Nonpharmacologic Options in the Treatment of Chronic Pain

Mark Altenhofen, MS

Eastern Oregon Coordinated Care Organization Provider Forum on Chronic Non-cancer Pain Management

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Thank you

Catriona Buist, Ph. D
Oregon Pain Commission Chair &
Pain Psychologist OHSU
Definition of Pain

Pain: an unpleasant sensory and emotional experience associated with actual or potential tissue damage  (International Association for the Study of Pain)

Acute Pain < 3 months
Chronic Pain > 3 months
Acute Phase (< 2 weeks)
  Maintain activity
  Provide support
  High proportion return to activity & work

Sub-acute (2-12 weeks)
  Identify biopsychosocial obstacles to prevent the development of long term consequences including work loss

Chronic (> 12 weeks)
  Multidisciplinary approach
Our understanding of certain pain conditions and treatment has changed...

- **Central sensitization** is a condition of the nervous system that is associated with the development and maintenance of chronic pain.

- When **central sensitization** occurs, the nervous system goes through a process called “wind-up” and gets regulated in a persistent state of high reactivity.
Chronic pain often a complex biopsychosocial issue.
Opioids do not address psychosocial contributors to chronic pain.
Use opiates as part of multimodal treatment program that includes:
- Cognitive-behavioral therapy
- Functional restoration
- Interdisciplinary therapy
- Motivational interviewing
- Relaxation training
- Addresses sleep issues

Assess and treat for PTSD and other MH disorders.
Biopsychosocial model of pain
Championed by Butler and Moseley and others. 2000
The Goals of Treatment

IMPROVE FUNCTION

&

IMPROVE QUALITY OF LIFE

&

DECREASE SUFFERING
Non-Pharmacological Approaches

BEHAVIORAL HEALTH
What do Pain Psychologists Do?

- Help change behavior
- Education
- Motivational Interviewing
- Cognitive Behavioral Therapy
- Acceptance and Commitment Therapy
- Stress Management
- Relaxation Training
- Biofeedback
- Neuroplasticity Training
- Trauma Informed Care

There is a great deal of pain in life and perhaps the only pain that can be avoided is the pain that comes from trying to avoid pain.
Pre-Surgical Psychological Evaluation

- For spinal surgery, SCS/Intrathecal Pump Implant, bariatric surgery, and plastic surgery.

- Patients' emotional and psychosocial concerns, health-related behaviors, outcome expectations, and compliance with treatment regimen can all strongly influence the ultimate effectiveness of surgery.

- Depression, anxiety, catastrophizing, expectations can impact surgical outcomes.
Group Based Tx
(Therapy, Pain School or Peer to Peer Group)
Role of the family in promoting illness or well behavior???
Cognitive Behavioral Therapy (CBT)

“CBT is based on the premise that perceptions and observable displays of pain are influenced by complex interactions between environmental events and individuals’ emotional, physiological, behavioral, and cognitive responses. Effective interventions for chronic pain must address the emotional, cognitive, and behavioral dimension of pain, and must also help patients become active participants in learning new methods of responding to their problems.”

(Gatchel, R.J. & Turk, D.)
Acceptance & Commitment Therapy (ACT)
Steve Hayes, 1994

Goal of ACT is to help you live a rich, full, and meaningful life while effectively handling the pain that inevitably comes your way.
Insomnia (Sleep Hygiene)

1. Maintain a regular bed and wake time schedule, including weekends.
2. Establish a regular, relaxing bedtime routine.
3. Workout regularly (stop exercise 3 hours before bed).
4. No electronics in bedroom - TV, phones .
5. No exposure to TV or computers 2 hours prior to bedtime.
6. Use bedroom only for sleep and partner time.
7. Finish eating at least 2-3 hours before bed.
8. Refrain from taking naps (not more than 20’).
9. Avoid caffeine afternoon.
10. Avoid alcohol close to bedtime.

Resource: CBT-i Coach
Biofeedback

- Diaphragmatic breathing
- Stress management through relaxation
- Muscle tension reduction
- Heart rate variability
- iPhone apps:
  - Breathe2Relax
  - Breath Pacer
Non-Pharmacological Approaches

SELF CARE STRATEGIES
3 Key Shifts in Perspective Necessary to Effectively **Self-Manage** Chronic Pain

1. **Accept** the diagnosis of chronic pain.

2. Understand the **mind/body connection** with regard to pain symptoms.

3. Change to an **active orientation** regarding self-management.
Self-Management Tools
Effect of Mindfulness-Based Stress Reduction vs Cognitive Behavioral Therapy or Usual Care on Back Pain and Functional Limitations in Adults With Chronic Low Back Pain A Randomized Clinical Trial

Daniel C. Cherkin; PhD, Karen J. Sherman; PhD; Benjamin H. Balderson, PhD; Andrea J. Cook; PhD; Melissa L. Anderson; MS; Rene J. Hawkes; BS; Kelly E. Hansen, BS; Judith A. Turner, PhD


- MBSR involves combination of meditation, body awareness and yoga.
- Focuses on increasing awareness and acceptance of one’s experiences.
- Conclusion: people with LBP who did 8 x 2 hour sessions of group showed greater improvements in function compared to CBT alone.
A physical state of deep rest that changes a person's physical and emotional responses to stress.

Opposite (physiological reaction) of the Flight or Fight response.

A technique to help people counteract the toxic effects of chronic stress by slowing breathing rate, relaxing muscles, and reducing blood pressure.

VIDEO: HTTPS://YOUTU.BE/HRoBUF2JWOG?LIST=PLID6CJUCWWP4U9CNEDUN6OZNJISC5HNAM
Non-Pharmacological Approaches

MOVEMENT THERAPY
The fear of pain is more disabling than the pain itself.

(Waddell, 1993)
PT - Restore Function
OT – Restore Activities of Daily Living
Graded Motor Imagery (CRPS)
3 Step Process

http://www.gradedmotorimagery.com/
Adaptive / Restorative Yoga

Overcoming “Fear of Movement”
Relaxation
Breathing
Posture
Walking
Stretching
Connecting with your body
What do SilverSneakers and Silver & Fit memberships include?

- These programs allow older adults a variety of resources to meet their health needs including: a free basic fitness membership at any participating location around the country with access to all amenities; a variety of aquatics and land classes like balance, yoga, and cardio; and an online portal to track progress.

Who is eligible?

- SilverSneakers and Silver & Fit are offered through many leading Medicare health plans and Medicare Supplement carriers throughout the United States. Major carriers include United Health Care, Anthem Blue Cross and Blue Shield, Humana, Aetna and more.
Natural resistance builds muscle

Buoyancy may reduce nociception by acting on thermal and mechanoreceptors

Decreases load on lower extremities

Strong evidence for hydrotherapy & balneotherapy

Non-Pharmacological Approaches

PAIN EDUCATION
CONCLUSIONS: For chronic msk pain disorders, there is compelling evidence that an educational strategy addressing neurophysiology and neurobiology of pain can have a positive effect on pain, disability, catastrophizing, and physical performance.
Explain Pain

- Explain Pain by David Butler and Dr. Lorimer Moseley is an evidence based book designed for therapists, patients and students. It answers the most common questions asked by pain sufferers: 'why do I hurt?' and 'what can I do for my pain?' Written in simple language that anyone can understand, it encourages patients to move better and research shows that they will have less pain once they have understood its underlying causes.
Non-Pharmacological Approaches

MANIPULATIVE OR PASSIVE TECHNIQUES
Manipulative Techniques

- Osteopaths D.O. vs. M.D.
  - Includes Osteopathic Manipulation

- Chiropractic
  - Relationship between Body Structure and Function
  - Subluxation & Adjustment

- Therapeutic Massage
Electrical Stimulation

TENS Unit

Alpha Stim
Biologically Based Therapies

- Nutrition or Dietary Therapies
- Herbs
- Vitamins
- Aromatherapy
Acupuncture

- Derived from traditional Chinese medicine and other countries and alternative systems.
- Research is substantial, yet contradicting – Active vs Sham vs Placebo.
- Needles are applied to Acupoints on the Meridians to restore the flow of qi.
Resources
What’s Happening In Oregon for Pain?

- September 2016 HB 4124 permits pharmacists to prescribe and distribute packages of naloxone to individuals who complete the OHA approved training.


- Oregon Pain Guidance [http://www.oregonpainguidance.org/](http://www.oregonpainguidance.org/) (local pain resource websites for providers and patients linked to OPG)

- Back Pain brought above the line for Medicaid/OHP (July 1, 2016) [https://www.oregon.gov/oha/herc/FactSheet/Back-policy-changes-fact-sheet.pdf](https://www.oregon.gov/oha/herc/FactSheet/Back-policy-changes-fact-sheet.pdf)

- Oregon Pain Management Commission updated 1 hour online pain module [https://www.oregon.gov/oha/OHPR/PMC/Documents/Module.pdf](https://www.oregon.gov/oha/OHPR/PMC/Documents/Module.pdf)
What’s Happening In Oregon for Pain?

- Pain Society of Oregon (Eugene, Portland, Bend) [https://www.painsociety.com/](https://www.painsociety.com/)
- The Oregon Opioid Guidelines Taskforce 2016
- New OHA grant from the CDC to support statewide implementation of opioid prescribing guidelines, expand regional funding and support regional symposia and training opportunities
- New grant at OHA going to fund consultation services for providers treating pain and addiction through the University of Washington TelePain starting 1/2017
- New SAMHSA grant funding live bupenorphine trainings for providers – contact Dr. Melissa Weimer, OHSU ([weimerm@ohsu.edu](mailto:weimerm@ohsu.edu))
- New grant funding to provide ECHO at OHSU – 40 1 hour sessions.
- The Tri-County Opioid Safety Coalition 2016 (Multnomah, Washington, Clackamas)
Starting July 1st 2016 the Oregon Health Plan will begin providing reimbursement for alternative pain care for LBP.


- Comprehensive integrated tx focused on the biopsychosocial needs

- Added evidence based tx: Cognitive behavioral therapy, physical therapy, chiropractic manipulation, osteopathic manipulation, acupuncture, yoga

- Restricts or eliminates ineffective or harmful tx: long term opioid prescribing, unnecessary intervention

- Focus is to include medical, cognitive-behavioral, and psychoeducational interventions to increase function and quality of life

- Programs should address:
  - Managing comorbid conditions (sleep, PTSD...)
  - Fear and exercise avoidance, catastrophizing
  - Teach self-management skills (gentle exercise, relaxation, mindfulness)
July 29, 2016

NEW Portland resource for patients and providers

http://portlandmetro.oregonpainguidance.org/
Free Training from Washington State
www.coperems.org

Tips on How to Safely Taper Patients Off of Prescription Opioids
An Interview with Mark Sullivan, MD, PhD

READ MORE
Worthwhile Resources for Providers and Patients

YouTube Videos on pain:
- (new VA 6 min video on chronic pain):
  http://www.dvcipm.org/clinical-resources/joint-pain-education-project-jpep
- Understanding Pain: What to do about it in less than 5 Minutes (from Australia)
- Brainman Chooses
- Brainman Stops His Opioids
- Back Pain by Mike Evans
- TED talk by Lorimer Moseley – Why Things Hurt

Smart phone apps: IREHAB Back Pain, My Pain Diary, or Pain Free Back for the iphone

Exercise programs on YouTube from Bree Collaborative:
Exercises for lower back http://www.youtube.com/watch?v=u_alXoZ4774
Low back pain remedy stretching exercises http://www.youtube.com/watch?v=019f62bu364
Top 5 stretches to relieve low back pain http://www.youtube.com/watch?v=XNN3K2qj_LO
Yoga for back pain http://www.youtube.com/watch?v=aSthNvRxvaE

Kevin Vowels ACT Manual for Chronic Pain:
“Understanding Pain and What to do About It in 6 Minutes”

UNDERSTANDING PAIN AND WHAT TO DO ABOUT IT IN 6 MINUTES - JOINT PAIN EDUCATION PROJECT VIDEO FROM THE DEPARTMENT OF DEFENSE AND VETERANS HEALTH ADMINISTRATION TO LEARN MORE ABOUT CHRONIC PAIN MANAGEMENT.

HTTPS://WWW.YOUTUBE.COM/WATCH?V=CLWNNTMDGFCS
Cognitive Behavioral Therapy for Chronic Pain (CBT)

Managing Chronic Pain with 10 Minute CBT - This clip contains an excerpt from the DVD "10 Minute CBT in Practice: Physical Health and Long-Term Conditions". In this scenario, a GP demonstrates simple CBT strategies for managing a patient with chronic back pain.

HTTPS://WWW.YOUTUBE.COM/WATCH?V=TIUZBNDEWBE
Acceptance and Commitment Therapy (ACT)

PORTLAND PSYCHOTHERAPY RESOURCE PAGE:

HTTP://PORTLANDPSYCHOTHERAPYCLINIC.COM/MINDFULNESS_AND_ACCEPTANCE_EXERCISES/

PSYCHOTHERAPY EXAMPLE: PART 6 ACT IN A NUTSHELL

HTTPS://WWW.YOUTUBE.COM/WATCH?V=BJ1KRDVFJGY
Motivational Interviewing for Healthcare Professionals - Online Education
College of Nursing at the University of Colorado

DOCTOR INTERVIEW WITH PATIENT WITH CHRONIC PAIN UTILIZING A MOTIVATIONAL INTERVIEWING APPROACH WITHIN AN SBIRT MODEL. ASSESSMENT INTERVIEW. THIS IS THE INITIAL VISIT ASSESSMENT INTERVIEW.

HTTPS://WWW.YOUTUBE.COM/WATCH?V=VFKGEQSMZZC
SCOPE of Pain is a series of continuing medical education/continuing nursing education activities designed to help you safely and effectively manage patients with chronic pain, when appropriate, with opioid analgesics.

Trainer’s toolkit - 7 videos:
- Initiating opioid therapy, discussing safety and benefit
- Assessing and managing aberrant opioid taking behavior
- Discussing discontinuation of opioids due to lack of benefit and excessive risk
- Modifying treatment plan of inherited patient on high doses
- Assessing and managing illicit drug use in patient with chronic opioid therapy
- Assessing and managing PDMP questionable activity in established patient and in a new patient
American Chronic Pain Association
www.theacpa.org

Our Mission:

To facilitate peer support and education for individuals with chronic pain and their families so that these individuals may live more fully in spite of their pain.

To raise awareness among the health care community, policy makers, and the public at large about issues of living with chronic pain.

• Resources for patients and providers
This 2015 book is designed to help manage pain so people with chronic pain can get on with living a satisfying, fulfilling life, and includes the *Moving Easy Program CD*. This book and CD are the companion resources to the Chronic Pain Self-Management workshop.
CBT Resources
Mindfulness means paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally.

Jon Kabat-Zinn
PSYCHOTHERAPY EXAMPLES: PART 7 MINDFULNESS

HTTPS://WWW.YOUTUBE.COM/WATCH?V=GD8TXFMZDAK
Neuroplasticity Resources
Neuroplastic Transformation (Moskowitz & Golden, 2013)
http://www.neuroplastix.com/
Self-help books that use cognitive behavioral principals to guide recovery from chronic pain. Includes a relaxation CD.

Great for patients 2016

Great for clinicians, patients and family
Headache Resources

American Headache Society
http://www.americanheadachesociety.org/

International Headache Society http://www.ihs-headache.org/

Migraine Research Foundation http://www.migraineresearchfoundation.org/

National Headache Foundation http://www.headaches.org/

Your Headache Isn’t All in Your Head by Adriaan Louw
Reviewed FM literature from 1955-2014

FM is a constellation of symptoms characterized by central nervous system pain amplification with concomitant fatigue, memory problems and sleep and mood disturbances.

Evidence based tx for FM: education, exercise, CBT, tricyclics, SNRIs, and gabapentinoids
Fibromyalgia Resources

www.myalgia.com

Your Fibromyalgia Workbook – Adriaan Louw

Dan Clauw from UM utube – Chronic Pain Is It All in Their Head (central sensitization)
https://www.youtube.com/watch?v=pgCfkA9RLrM

YouTube: Kim Jones/fibromyalgia/exercise
https://www.youtube.com/watch?v=d3M9R0pc1jI

Exercise DVDs for fibromyalgia
www.myalgia.com/videos

Instructions for modification to share with exercise trainers
www.myalgiateam.com/exercise
Web Based CBT Resource for Fibromyalgia Patients
(from Kim Jones)

www.fibroguide.com

- Program features 10 CBT modules:
  - Understanding Fibromyalgia
  - Being Active
  - Sleep
  - Relaxation
  - Time for You
  - Setting Goals
  - Pacing Yourself (Task Player App)
  - Thinking Differently
  - Communicating
  - Fibro Fog

- In a RCT of 118 FM patients comparing the earlier version of this website plus usual care, to usual care alone, Williams demonstrated statistically significant improvements in pain (29% in the WEB group had 30% improvement in pain vs 8% in usual care, p=.009) and function (i.e., 31% in WEB-SM had .5 SD improvement in SF-36 PF vs. 6% in standard care, p<.002) Williams et. al. Pain. 2010;151(3):694-702 & Bernardy, et al., 2010, J Rheumatology
CRPS Resources

- Pain Medicine 2013; 14: 180-229 Special Article
  (Harden, R., Oaklander, A., Burton, A., Perez, R., Richardson, K., Swan, M., Barthel, J., Costa, B., Graciosa, J., Bruehl, S)

- [www.rsdsa.org](http://www.rsdsa.org)
Free Resources

Continuing Education Examination available
http://www.cdc.gov/mmwr/cme/conted.html

AMDG Opioid Dosing Guideline Available as mobile app
http://www.agencymeddirectors.wa.gov/opioiddosing.asp

Free CMEs
http://www.agencymeddirectors.wa.gov/opioiddosing.asp
Resources to highlight our addiction issues...

Chasing Heroin
(Frontline & PBS)

http://www.pbs.org/wgbh/frontline/film/chasing-heroin/
PTSD and Chronic Pain

- Prevalence of PTSD is substantially elevated in pts with chronic pain (15-35%) compared to those who do not have chronic pain (2%). (Asmundson, Bonin, Frombach, & Norton, 2000)

- For those with history of abuse, having chronic pain can feel like being abused again. Anxiety, vulnerability, lack of control, and not being believed can magnify pain emotionally and physically. (Caudill, MA., 2002)

- The pain may serve as a reminder of the traumatic event, which will tend to exacerbate the PTSD. (DeCarvalho, L. T.)

- Important to treat the PTSD and the pain.
An astonishing new science called "neuroplasticity" is overthrowing the centuries-old notion that the human brain is immutable. In this revolutionary look at the brain, psychiatrist and psychoanalyst Norman Doidge, M.D., provides an introduction to both the brilliant scientists championing neuroplasticity and the people whose lives they've transformed. From stroke patients learning to speak again to the remarkable case of a woman born with half a brain that rewired itself to work as a whole, The Brain That Changes Itself will permanently alter the way we look at our brains, human nature, and human potential.

“The neurons that fire together, wire together.”
The Graded Motor Imagery Handbook for CRPS
Moseley, Butler, Beames, Giles (2012)

Designed for both clinicians and pain sufferers, The Graded Motor Imagery (GMI) Handbook offers a novel three-stage synaptic exercise process for neuropathic pain using left/right discrimination, imagined movements and mirror therapy to explore the representation of body parts in our brains and how these may be affected by injury.
Why Do I Hurt?
Adriaan Louw, PT, Ph.D., M.App.Sc (2013)

“Pain is normal – living in pain is not. Chronic pain is commonly due to an extra-sensitive nervous system and how the brain processes information from the nerves. Understanding more about the neuroscience of pain has been shown to allow patients to hurt less, exercise more and regain control of their lives. “Why Do I Hurt?” teaches patients the science of pain in approachable language with metaphors, examples and images.”
When to Refer to Behavioral Health

- Depression, anxiety, or PTSD.
- Social, interpersonal and intimate activities limited by the fear of pain.
- Multiple or varied treatments have not been satisfactory to the patient.
- Patient views their role as passive and is “waiting” until the providers fix the pain.
- Escalation of medications without increase in function.
- When downtime exceeds uptime.
- Self-appraisals and beliefs that they are unable or helpless to resume a modified normal life due to pain.
Compassionate Conversations Emphasize

YOUR CONCERN FOR THE PATIENT’S SAFETY

YOU ARE THERE TO SUPPORT THEM AND HELP THEM SAFELY AND EFFECTIVELY MANAGE THEIR PAIN

INVOLVE THE PATIENT IN DECISIONS THAT AFFECT THEM AND MAKE THEM PARTNERS IN THEIR CARE TEAM (SHARED DECISION MAKING)
Redirecting conversations away from eliminating pain and moving towards managing pain with a focus on
- Function
- Quality of life
- Living a meaningful life
Trauma-Informed Approach

- *Realizes* the impact of trauma and understands path for recovery.
- *Recognizes* the signs and symptoms of trauma in clients, families, staff, and others involved.
- *Responds* by fully integrating knowledge about trauma into policies, procedures and practices.
- Seeks to actively resist *re-traumatization.*
- Distinct from trauma-specific interventions used to facilitate healing.
A collaborative person-centered process (using warmth, genuine empathy, and acceptance) to engage client, elicit change talk and evoke motivation to make positive changes from the client.

Empower the patient by giving them options:
“Based on your risk factors, opioids are not a safe option, would you be willing to discuss some non-opioid treatments?”

Use Reflection and validation:
“You seem ___ (upset, anxious, fearful, scared) by what I have said”

The Efficacy of Motivational Interviewing in Adults with Chronic Pain: A Meta-Analysis and Systematic Review
“MI significantly increased adherence to chronic pain treatment in the short term...”
MI Great Technique to Help Change Behavior

- Pain management
- Smoking cessation
- Weight loss
- Sleep hygiene
- Healthy eating
- Drug and alcohol rehab
- Diabetes mgnt
- Hypertension mgnt
- Increasing activity

http://psychology.tools/technique-motivational-interviewing.html
Why are you sending me to [Behavioral Health, Pain School, PT, Etc]??? I need help with my pain!

- Learning to manage chronic pain is most effective when it involves a team (PT, MD, psychologist, and CAM providers).

- Similar to other chronic conditions (such as diabetes, hypertension) it is helpful to have education to learn tools to manage your pain more effectively.

- Managing chronic pain often requires changing behavior (sleep patterns, eating habits, and exercise).

- The team will help you develop a toolbox to manage your pain and help you get back to some of the activities you enjoy.
<table>
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<tr>
<th>Validated Tools for Screening and Assessment</th>
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<td>(* = most commonly used in primary care)</td>
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- PHQ-9 (depression) *
- GAD-7 (anxiety) *
- PHQ-4 (depression and anxiety)*
- Pain Self-Efficacy Scale
- Pain Anxiety Symptoms Scale
- Pain Disability Questionnaire
- PHQ-15 (somatic focus) *
- Oswestry (LBP disability)
- Neck disability Index
- PCL-C (PTSD Checklist)
- PC-PTSD *
- Fear Avoidance Beliefs Questionnaire
- Tampa Scale of Kinesiophobia
- Pain Catastrophizing Scale
- Pain Disability Index
- Brief Pain Inventory
- Multi-dimensional Pain Inventory

- CAGE Adapted to Include Drugs (CAGE-AID)
- Alcohol Use Disorders Identification Test (AUDIT)
- Opioid Risk Tool *
- Screener and Opioid Assessment for Patients with Pain-Revised (SOAPP-R)
- Current Opioid Misuse Measure (COMM)
- DIRE
- The Berlin Questionnaire (sleep)
- STOP-Bang (sleep apnea)
- Pain, Enjoyment of life, General activity (PEG) *
- 2- Item Chronic Pain Scale *
- STarTBack Tool *
- Functional Recovery Questionnaire
Primary Care PTSD Screen – (PC-PTSD)

- In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you:
  - Have had nightmares about it or thought about it when you did not want to? YES / NO
  - Tried hard not to think about it or went out of your way to avoid situations that reminded you of it? YES / NO
  - Were constantly on guard, watchful, or easily startled? YES / NO
  - Felt numb or detached from others, activities, or your surroundings? YES / NO

Current research suggests that the results of the PC-PTSD should be considered "positive" if a patient answers "yes" to any three items.
Mark Altenhofen, MS
CEO, Oregon Pain Advisors, LLC

Cell: (503) 915-2055
mark@painadvisors.com