A Shifting Paradigm:
From Biomedical to Biopsychosocial Interactions

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Accreditation and Credit Designation

• Accreditation:
  ▪ The American Academy of Pain Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

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Target Audience

• The overarching goal of PCSS-O is to offer evidence-based trainings on the safe and effective prescribing of opioid medications in the treatment of pain and/or opioid addiction
• Our focus is to reach providers and/or providers-in-training from diverse healthcare professions including physicians, nurses, dentists, physician assistants, pharmacists, and program administrators

Educational Objectives

• At the conclusion of this activity, participants should be able to:
  1. Describe the critical interaction between biopsychosocial factors in the manifestation, maintenance, and treatment of chronic pain
  2. Identify at least two ways to discuss the biopsychosocial approach with patients so that they appreciate the complex interplay of psychosocial variables in the pain experience
Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage.

Illustration of the pain pathway in René Descartes’ *Traité de l’homme* (Treatise of Man) 1664.

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Pain Experience

Motivational Affective

PAIN EXPERIENCE

Cognitive Evaluative

Pain Experience

**Biomedical or Biopsychosocial**

- **Biomedical**
  - Focus on purely biological factors in illness/disease
  - Predominant model used in medical education/by medical providers
  - Health = freedom from:
    - Disease
    - Pain
    - Defect

- **Biopsychosocial**
  - Focuses on 3 factors which all play a role in illness/disease process/functioning:
    - Biological/physiological
    - Psychological
    - Social
  - Acknowledges the interaction between the physical body and the mind and social context

Effective Pain Management

- Requires an integrated bio-behavioral approach and understanding of relevant psychosocial factors and the peripheral and central systems
- The importance of psychosocial variables is often underestimated and misunderstood by patients and providers, despite the evidence supporting their relationship to the pain experience

Why Does the Gap Between Standard and Practice Exist?

- Biopsychosocial model is the recognized gold standard
- However, clinical practice is largely based on biomedical perspective
  - How does this gap impact patients?
  - How does the gap impact provider satisfaction?
  - What can we do to change the culture and shift the paradigm?

Unified Front?

• Medical providers acknowledge psychosocial factors in pain experience and treatment outcomes
• Recognition of limitations of a purely biomedical focus
• Accept chronic pain as a chronic condition
• A clear consistent message about realistic options and outcomes, focused on living a quality life with pain
• Biopsychosocial care is the best foundation for care, not the last resort

Early and Often

• Introduce the biopsychosocial model to patients as early as possible, especially by medical providers
• Educate on complexity of chronic pain
• Positively impact ‘buy in’
• Need for comprehensive, multimodal approach
• Encourage self-managed techniques
• Factors should be discussed and integrated every visit

Pain Train

- Biopsychosocial aspects are the engine, not the caboose
- Using analogies can help explain complex concepts:
  - e.g. you don’t get to pick all the cars on the train, but you can help steer the train in your chosen life journey

CASE: 45-Year-Old Married Teacher

- Presents seeking medication for pain and feeling “on edge”
- Chief complaint: fibromyalgia and “fiber fog”
- Consumes a few drinks 2-3 times/week
- Hydrocodone/acetaminophen reduces pain from 7 to 4 on a 1-10 scale for about 2 hours
- She is smoking, missing work, and “moody”
- She wants you to prescribe hydrocodone/acetaminophen, lorazepam, and methylphenidate
- **What will you prescribe?**
What Would You Prescribe?

- Opioids?
- Benzodiazepines?
- Stimulants?
- Antidepressants?
- Antabuse?
- Other?

What May Your Prescription Imply?

- Medication: Medication is the answer.
- Surgery referral: Surgery is the answer.
- Etc.
- Etc.
- Eventual result: Passive approach to a chronic problem that requires a proactive engaged patient
Never Only Opioids...

- In 2012, National Institutes of Health’s working group on integrative pain strategies for the military declared that “opioids alone cannot be the answer.”


Step 1: Non-pharmacological treatments:
- Yoga, heat and cold, exercise, manual therapies, weight loss, CBT, meditation, massage, acupuncture, self-management, TENS, assistive devices

Step 2: Topical treatments

Step 3: Local injections

Step 4: Spine injections:
- Epidural steroid injection, trigger point injection
  as a means to get patient to physical therapy

Step 5: Systemic analgesics:
- Level 1: acetaminophen 3000 mg/d or short-term NSAIDs
- Level 2: non-acetylated salicylates
- Level 3: low-dose, short-acting opioids
- Duloxetine (likely addresses central sensitization)

Step 6: Surgery

**Prescribe Evidence-Based Therapy For Chronic Pain**

1. Soothe the central nervous system
2. Change pain thoughts
3. Change pain behaviors
4. Ask family to change reaction to pain
5. Daily physical activity
6. Change relationship to pain
7. Focus on life
8. Help body and brain heal:
   - Sleep hygiene
   - Don’t smoke

**Biopsychosocial Multimodal Menu: Reduce Distress and Symptoms**

<table>
<thead>
<tr>
<th>BIO</th>
<th>PSYCHO</th>
<th>SOCIAL</th>
</tr>
</thead>
</table>
| Rational polypharmacy  
  - NSAIDs  
  - Anticonvulsants  
  - Tricyclics/SNRIs | Cognitive behavioral therapy | Productive activities |
| Physical conditioning  
  - Physical therapy  
  - Occupational therapy  
  - Exercise | Physiological soothing  
  - Relaxation techniques  
  - Progressive muscle relaxation  
  - Biofeedback | Plan fun activities with adults outside of the home |
| Physical therapies  
  - Counterstimulation  
    - TENS  
    - Heat/cold | Yoga/tai chi  
  Activity pacing  
  Increase positive self-talk  
  Reduce catastrophizing | Engage with family  
  Stay active  
  Reduce time off feet |
**Change Patient’s Relationship to Pain**

- **Acceptance:**
  - Letting go of struggle against the way things are now
  - Peaceful coexistence with pain

Promote acceptance of pain in life, so can focus energy on having quality of life


**Change Focus from Pain to Quality of Life**

- What gives your meaning?
- What are your most important values?
  - eg, loving partner, fun parent
- What goals do you have to honor these values?

Your Goals
1. Being kind even when in pain
2. Shared activities despite pain
3. Etc...

- What actions are you taking to live your life consistent with your values?

*Goal is to enlarge life not reduce pain*

Discuss Dialing Down the Danger Signal to Reduce Catastrophizing and Anxiety

<table>
<thead>
<tr>
<th>Pain Amplifying</th>
<th>Pain Dampening</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I can’t stand this.”</td>
<td>“I don’t like it, but I’ve dealt with worse.”</td>
</tr>
<tr>
<td>“It’s killing me.”</td>
<td>“It’s bothering me, so I’ll need to adjust my day.”</td>
</tr>
<tr>
<td>“I should be pain free.”</td>
<td>“I choose to make the most of each day.”</td>
</tr>
<tr>
<td>“I can’t live like this.”</td>
<td>“This will pass. My life matters.”</td>
</tr>
</tbody>
</table>

Be Mindful of Our Own Catastrophizing

- If I (stop opioids, suggest CBT, etc), the patient will get mad at me.
- They will stop coming in and buy heroin on the streets.
- If my Press Ganey scores drop, my director will be upset with me, I’ll lose my job, my children will go hungry…
- I should please all of my patients.

Self-CBT: Is this accurate? Is it helpful?
Change the Scale

• NOT “What’s your pain rating on a 1 to 10 scale?”
• How many steps are you averaging each day?
• How many minutes of relaxation breathing are you doing on most days?
• How many tai chi or yoga classes have you attended (or videos watched) since our last visit?

Change the Conversation at Each Visit

• NOT “How’s your pain?”
• How was your meeting with the pain psychologist?
• What is the most interesting thing you learned from the pain care book you are reading?
How to Shift Locus of Control at Each Visit

- What are you most proud of regarding your progress since our last visit?
- How are you managing difficult days?
- What “movement medicine” are you doing now?
- What “relaxation medicine” are you practicing?
- What “pleasure medicine” will you do before our next visit?

How to Shift Perspective at Each Visit

- How has your family responded to your progress?
- How have your friends supported your changes?
- Since they are so concerned about you, how can you reassure them and have them support your progress?
Discuss Changing Pain Behaviors

- Focusing on pain:
  - Makes the pain worse
  - Is time-consuming
  - Can lead to isolation from friends and family
  - Affects relationships
- So I've noticed that you tend to hold your neck, tilt, etc.
  - What else have you noticed that you do that shows pain?
  - How can you change that?


Have Patient Ask Family Members to Ask About Plans/Distractions, Not About Pain

- When spouse/significant other is solicitous, person with chronic pain:
  - Has increased pain
  - Has increased pain behaviors
  - Has decreased functioning
  - Has increased opioid use

Move Patient From Passive Role to Active Role

- How can I support you in your progress?
- What area of functioning are you working on now?
- What have you found to be the most helpful so far in achieving that goal?
- What will be the next step that you will take in your pain care plan?

Pain Care Plan

- Daily stretch, tai chi, yoga
- Good nutrition
- Get enough sleep
- Daily exercise
- Steady pace
- Schedule breaks
- Ask for help when needed
- Active relaxation
- Watch your (pain) language

What are you willing to do? How confident are you?

Designed by creativemarm/Freepik

Designed by Freeqik

Designed by iStockphoto/Freepik
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- What will you prescribe?

Biopsychosocial Script

1. Physical activity medicine: Walk 5 minutes daily
2. Relaxation medicine: Listen to relaxation CD 2X/day
3. Movement medicine: Stretch 10 minutes AM and PM
4. Pleasure medicine: Pleasant activity 20 minutes/day
5. Desensitization medicine: Begin SNRI
6. Social medicine: Attend Yoga class 2 x week
7. Anti-hyperalgesia medicine: Reduce opioid by 10%/week
Summary

- Biopsychosocial care for chronic pain should begin at first visit and be reinforced at each visit
- Promote self-efficacy and self-care
- Use language to change locus of control
- Encourage the patient’s active role in their care
- Imply momentum in their movement
- Help find healing community for wellness

References

References

• IOM Committee on Advancing Pain Research, Education and Care. Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research. Institute of Medicine; 2011.
• Newton-John TR. How significant is the significant other in patient coping in chronic pain? Pain Manag 2013;3:485-93.

PCSS-O Colleague Support Program and Listserv

• PCSS-O Colleague Support Program is designed to offer general information to health professionals seeking guidance in their clinical practice in prescribing opioid medications.
• PCSS-O Mentors comprise a national network of trained providers with expertise in addiction medicine/psychiatry and pain management.
• Our mentoring approach allows every mentor/mentee relationship to be unique and catered to the specific needs of both parties.
• The mentoring program is available at no cost to providers.

For more information on requesting or becoming a mentor visit: www.pcss-o.org/colleague-support

• Listserv: A resource that provides an “Expert of the Month” who will answer questions about educational content that has been presented through PCSS-O project. To join email: pcss-o@aaap.org.
PCSS-O is a collaborative effort led by American Academy of Addiction Psychiatry (AAAP) in partnership with: Addiction Technology Transfer Center (ATTC), American Academy of Neurology (AAN), American Academy of Pain Medicine (AAPM), American Academy of Pediatrics (AAP), American College of Physicians (ACP), American Dental Association (ADA), American Medical Association (AMA), American Osteopathic Academy of Addiction Medicine (AOAAM), American Psychiatric Association (APA), American Society for Pain Management Nursing (ASPMN), International Nurses Society on Addictions (IntNSA), and Southeast Consortium for Substance Abuse Training (SECSAT).

For more information visit: [www.pcss-o.org](http://www.pcss-o.org)
For questions email: pcss-o@aaap.org

Twitter: [@PCSSProjects](https://twitter.com/PCSSProjects)

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