaction is to make you stop what you're doing. Pain is a natural part of life. It's your body's way of telling you something is wrong.
- For more information, visit the Oregon Pain Coalition.

See Resources or visit the Oregon Pain Coalition.
Sleep: Resources

Tips for Better Sleep

Healthy balance in your day creates better sleep
- Early bedtime and wake-up time
- Avoid naps
- Avoid caffeine
- Exercise regularly
- Wind down before bed
- Use sleep hygiene practices

Lack of balance during the day creates poor sleep
-irregular activities
- late night
- stress
- illness
- other medical conditions

See Resources or visit the Oregon Pain Management Commission (OPMC) for the Pain aiThority: www.painauthority.org
A picture doesn’t tell the whole story

These images show X-rays of two knees. On the left, we see severe degeneration of the joint, and on the right, we see a healthy knee.

Up to half of people with severe arthritis in the knee have no symptoms.

Ten percent with no arthritis on an X-ray have severe pain.

Pain ≠ Harm
Nutrition: Resources

Change your food
Change your pain

Limit added sugar and sugary foods from one's diet
Avoid sugar as it can lead to weight gain and is unhealthy.

Drink enough fluids, especially water
Stay hydrated to avoid dehydration.

Eat lots of low starch vegetables
Include vegetables in every meal to increase fiber intake.

Eat healthy fats and avoid the bad fats
Choose healthy fats like olive oil and avoid saturated fats.

Ideas for Healthy Eating on a Budget

Easy Meals:

Healthy Snacks:

Dairy:

Don't buy on impulse:

Plan your menu for the week:

See Resources or visit the Oregon Pain Management Commission (OPMC) for the Pain Management Program.