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Managing Patients with Pain and Psychiatric Co-Morbidity

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Educational Objectives

At the conclusion of this activity participants should be able to:

- Recognize the prevalence of Co-Occurring Psychiatric Disorders in patients with chronic pain
- Review the Impact of Psychiatric Co-morbidity on Chronic Pain
- Describe the assessment of patients with chronic pain who suffer from Co-Occurring Psychiatric Disorders
- Compare treatments for Co-Occurring Psychiatric Disorders in patients with chronic pain

Psychiatric Co-Morbidity and Chronic Pain

CONDITION	Current Incidence in Patients with Chronic Pain	Incidence in the General Population
Depression	45%	5%
Anxiety Disorders	25%	3% to 8%
Personality Disorders	51%	10% to 18%
PTSD	2% civilian population 49% veteran population	1% general population 20% combat veterans 3.5% to 15% in civilians with trauma
Substance Use Disorders	15% to 28%	10%
Somatoform Disorders	97% in patients with chronic low back pain in inpatient rehab programs	unknown

Psychiatric Co-Morbidity and Chronic Pain

CONDITION	Current Incidence in Chronic Pain Patients	Reference
Depression	45% (range: 33% to 54%*)	Cheatle M, Gallagher R, 2006; Knaster, 2012 *Dersh J, et al., 2002
Anxiety Disorders	25% (range:16.5% to 50%*)	Knaster P, et al., 2012 *Cheatle M, Gallagher R, 2006
PTSD	49% veterans; 2% civilians* (range: 4.7% to 95%**)	Otis J, 2010; *Knaster, 2012 **Lopez-Martinez, 2019
Substance Use Disorders	12% (range: 15% to 28%*)	Knaster P, et al., 2012 *Cheatle M, Gallagher R, 2006
Borderline Personality	58% in Behavioral Medicine Pain Clinic	Fischer-Kern M, et al., 2011
Personality Disorders	51% (range: 31% to 81%*)	Polatin PB, et al. 1993 *Fischer-Kern M, et al., 2011

Psychiatric Co-Morbidity and Chronic Pain Summary: Prevalence of Co-Occurring Disorders

- The incidence of co-occurring psychiatric disorders is 2 to 3 times higher in patients with chronic pain than in the general population
- The most common co-occurring disorders are depression, anxiety disorders and substance use disorders
- The incidence of PTSD is very high in combat veterans with chronic pain

- Prevalence of Co-Occurring Psychiatric Disorders in Patients with chronic pain
- The Impact of Psychiatric Co-morbidity on Chronic Pain
- Assessment of Patients with chronic pain with Co-Occurring Psychiatric Disorders
- Treating Co-Occurring Psychiatric Disorders in Patients with chronic pain

Is there a relationship between chronic pain and depression?

- Depression is the most common co-occurring psychiatric disorder in patients with chronic pain, occurring in 45% of such patients (Knaster, 2019).
- Among patients with Major Depressive Disorder (MDD), a significantly higher proportion reported chronic (i.e., non-disabling or disabling) pain than those without MDD (66% versus 43%, respectively).
- Disabling chronic pain was present in 41% of those with MDD versus 10% of those without MDD.

Arnow BA et al., Psychosomatic Medicine 2006;68:262-268;
Cheatle MD, Gallagher RM, 2006,Current Psych Reports 8:371-376

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Is there a difference in treatment response in patients with chronic pain with co-occurring depression?

- Poor adherence to treatment
- Worse satisfaction with treatment
- Higher likelihood for relapse
- Less chance for function improvement

Bair MJ, et al., Archives Internal Medicine 2003,163(20):2433-2445

How common are co-occurring depression and anxiety disorders in patients with chronic pain?

- All depressed patients with pain should be screened for an anxiety disorder
- There is a 16% prevalence of co-occurring disorders
- Most anxiety disorders are present before pain onset
- Most depressive disorders appear after onset of pain
- Psychiatric comorbidity is associated with increased pain intensity

Knaster P, et al., General Hospital Psychiatry 2012, 34:46-52

How common is chronic pain and PTSD?

- PTSD is relatively infrequent in civilian patients with chronic pain, averaging about 2%
- The incidence in combat veterans can be as high as 49%. These patients often present with depression and other anxiety disorders
- Anticipate substance use disorders in these patients

What is the impact of PTSD on chronic pain?

- Veterans with Chronic Pain and PTSD had:
  - Higher levels of maladaptive coping strategies
  - Greater catastrophizing
  - Greater emotional impact of their pain
  - Felt less control over their pain
  - Poorer outcomes for injury recovery

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Alschulere & Otis, 2011 European J Pain

Psychiatric Co-Morbidity and Chronic Pain Summary: Impact of Co-Occurring Disorders

- Depression and anxiety are the most common psychiatric disorders seen in patients with chronic pain
- These patients report more severe pain and disability, are less likely to adhere to treatment and have poorer outcomes
- Attention to assessment and treatment of chronic pain and concurrent psychiatric disorders is necessary to improve treatment outcomes

Roadmap

- Prevalence of Co-Occurring Psychiatric Disorders in Patients with chronic pain
- The Impact of Psychiatric Co-morbidity on Chronic Pain
- Assessment of Patients with chronic pain with Co-Occurring Psychiatric Disorders
- Treating Co-Occurring Psychiatric Disorders in Patients with chronic pain

Assessment for Psychiatric Disorders in Patients with Chronic Pain

- The initial assessment of all patients with chronic pain should include a review of psychiatric symptoms and previous treatment, and a mental status exam
- Be sure to include questions regarding:
  - Substance use and/or history of substance use disorders
  - Early childhood abuse and current domestic violence
  - PTSD
  - Suicidal ideation
  - Medications from multiple providers
  - Any litigation or compensation involved?
- If the diagnosis is unclear, refer for a psychiatric evaluation

Critical First Steps in Patient Assessment

- Screen for depression with suicidal ideation and plans for self-harm
  - Suicidal patients should be referred for psychiatric evaluation and/or hospitalization
- Screen for substance use disorder
  - Patients with substance use disorder may require inpatient detoxification before pain management can proceed
  - Patients regularly using opioids may require medical withdrawal treatment or stabilization on methadone or buprenorphine

How to Rule Out Substance-induced Psychiatric Disorders?

- The high incidence of substance use and substance use disorders in this population requires special attention to rule out substance-induced psychiatric disorders
- Substance-induced disorders can mimic:
  - Depressive disorders
  - Anxiety disorders
  - Psychotic disorders
  - Personality disorders

What are the DSM-V Criteria for Substance-Induced Psychiatric Disorders?

- Symptoms occur during or within 30 days of substance intoxication or withdrawal
- Symptoms may be reasonably assumed to be substance-induced – examples:
- Alcohol: depression, anxiety, hallucinations
  - Stimulants: depression, mania, paranoid psychosis
  - Psychedelics: psychosis, somatic delusions
- Marijuana: psychosis
- Symptoms remit with sobriety

What criteria suggest that substance-induced psychiatric disorders are less likely (i.e. that an independent psychiatric disorder is present)?

- Symptoms were present prior to substance use
- Symptoms are present during extended periods of sobriety (minimum 3 months)
- There is a family history of a similar disorder
- If symptoms are diagnosed while using the substance, or immediately following withdrawal treatment, reassess after 3-4 weeks sobriety

How to make the diagnosis of substance-induced psychiatric disorders?

- Do not attempt to confirm the diagnosis while patient is intoxicated or within 3-4 weeks of substance use or withdrawal treatment
- Verify drug-free state with laboratory tests and assess psychiatric status when sober
- Obtain a careful longitudinal history tracking both substance use and psychiatric symptoms – track parallel symptom courses
- Confirm history with relatives
- Review family history for psychiatric disorders

Completing the Psychiatric Assessment

- If you are able to rule out a substance-induced psychiatric disorder, proceed on the assumption that current symptoms reflect an independent psychiatric disorder and that psychiatric treatment will be required (see following section).
- If symptoms are substance-induced, treatment for a substance use disorder must be part of the treatment plan.
- A repeat psychiatric assessment should be part of the annual treatment plan review for all chronic pain patients.

Psychiatric Co-Morbidity and Chronic Pain Summary: Assessment

- All patients with chronic pain should be screened for psychiatric disorders, including PTSD and substance use disorders
- Suicidal ideation requires a careful psychiatric assessment
- A patient with a current substance use disorder may require medical withdrawal treatment (or MOUD) before pain treatment can proceed
- It is important to distinguish substance-induced disorders from independent psychiatric disorders

Roadmap

- Prevalence of Co-Occurring Psychiatric Disorders in Patients with chronic pain
- The Impact of Psychiatric Co-morbidity on Chronic Pain
- Assessment of Chronic Pain with Co-Occurring Psychiatric Disorders
- Treating Co-Occurring Psychiatric Disorders in Patients with chronic pain

General Principles: How to manage psychiatric disorders in patients with chronic pain?

- The basis for the successful management of chronic pain and co-occurring psychiatric disorders is a Biopsychosocial Treatment approach.

- If screening identifies the presence of an active substance use disorder and/or any substance-induced psychiatric disorder, patients must first be referred for medically-managed withdrawal (if required) and ongoing addiction treatment must be integrated into the ongoing chronic pain management program.

What is Biopsychosocial Treatment?

- The biopsychosocial model for chronic pain management includes:
  - Evidence-based pharmacotherapy for both chronic pain and any co-occurring psychiatric disorders
  - Cognitive-behavioral therapy (CBT) – this should address pain issues and any relevant psychiatric symptoms, including substance use disorders
  - A graded exercise program

Cheatle MD, Gallagher RM, 2006,Current Psych Reports 8:371-376

What is Chronic Pain Self-Management?

- Treatment should always begin with a Chronic Pain Self-Management Program:
  - Careful patient education on the physiologic mechanisms underlying their pain and the efficacy of recommended treatments
  - Patients must take responsibility for compliance with any recommended pharmacotherapy. This includes medications for pain and any psychiatric disorder.
- Patients must take responsibility for implementation of any graded exercise program.

What is the evidence for the efficacy of self-management treatment programs?

- This approach has been effective for diabetes and asthma
- Data for chronic pain self-management is marginal and compliance can be a problem
- A successful chronic pain self-management program requires strong support from family and the primary pain treatment clinician

Warsi A, et al., Arch Int Med 2004; 164(15):1641-1649
Kawi J, Pain Manag Nurs 2012 Dec 8. pii: S1524-9042(12)00147-6

What is the role of Cognitive-Behavioral Therapy?

- CBT is well established as an effective evidence-based therapy for chronic pain, depression, anxiety, PTSD and substance use disorders.
- CBT typically includes skill acquisition:
  - Relaxation therapy
  - Cognitive restructuring
  - Effective communication
  - Stress management
- This is followed by skill consolidation and rehearsal:
  - Training to generalize new skills
  - Maintenance of behavioral change
  - Strategies to avoid relapse

Morley S, et al., 1999, 80:1-13

What are the benefits of early implementation of CBT in chronic pain treatment?

- McCraken & Turk reviewed comprehensive program outcomes and reported that patients who complete a pain program based on the biopsychosocial/CBT model demonstrate:
  - Improved return to work
  - Pain reduction
  - Increased activity
  - Reduced medication use
  - Benefits were maintained at 5 year follow-up

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McCraken IM, Turk DC, 2002, Spine 27:2564-2573

Acceptance and Commitment Therapy ACT

- A newer development in CBT that has been useful in chronic pain treatment
- Frequently combined with mindfulness techniques
- Holds potential for future progress

McCracken LM, Vowles KE (2014)

Can pain be managed without opioids? Optimized antidepressant therapy and pain self-management in depressed primary care patients with musculoskeletal pain: A randomized controlled trial

- Optimized antidepressant therapy along with a pain self-management program produced significant reductions in depression severity and moderate reductions in pain severity and disability at 12 months

- Reductions in depression and pain were seen early (1 month) and were sustained

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Kroenke K, Bair M, Damush T et al. JAMA 2009; 301(20): 2099-2110.

What are the guidelines for pharmacotherapy of psychiatric disorders in patients with chronic pain?

- Begin with Chronic Pain Self-Management
- Add CBT/ACT and a Graded Exercise Program
- In most cases, standard psychiatric medications for depression, anxiety disorders and PTSD can be used
- There is little research available to guide medication choices in patients with chronic pain
- Avoid medications with an abuse potential
- Side effect profile can guide medication choice
- Monitor for medication compliance

How to manage the pharmacotherapy of psychiatric disorders in patients with chronic pain?

- Begin with non-abusable medications - the SSRI's are a good choice to treat BOTH depression and anxiety
- Adequate doses for an adequate time (6 to 8 weeks)
- If no response consider nefazodone, SNRI's, or dual action agents
- CBT will improve the response to medications
- Benzodiazepines have no role as a primary treatment for depression or PTSD
- Benzodiazepines can be used with caution, and short term, for some anxiety disorders if the patient has not responded to CBT and/or antidepressant medications and has no history of abuse of benzodiazepines

Pharmacotherapy Recommendations for Psychiatric Disorders in Patients with Chronic Pain

- Depression – SSRIs; Venlafaxine, Duloxetine, TCAs, Nefazodone, Bupropion
- Generalized Anxiety Disorder – SSRIs; TCAs, Buspirone, Duloxetine, Escitalopram
- Panic Disorder – SSRIs; Nefazodone
- Social Anxiety – Paroxetine
- PTSD – SSRIs; TCAs, Venlafaxine ER & Prazosin
- Bipolar Disorder – Valproate

Comparing Antidepressants

	Nefazodone	Fluoxetine	Sertraline	Paroxetine	Citalopram	Venlafaxine	Bupropion
Efficacy	yes	yes	yes	yes	yes	yes	yes
+ Sleep	helps						
Anxiety	helps	Helps for GAD	Helps for GAD	helps			
Sexual Dysfct	Min.	58%	61%	68%	41%-70%	69%	Min.
Weight Gain	none	yes	yes	yes	yes	yes	none

What are the risks for substance use disorders in depressed patients on chronic opioid therapy?

- Patients with moderate to severe depression are 1.8 and 2.4 times more likely, respectively, to misuse opioid medications to relieve these symptoms (Grattan 2012)
- Such patients will benefit from pharmacotherapy with standard antidepressant meds
- There are no clear guidelines to guide choice of medication, though consideration should be given to venlafaxine and duloxetine because of their efficacy in chronic pain management (Cheatle 2006)

Grattan A, et al., 2012, Annals Family Med 10(4):304-311
Cheatle MD, Gallagher RM, 2006,Current Psych Reports 8:371-376

What are the evidence-based pharmacotherapies for anxiety disorders?

- A recent systematic review of randomized controlled trials, including the Cochrane Database, reported on data from trials demonstrating a > 50% reduction from baseline score on the Hamilton Anxiety Scale in generalized anxiety disorder:
  - Fluoxetine was ranked first for response and remission
  - Sertraline was ranked first for tolerability
- In a sub analysis for generalized anxiety disorder:
  - Duloxetine was ranked first for response
  - Escitalopram was ranked first for remission
  - Pregabalin was ranked first for tolerability

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Baldwin D, et al., BMJ, 2011 Mar 11:342:d1199

What are the risks for using benzodiazepines in the treatment of other anxiety disorders?

- Comprehensive literature review
- Efficacy demonstrated for: Generalized Anxiety Disorder, Panic Disorder and Agoraphobia
- Probable efficacy for: Social Phobia
- Little evidence of added risk for medication abuse or increased relapsed BUT avoid use in primary sedative-hypnotic use disorder or in other individuals with substance use disorder

Posternak, Mueller. Am J Addict. 2001;10:48-68

Treating Co-occurring Pain and PTSD

- 12 session integrated treatment for chronic pain and PTSD
- Includes CPT for PTSD and CBT for chronic pain:
  - Relaxation training
  - Activity goal setting
  - Cognitive restructuring
  - Relapse prevention (J Otis et al. 2009 Pain Medicine)
- CBT for PTSD is not recommended until patients have achieved stable sobriety

Pharmacotherapy for Chronic Pain in the Presence of Co-occurring PTSD

- Avoid opioids whenever possible
- Preferred pharmacotherapy options for chronic pain with co-occurring PTSD:
  - NSAIDS
  - Anticonvulsants
  - Tricyclic antidepressants

Treating Co-occurring Pain, PTSD and TBI

- CBT for pain management
- Prolonged Exposure Therapy and Cognitive Processing Therapy for PTSD
- TBI may make if more difficult for patients to invest in these cognitive approaches, however these highly structured approaches may also aid individuals with TBI

D McGeary et al. 2011 J Clin Psychol Med Settings
Soo & Tate, 2007, Cochrane Data Base

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Practice Guidelines for PTSD Pharmacotherapy

- Biopsychosocial approach recommended:
  - SSRIs and SNRI Venlafaxine are first line medications
  - Venlafaxine ER may be more tolerable because of fewer/less intense side effects
  - Prazosin for nightmares, off label, (1 mg QHS gradually increased to 20 mg, as needed)
  - Add CBT if no response to medications alone; also consider Prolonged Exposure and Cognitive Processing Therapy
  - Second line medications: mirtazapine, topiramate, amitriptyline, imipramine, phenelzine, nefazodone
  - Cautions against using benzodiazepines

Friedman MJ, et al. Handbook of PTSD, Guilford Press, NY,NY (2010)
VA/DoD Clinical Practice Guidelines for PTSD Working Group (2017)

Psychiatric Co-Morbidity and Chronic Pain Summary: Treatment

- Develop a Biopsychosocial Treatment plan
- Begin with a Chronic Pain Self-Management Program
- Incorporate Cognitive Behavior Therapy/ACT
- Standard pharmacotherapy for depression, anxiety, and PTSD
  - Choose non-abusable medications
  - Adequate doses for an adequate time
- Warn patients that psychiatric medications are unlikely to work if combined with illicit drugs and that the combination can be lethal

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- PCSS Mentor Program is designed to offer general information to clinicians about evidence-based clinical practices in prescribing medications for opioid use disorder.
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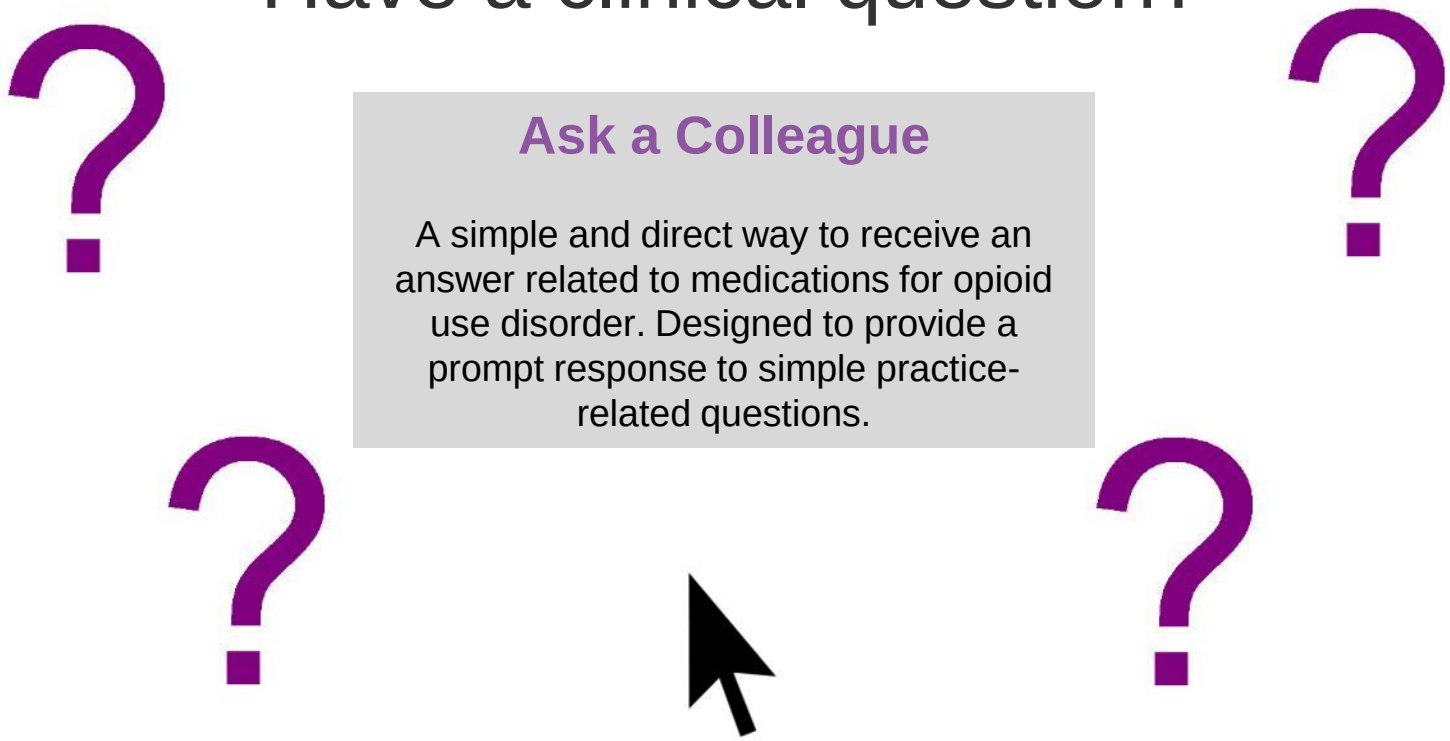

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