

# The Challenge of Pain Management in the Chemically Dependent Patient

Martin D. Cheatile, Ph.D.  
Center for Studies of Addictions  
University of Pennsylvania

Ken Thompson, MD  
Medical Director, Caron Treatment Centers

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# Managing Pain in PC

- Overview
- Diagnostic issues
- Risk Factors for Addiction
- Aberrant drug taking behaviors
- Treating the pain patient with addiction
- Summary
- Discussion

# Overview

- More than 75 million Americans (approximately 25% of the entire population) suffer from chronic or recurrent pain, with 40% reporting that the pain has a moderate – severe impact on their quality of life
  - National Center for Health Statistics, 2006
- Greater than 40% of chronic pain patients rate that their pain is poorly controlled.
  - Nicholson et al, 2008
- Annual cost in medical diagnostics and treatment, compensation for lost wages, lost productivity is estimated at costing greater than 100 billion dollars per year
  - Stewart et al, 2003; (see <http://men.web.com/features/price-tag-on-pain>)
- The total cost of prescription opioid abuse in 2001 was estimated as 8.1 billion
  - Strassels et al 2009

# Chronic Pain-Consequences

- Untreated or mismanaged pain can lead to adverse effects such as delays in healing, changes in the central nervous system (neuroplasticity), chronic stress, depression, suicide and opioid addiction

McCaffery & Pasero 1999

Fishbain 1999

Mendell & Sahenk 2003

Martell et al 2007

# Psychiatric Illness in Chronic Pain

- 200 CLBP patients beginning functional restoration program
- Structured Clinical Interview/DSM-III-R
  - 59% had current symptoms of  $\geq 1$  psychiatric dx
  - most common:
    - major depression (45%)
    - substance abuse (19%)
    - anxiety disorders (16%)

Polatin PB, et al Spine 1993

# Comorbid Chronic Pain and Depression: Who is at Risk?

Miller and Cano, *The Journal of Pain*, 2009

- Telephone interview of community sample of 1,179
- The prevalence of chronic pain was 21.9%
- 35% of these pain patients experienced comorbid depression (7% of entire sample)
- Participants with CP or comorbid CP and depression tended to be older, female, employed less than FT, and less educated

***Authors concluded that these results suggest the need for depression screening in CPPs***

# Opioid Dependence and Abuse in Chronic Pain Patient Population

- Treatment of chronic non-cancer pain with opioids is considered a standard of practice

Portenoy, 2000; Harden, 2002; Ballantyne & Mao, 2003

- However, there is ongoing debate regarding this policy given the rising prevalence of prescription opioid abuse and addiction in the country

Johnston, 2005

# Increasing Prevalence of Opioid Abuse and Addiction

- The incidence of non-medical use of prescription opioids increased from 573,000 in 1990 to 2.5 million in 2002

Substance Abuse and Mental Health Services Administration (SAMHSA) 2005

- Admission rates to substance abuse treatment facilities for opioid abuse other than heroin increased from 1% of all admissions in 1997 to 5% in 2007.

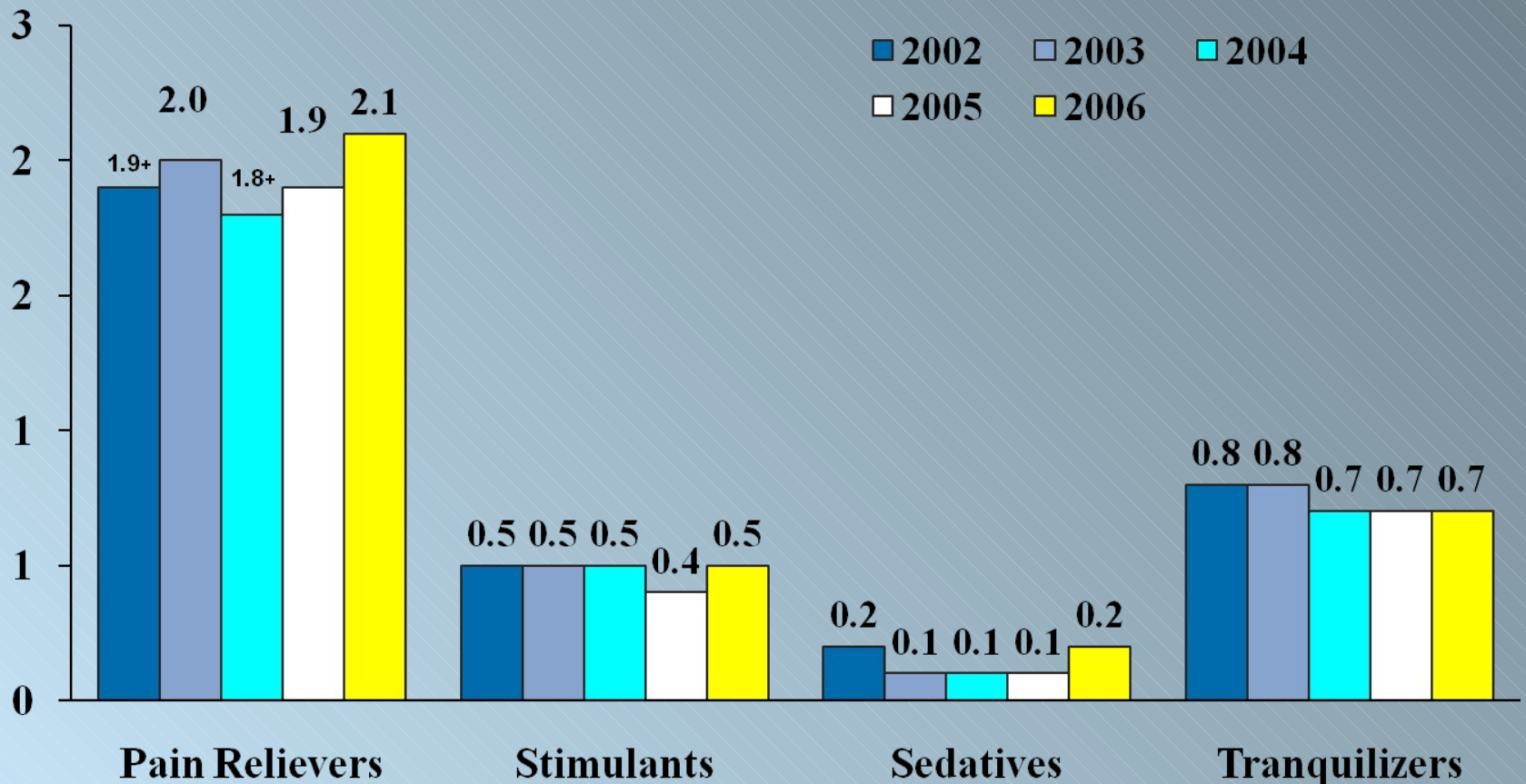
Substance Abuse and Mental Health Services Administration (SAMHSA) 2009

- Between 2004 and 2006 there was a 43% increase in ED visits related to the nonmedical use of opioid analgesics

DAWN, 2008

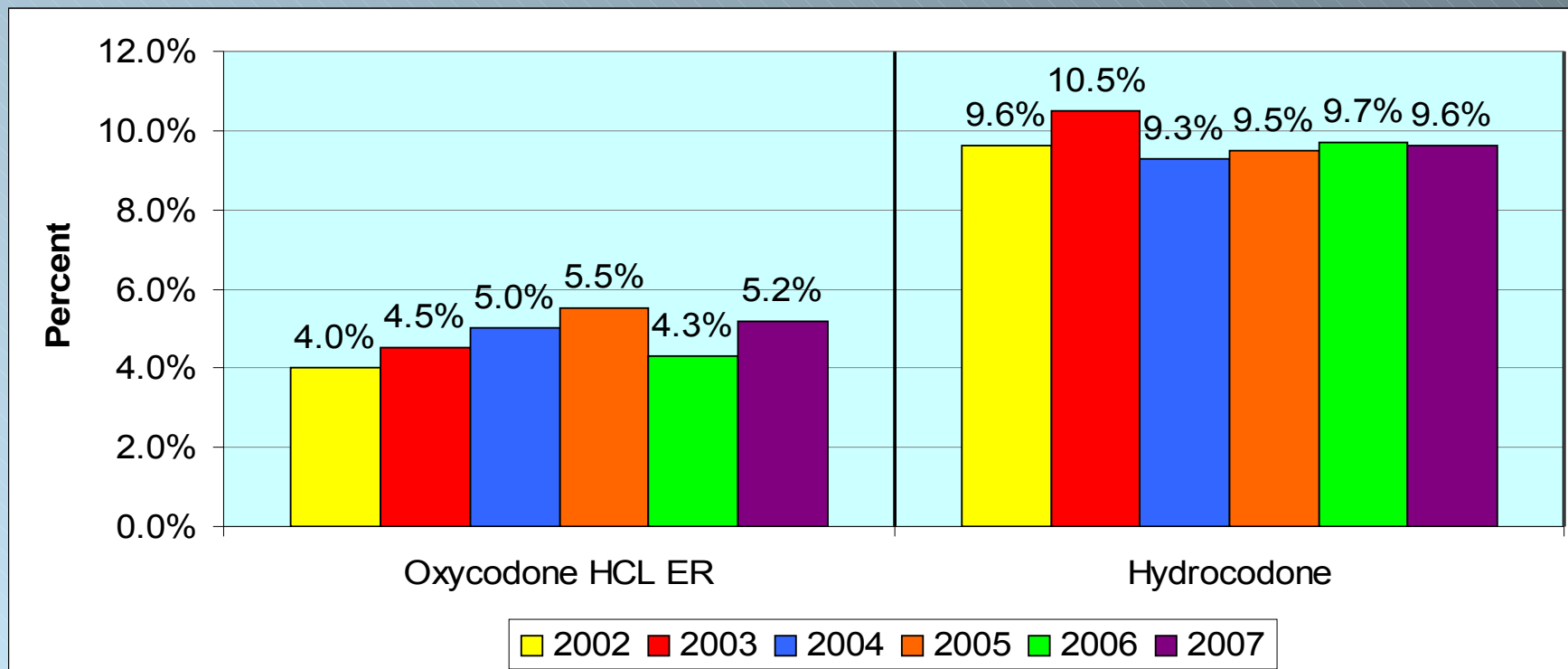
# Past Month Non-medical Use of Prescription Drugs (Psychotherapeutics) among Persons 12+: 2002-2006 National Survey on Drug Use and Health (NSDUH)

## Percent Using in Past Month



<sup>+</sup> Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

# Percent of 12<sup>th</sup> Graders Reporting Non-medical Use of Oxycodone HCL ER and Hydrocodone in the Past Year



**No year-to-year differences are statistically significant.**

# Prevalence of SUD in Chronic Pain

- Numerous studies have identified high prevalence rates of SUD in chronic pain patients
  - Polantín et al, 1993; Compton et al, 1998; Martell et al, 2007
- 3-62% of chronic pain patients on opioid therapy exhibit problematic opioid-taking behaviors, including doctor shopping, preoccupation with pain, forging prescriptions and unsanctioned dose escalation
  - Martell et al, 2007; Katz & Fachullo 2002; Michna et al 2007; Ballantyne & Laforge, 2007
- The reported prevalence of opioid addiction in CPP ranges from 3-40%
  - Fishbain et al; 2008; Ives et al, 2006; Reed et al, 2002

# Prevalence of SUD in Chronic Pain

- Ives et al (2006) reported substance misuse in 32% of 196 primary care patients who were referred over a 12-month period to a multi-specialty pain clinic
- In a review by Martell et al (2007) a metanalysis of studies on opioid treatment in chronic back pain revealed that the prescription of opioids range from 0.14% to 58% and opioid addiction (as defined by DSM IV) was present in up to 24% of this population
- Edlund et al (2007) examined data from a nationally represented survey of 9,279 patients and discovered that users of prescribed opioids had significantly higher rates of opioid misuse (odds ratio= 3.07,  $p < 0.001$ ) and problem opioid misuse (OR = 6.11,  $p < 0.001$ )
- Patients with chronic pain have high rates of concomitant psychiatric disorders including depression, anxiety and substance abuse (for review, see Cheatle & Gallagher, 2006)

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# Substance Dependence (Addiction)

## DSM-IV

- ◆ Tolerance
  - ◆ Physical dependence/withdrawal
  - ◆ Used in greater amounts or longer than intended
  - ◆ Unsuccessful attempts to cut down or discontinue
  - ◆ Much time spent pursuing or recovering from use
  - ◆ Important activities reduced or given up
  - ◆ Continued use despite knowledge of persistent physical or psychological harm
- 3/7 required for diagnosis
- 5/7 common in non-addicted pain patients

# Addiction

- A primary, chronic, neurological disease with genetic, psychosocial, and environmental factors influencing its development and manifestations
- Characterized by behaviors that include one or more of the following:
  - Continued use despite harm (adverse **C**onsequences)
  - Impaired **C**ontrol over use (**C**ompulsive use)
  - Preoccupation with use for non-pain-relief purposes (**C**raving)

*Physical dependence and tolerance not necessary*

*AAPM, APS, ASAM*

# Physical Dependence

- Physical dependence is a state of adaptation that is manifested by a drug class specific withdrawal syndrome that can be produced by abrupt cessation, rapid dose reduction, decreasing blood level of drug, and/or administration of an antagonist.

AAPM, APS, ASAM

# Pseudoaddiction

- A term used to describe patient behaviors that may occur when pain is undertreated such as becoming focused on obtaining medications, “clock watching”, and “drug seeking”.
- Pseudoaddiction can be distinguished from true addiction in that the aberrant behaviors resolve when pain is effectively treated.

# Tolerance

- Tolerance is a state of adaptation in which exposure to a drug induces changes that result in a diminution of one or more of the drug's effects over time

AAPM, APS, ASAM, 2001

# DSM-V

## Opioid-Use Disorder

A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by 2 (or more) of the following, occurring within a 12-month period:

- Recurrent substance use resulting in a failure to fulfill major role obligations
- Recurrent substance use in situations in which it is physically hazardous
- Continued substance use despite having persistent or recurrent social or interpersonal problems
- Tolerance, as defined by either of the following:
  - A need for markedly increased amounts of the substance to achieve intoxication or desired effect
  - Markedly diminished effect with continued use of the same amount of the substance (Note: tolerance is not counted for those taking medications under medical supervision such as analgesics, antidepressants, anti-anxiety medications or beta-blockers)
- Withdrawal, as manifested by either of the following:
  - The characteristic withdrawal syndrome for the substance (refer to Criteria A and B of the criteria set Withdrawal from the specific substances)
  - The same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms (Note: Withdrawal is not counted for those taking medications under medical supervision such as analgesics, antidepressants, anti-anxiety medications or beta-blockers)
- The substance is often taken in larger amounts or over a longer period than was intended
- There is a persistent desire or unsuccessful efforts to cut down or control substance use
- A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects
- Important social, occupational or recreational activities are given up or reduced because of substance use
- The substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance
- Craving or a strong desire to urge to use a specific substance

# Case Presentations

- 41 y.o. woman with c/o CLBP, cervical pain s/p fall
- PMH + migraines, endometriosis with multiple laparoscopies
- SH + spouse died from MI mid 30's, subsequent abusive relationships
- Psych HX: psych f/u off and on since death of spouse. Residential psych. facility 8 months for depression, SUD treatment Betty Ford and Caron for polysubstance including opioids, benzos and ETOH
- MSE + multiple neurovegetative signs of depression, BDI-FSMP indicates severe range

# Case Presentations

- 34 y.o. woman c/o CLBP s/p lumbar discectomy
- PMH/ROS: unremarkable
- SH– single, professional, good support system
- Psych Hx: unremarkable
- SUD Hx: unremarkable hx but admitted to residential CD program using Rx 240 Vicodin/ month plus Alprazolam from pain specialist

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# Retail sales of opioid medications (grams of medication) from 1997 to 2006

Manchikanti et al 2003

Drug	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	% of change from 1997
Methadone	518,737	692,675 (34%)	964,982 (39%)	1,428,840 (48%)	1,892,691 (32%)	2,649,559 (40%)	3,683,881 (39%)	4,730,157 (28%)	5,362,815 (13%)	6,621,687 (23%)	1177%
Oxycodone	4,449,562	6,579,719 (48%)	9,717,600 (48%)	15,305,913 (58%)	19,927,286 (30%)	22,376,892 (12%)	26,655,152 (19%)	29,177,530 (9%)	30,628,973 (5%)	37,034,220 (21%)	732%
Fentanyl Base	74,086	90,618 (22%)	107,141 (18%)	146,612 (37%)	186,083 (27%)	242,027 (30%)	317,200 (31%)	370,739 (17%)	387,928 (5%)	428,668 (11%)	479%
Hydromorphone	241,078	260,009 (8%)	292,506 (12%)	346,574 (18%)	400,642 (16%)	473,362 (18%)	579,372 (22%)	655,395 (13%)	781,287 (19%)	901,663 (15%)	274%
Hydrocodone	8,669,311	10,389,503 (20%)	12,101,621 (16%)	14,118,637 (17%)	15,594,692 (10%)	18,822,619 (21%)	22,342,174 (19%)	24,081,900 (8%)	25,803,543 (7%)	29,856,368 (16%)	244%
Morphine	5,922,872	6,408,322 (8%)	6,804,935 (6%)	7,807,511 (15%)	8,810,700 (13%)	10,264,264 (16%)	12,303,956 (20%)	14,319,243 (16%)	15,054,846 (5%)	17,507,148 (16%)	196%

Number in parenthesis is percentage of change from previous year

Source: [http://www.deadiversion.usdoz.gov/arcos/retail\\_drug\\_summary/index.html](http://www.deadiversion.usdoz.gov/arcos/retail_drug_summary/index.html)

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# Aberrant Drug-taking Behaviors

- Probably more predictive
  - Selling prescription drugs
  - Stealing or borrowing another patient's drugs
  - Prescription forgery
  - Injecting oral formulation
  - Obtaining prescription drugs from non-medical sources
  - Concurrent abuse of related illicit drugs
  - Multiple unsanctioned dose escalations
  - Recurrent prescription losses
- Probably less predictive
  - Aggressive complaining about need for higher doses
  - Drug hoarding during periods of reduced symptoms
  - Requesting specific drugs
  - Acquisition of similar drugs from other medical sources
  - Unsanctioned dose escalation 1-2 times
  - Unapproved use of the drug to treat another symptom
  - Reporting psychic effects not intended by the clinician

Jaffe, 1992

Passik and Portenoy, 1997

# Differential Diagnosis of Aberrant Drug-Taking Attitudes and Behavior

- Addiction (out of control, compulsive drug use)
- Pseudo-addiction (inadequate analgesia)
- Other psychiatric diagnosis
  - Encephalopathy
  - Personality Disorder
  - Depression/Anxiety
- Criminal Intent (diversion)
- Self-medication of mood /sleep disorders

Kirsh et al, 2002

Savage, 2002

# Risk Factors for Opioid Abuse

- Personal history of substance abuse
- Family history of substance abuse
- Age
- History of preadolescent sexual abuse
- Mental disease
  - Webster & Webster, 2005
- Polysubstance Abuse
- Poor social support
  - Dunbar & Katz, 1996
- Cigarette dependency
- History of repeated drug/alcohol rehabilitation
  - Friedman, Li, & Mehrotra, 2003

## Pain

## Addiction/Chemical Coping

Follows opioid contract	Does not follow through with contract
Uses medications according to direction	Loses control with medications
Frequently has medications left over	Runs out of medications early, especially breakthrough meds
Never losses medications	Often has excuses for medication losses

## Pain

## Addiction/CC

Once on stable dose, usually does not increase	Dose increases regularly
Takes medication for relief of “pain”	Takes medications to alter mood
Medications improve function	Medications cause deterioration
Will want to decrease medication if side effects are present	Will continue despite side effects

## Pain

## Addiction/CC

Never intoxicated, no impairment	May use to point of intoxication, often impaired
Negative drug screens for drugs of abuse	Uses other drugs – may have a positive UDS
Often improve	Seldom improve unless addiction treated
Benefit from long acting opioids	Prefer short acting opioids

## Pain

## Addiction/CC

Interest in rehabilitation	Interest only in relief of symptoms
Worried about side effects of opioids	No concern over adverse opioid effects
Improves with non-opioid interventions (physical therapy, NSAIDS, blocks, etc)	No effect with non-opioid interventions
Complies with non-drug modalities	Does not follow through with non-drug modalities

## Pain

## Addiction/CC

Uses one doctor for opioids	Multiple doctors for opioids
Rarely needs emergency help	Frequent ER visits
Compliant with follow-up	Appears at clinic without appointment
Family reports no problems	Family reports concerns about intoxication or altered behaviors
No illegal behavior	Diverts, forges, takes drugs from family or friends

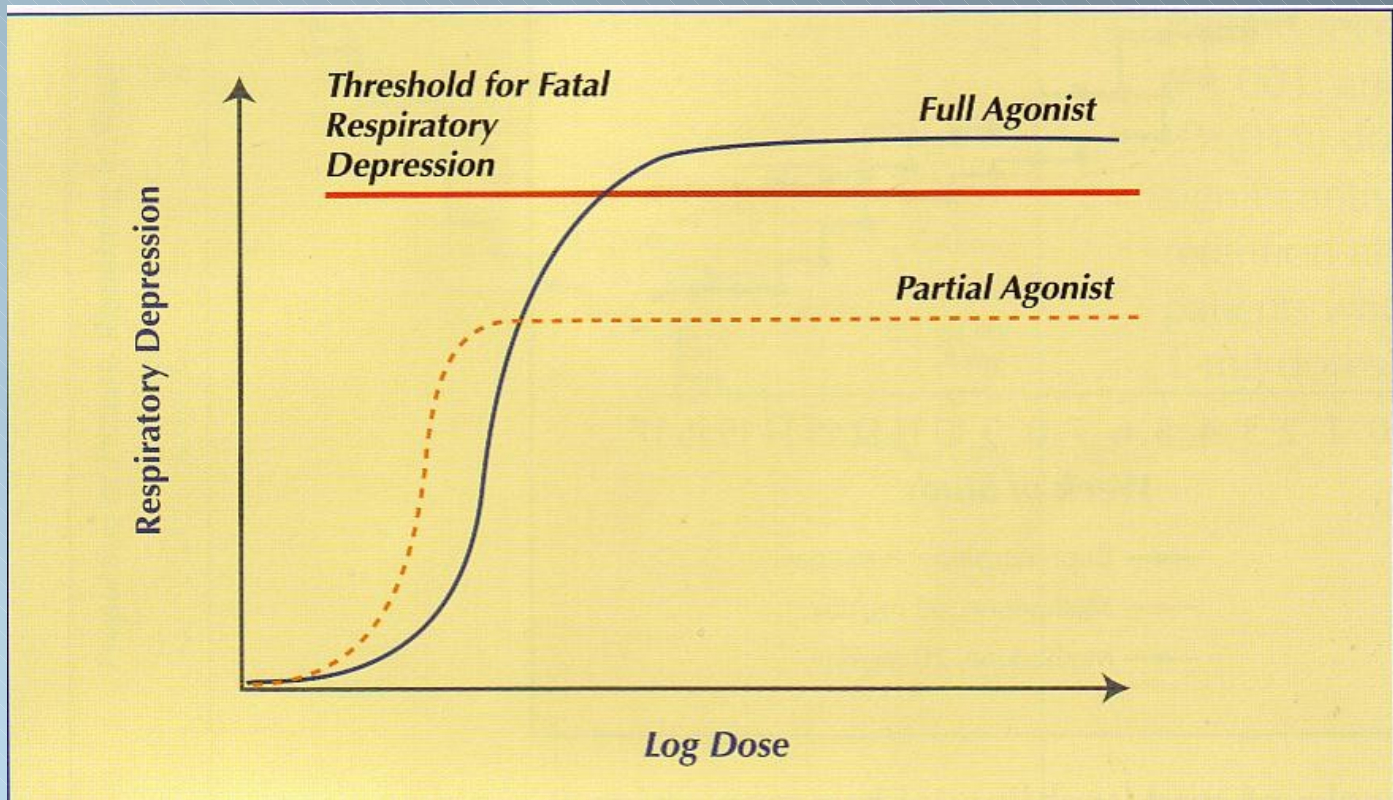
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# Detoxification

- Belief: pain will be less once off of all mood altering drugs – “hyperalgesia”
- Expect: Pain will get worse in the short run
- Process: aggressive intervention of modalities to treat pain

# Suboxone (buprenorphine + naloxone)



# Non-opioid therapy

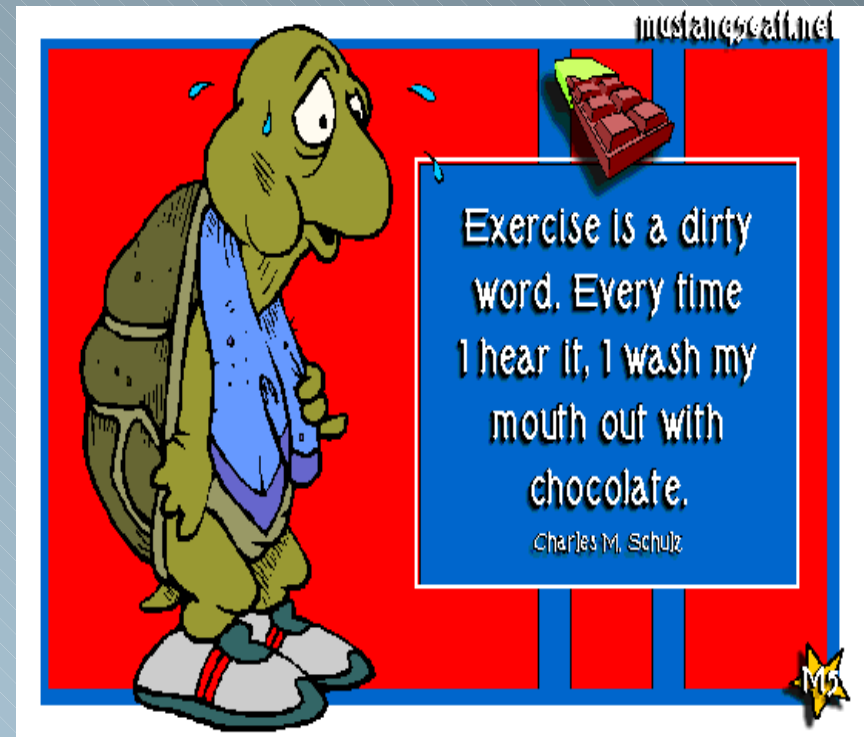
- NSAIDs
- Acetaminophen
- Muscle relaxants (with caution)
- Antidepressants
- Anticonvulsants
- Lidocaine patches

# Alternative Medicine and Pain

- What we do at Caron:
  - Acupuncture
  - Neurofeedback & Biofeedback
  - CBT
  - Physical Therapy
  - Massage
  - Hydrotherapy
  - Mindfulness
  - Yoga

# Physical Therapy Program Goals

- Learn “first-aid” techniques for pain at home (e.g., TENS, heat/cold, positioning)
- Establish a well-balanced independent exercise program



# CBT

- Chronic pain patients often acquire maladaptive thought patterns (catastrophizing) and behaviors (kinesiophobia) contributing to suffering
- Goal of CBT is to help patient reconceptualize view of pain and their role in healing to promote being proactive and competent rather than reactive and incompetent

# Spirituality and Pain

- Addressing spiritual issues is important with pain
- “Suffering” (a spiritual notion) to some degree is always associated with chronic pain
- Addressing the suffering can dramatically change the outcome

# 12-steps and pain

- Addicted persons with pain generally don't fit into traditional 12-step meetings.
- However, 12-step principles apply well to pain management
- First step = “We admitted we were powerless over our pain and that our lives had become unmanageable.”

# Post Treatment

- Importance of continuing treatment
- Make certain that the followup practitioners have an adequate “tool box”

# Adapting the Structure of Care to Match Risks

- Setting of care (primary versus specialty care, clinical care team membership)
- Selection of treatment (risk/benefit assessment of specific medications and treatments)
- Supply of medications (controls on and amounts of medications dispensed)
- Supports for recovery (implementation and documentation of recovery activities)
- Supervision and monitoring (frequency of visits, toxicology screens, pill counts, other)

Savage et al 2008

# Pain + Addiction

- Even if you can't figure out addiction vs pain – you can still help this person
- Addiction is a treatable chronic disease
- Continue pain treatment – do not throw them out of your practice
- Avoid mood altering drugs
- Referral to specialist for treatment
- Empathy

# Times of Illness

## Acute Pain Management in Addiction

- Need adequate pain control
- Solicit patient's internal reserve – “willing to put up with more pain”
- Use of all recovery skills while sick – meetings, sponsor, family, prayer, meditation
- Remember: the risk of relapse continues for weeks after the exposure to the drug.

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# Questions/Discussion Points

- Use of buprenorphin for pain and addiction
- Integrated pain and addiction treatment vs sequential treatment
- What is the difference between chemical coping and addiction? Does it matter?
- Why are some addicted pain patients resistant to the 12-step principles?