

Behavioral Management of Chronic Pain in Primary Care



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Introduction



- Licensed counseling psychologist
- Arizona State University's DBH Program
 - www.dbh.asu.edu
- Experiences with chronic pain in primary care

Poll....



- Provider types
- Have any of you experienced acute pain? Chronic pain?
- Experience with chronic pain in your practice
- How comfortable are you managing chronic pain?
 - Opioid misuse?

Agenda



- Chronic pain and primary care – facts and figures
- Models of chronic pain
- Behavioral health approaches to managing chronic pain
 - The 5 A's
 - Stepped care in an interdisciplinary setting
- Assessment and management of opioid risk

Chronic Pain



- NIH has identified chronic pain as the most costly medical problem in **America** (Bryne & Hockwarter, 2006)
- **CDC: 1 in 4** have had a day long episode of pain within the last month (CDC, 2006)
 - 1 in 10 have had pain lasting 1+ years
- Pain accounts for over **80%** of all physician visits (Gathel & Turk, 1996)
- **10%** of drug sales are pain related (Max, 2003)
- **30-54%** of pain patients have comorbid depression (Banks & Kerns, 1996)
- **24-67%** of patients with substance use disorders have chronic pain (Otis & Pincus, 2008)

Chronic Pain in Primary Care



- Most common pain complaints in primary care include (Hunter et al., 2009):
 - Low back pain
 - ✦ Lifetime prevalence of 60-70%
 - ✦ 25-30% of people with LBP seek medical care (Kincade, 2007)
 - Migraine & Tension headaches
 - Arthritis pain
 - Fibromyalgia
- Over 80% of PCPs rate medical school training in chronic pain treatment as inadequate (Upshur, Luckmann, & Savageau, 2006)
- Behavioral health interventions have been demonstrated to be effective for managing all categories of chronic pain

Acute vs. Chronic Pain (Hunter et al., 2009)



- **Acute pain:**
 - Generally occurs with illness or injury
 - Resolves with health or resolution of injury
- **Chronic pain:**
 - Persistent pain
 - Typically lasts 6+ months
 - ✦ Some variation in literature classifies pain as chronic after three months
- Patients often initially manage chronic pain in ways similar to acute pain, which exacerbates experiences

Types of Pain



- **Nocioceptive**
 - Somatic pain – activation of pain receptors on skin or deep tissues/muscles
 - ✦ *Surface somatic pain*: often described as sharp, burning, prickling
 - E.g. cuts, burns, post-surgery
 - ✦ *Deep somatic pain*: described as dull, localized, aching
 - E.g. musculoskeletal or repetitive strain injuries
 - Visceral pain – activation of pain receptors in areas of the body that are enclosed
 - ✦ Not well localized, described as pressure-like or deep-squeezing
 - E.g. cancer, compression, infiltration, extension, or stretching of abdomen, chest, or pelvis
 - Often treated with:
 - ✦ Nonsteroidal anti-inflammatory medications (NSAIDs)
 - ✦ Opioids (e.g. methadone, morphine, Vicodin, Percocet)

Types of Pain



- **Neuropathic pain**
 - Results from damage to nerve endings
 - ✦ E.g. diabetes, phantom limb, cancer, HIV/AIDS
 - Described as shooting, stabbing, burning, electric
 - May travel along spine into extremities
- **Medication treatment for nociceptive pain is generally less effective for neuropathic pain**
- **Treated with:**
 - Anticonvulsants (e.g gabapentin, neurontin)
 - Nerve block injections
 - Off-label use of tricyclic antidepressants (e.g. amitriptyline)

Models of Pain



- Multiple models of the pain experience
- Important to find model that fits best with patient's experience of pain
 - Variation in patient worldview, life experience will impact perceptions
- Examples:
 - Gate-control theory
 - Biopsychosocial model
 - Cognitive-behavioral transactional model
 - Cognitive-behavioral fear-avoidance model

Gate Control Theory (Melzack & Wall, 1965)



- First theory to suggest pain not simply a function of nerve impulses from sensory inputs directly to the brain
- “Gate mechanism” at the dorsal horn of the spinal cord
 - ✦ Degree to which gate is open determines extent of pain experience

Factors that open the gate:

- *depression
- *anxiety
- *fear
- *mental focus on injury/pain
- *sense of loss of control
- *negative thoughts
- *social withdrawal

Factors that close the gate:

- *emotional control
- *relaxation
- *mental distraction
- *positive thoughts
- *sense of control
- *engaging in pleasurable activities

Biopsychosocial Model of Pain (Engel, 1977)



- Pain as the product of interactions among biological, psychological and social processes
- For example:
 - Pain → Negative thoughts about pain (psychological)
 - ✦ “This is never going to get better”
 - Negative thoughts → Withdrawal from activities due to fear of re-injury or exacerbation (social)
 - Withdrawal → Muscle atrophy, increased pain (biological)

Cognitive-Behavioral Transactional Model (Kerns, Otis, & Wise, 2002)



- Emphasis on the role of family/social groups in development and maintenance of chronic pain
- Families reinforce:
 - *Coping
 - *Continued activity
 - *Emotional wellbeing
 - *Increased pain
 - *Disability
 - *Affective distress
- Family's response and its perceived impact shape future views of stress/pain in a dynamic and reciprocal way

Cognitive-Behavioral Fear Avoidance Model (Vlaeyen & Linton, 2000)



- **Individuals may:**
 - Consider pain as non-threatening, which leads to engaging in adaptive behaviors to improve functioning
 - Consider pain as threatening and catastrophize, which leads to development of fear of pain, avoidance, deconditioning, depression, and subsequent increased pain
- **Avoidance leads to increased disability, depression, and more pain**

Discussion Questions



- Which model resonates best with you and your patient population?
- How does this impact patient care?

Integrated Behavioral Care for Chronic Pain



- *Integration* – structural & collaborative integration
 - Behavioral health as part of the primary care team
 - Ongoing collaboration between behavioral health and PCPs
 - Shared medical records, treatment goals

- *Coordination* – programmatic approaches to managing care among providers
 - Referral programs
 - Discussion of cases

The 5A's

(Whitlock, Orleans, Pender, & Allan, 2002)

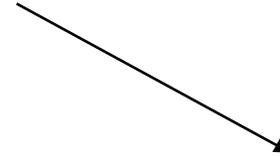


- Commonly used in primary care for a wide range of concerns
 - Stepped care programs often incorporate 5A's as lowest level of intervention
- Assess
- Advise
- Agree
- Assist
- Arrange

The 5A's Model of Behavior Change in Primary Care

Assess

Risk factors, behaviors, symptoms, attitudes, preferences.



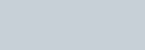
Advise

Specify personalized options for treatment, how symptoms can be decreased and functioning and quality of life/health can be improved.



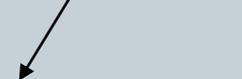
Personal Action Plan

1. List goals in behavioral terms.
2. List strategies to change health behaviors.
3. Specify follow-up plan.
4. Share the plan with health care team.



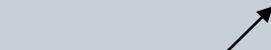
Agree

Collaboratively select goals based on patient interest and motivation to change.



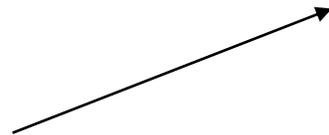
Assist

Provide information, teach skills, and help problem solve barriers to reach goals.



Arrange

Specify plans for follow-up (visits, phone calls, mail reminders).



From "Self-Management Aspects of the Improving Chronic Illness Care Breakthrough Series: Implementation With Diabetes and Heart Failure Teams," by R. E. Glasgow et al., 2002, *Annals of Behavioral Medicine*, 24, pp. 80–87. Copyright 2002 by Erlbaum. Adapted with permission

Assess: Key Areas



- **Goal of assessment is to:**
 - Identify factors that contribute to the initiation, exacerbation, or maintenance of pain
 - Identify factors that lead to excessive suffering
 - Determine best course of action/treatment
- **Domains of interest:**
 - Physiologic
 - Sensory
 - Affective
 - Cognitive
 - Behavioral
 - Sociocultural
 - Spiritual
- **An assessment using the 5A's is inherently more targeted than traditional mental health assessments that use open ended-questions**

Sample Questions



- Where is the pain located, and can you describe the quality?
- When did the pain start? What was going on at that time?
 - How many times a day/week/month does it (or exacerbations) occur?
- On a scale of 1-10, what are the current, highest, and lowest pain levels you experience?
 - What makes pain better or worse?
- How does your pain limit you?
 - Describe a typical day, including work, home, and leisure activities
 - What would you be doing differently if you weren't in pain?
- How has pain impacted your relationships?
 - How do people in your life respond to your pain? How would you like them to respond?
- What have you done to cope with the pain?
- Are you currently using drugs or alcohol? What kind? How much?

Additional Assessment Tools



- Paper pencil tools can be of added value to a clinical interview
 - Allows for ongoing assessment of impact of treatment/clinical outcomes

- Recommended measures:
 - Pain Beliefs Questionnaire
 - ✦ Assesses organic and psychological beliefs about pain, which have been shown to impact coping behaviors
 - Pain Self-Efficacy Questionnaire
 - ✦ Assesses confidence of performing particular activities when experiencing pain
 - ✦ Higher scores have been associated with higher levels of functioning
 - Multidimensional Pain Inventory
 - ✦ Lengthy measure, assesses pain experiences, responses of others, and impact on activities

Advise



- Primary goal is to help patients understand interaction of biopsychosocial domains related to pain
 - Increase motivation to address various social, cognitive, and behavioral issues related to increase pain
 - Education around models of chronic pain important
- Provide information on skills and changes that you can use to improve pain experience
 - Describe how these changes will directly impact symptoms, functioning and suffering
 - ✦ E.g. by teaching relaxation, we can help you “close the gate,” even just a little

Agree



- First step is to determine if patient agrees that behavioral management will be useful
 - If only agenda is pain medication, may need to provide more education and/or determine patient is not a good candidate
- Agree on goals of treatment
 - Move away from “cure” towards “management”
- Practical aspects of treatment
 - E.g. homework, frequency of appointments, involvement of family members, etc.

Assist



- Based on assess, advise, and agree, you should have determined what level of stepped care is necessary
- **Step 1: Lowest level of intervention**
 - Education & advice around return to ADLs as soon as possible
 - Specific recommendations for increasing activity
- **Step 2: Intermediate level of intervention**
 - Appropriate for people with limited functioning related to pain
 - Individual or group treatment using CBT, ACT, and relaxation training
- **Step 3: Most intensive intervention**
 - Multidisciplinary chronic pain rehabilitation
 - Appropriate for people who do not respond to step 1 or step 2 intervention
 - Addresses psychiatric comorbidity, substance abuse, family dynamics
 - May require referral to specialty care

Assist: Step 1 & 2 Level Interventions



- Education and goal setting
- CBT or ACT-based interventions with goal to:
 - Enhance functioning
 - Decrease suffering
 - Improve quality of life
 - ✦ Improved QOL does not mean pain free

Step 2 Treatment Components (Assist)



- **Challenging unhealthy beliefs about pain**
 - People often inactive due to perceived disability
 - In chronic pain, pain does not = harm
- **Monitoring of pain experiences**
 - Intensity, duration, precipitating events, thoughts related to pain, emotional reactions, pain behaviors
 - Use of pain log important to identify and alter problematic patterns
- **Relaxation training**
 - Biofeedback, imagery, autogenics, mindfulness, passive or progressive muscle relaxation depending on patient preferences

Step 2 Treatment Components (Assist)



- **Activity pacing**
 - Breaking the cycle of overdoing it, followed by under-doing it
- **Graded homework to decrease avoidance of activity**
 - Exercise homework with SMART goals
 - Activity scheduling
 - Graded task assignments
- **Adjunctive topics including:**
 - Sleep
 - Nutrition
 - Complimentary and alternative medicine
 - ✦ Acupuncture, chiropractors, naturopathic medicine, massage, etc.

Step 2 Treatment Components (Assist)



- **Managing intense pain episodes/Relapse Prevention**
 - **Five Step Protocol:**
 - ✦ **Managing thinking**
 - How are thoughts helpful or hurtful in managing pain?
 - Can you alter any of them?
 - ✦ **Staying relaxed**
 - Breathing activities
 - ✦ **Using imagery and distraction**
 - ✦ **Using medication effectively**
 - ✦ **Using support networks**

Step 3 Treatment Components (Assist)



- **Multidisciplinary Team Approach**
 - Primary care providers
 - Rehabilitation specialists (PT, OT, physiatrists)
 - Mental health specialists
- **Support groups**
- **Advanced monitoring of opioid risk**
 - Regular phone contacts
 - Pill counts, urine screens (more on this in a moment)

Arrange



- If patient is appropriate for Steps 1 or 2, this may be arranging for follow-up appointments
 - Can be useful to schedule over 1-4 weeks to determine effects of new skills
- If patient needs referral to multidisciplinary team (step 3), this may be arranging referral
 - Follow-up to ensure patient connected/enrolled at pain management clinic
 - Facilitate communication between specialty care and PCP

Practice – Step 2 Care: Steve



- 25 year old Caucasian male
- PMH+ for low back pain related to military combat
- PPH+ for PTSD, hx of substance abuse (approximately five years ago)
- Recently sustained 3rd degree burns in electrical house fire
- Significant surface somatic pain being treated by a burn center with opioids, neuropathic pain poorly controlled
 - Want to transfer prescription to primary care doctor
- Pain limits ability to work in retail job, intimacy with girlfriend, has led to increased irritability

- What other information would be of use to you?
- Role play with a partner 5 A's
- What was this style of intervention like?

Assessment of Opioid Abuse Risk



- One third of PCPs report they would not prescribe opioids for management of chronic non-cancer pain
(Butler et al., 2008)
 - 70% of these same physicians report that chronic non-cancer pain is inadequately treated
- Point prevalence of opioid addiction in primary care is 3.8%
- Optimal use of opioids for pain management requires evaluation of risk for abuse

The Case for Integration



“Because no practical guidelines exist to guide clinical decision making, providers need the assistance of psychiatric consultants who have greater experience and expertise dealing with both mental health and addiction problems in medical patients”

(Haller & Acosta, 2010)

Terms



- Pseudo-addiction: behaviors associated with pain-relief seeking that may be due to under-medication
 - E.g. use of multiple providers, hoarding medications
- Misuse: using a drug in a manner other than how it is indicated or prescribed
 - E.g. using more than prescribed
- Abuse: use of any substance when use is unlawful or detrimental to self or others
- Addiction: neurobiological disease characterized by impaired control over drug use, compulsive use, continued use despite harm, craving

Risk Factors for Opioid Misuse



- History of mood disorders
- History of alcohol misuse
- History substance abuse or dependence
 - Up to six times greater risk of aberrant medication behaviors (e.g. prescription forgery) (Starrels et al., 2011)
- History of trauma
- Tobacco use
- Male gender
- Younger age
 - 70% of opioid overdose deaths occur in persons under the age of 45 (Starrels et al., 2011)

Aberrant Behaviors Related to Misuse/Abuse



- Selling prescription drugs
- Forging prescriptions
- Stealing drugs
- Injecting oral formulations
- Obtaining prescription drugs from non-medical sources
- Concurrently abusing alcohol or other illicit drugs
- Escalating doses on one's own
- “Doctor shopping” or “drug seeking”
- Evidence of deterioration in functioning

Recommendations for Managing Opioid Risk



- Urine drug testing
- Regular face-to-face appointments to determine drug response
- Opioid contracts
- Pre-defined refill schedule
 - Restricting refills
 - Pill counts
- Appropriate screening
 - Clinical interview
 - Paper-pencil tests such as the SOAPP-R or ORT
- Strong evidence to support recommendations is lacking
- Adoption of risk reduction strategies is limited, even among patients with multiple risk factors for abuse (Starrels et al., 2011)

The Case for Stepped 3 Care: Ralph



- 76 year old Caucasian male
- PMH + for: Gerd, hyperlipidemia, other chronic pain
- PPH + for: depressive disorder NOS, anxiety, somatization disorder
- Complaints of “migrating pain” at an average of 8/10 with dizziness
- History of psychiatric hospitalization
- Regularly presents to ED for pain medication (dilaudid or hydromorphone)
- Currently receiving: nortriptyline 25mg, citalopram 40mg, Ambient 10 mg from off-site psychiatrist
 - Wife reports misuse of Ambien
- Substantial familial strain due to pain behaviors and isolation

Ralph: The Treatment



- Assessment indicating high risk for opioid misuse
 - Establish pain contract, set up twice-weekly appointments for medication refills
- Enrollment in pain self-management group
 - Wife attended additionally to receive psychoeducation about how her behaviors facilitated pain response
- Weekly conjoint psychotherapy
- Regular team meetings between psychiatrist, primary care provider, behavioral health provider, patient and wife

Questions?



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