



Minimizing Pills and Maximizing Skills: Achieving Successful Opioid Cessation in Chronic Pain

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Disclosures

- Nothing to disclose



Learning Objectives

- Review current evidence based approaches to opioid tapering in chronic noncancer pain
- Discuss the benefits of opioid tapering in terms of improvements in pain, function, and mood
- Identify the difference between the terms addiction, abuse, dependence, and tolerance
- Explain of the role of behavioral interventions in the management of pain and the data supporting their use

PainWeek.

Does pain serve any function or purpose?



PainWeek.



Is all pain the same?

Acute Pain

- Hurt = Harm
 - Avoidance decreases damage

- Etiology:
 - Clear pathway
 - Often single cause

- Treatment Course
 - Fixed end point
 - Immobilization often essential for recovery
 - Medications

Chronic Pain

- Hurt ≠ Harm
 - Fear-avoidance cycle

- Etiology:
 - Many unknowns
 - Multifactorial

- Treatment Course
 - No fixed end point
 - Immobilization can worsen condition
 - Medications: Caution

PainWeek

Management Approach to Pain

- Similar to other chronic health conditions lacking a cure
- Focus on quality of life & functioning

PainWeek.

Example: Diabetes

- Regulate diet
- Check blood sugars
- Exercise regularly
- Take insulin/medications
- Monitor wounds

PainWeek.

Chronic Pain Management

- Medical optimization
 - Physician, NP, PA

- Physical reconditioning
 - Rehabilitation provider (PT, OT)

- Behavioral/lifestyle modification
 - Pain psychologist

PainWeek.

Interdisciplinary Management

Diabetes

- Regulate diet

- Check blood sugars

- Exercise regularly

- Take insulin/medications

- Monitor wounds

Chronic Pain

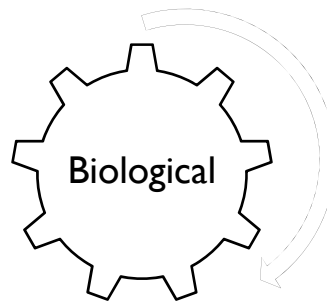
- Medical optimization

- Physical reconditioning

- Behavioral/lifestyle modification

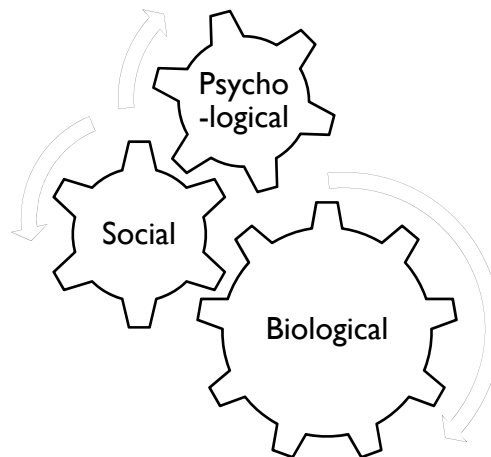
PainWeek.

Biomedical vs Biopsychosocial



PainWeek.

Biomedical vs Biopsychosocial (cont'd)



PainWeek.

Interdisciplinary Management

Primary goal:

Help patients learn
to live with pain

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"Have you tried *enjoying* the aches and pains?"

PainWeek

Learn to Live with Pain?

LIFE

Family Friends Work School
Sports Leisure Self-care Music
Vacations Hobbies Dining
Entertainment Socializing
Cooking Cleaning Errands

PainWeek

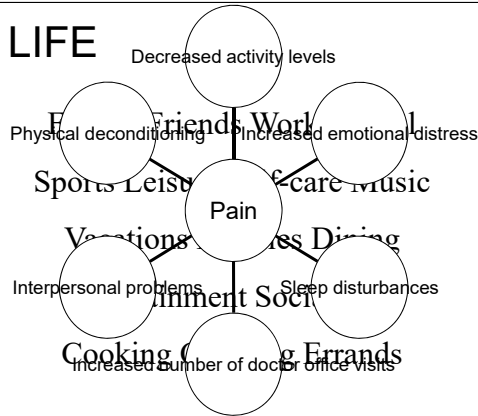
Learn to Live with Pain? (cont'd)

LIFE

Family Friends Work School
 Sports Leisure Self-care Music
 Vacation **Pain**ies Dining
 Entertainment Socializing
 Cooking Cleaning Errands



Learn to Live with Pain? (cont'd)



Yes, Learn to Live with Pain!

LIFE

Family Friends Work School

Sports Leisure Self-care Music

Vacations Hobbies Dining

Entertainment Socializing

Cooking Cleaning Errands

Pain

PainWeek.

Chronic Pain Management Dilemma

- Medical optimization
 - Physician, NP, PA
- ~~Physical reconditioning~~
 - ~~Rehabilitation provider (PT, OT)~~
- ~~Behavioral/lifestyle modification~~
 - ~~Pain Psychologist~~

PainWeek.

Medications

- Physical dependence

- Psychological dependence

- Tolerance

- Abuse

- Addiction

PainWeek.

Prescription Opioids

- Approximately 3 million Americans meet criteria for opioid abuse or dependence (4x increase since 1999)
- 60% of overdose deaths in the US (2014) were attributed to opioids
- 80% of new heroin users initiated SUD by misusing prescribed medications
- US Department of Health and Human Services (2016). HHS research on pain treatment and opioid misuse and overdose: translating science into action
- US Department of Health and Human Services (2015). The opioid epidemic: by the numbers. CDC, MMWR, 2015;64:1-5.
- US Department of Health and Human Services (2016). HHS opioid initiative: One year later.

PainWeek.

Prescription Opioids: A Day in the US

- 5,753 individuals misused rx opioids for the first time
- 116 opioid-related fatalities
- \$1.38 billion in economic costs
- US Department of Health and Human Services:
<https://www.hhs.gov/opioids/about-the-epidemic/index.html> accessed March 2018.

PainWeek

Prescription Opioids

- Opioid crisis declared a public health emergency
- HHS 5-point strategy
 - Better addiction prevention, treatment, and recovery
 - Better data
 - Better pain management (crisis = opportunity)
 - Better targeting of overdose reversing drugs
 - Better research
- US Department of Health and Human Services
<https://www.hhs.gov/opioids/about-the-epidemic/index.html> accessed March 2018
- US Department of Health and Human Services (2017).
 HHS opioid research portfolio brief: translating science into action.

PainWeek

Common Pain Psychology Curriculum Components

- Overview of pain
- Pacing of activities
- Pain & stress physiology
- Relaxation training
- Sleep hygiene

PainWeek.

Common Pain Psychology Curriculum Components (cont'd)

- Identifying environmental stressors (work & home)
- Development of stress management techniques (eg, cognitive restructuring)
- Assertiveness/communication skills development
- Flare contingency planning

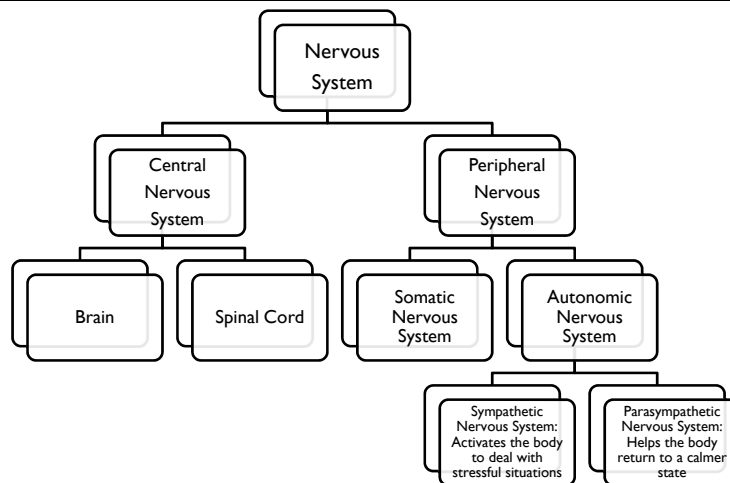
PainWeek.

Deconstructing Pain Psychology

- Relaxation training
- The role of cognitive processes

PainWeek

Stress, the Nervous System, and Pain



PainWeek

Stress, the Nervous System, and Pain (cont'd)

Sympathetic activation

- Increased heart rate
- Increased blood pressure
- Increased muscle tension
- Constriction of blood vessels
- Release of stress hormones
- Pupil dilation
- Change in breathing patterns
- Additional systemic changes

PainWeek.

Stress, the Nervous System, and Pain (cont'd)

Parasympathetic activation

- Decreased heart rate
- Decreased blood pressure
- Decreased muscle tension
- Expansion of blood vessels
- Discontinuation of stress hormone release
- Pupil constriction
- Change in breathing patterns
- Additional systemic changes

PainWeek.

Stress, the Nervous System, and Pain (cont'd)

Pain

Nervous System Activation

Painweek.

Stress, the Nervous System, and Pain (cont'd)

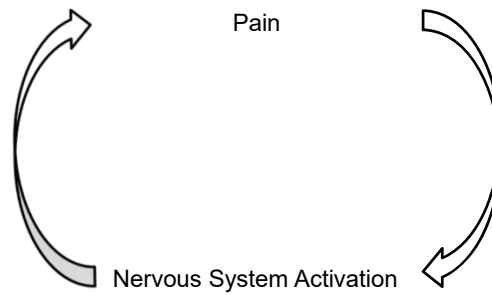
Pain

Nervous System Activation



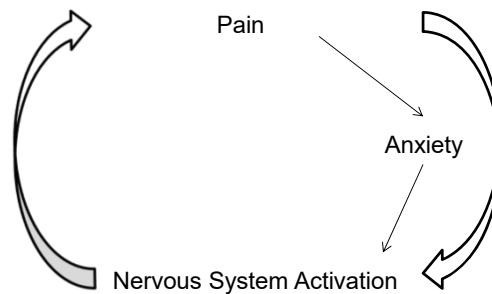
Painweek.

Stress, the Nervous System, and Pain (cont'd)



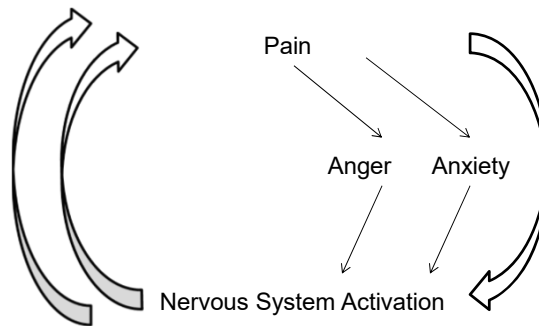
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Stress, the Nervous System, and Pain (cont'd)



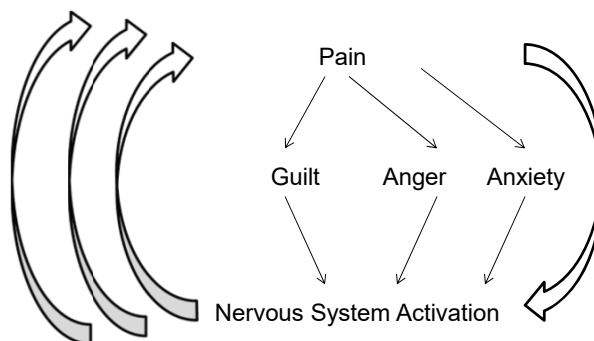
Painweek.

Stress, the Nervous System, and Pain (cont'd)



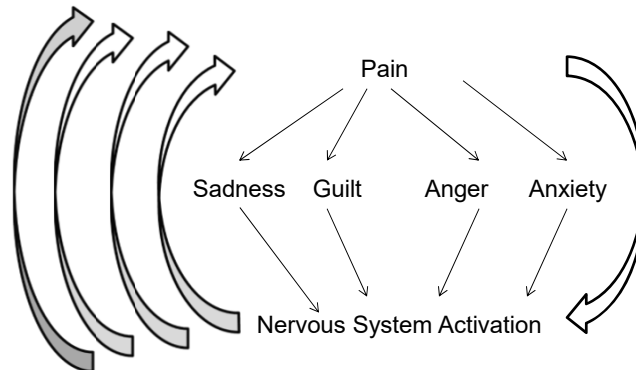
Painweek.

Stress, the Nervous System, and Pain (cont'd)



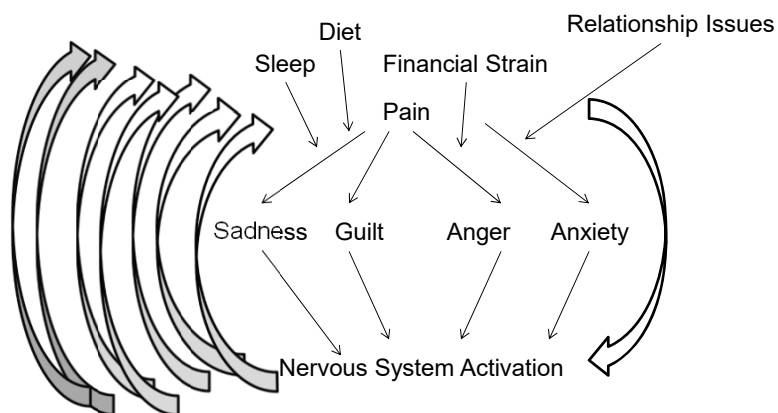
Painweek.

Stress, the Nervous System, and Pain (cont'd)



Painweek.

Stress, the Nervous System, and Pain (cont'd)



Painweek.

Relaxation Training

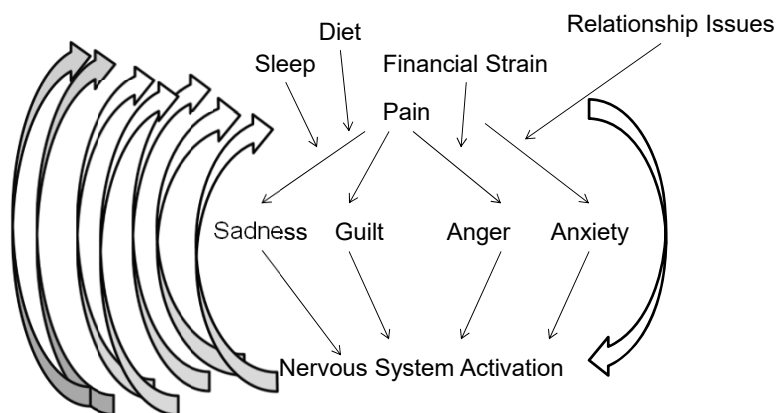
▪Breathing exercises

–Parasympathetic activity

–Distraction

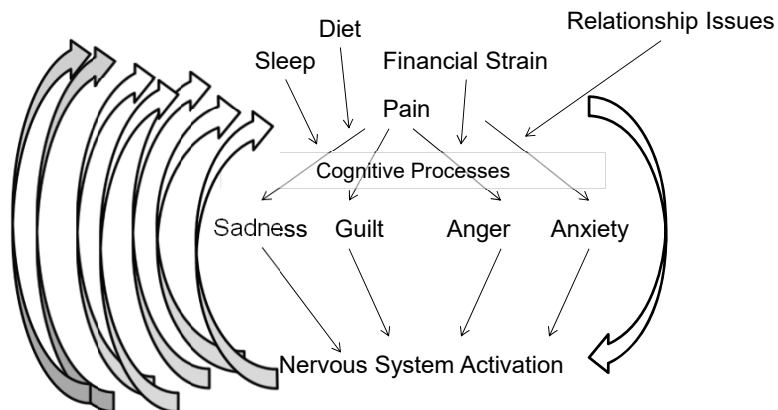
Painweek.

Stress, the Nervous System, and Pain



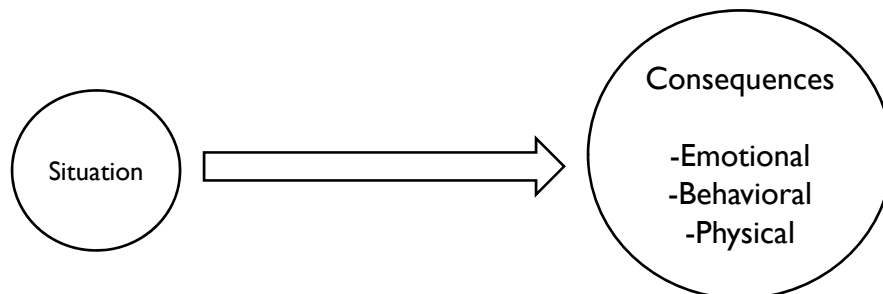
Painweek.

Stress, the Nervous System, and Pain



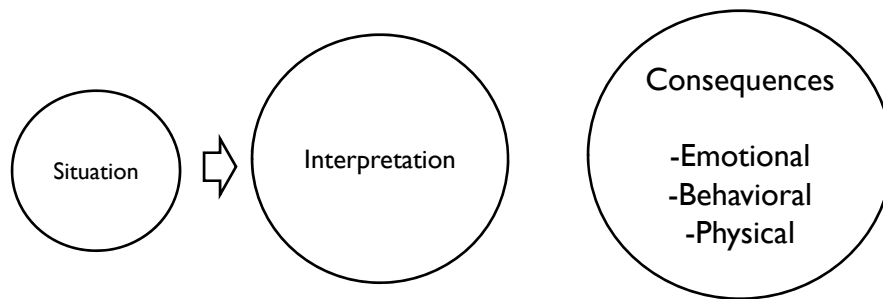
PainWeek

The Role of Cognitions



PainWeek

The Role of Cognitions (cont'd)



PainWeek.

The Role of Cognitions (cont'd)

- Thought processes are often rooted in our core perception of ourselves and our roles in this world
- Usually shaped by early experiences
- Much of our maladaptive behaviors are rooted in dysfunctional thought patterns
- Can take a significant amount of time and work to alter our automatic thought processes

PainWeek.

Catastrophization

- Exaggerated perception of a situation being worse than it actually is

- Magnification

- Rumination

- Helplessness

PainWeek.

Catastrophization (cont'd)

- Implications

- Pain expectations → affective distress

- Somatic hypervigilance/attention → increased pain perception

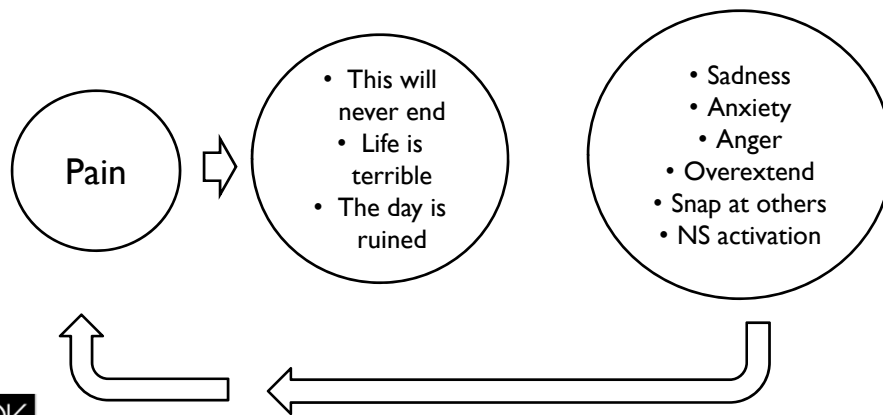
- Activity reduction coping strategy → fear-avoidance cycle

- Persistent symptoms

- Disability

PainWeek.

The Role of Cognitions



Cognitive Restructuring

- Is this helpful?
- Is this accurate?

Cognitive Restructuring (cont'd)

Previous Thoughts

- There is nothing I can do to control this
- Life is terrible
- Nothing will get done today

Modify Thoughts

- Are these statements helpful?
- Are these statements accurate?

PainWeek.

Cognitive Restructuring (cont'd)

Previous Thoughts

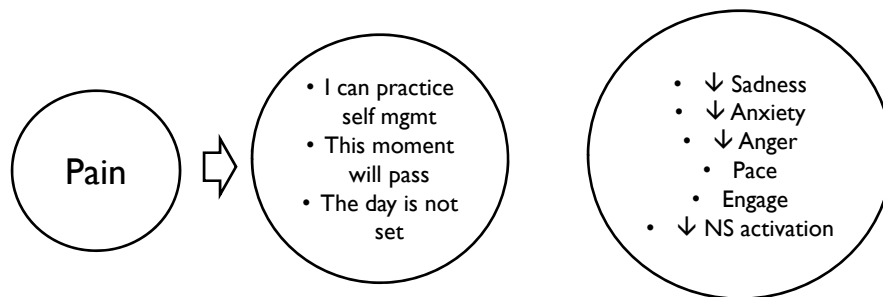
- There is nothing I can do to control this
- Life is terrible
- Nothing will get done today

Modified Thoughts

- I can practice self-management skills
- Life may feel terrible now, but I know this flare will end
- I don't know what the rest of the day will be like, but I will make the most of it by pacing

PainWeek.

The Role of Cognitions



PainWeek.

Empirically Validated Treatment: Self-Management Education

- Lambeck, Van Mechelen, Knol, Loisel, Anema (2010)
- Buchner, Zahlten-Hinguranage, Schiltewolf, Neubauer (2006)
- Linton & Ryberg (2001)
- Flor, Fydrich, Turk (1992)

PainWeek.

Empirically Validated Treatment

- Linton & Andersson (2000)
 - Randomized control trial (n=213)
 - All patients received regular primary care tx + minimal treatment (information pack, pamphlet) or 6-session CBT treatment
 - Assessments administered at pretest and 12-month follow-up
 - Risk for developing long-term sick absence decreased 9x in CBT group
 - CBT participants had decreased medical utilization compared to increase in other groups

PainWeek.

Empirically Validated Treatment (cont'd)

- Linton & Nordin (2006)
 - 5-year follow-up of Linton & Andersson (2000) study, also used supplemental records from the National Insurance Authority
 - 97% completed follow-up questionnaire
 - CBT group had significantly less pain, higher activity, better quality of life, and better general health compared to minimal treatment group
 - Risk of long-term sick leave 3x higher in the non-CBT group
 - CBT group had significantly less lost productivity costs

PainWeek.

Empirically Validated Treatment (cont'd)

- Gatchel, Polatin, Noe, Gardea, Pulliam, Thompson (2003)

- Patients deemed HR for development of chronic disability were randomly assigned to an early intervention FR group (n=22) or a nonintervention group (n=48). Low risk nonintervention subjects also evaluated (n=54)

- Patients tracked at 3 month intervals over the course of a year

- HR patients in the early intervention group had significantly lower rates of healthcare utilization, medication use, and self-report pain variables

PainWeek.

Empirically Validated Treatment (cont'd)

- [continued] Gatchel, Polatin, Noe, Gardea, Pulliam, Thompson (2003)

- HR nonintervention group displayed more symptoms of chronic pain disability compared to low risk subjects

- Greater cost savings associated with early intervention (\$12,721) vs no intervention group (\$21,843). Cost variables included healthcare visits, medication, lost wages, early intervention program cost

PainWeek.

Cochrane Review of Multidisciplinary Programs for Pain

- 41 studies, 6858 participants
- LBP > 3 months with some prior treatment
- MDP vs unimodal care focused on physical factors, standard care with GP
- Moderate quality evidence for improvements in pain and daily functioning
- Increased likelihood of RTW in 6-12 months



Kamper SJ, Apeldoorn AT, Chiarotto A, Smeets R.J.E.M., Ostelo RWJG, Guzman J, van Tulder MW. Multidisciplinary biopsychosocial rehabilitation for chronic low back pain. Cochrane Database of Systematic Reviews 2014, Issue 9.

Stanford Comprehensive Interdisciplinary Pain Program (SCIPP)

- Typical patient
- Pain conditions accepted
- Admission criteria



Interdisciplinary Treatment

- Physical therapy
- Occupational therapy
- Medication optimization (cocktail)
- Lifestyle/behavioral modification

PainWeek.

Scheduled Activities

- AM rounds
- Physical therapy
- Occupational therapy
- Pain coping skills class
- Individual provider visits

PainWeek.

Unscheduled Activities

- Independent practice
- Walking
- Activity tracking log

PainWeek.

Behaviors Reinforced

- Consistent across all team members, including nursing
- Application of self-management skills
- Increased activity levels
- Focus on functioning

PainWeek.

Behaviors not Reinforced

- Pain behavior
- Medication focus
- Somatic complaints
- Inactivity

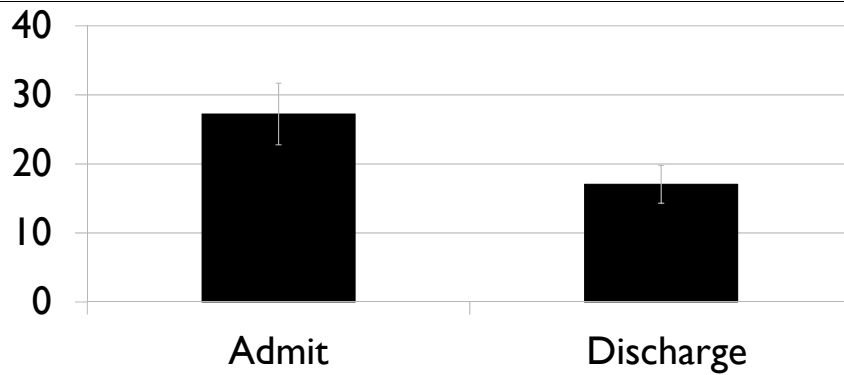
PainWeek.

SCIPP Outcomes

- n = 44 (19 male, 25 female)
- Minimum of 1 pain diagnosis
- Assessments:
 - Center for Epidemiologic Study of Diseases—Depression Scale (CESD)
 - McGill Pain Questionnaire (MPQ)
 - McGill Pain Questionnaire-Visual-Analog Scale (MPQ-VAS)
 - Profile of Mood States (POMS)
- Administered within 24 hours of admission and discharge

PainWeek.

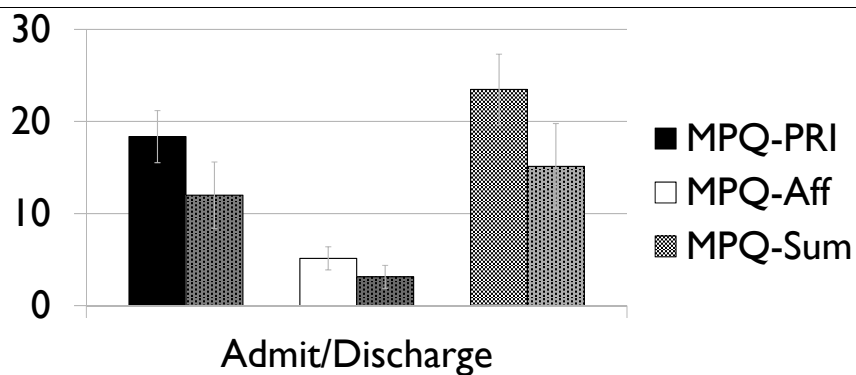
CESD



Total CESD score was significantly lower at discharge than at admission ($p < .001$).

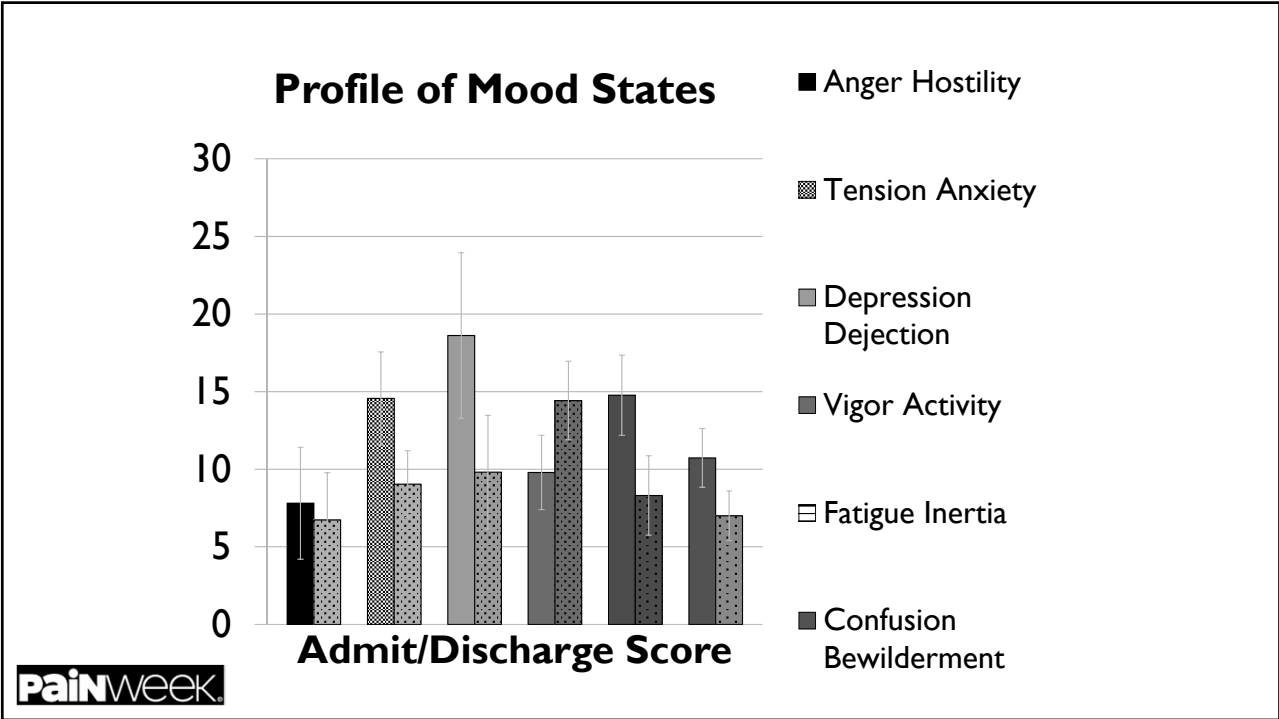
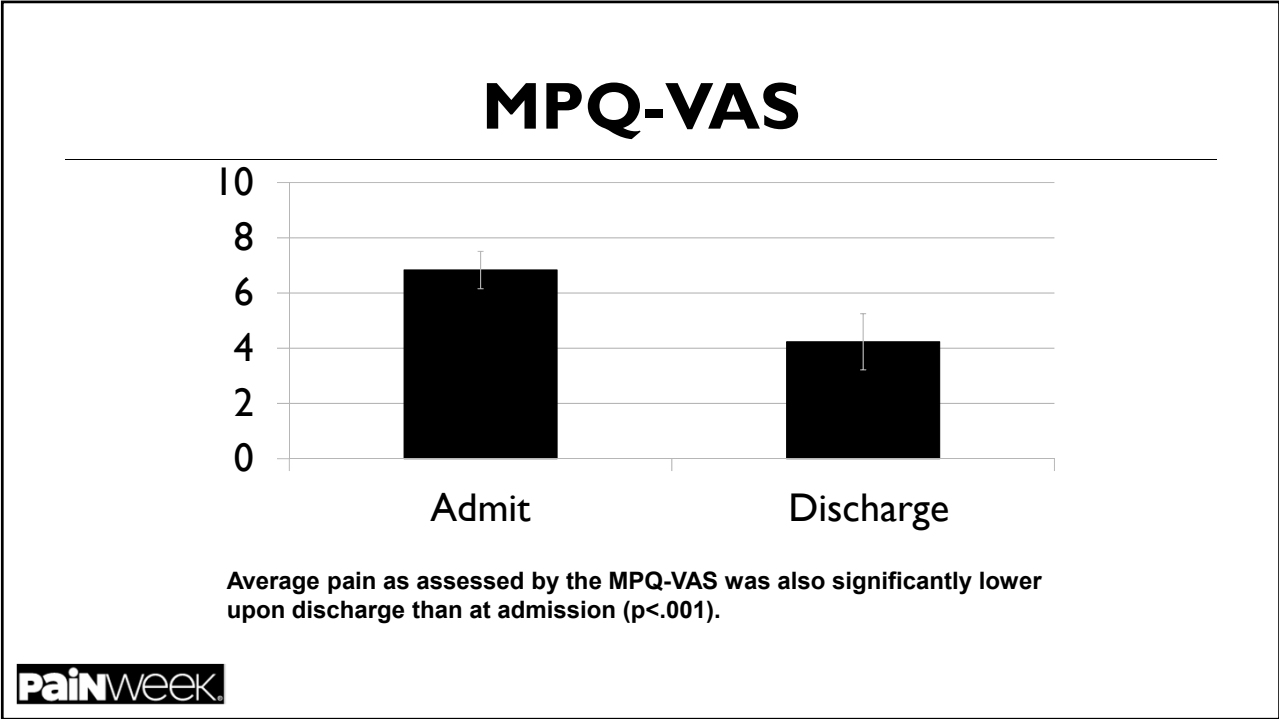
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MPQ



Significant reductions were detected on the MPQ sum score ($p = .005$) and each of the MPQ subscales – PRI (single item pain rating index; $p = .007$) and Affective ($p = .01$).

PainWeek



SCIPP Outcomes

- Significant changes on
 - CESD ($p < .001$)
 - MPQ-VAS average pain ($p < .001$)
 - MPQ summary score ($p = .005$)
 - MPQ pain rating index ($p = .007$)
 - MPQ affective score ($p = .01$)
 - POMS Tension-Anxiety ($p = .005$)
 - POMS Depression-Dejection ($p = .001$)
 - POMS Vigor-Activity ($p = .005$)
 - POMS Fatigue-Inertia ($p = .002$)
 - POMS Confusion-Bewilderment ($p = .003$)
 - POMS Total Mood Disturbance ($p = .01$)

- No significant difference on
 - POMS Anger-Hostility



Other Literature Findings

- 373 CPRP participants (3 week)

- ~57% on opioids at admission

- Assessments at admission, discharge, and 6-month (70% return rate; pain severity, depression, psychosocial functioning, health status, pain catastrophizing)

- Pain severity and depression higher in opioid users at admission

- Significant improvement on all variables at discharge, 6-month follow-up regardless of opioid status



Townsend, CO, Kerkvliet, JL, Bruce, BK, Rome, JD, Hooten, WM, Luedtke, CA, Hodgson, JE. (2008). A Longitudinal Study of the Efficacy of a Comprehensive Pain Rehabilitation Program with Opioid Withdrawal: Comparison of Treatment Outcomes Based on Opioid Use Status at Admission. *Pain*, 140(1): 177-189.

Other Literature Findings (cont'd)

- 705 (600 completed) outpatient interdisciplinary program participants
- Opioid group tapered with cocktail
- Opioid group improved same as more than non-opioid group (pain severity, catastrophizing, sleep, treatment satisfaction, pain-related functioning domains)

Murphy, JL, Clark, ME, Banou, E (2013). Opioid Cessation and Multidimensional Outcomes After Interdisciplinary Chronic Pain Treatment. *Clin J Pain*, 29(2): 109-17.

PainWeek

Beyond CBT

- Acceptance and commitment therapy (ACT)
- Biofeedback training
- Mindfulness-based interventions
- Emotional awareness and expression therapy

PainWeek

Outpatient Application

- Participation in CBT-based coping skills class
- Concurrent medication reduction
- Consider joint psych-MD appointments

PainWeek

Addressing Chronic Pain in the Context of Substance Use Disorders

- Medication reduction can improve functional outcomes
- Interdisciplinary care enhances results and can lead to decreased medical utilization

Lambeek, Van Mechelen, Knol, Loisel, Anema (2010); Flor, Fydrich, Turk (1992)
Buchner, Zahlten-Hinguranage, Schiltewolf, Neubauer (2006); Linton & Ryberg (2001)

PainWeek

Risk Evaluation and Mitigation Strategy (REMS)

- Safety education for prescribers & patients

- Multiple possibilities
 - Prescription Drug Monitoring Programs (PDMPs)
 - UDS
 - Risk assessment tools (ORT, SOAPP, etc)
 - Individual evaluation(s)
 - Visit frequency
 - Treatment plan components

PainWeek.

Psychology in REMS

- Guidance re: creation

- Service delivery

PainWeek.

Addressing Chronic Pain in the Context of Substance Use Disorders

- Medication Assisted Treatment (MAT): combination of pharmacologic treatment AND behavioral interventions
- Employ use of a biopsychosocial formulation of the patient's predicament vs focusing solely on a biomedical model
- Emphasize focus on function vs pain elimination: Set functional goals (resumption of normal activities, RTW) and use activity tracking sheets

PainWeek.

Questions?

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PainWeek.