

Treatment of Chronic Pain in Patients with Comorbid Substance Use Disorder

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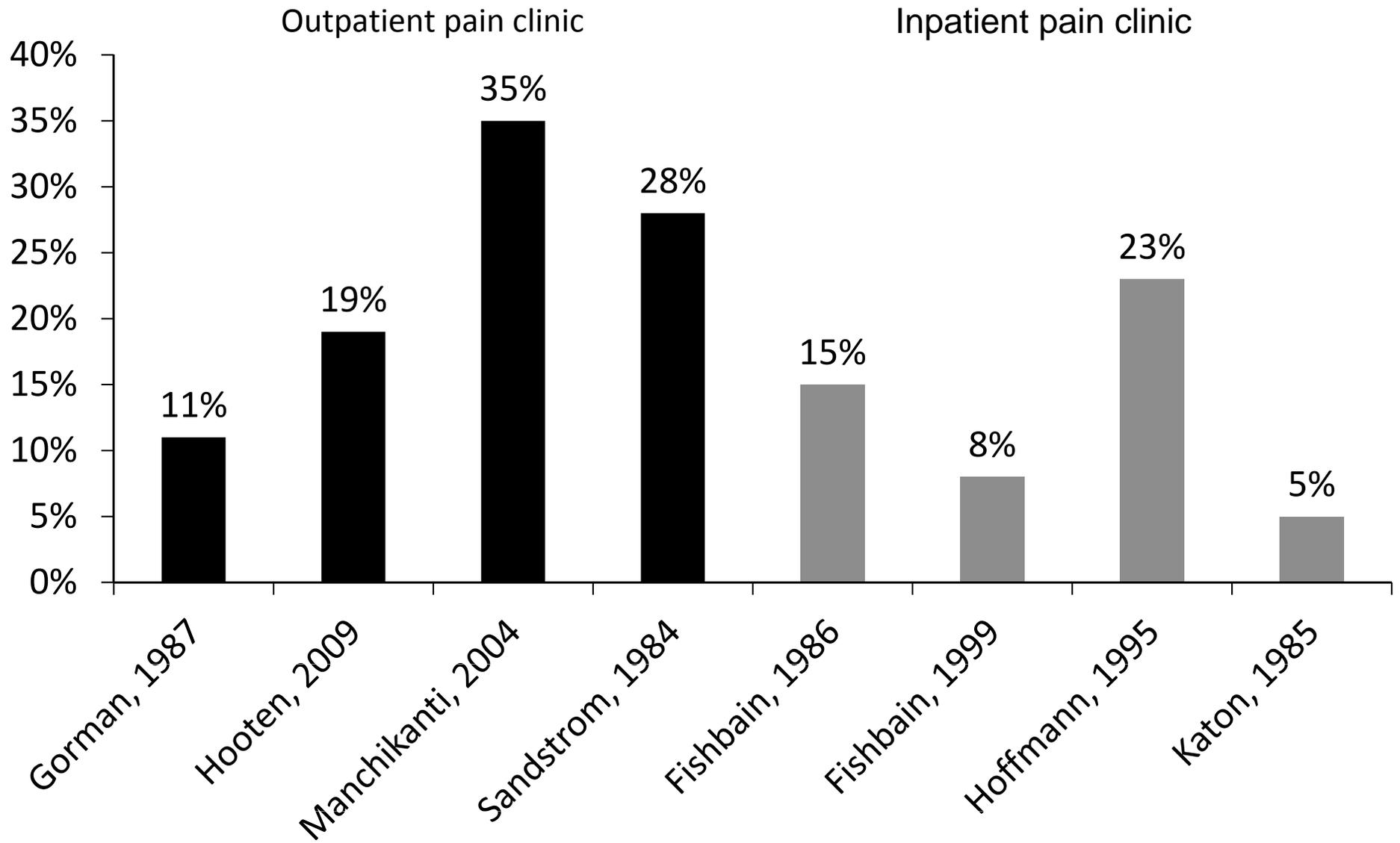
Objectives

- Review the prevalence of SUD in different pain populations.
- Review data on prescription opioid misuse.
- Report treatment outcomes based on SUD status.
- Identify current treatment practices for pain among patients with comorbid SUD.
- Provide recommendations for clinical practice.

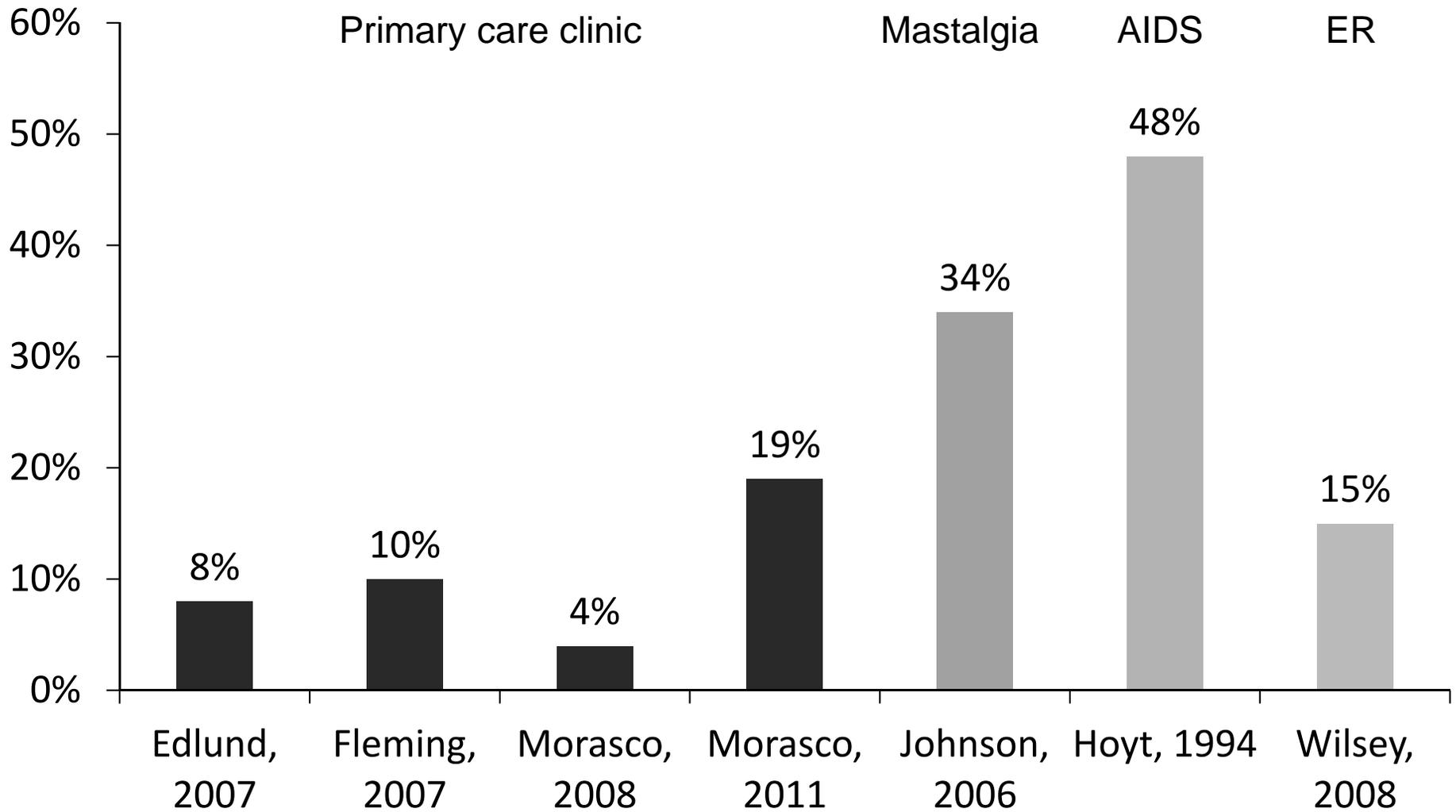
Pain and SUD

- Comorbid substance use disorders (SUDs) are common among patients with chronic pain, but systematic research is limited.
- Prevalence rates of SUDs vary widely across studies.
- Data are limited regarding treatment options for chronic pain patients with comorbid SUD.
- Conducted a systematic review: To assess the prevalence, associated demographic and clinical characteristics, and treatment outcomes for chronic pain patients with comorbid SUD.

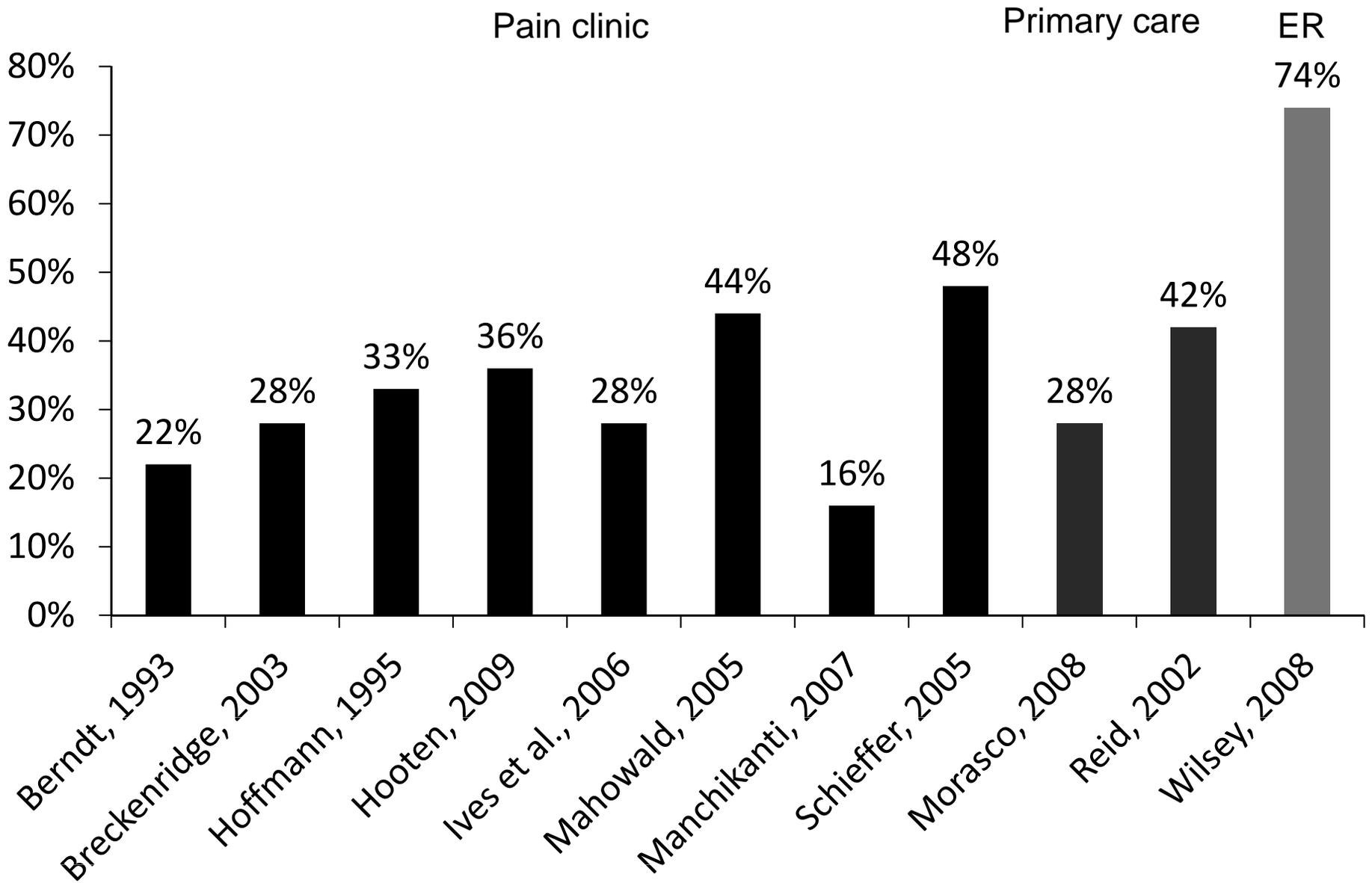
Proportion of Pain Patients with Current SUD



Proportion of Pain Patients with Current SUD



Proportion of Pain Patients with a History of SUD



Assessment for SUD

- All patients should be assessed for current and past SUD. Assessment of current use should be incorporated into all follow-up visits.
- Brief Addiction Monitor (BAM), a validated 17-item test of current alcohol and substance use, as well QOL.
 - This measure is now routinely administered in VA substance abuse treatment programs.
 - In CPRS, click on Tools → Mental Health Assistant → Instrument Administrator → BAM
 - Can also administer as a paper and pencil test:
<https://vaww.portal.va.gov/sites/OMHS/SUD/Lists/BAM/AllItems.aspx>
- Other Measures:
 - AUDIT-C, 3 items, alcohol only
 - ASSIST, alcohol and illicit substances, number of items depend upon what is endorsed; questions about craving, misuse, etc.

Implications of Having a Comorbid SUD

- Potentially more difficulty to treat.
- Concern about other comorbidities (depression, anxiety).
- For patients prescribed opioids, there may be increased risk for prescription opioid misuse.

SUD Status and Prescription Opioid Misuse

- A total of 7 prior studies have examined prescription opioid misuse based on SUD status, and 4 found that patients with a history of SUD were more likely to exhibit prescription opioid misuse.
 - All of the prior studies that were rated higher in methodological rigor found that history of SUD was associated with current prescription opioid misuse.

Signs of Prescription Opioid Misuse

Behaviors LESS indicative of “addiction”:

- anxiety/desperation over symptoms
- hoarding medications
- taking medications from others
- requesting specific medications
- used more opioids than recommended
- drink more alcohol when in pain
- express concern when changing medications
- express concern that pain might lead to use of street drugs
- smoke cigarettes for pain relief
- use of opioids to treat other symptoms

Signs of Prescription Opioid Misuse

Behaviors MORE indicative of “addiction”:

- bought pain medications from a street dealer
- stole money to obtain drugs
- tried to get opioid from more than one source
- performed sex for opioids or for money to obtain opioids
- saw two physicians at once without them knowing
- stole drugs from others
- prescription forgery

How Often Does Prescription Opioid Misuse Occur?

- It depends upon the definition of misuse.
- Less than 4% of patients prescribed opioids develop DSM-IV opioid abuse or dependence to the prescribed opioid (Fishbain et al., 2008; Fleming et al., 2007).
- 78% of patients with chronic pain report 1 or more past-year indicator of misuse (Morasco & Dobscha, 2008):
 - Borrow pain medications from others – 8%
 - Take more medication than prescribed – 53%
 - Multiple requests for opioid dose increase – 56%
 - Ran out of pain medications and requested early refill – 30%
 - Doctor shopping – 3%

Rates of Misuse

- A recent study examined the rate of prescription opioid misuse behaviors documented in the medical record and examined whether these were associated with clinical diagnoses of a prescription drug use disorder (Meltzer et al., “In press”, Pain Medicine).
 - Reviewed medical records for patients prescribed long-term treatment with opioids or benzodiazepines. They also conducted research clinical interviews to diagnose a drug use disorder.
 - 85% of patients had medical record documentation of prescription opioid misuse.
 - No difference between those with and those without a prescription drug use disorder in rates of documented misuse.
- Taken together, results suggest the prevalence of a diagnosable prescription SUD is low, yet many patients may intermittently misuse pain medications.

Predictors of Current Prescription Opioid Misuse

- Current or past substance use disorder (Barry et al., 2011; Fleming et al., 2007; Morasco & Dobscha, 2008; Reid et al., 2002)
- Younger age (Ives et al., 2006)
- Personal or familial history of legal problems (Michna et al., 2004)
- Anxiety (Schieffer et al., 2005) or depression (Grattan et al., 2012)
- Beliefs about the effectiveness of opioids (Schieffer et al., 2005)
- Perceptions of the threat of pain (Morasco et al., In press)
- Type of pain disorder, duration of pain, intensity, function, or quality of life have not been associated with risk for prescription opioid misuse.

Recommendations to Reduce the Impact of Medication Misuse

For patients who show initial signs of prescription opioid misuse

(Jamison et al., 2007):

- More frequent opioid prescriptions (weekly)
- 24 hour notice pill counts
- Early detection of risk factors for misuse
- Collaborate with substance abuse and mental health professionals
- Complete an opioid compliance checklist before opioid prescription (12-item yes/no questionnaire)
- Give urine drug screens at each visit

A Randomized Trial Designed to Reduce Medication Misuse

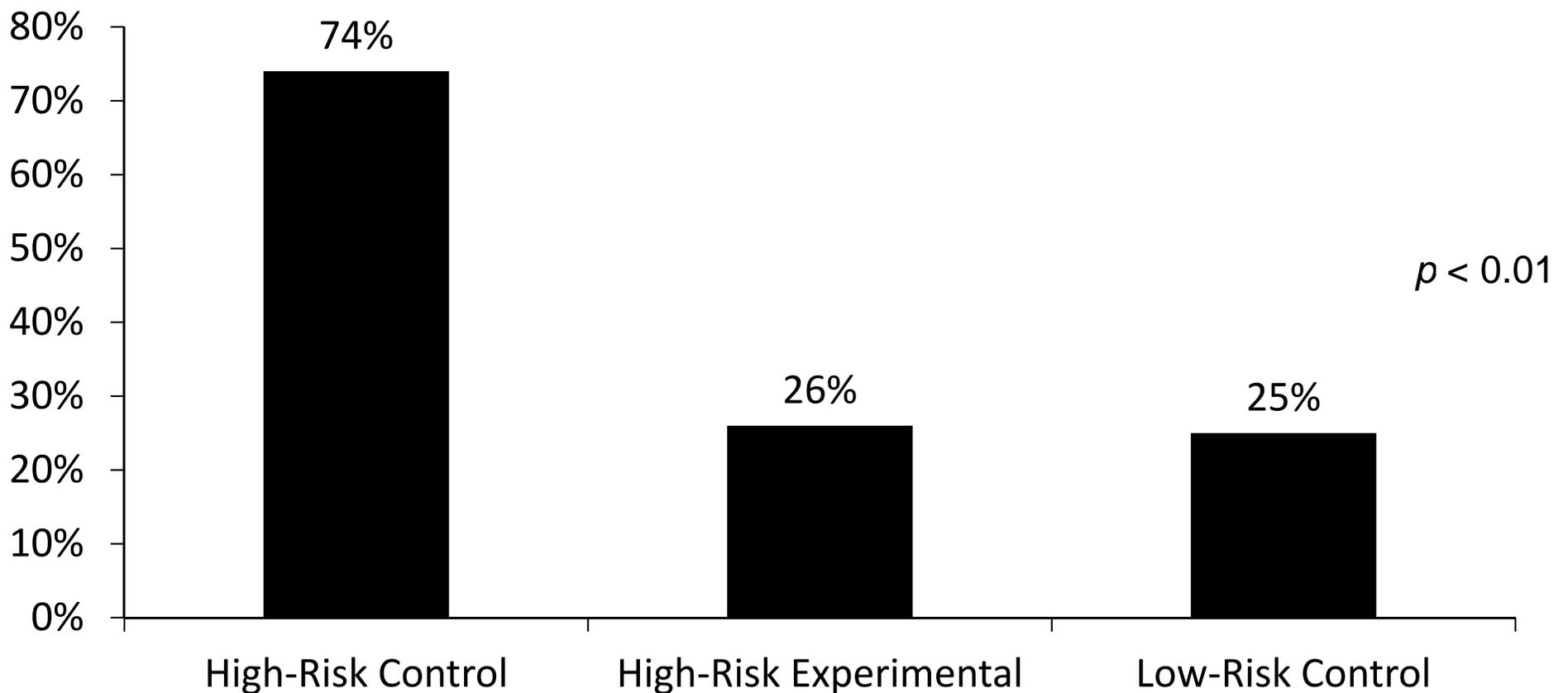
- All patients were assessed for likelihood of prescription opioid misuse at baseline. Participants randomized to 1 of 3 groups:
 - 19 patients at high-risk were randomized to an experimental condition (High-Risk Experimental).
 - 19 patients at high-risk were randomized to usual care (High-Risk Control).
 - 20 patients at low-risk for medication misuse received usual care and were followed as a second comparison group (Low-Risk Control).
- All patients were followed for 6 months.

High-Risk Experimental Group: Compliance with Treatment

- Monthly completion of opioid compliance checklist
- Monthly urine drug screens
- Monthly individual therapy
 - Review of compliance checklists, response to medication, advice for abstinence from illicit substances, patient support, education on pain management, and discussion of non-compliance.
- Monthly group therapy
 - Focused on opioid addiction risks, education about misuse and relapse, making lifestyle changes, avoiding drug use triggers, and encouraged attendance at all appointments.

Results of a RCT Designed to Reduce Medication Misuse

Proportion of Patients with Medication Misuse



Treatment of Chronic Pain

- The best data available indicate that most treatments of chronic pain relieve no more than 40-50% of pain.
- Opioid medications may result in as much as a 30% reduction in pain intensity, for only one-half of the patients that take them.
- Few patients are “cured” of their chronic pain.
- Multidisciplinary care is the most optimal treatment for chronic pain, which may include primary care, physical therapy, occupational therapy, mental health, nursing, social work, pharmacy, and potentially specialty medical services (physiatry, orthopedics, anesthesiology, etc.).

What do we Know about Treating Pain in Patients with SUD?

- Little empirical data available.
 - Primary exclusion criteria for most clinical studies on chronic pain treatment is having a history of SUD.
- No well-conducted studies have compared treatment outcomes for chronic pain based on SUD status.
- There have been no published randomized trials examining a medication or psychological intervention in pain patients with comorbid SUD.

What is the Efficacy of Treatment in Patients with Pain and SUD?

1. A primary care multidisciplinary disease management program was effective in reducing pain and improving function (Chelminski et al., 2005).
2. Enrollment in a methadone maintenance program, which included regular group therapy and case management resulted in significant improvements in pain relief and quality of life (Rhodin et al., 2006).
3. Participation in a pharmacy-led opioid renewal clinic was effective in reducing aberrant medication use and maintaining pain management (Wiedemer et al., 2007).
4. Cognitive-behavioral therapy, incorporating relapse prevention, helps reduce pain, improve function, and reduce relapse risk (Currie et al., 2003; Ilgen et al., 2011).

Pain Outcomes in a Prospective Randomized Trial

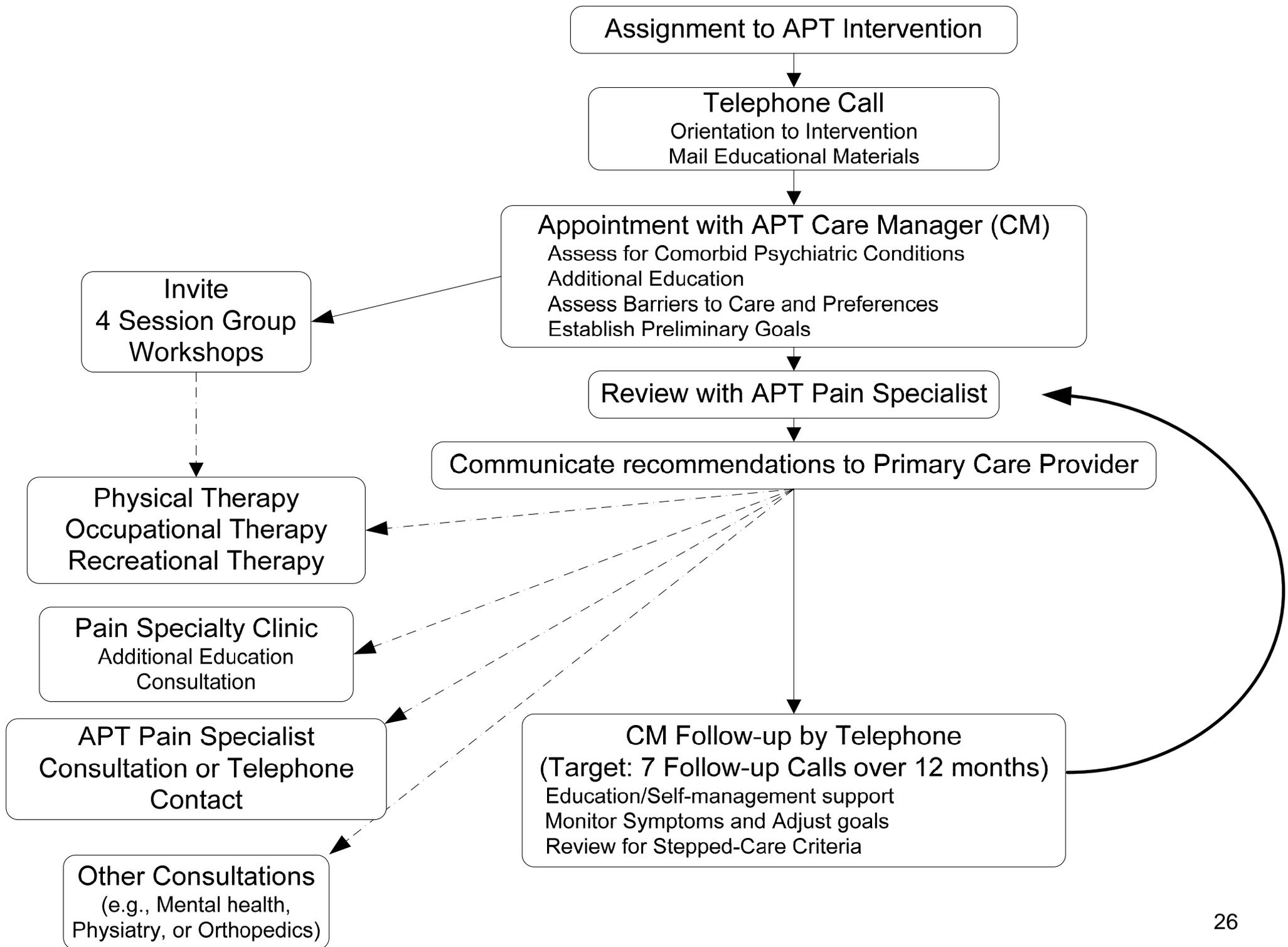
- Research Question: To what extent does a collaborative care intervention improve chronic musculoskeletal pain and depression outcomes?
- Setting: 5 primary care clinics of one VA Medical Center
- Participants:
 - 401 primary care patients with musculoskeletal pain
 - 42 primary care clinicians

Methods

- Cluster randomized controlled trial.
- Compared collaborative care to usual care for the treatment of pain and depression.
- Inclusion criteria: diagnosis of chronic musculoskeletal pain, pain intensity and interference ≥ 4 , and telephone access.
- Exclusion criteria: psychotic-spectrum disorder, dementia, cognitive impairment.
 - Did not exclude patients with active alcohol or substance use disorders.

Intervention: Assistance with Pain Treatment (APT)

- Main Conceptual Components:
 - Chronic illness model; stepped care
 - Biopsychosocial framework
 - Focus on developing individualized functional goals
 - Multidisciplinary approach
 - Behavioral/activating approach
- Full-time Psychologist Care Manager
- Up to 1 day/week Physician Pain Specialist



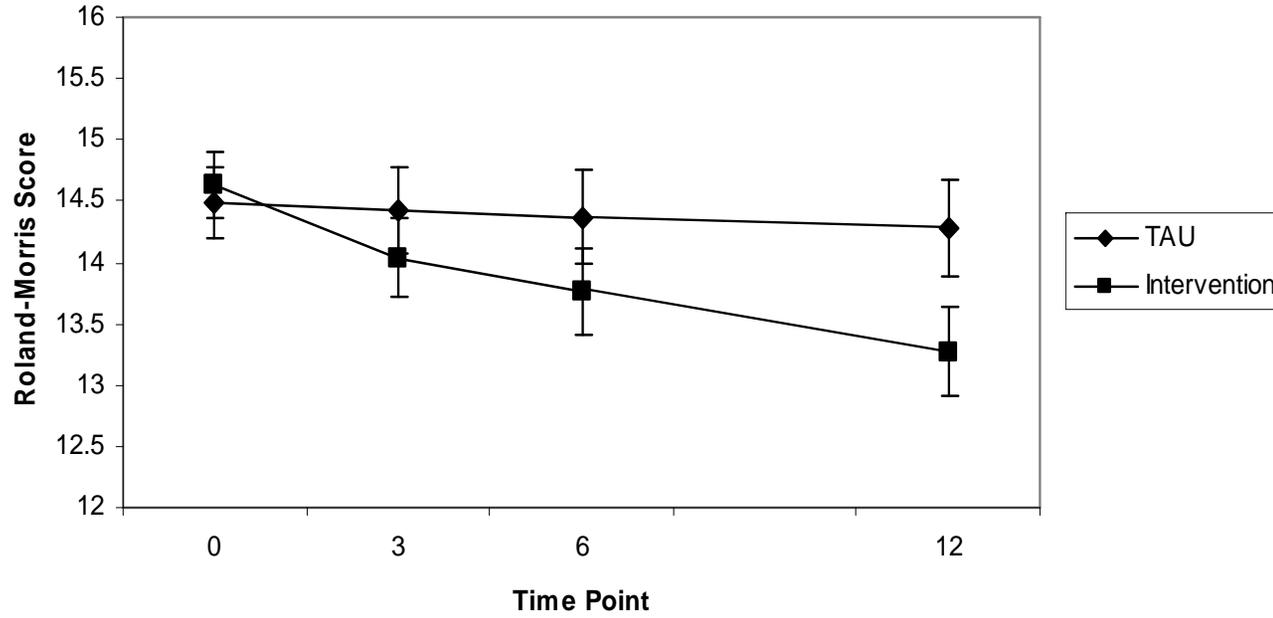
Selected Baseline Patient Characteristics

	Overall
Mean age, years	62
Male	92%
Self-reported race/ethnicity—Caucasian/white	89%
Married	59%
Worked during past 12 months	32%
Currently receiving disability payment	65%
Current depression	37%
Positive alcohol misuse screen	16%
Posttraumatic stress disorder	17%

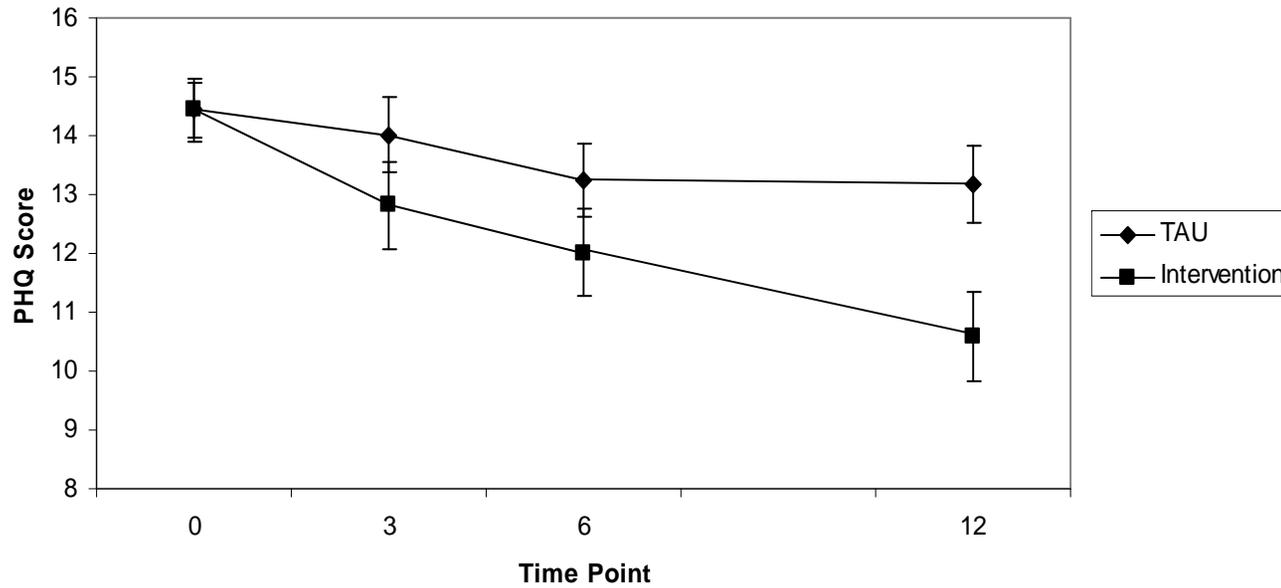
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Roland-Morris Score Change Over Time



PHQ Score Among Those With PHQ GE 10 at Baseline



Summary of Findings

- Collaborative Care resulted in improvements in measures of:
 - Pain disability
 - Pain intensity
 - Depression severity
 - Patient-rated global impression of change
- Clinicians and patients satisfied with intervention
- Meaningful improvements for this population with substantial baseline disability/comorbidity

Predictors of Treatment Outcome

- Conducted a secondary analysis to determine if any variables assessed at baseline were associated with treatment outcome.
- Clinically significant improvement was defined as a 30% reduction between baseline and 12 months on the Roland Morris Disability Questionnaire.
- Analyses were stratified by intervention status (collaborative care or treatment-as-usual) due to significant differences in pain care received.

History of SUD

- Of the 362 participants with 12 month follow-up data, 20.0% (n=72) had a history of SUD.
 - Alcohol - 86%
 - Cannabis - 14%
 - Opiate (prescribed and/or illicit) - 8%
 - Amphetamine - 3%
 - Other - 18%

Comparisons Based on History of SUD – Baseline

	Pain & SUD (n=72)	Pain Only (n=290)	<i>p</i> -value
Mean age, years*	58 (10)	63 (12)	.001
Male gender	92%	92%	.91
Married*	47%	63%	.01
Caucasian	90%	89%	.75
VA service-connected	53%	52%	.28
Duration of pain diagnosis	14 years	15 years	.80
Current opioid prescription*	40%	26%	.02

Baseline Comparisons

	Pain & SUD (n=72)	Pain Only (n=290)	<i>p</i> -value
Pain intensity	68 (12)	67 (14)	.63
Pain-related function*	16 (16)	14 (4)	.01
Major depressive disorder*	26%	14%	.01
PTSD*	25%	14%	.02
Positive alcohol misuse screen*	11%	4%	.02

Predictors of Treatment Outcome

For patients randomized to Collaborative Care, the overall model was not significant and no factor predicted outcome.

	Odds Ratio	95% Confidence Interval
Step 1		
Age	0.99	0.95 – 1.02
Male Gender	0.91	0.23 – 3.67
Pain Duration	1.01	0.98 – 1.04
Number of Pain Diagnoses	1.04	0.61 – 1.77
Opioid Prescription	0.60	0.28 – 1.30
Step 2		
PTSD	0.73	0.22 – 2.40
Major Depression	3.72	0.77 – 18.04
History of SUD	1.06	0.37 – 3.01

Predictors of Treatment Outcome

For patients randomized to Usual Care, the overall model was significant, and the only predictor of outcome was history of SUD.

	Odds Ratio	95% Confidence Interval
Step 1		
Age	0.99	0.95 – 1.03
Male Gender	0.64	0.12 – 3.51
Pain Duration	0.96	0.92 – 1.00
Number of Diagnoses	0.55	0.28 – 1.09
Opioid Prescription	0.72	0.28 – 1.81
Step 2		
PTSD	4.46	0.73 – 27.22
Major Depression	1.26	0.28 – 5.60
History of SUD	0.30	0.11 – 0.82

Summary of Data

- Chronic pain patients with a history of SUD:
 - Had poorer functioning and greater psychiatric comorbidity at baseline
 - Were more likely to be prescribed an opioid
 - For those randomized to usual care, were 70% less likely to have a clinically significant improvement in pain functioning
- For patients randomized to collaborative care, SUD status was not associated with long-term functioning.
- Implications: Chronic pain patients with comorbid SUD need more intensive and supplementary treatment in order to have clinically significant improvements in pain-related function.

What Did Participants in This Study Receive?

- Usual care.
- Individualized assessments from a psychologist with bimonthly telephone calls to offer support, identify treatment needs, and encourage compliance.
- In collaboration with an internist, recommendations were given to the PCP for possible implementation:
 - Suggestions may have included referral to mental health, specialty pain service, PT, or other service; imaging; medication change.
Recommended guideline-concordant treatment.
- Stepped-care model.
- Eligible to participate in a 4-session pain workshop (facilitated by psychologist and physical therapist).

What is Usual Care?

- Conducted a retrospective cohort study with 5,814 veterans who received care in the Pacific Northwest.
 - All patients had chronic non-cancer pain and were prescribed chronic opioid therapy.
- Compared patients with a current diagnosis of SUD versus those without current SUD on receiving different indicators of guideline concordant care.
 - Patients were identified in 2008 and followed for the subsequent 12 months.
- Goal was to examine the extent to which patients receive different aspects of care in a manner that is consistent with opioid treatment guidelines.

Current SUDs in Patients with Chronic Pain

- Of the 5,814 patients with chronic pain and prescribed chronic opioid therapy in 2008, 19.5% had a current SUD diagnosis documented in the medical record.
 - Alcohol - 73%
 - Cannabis - 16%
 - Cocaine - 11%
 - Opiate (prescription and/or illicit) - 15%
 - Amphetamine - 8%
 - Polysubstance - 7%

Bivariate Comparisons

	Pain & SUD (n=1136)	Pain Only (n=4678)	<i>p</i> -value
Age	53 (9)	56 (12)	<0.001
Male gender	93%	90%	0.004
Married	33%	50%	<0.001
Charlson comorbidity score	1.2 (1.5)	1.1 (1.5)	0.23
Average daily opioid dose morphine equivalent	57 mg/day (SD=86)	57 mg/day (SD=122)	0.87
3 or more documented pain diagnoses	31%	27%	0.004

Comparison of Psychiatric Diagnoses

	Pain & SUD (n=1136)	Pain Only (n=4678)	<i>p</i> -value
Depression	53%	37%	<0.001
Bipolar disorder	12%	4%	<0.001
PTSD	40%	25%	<0.001
Schizophrenia	6%	2%	<0.001
Any sleep disorder	11%	10%	0.11
Nicotine disorder	56%	27%	<0.001

Indicators of Guideline Concordant Care

	Pain & SUD (n=1136)	Pain Only (n=4678)	Odds Ratio (95% CI)
More intensive treatment in primary care			
Receive a long-acting opioid			
Physical therapy			
Urine drug screen			
Mental health visit			
Antidepressant Medication			

Likelihood of Receiving Guideline Concordant Care

	Pain & SUD (n=1136)	Pain Only (n=4678)	Odds Ratio (95% CI)
More intensive treatment in primary care	63%	61%	1.1 (0.9 – 1.2)
Receive a long-acting opioid	27%	26%	0.9 (0.8 – 1.1)
Physical therapy	31%	29%	1.1 (0.9 – 1.3)
Urine drug screen	47%	18%	3.5 (3.1 – 4.1)
Mental health visit	30%	17%	1.5 (1.3 – 1.8)
Antidepressant Medication	88%	86%	1.3 (0.9 – 1.7)

Summary of Tx in Usual Care

Among patients with chronic pain who were prescribed chronic opioid therapy:

The Good:

- 62% met with PCP four or more times in 1 year
- 86% with a depressive disorder received an antidepressant

Room for Improvement:

- 26% received a long-acting opioid
- 29% received physical therapy
- 24% were administered a UDS

Most Urgent Issues to Address:

- 35% of patients with a current SUD received substance abuse tx
- 47% of patients with a current SUD received a UDS
- Of patients that had a UDS, 14% of those with a SUD and 5% of those without had a positive UDS for an illicit substance

Recommendations for Treating Pain in Patients with Comorbid SUD

- Risk monitoring for prescription opioid misuse should be done with all patients prescribed opioids.
 - This occurs prior to starting opioids and throughout treatment.
 - There are standardized measures of misuse that can be used.
 - Urine drug testing, pill counts, opioid compliance checklists, and collateral interviews are also options.
- Monitoring of pain, function, adverse events, and misuse should occur at every visit.
- Detection of aberrant medication use is an opportunity to discuss treatment options.

Treatment Recommendations

- Patients with pain and comorbid SUD should be enrolled in specialty addiction treatment.
 - Is a necessity for patients with SUD who are prescribed opioids.
- Data indicate that, in order for patients with comorbid SUD to have clinically significant improvements in pain-related function, treatment must be more intensive and include additional components, relative to usual care.
 - Highest recommendation is for multidisciplinary treatment.
- Cognitive-behavioral interventions, that incorporate relapse prevention, have strong preliminary data for helping to reduce pain, improve function, and reduce relapse risk.

Additional Readings

- VA/Department of Defense Clinical Practice Guidelines for treating chronic pain with opioid therapy:
 - http://www.healthquality.va.gov/Chronic_Opioid_Therapy_COT.asp
- Clinical practice guidelines for the use of chronic opioid therapy in chronic noncancer pain, commissioned by the American Pain Society and the American Academy of Pain Medicine:
 - <http://download.journals.elsevierhealth.com/pdfs/journals/1526-5900/PIIS1526590008008316.pdf>
- SAMSHA Manual on Managing Chronic Pain in Adults With or In Recovery From Substance Use Disorders (TIP 54)
 - <http://store.samhsa.gov/product/TIP-54-Managing-Chronic-Pain-in-Adults-With-or-in-Recovery-From-Substance-Use-Disorders/SMA12-4671>

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Thank you!

Questions? Comments?