

# [ How to Recognize Addiction in your (chronic) Pain Patients ]

Carl Christensen, MD PhD, FASAM  
Associate Prof, Depts of Psychiatry & OB Gyn, WSU  
President, Mich Society of Addiction Medicine  
Pain Recovery Solutions, A2, MI

[cchriste@med.wayne.edu](mailto:cchriste@med.wayne.edu)

# [ Disclaimers ]

- Consultant for Substance Abuse and Mental Health Services Administration (SAMHSA)
- Speaker for Reckitt Benckiser: makers of Subxone, Subutex and Buprenex (Buprenorphine)
- Methadone provider (WSU)
- Medical Director, Dawn Farm Detox (Spera Center)

# [ Disclaimers ]

- Use of buprenorphine & methadone for addiction will be discussed.
- No off label use of medications will be discussed.
- This talk is available online at <http://public.me.com/ccmdphd>

[ This talk available online at: ]

- <http://public.me.com/ccmdphd>

# [ Educational Objective 1 ]



# Educational Objective 2



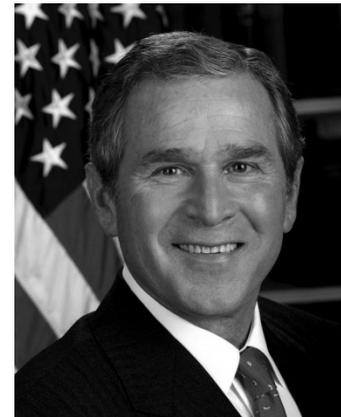
# [ What is Addiction? ]

- Physiologic Dependence?
- Lack of willpower?
- An “amoral” condition?
- A brain disease?

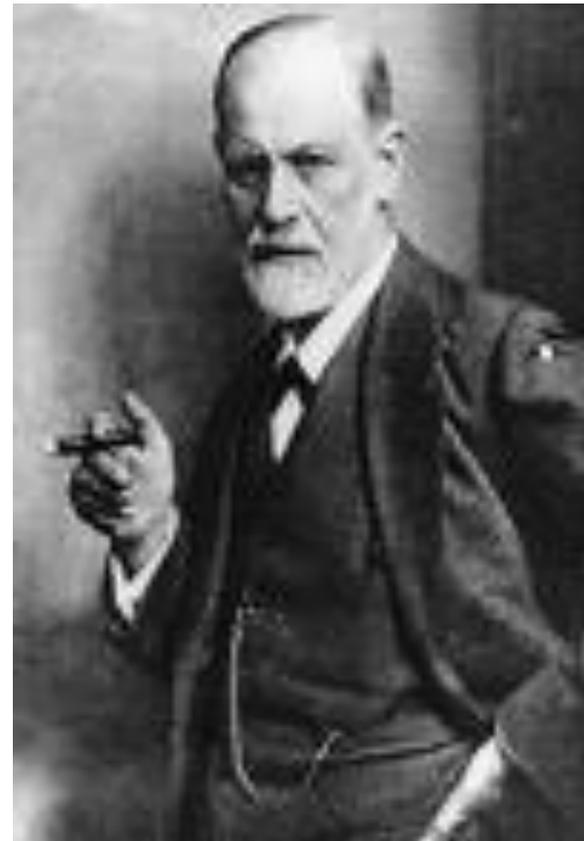
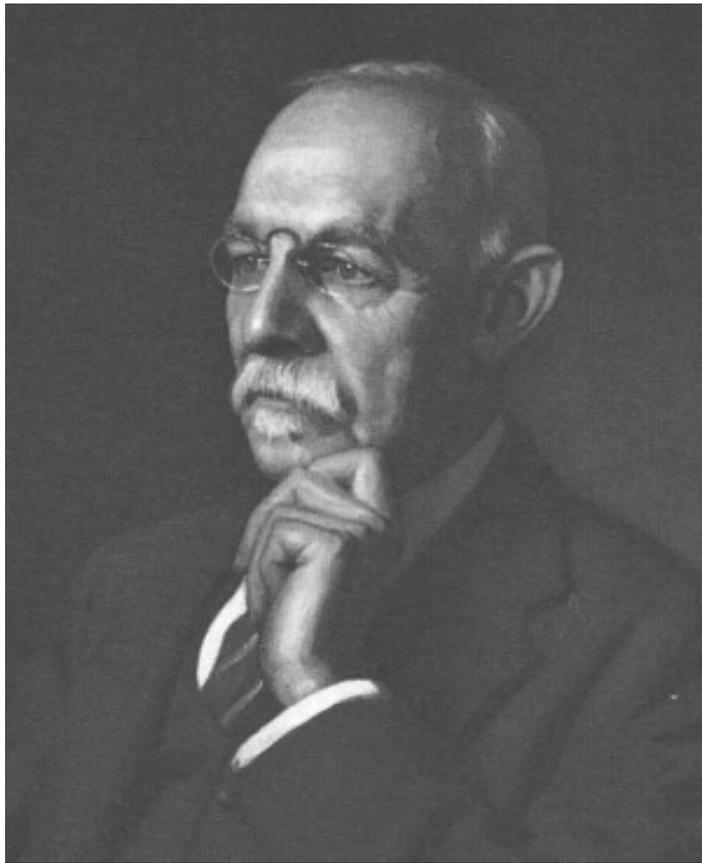
# Physiologic Dependence: Tolerance and Withdrawal

- Tolerance: requiring increasing amounts of drug to get the same effect
- Withdrawal: the opposite effect of the drug when it is removed
- **NEITHER** of these imply chemical dependency (addiction)

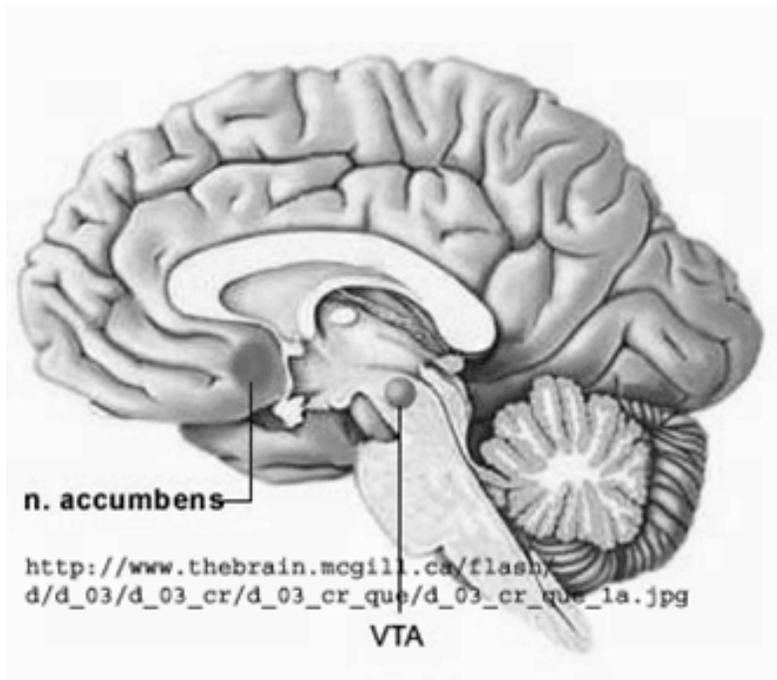
# [Lack of Willpower?]



[ An “amoral” condition? ]

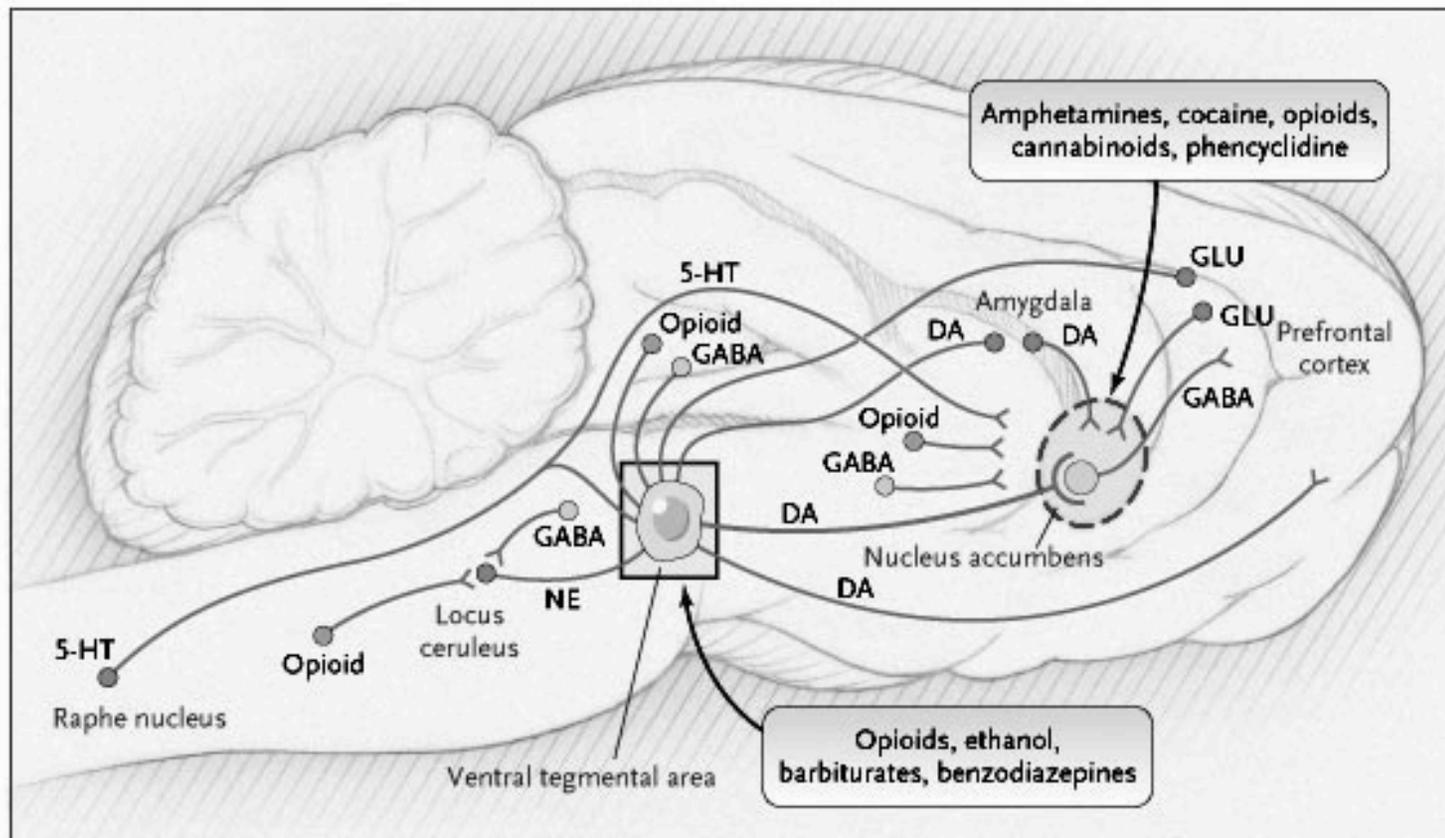


# [ Nucleus Accumbens = the Pleasure Center ]

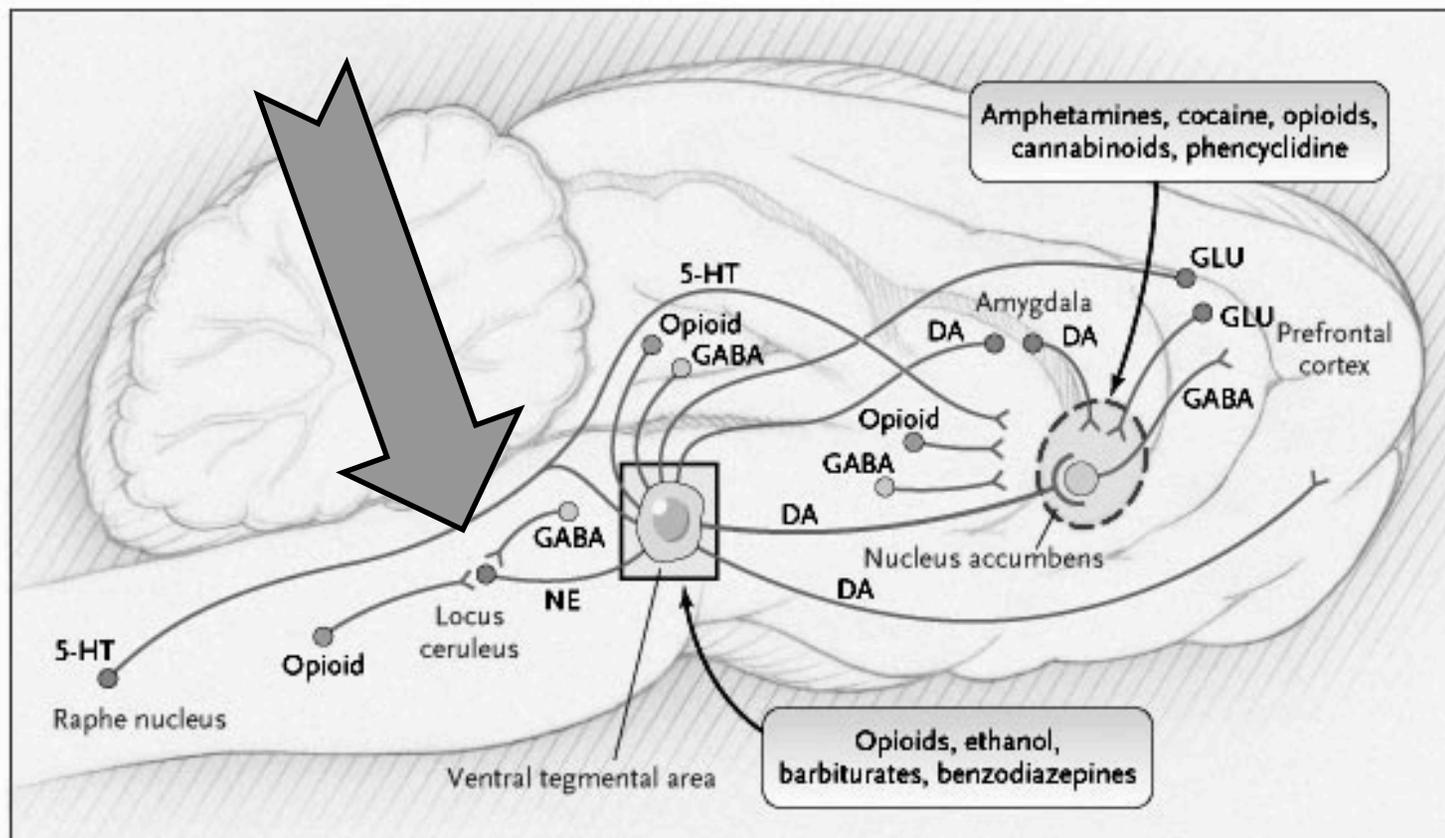


- Responds to dopamine (DA)
- Part of the LIZARD BRAIN
- Responds to drugs
- Responds to food
- Responds to sex
- Sends signals to your frontal cortex
- **THE PLEASURE CENTER IS ABNORMAL (DAMAGED) IN ADDICTION**

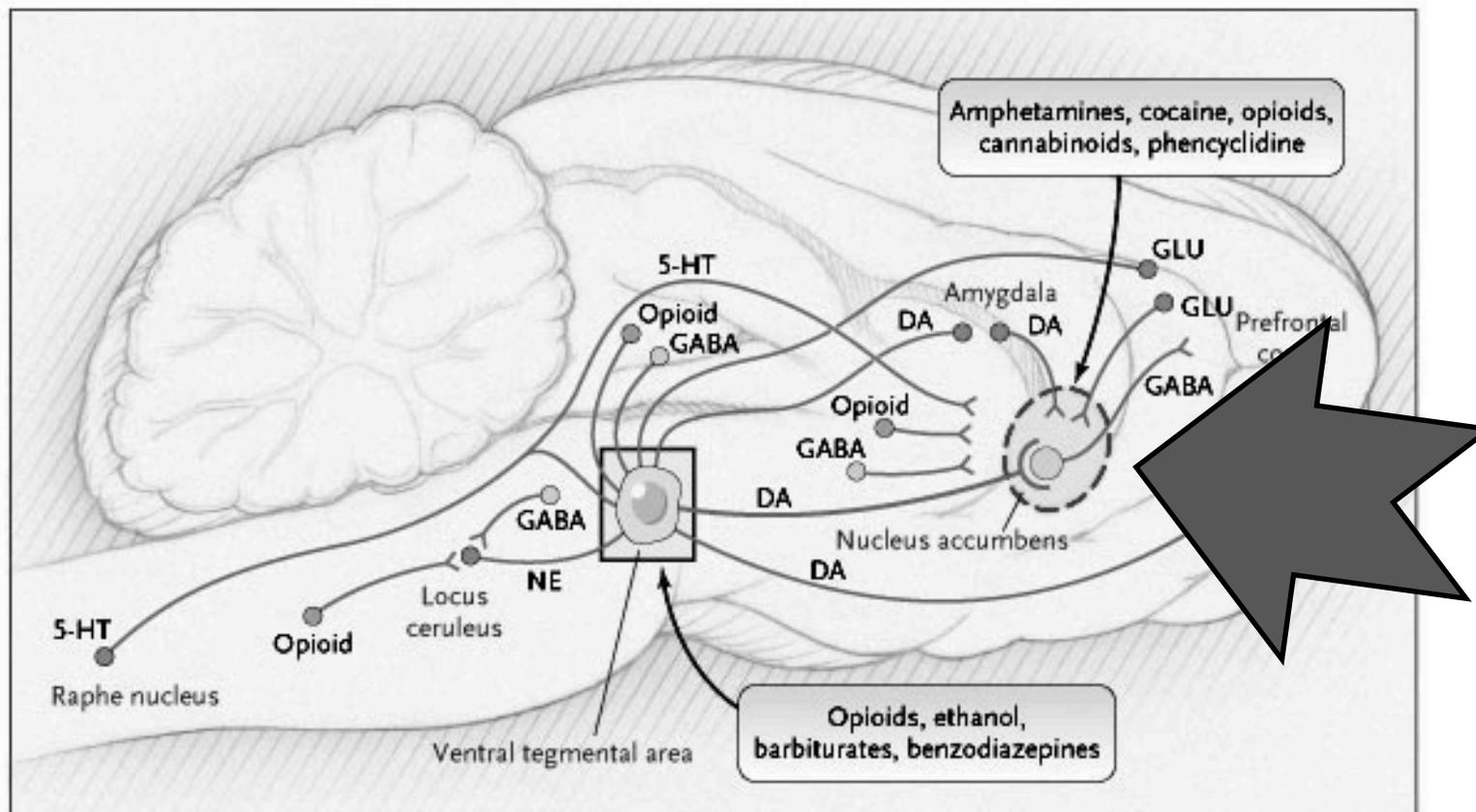
# WHO'S IN CHARGE HERE?



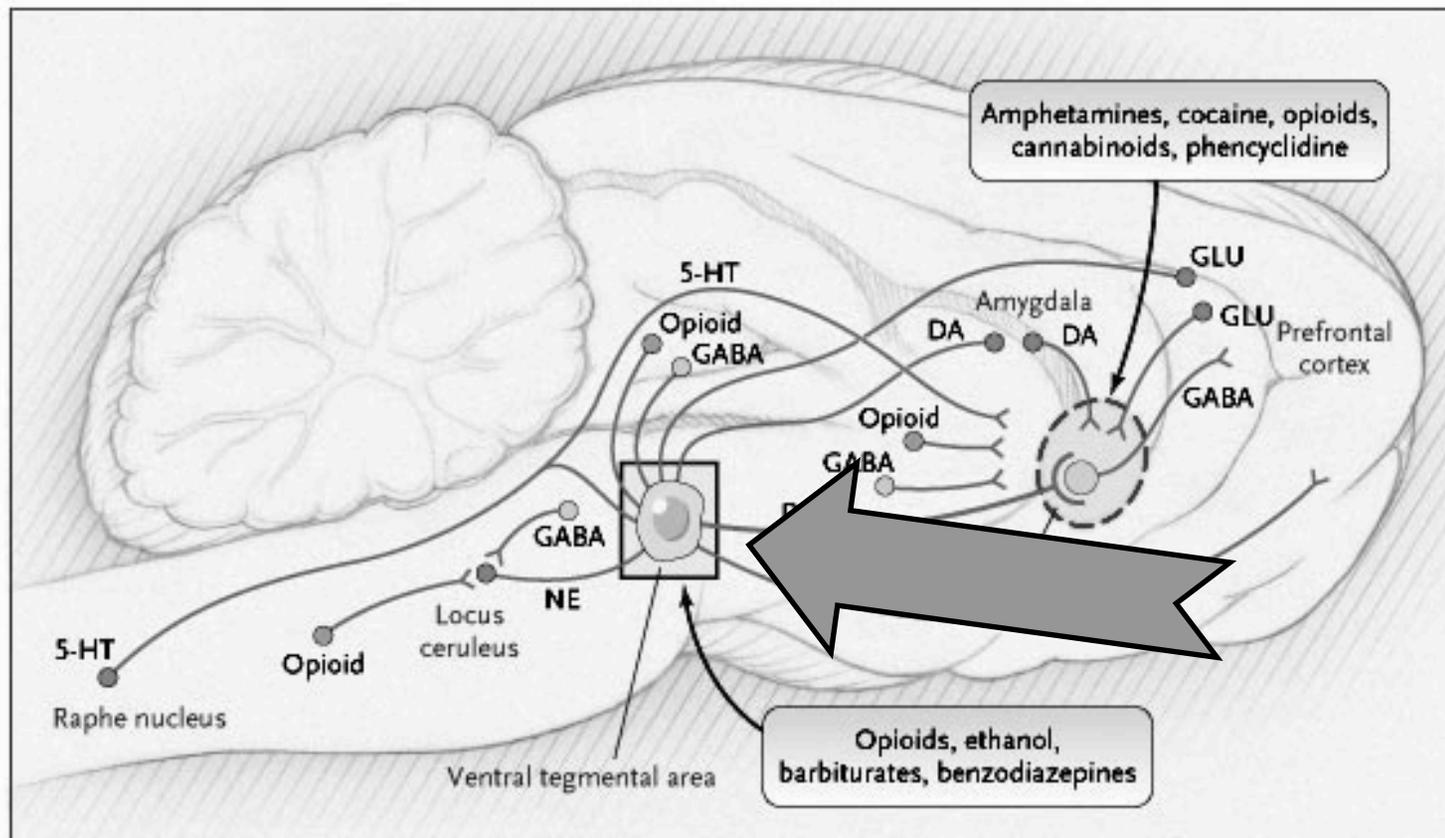
# Locus Ceruleus: the withdrawal center



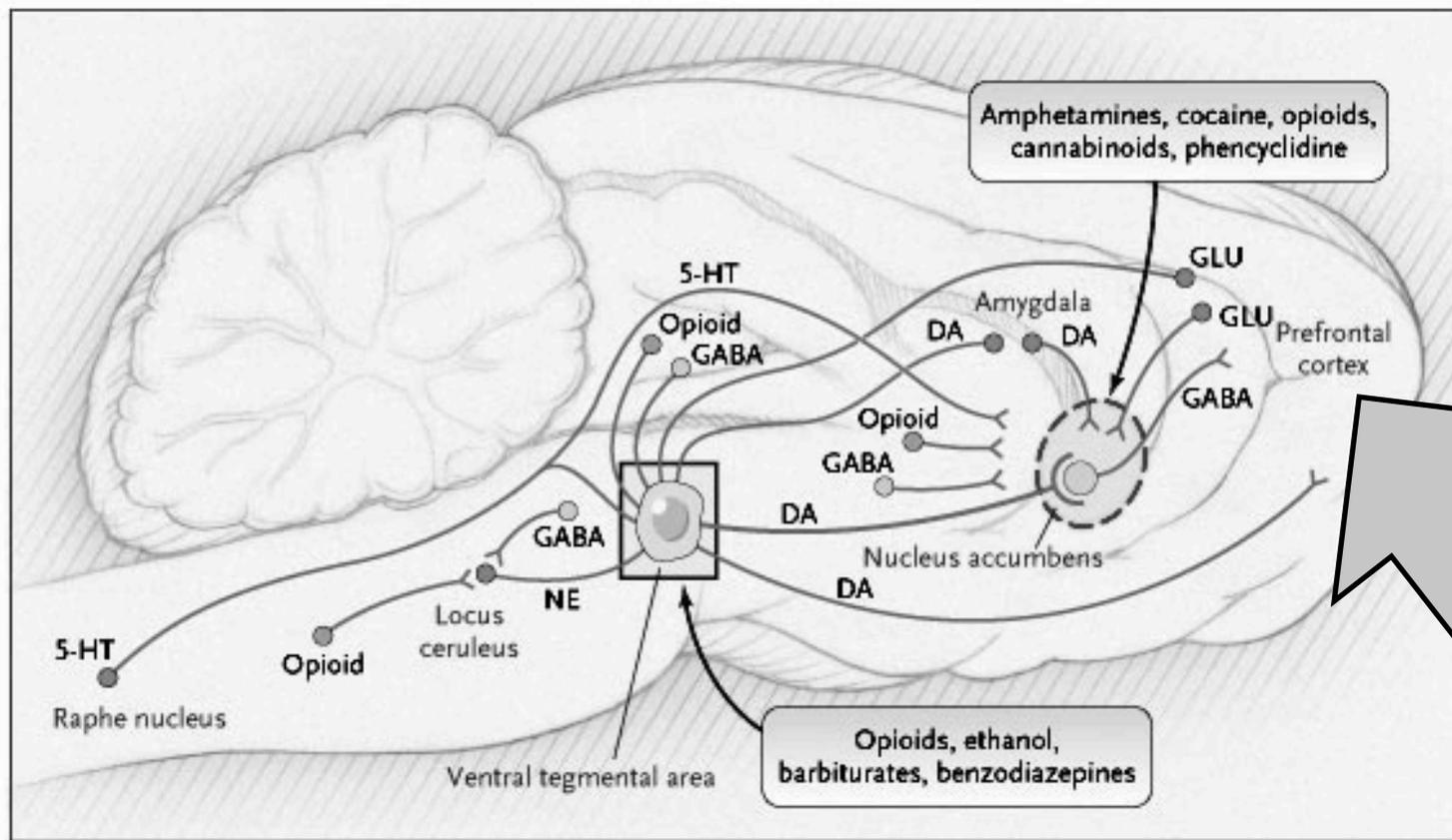
# The Nucleus Accumbens: the “pleasure center”



# VTA: the “gas tank”: supplies dopamine to the Nucleus Accumbens



# Frontal Cortex: Cognitive Function & Inhibition



# Dopamine D2 Receptors are Lower in Addiction



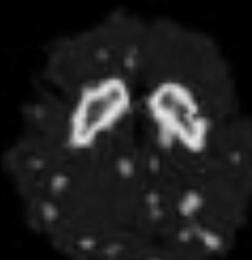
**Cocaine**



**Alcohol**



**Heroin**



control

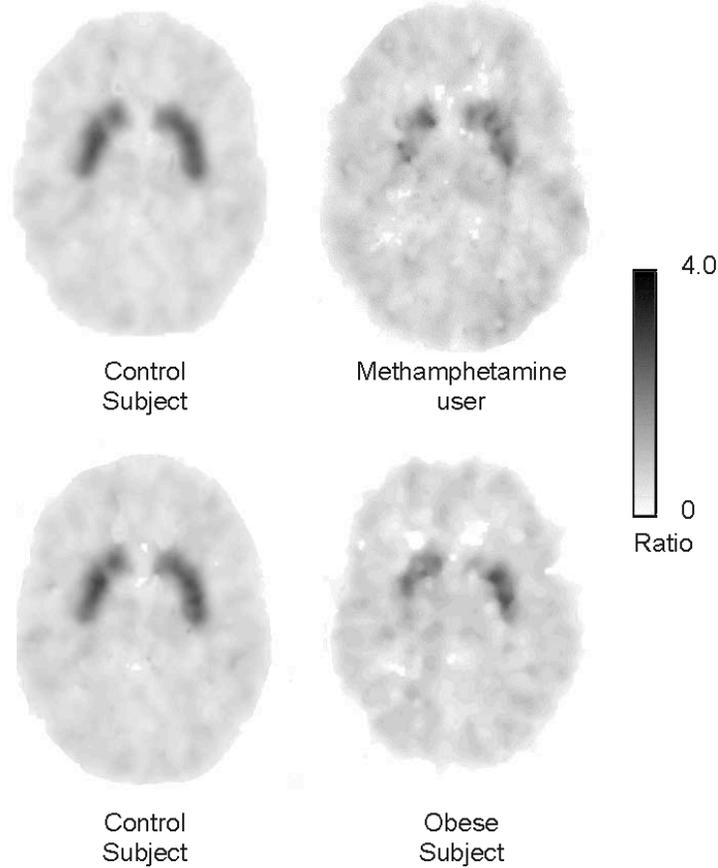
addicted

DA D2 Receptor Availability ↑



# Obese subjects have decreased DA: just like methamphetamine addicts

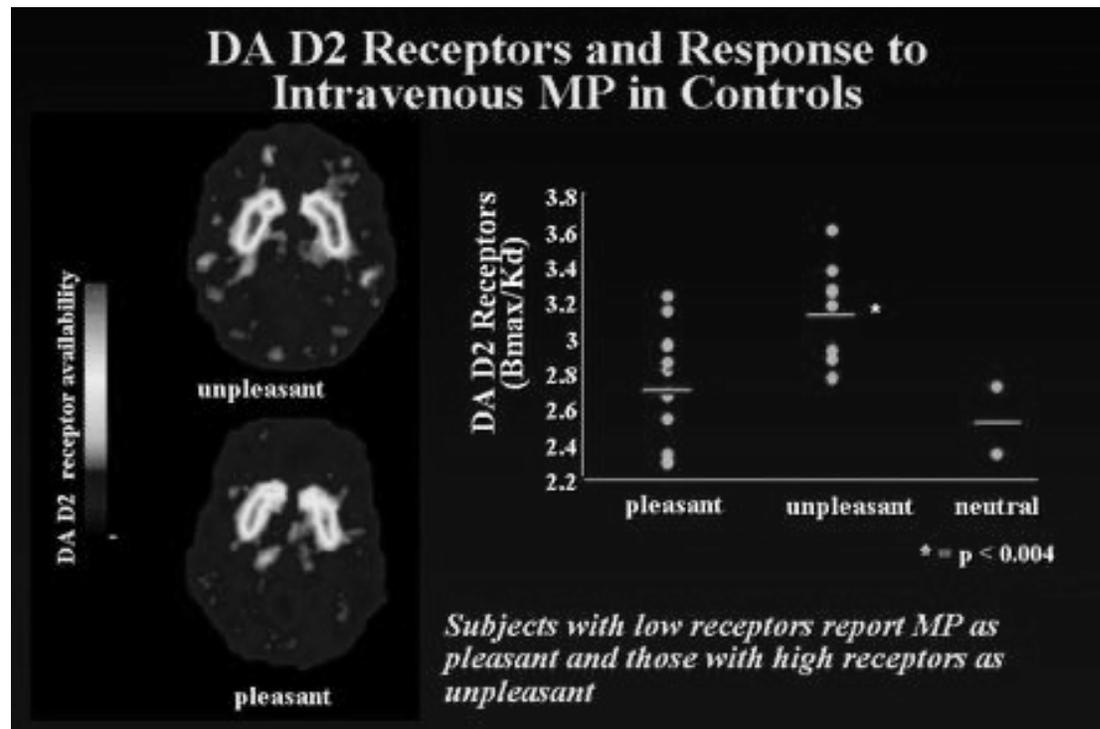
[<sup>11</sup>C]Raclopride



# [ Which came first? ]

- Do some people develop addiction because they have “reward deficiency syndrome” (decreased dopamine) OR:
- Do people with addiction have low dopamine because they have “burned out” their pleasure centers?

Abnormal response to  
[ methylphenidate (Ritalin®) is due to  
abnormal dopamine response ]



# [ Predisposed to addiction? ]

- Those who “enjoyed” methylphenidate (amphetamine) had lower levels of dopamine.
- Those who found it “unpleasant” had NORMAL levels of dopamine
- Conclusion?

“I feel like I don’t belong in my own skin....”  
anonymous alcoholic

- Decreased Dopamine receptors  
=decreased Dopamine activity =

- **Decreased Hedonic Tone**

- **Salsitz 2006**

Can you find the (alleged) future alcoholic?



# [ Stimulants & Blood Flow ]



**Healthy Control**



**Cocaine-dependent**

High  
flow

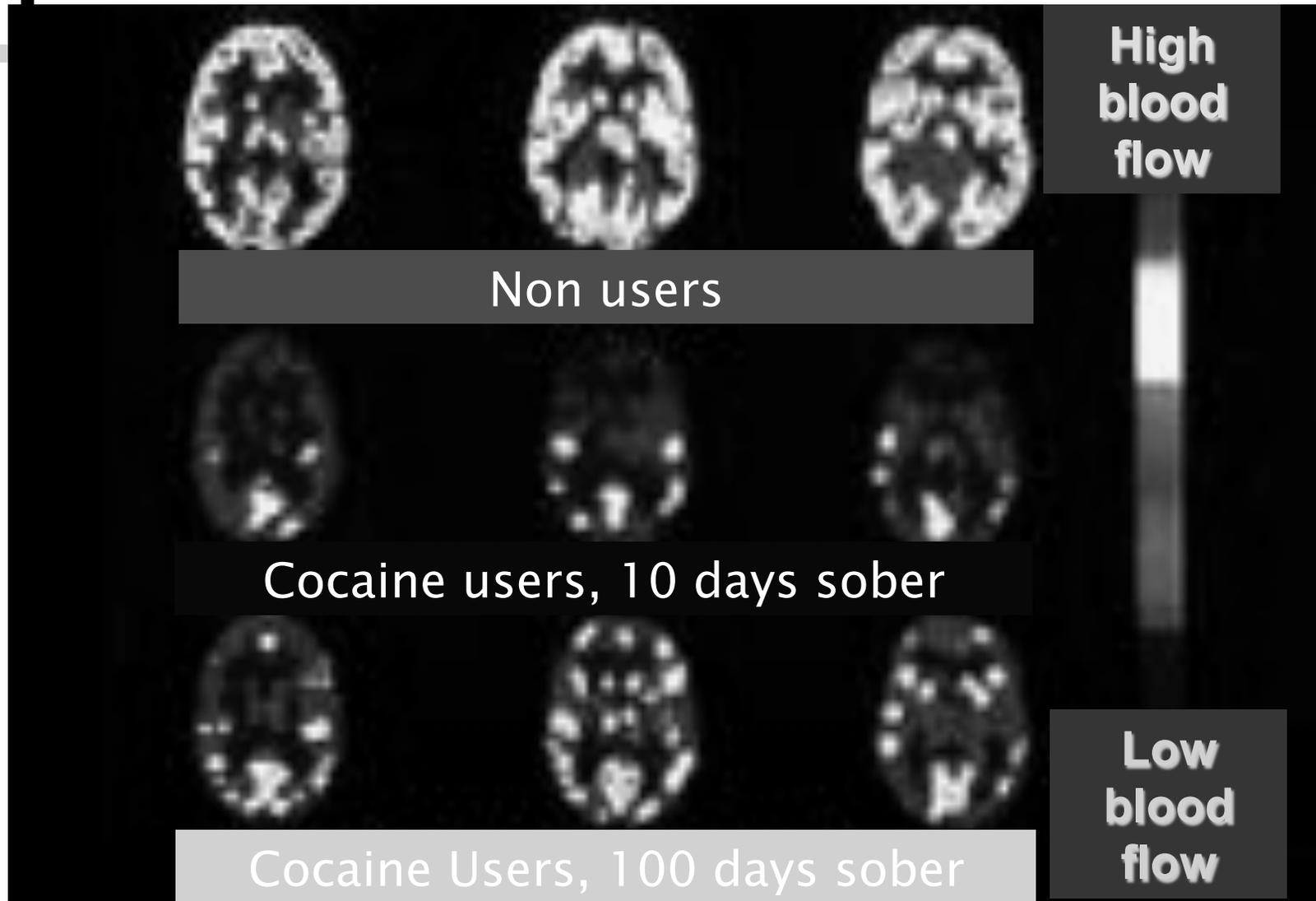


Low  
flow

*Gottschalk, 2001, Am J Psychiatry*

Physiology of Addiction

# Blood Flow Recovery



[ 1939 ]

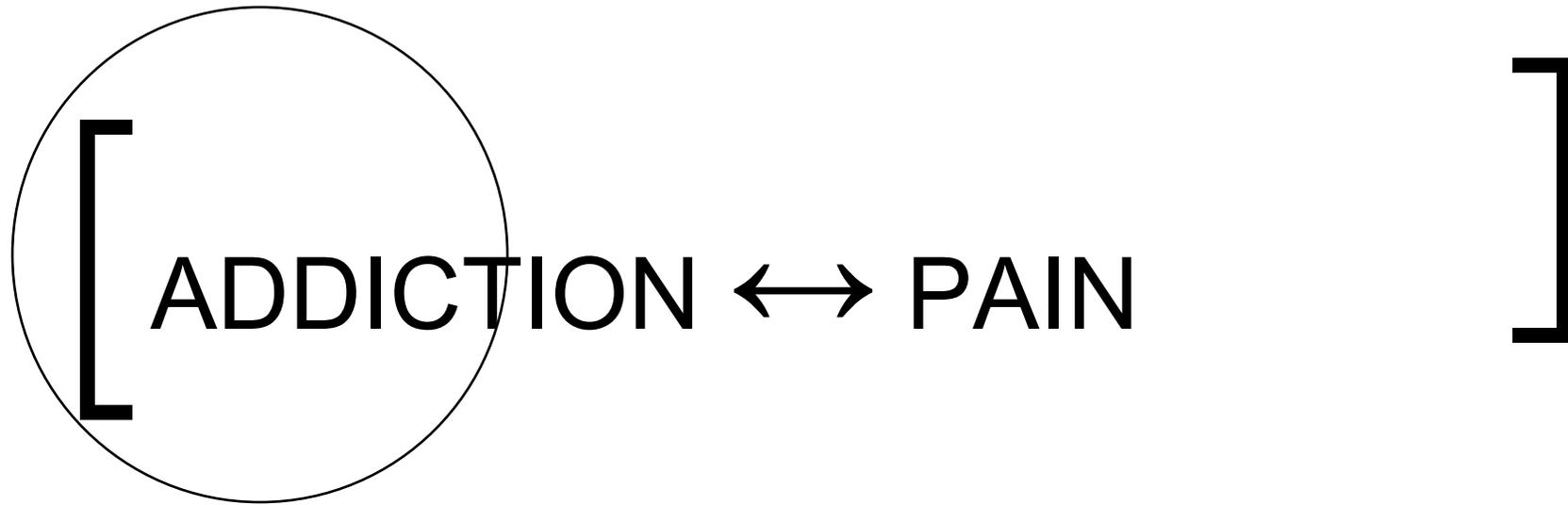
- “we were maladjusted to life... we were in full flight from reality, or were outright mental defectives”
- From “The Doctor’s Opinion”,  
Alcoholics Anonymous

# [ How to Recognize Addiction: DSM IV definition ]

- Tolerance
- Withdrawal
- Take more/take longer than intended
- Can't cut down or control use
- Great deal of time spent in obtaining/using /recovering
- Important activities given up 2° to use
- Use despite physical/psych problem

# [ How to recognize addiction: working definition ]

- A chronic progressive disease characterized by the following physical and psychological symptoms (the four (five) C' s):
  - **Craving**
  - **Compulsion**
  - **Loss of Control**
  - **Continued use despite consequences, and**
  - **Chronic use**



How do you recognize when you are fueling addiction rather than treating pain?

I: Differential Diagnosis

# [ More on Addiction and Pain: Differential Diagnosis of Chronic Pain ]

- Legit:
- Hooked:
- Crazy:

# [ More on Addiction and Pain: Differential Diagnosis of Chronic Pain ]

- Legit: Chronic non cancer pain
- Hooked: Addiction/secondary gain
- Crazy: Chronic pain syndrome

[ Differential diagnosis for chronic pain with uncontrolled medication use: ]

- Chronic non cancer pain
- Pseudoaddiction
- Chronic pain syndrome
- Addiction with secondary gain
- Malingering
- Co-occurring pain and chemical dependency



# Diagnosis ?

- A patient with recurrent endometriosis is being treated with hydrocodone 7.5 mg (Vicodin ES®).
- She has gone from 1 to 4 pills/day.
- She requests surgery to “get off the pills”.
- No sign of compulsive use, cravings, loss of control.
- Doesn't smoke.
- No psychiatric diagnosis.

# [ Chronic non cancer pain ]

- A patient with recurrent endometriosis is being treated with vicodin.
- She has gone from 1 to 4 vicodin/day.
- She requests surgery to “get off the pills”.
- No sign of compulsive use, cravings, loss of control.
- Doesn't smoke.
- No psychiatric diagnosis.

# [ Diagnosis?II ]

- You referred a patient with cervical cancer to your gyn oncologist 3 years ago.
- She was treated with XRT with multiple complications.
- The gyn onc calls you and says:
- “you can have her back. She forged a scrip”.

# [ Diagnosis? II ]

- You find out she was being given small doses of (short acting) pain meds for radiation necrosis.
- She had been drug seeking with different Drs and forged a scrip for MS.
- When she got adequate (long acting) pain medication, her drug seeking disappeared.

# [ Pseudoaddiction ]

- You find out she was being given small doses of (short acting) pain meds for radiation necrosis.
- She had been drug seeking with different Drs and forged a scrip for MS.
- When she got adequate (long acting) pain medication, her drug seeking disappeared.

# [ Pseudoaddiction ]

- Howard Heit:
- “The key with pseudoaddiction is that with proper pain management, retrospectively, the patient’s behavior normalizes. However, with the disease of addiction, in the genetically sensitive individual, behavior deteriorates with pain management”

Heit, 2005

# [ The trouble with opioids: addiction? ]

- Overall: the incidence of iatrogenic addiction in the chronic pain patient is low.
- The incidence of addiction in the chronic pain population is similar to the general population.

Aronoff, 2000; Heit, 2004; Porter, 1980

# [ Diagnosis? ]

- You are referred a patient with endometriosis, CPP, IC, IBS, back pain, fibromyalgia and radon poisoning.
- She is also being treated for anxiety and depression.
- She is being treated with alprazolam (Xanax) and hydromorphone (Dilaudid)
- “nothing seems to work”
- Your exam shows diffuse abdominal pelvic tenderness without any localizing findings.
- She does not smoke, drink nor have a family history of CD.

# [ Chronic pain syndrome? ]

- “pain and psychologic distress”
- Complaints not supported by exam
- Excessive use of medical resources
- Co-existing psychiatric complaints
- Often seeking disability diagnosis
- “honeymoon” with new treatments
- DSM IV: a somatoform disorder

# Fibromyalgia vs. CPS?

## Level IV evidence\*

- FM patient wants to get better
- FM patient wants to go back to work
- May respond to pregabalin (Lyrica), amitriptyline (Elavil), exercise regimen
- NOT seeking disability
  
- \*hot air

# [ Diagnosis? ]

- A patient comes to see you at 14 weeks gestation, stating “I’m here for Vicodin”.
- She had a “back injury” during her first childbirth 4 years ago.
- She smokes 1 ppd.
- She does not have custody of the child.
- She declines to let you speak to her previous OB Gyn (“she’s an idiot”).

## [ Addiction with Secondary Gain II ]

- She refuses to take a urine drug screen.
- She becomes hostile and tearful when you express concern for her narcotic use during pregnancy.
- When you ask about family history, she reveals that her sister died from a methadone overdose.

# Addiction with Secondary Gain ("Drugstore Cowboy")



## [ Addiction with Secondary Gain: Warning Signs ]

- Friday afternoon appointments
- Can't tell you who their referring doc was
- Just moved from "out of state"
- Vague complaints, normal physical exam
- Asking for specific narcotics by name
- Most prognostic sign.....

[

]

- Your prescription pad is now missing.

# [ Diagnosis? ]

- A patient returns to you after back surgery which he claims “failed”.
- In the meantime, he has lost his job.
- He requests to “go back on Dilaudid” (hydromorphone, Dilaudid®).
- He requests DAW since “generics don’t work”.
- His urine drug screen is negative for opioids.

# [ Malingering ]

- A patient returns to you after back surgery which he claims “failed”.
- In the meantime, he has lost his job.
- He requests to go back on Diluadid (hydromorphone).
- He requests DAW since “generics don’t work”.
- His urine drug screen is negative for opioids.

# [ Diagnosis? ]

- Pt with recurrent cervical cancer, s/p radical hysterectomy, XRT, chemotherapy, bilateral nephrostomies, admitted with bone mets and intractable pain (1992).
- History of opioid dependence, IVDU, Hep C, HIV (“Christensen Patient”).
- Chart entry on final admission:  
“The patient is an addict. Should reserve opiates for UNBEARABLE PAIN ONLY”.

# [ “Pseudophysician” ]

- Pt with recurrent cervical cancer, s/p radical hysterectomy, XRT, chemotherapy, bilateral nephrostomies, admitted with bone mets and intractable pain (1992).
- History of opioid dependence, IVDU, Hep C, HIV (“Christensen Patient”).
- Chart entry on final admission:  
“The patient is an addict. Should reserve opiates for UNBEARABLE PAIN ONLY”.

# [ Pseudoaddiction: threat or menace? ]

- Suspected when there is uncontrolled pain and addiction workup is otherwise negative.
- Must INCREASE amount of pain meds and see the outcome.
- “when given the proper amount of pain medication, pseudoaddiction becomes better, and addiction becomes worse”. Howard Heit
- BE CAREFUL!

# [ Case #1 ]

- A patient with radiation necrosis of the pelvis has been referred for forging a morphine prescription.
- She is converted to long acting opioids and finally methadone for pain.
- Over a period of two years, her urine is positive intermittently for THC only.
- Then.....

# [ Case #1 ]

- A patient with radiation necrosis of the pelvis has been referred for forging a morphine prescription.
- She is converted to long acting opioids and finally methadone for pain.
- Over a period of two years, her urine is positive intermittently for THC only.
- She is brought in by EMS, requiring 4 mg of narcan for resuscitation, after consuming ½ gallon of wine.

# [ Case #2 ]

- A patient is referred to you for uncontrolled use of vicodin with a history of endometriosis.
- Your addiction evaluation is positive only for tobacco.
- You start her on buprenorphine, off label, for chronic pain.
- No agreement is signed, no treatment is required.
- One day....

# [ OOPS ]

<b>Birth Date</b>	<b>Medication</b>			<b>Practitioner Name</b>
<b>Issue Date</b>	<b>Form / Qty</b>	<b>Rx Number</b>	<b>Payment Type</b>	<b>Practitioner DEA#</b>
<b>Fill Date</b>	<b>Strength</b>			<b>Practitioner Address</b>
01/25/1977	DEXTROAMPHETAMINE SULFATE			SOSKINA, YEVA MD
03/02/2009	TAB 60.00	2203647	Commercial PBM Ins	BS5881847
03/02/2009	10 MG			26699 W. TWELVE MILE SOUTHFIELD, MI, 480340000
01/25/1977	ZOLPIDEM TARTRATE			SOSKINA, YEVA MD
03/02/2009	TAB 30.00	4409799	Commercial PBM Ins	BS5881847
03/02/2009	10 MG			26699 W. TWELVE MILE SOUTHFIELD, MI, 480340000
01/25/1977	APAP/HYDROCODONE BITARTRATE			SOSKINA, YEVA MD
03/02/2009	TAB 60.00	4409800	Commercial PBM Ins	BS5881847
03/02/2009	750 MG-7.5 MG			26699 W. TWELVE MILE SOUTHFIELD, MI, 480340000
01/25/1977	AMITRIPTYLINE HCL			SOSKINA, YEVA MD
10/13/2008	POW 200.00	0982585	Commercial PBM Ins	BS5881847
02/23/2009				26699 W. TWELVE MILE SOUTHFIELD, MI, 480340000

# [ Case #3 ]

- A pregnant patient is admitted to Hutzel for uncontrolled back pain with documented disc herniation on MRI.
- She is requiring large amounts of opioids to control pain, is taking benzos; is tobacco dependent.
- A conference is held with the patient and her family where they all insist there has never been a problem with drugs; just with pain.
- You agree (reluctantly) to treat her with methadone, 20 mg q 8 hours with weekly visits.
- Then.....

# [ OOPS ]

- A pregnant patient is admitted to Hutzel for uncontrolled back pain with documented disc herniation on MRI.
- She is requiring large amounts of opioids to control pain, is taking benzos; is tobacco dependent.
- A conference is held with the patient and her family where they all insist there has never been a problem with drugs; just with pain.
- You agree (reluctantly) to treat her with methadone, 20 mg q 8 hours with weekly visits.
- She is seen at next visit with uds positive for benzos, cocaine, MJ, amphetamines and Opioids.

# [ Case #4 ]

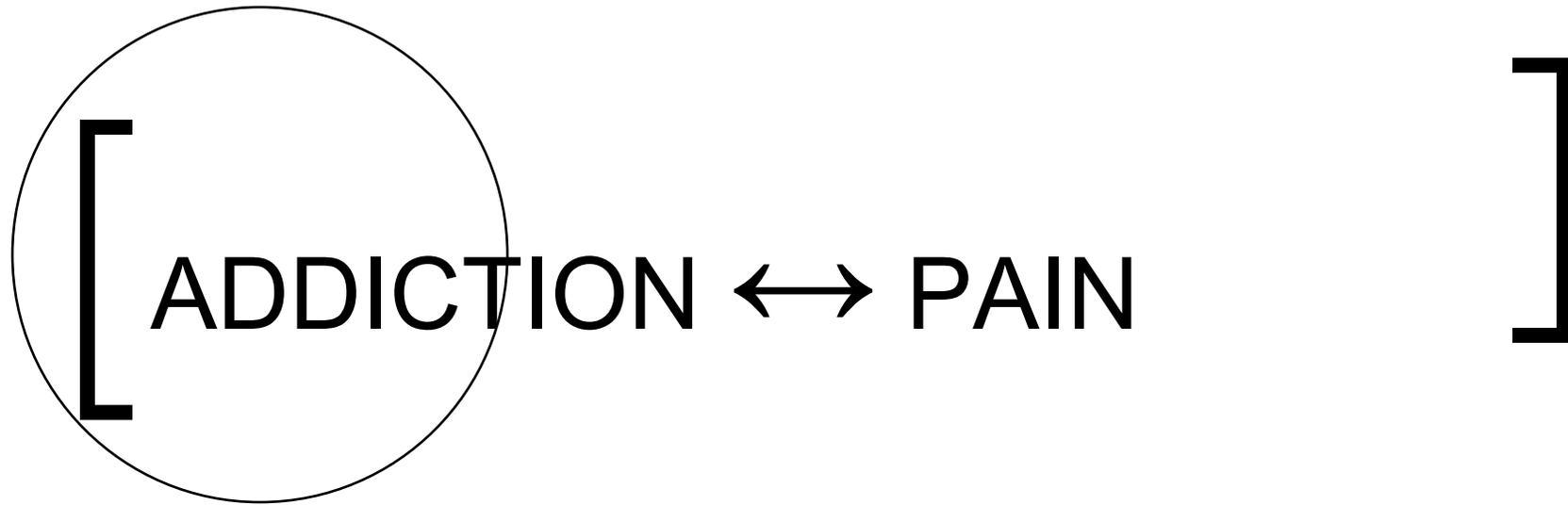
- A patient presents to Hutzel Hospital at 32 weeks gestation after “moving from Florida”.
- No valid ID or insurance can be confirmed.
- She has a history of sickle cell disease with frequent pain crisis since becoming pregnant.
- She is admitted in crisis, crying, begging for pain meds.
- PICC line is started due to lack of IV access.

# [ Case #4 ]

- IV morphine and hydromorphone (Dilaudid®) is given with escalating doses without relief of pain.
- Labs are completely within normal limits.....hematology is consulted.
- Peripheral smear is normal.

# [ OOPS ]

- Hemoglobin electrophoresis is normal.
- The patient is confronted and give a false name for her hematologist in Florida. He doesn't exist.
- While the residents google her imaginary hematologist, she leaves AMA....PICC line in place.



How do you recognize when you are fueling addiction rather than treating pain?

II: Red Flag Behavior

Warning signs of Addiction in patients  
presenting with Chronic Pain: red flags ◀

- Tobacco addiction! ◀
- Legal history (esp DUI)
- MAPS (Michigan Automated Prescription Service) discrepancies
- MJ use
- Family history
- Non-prescribed/prescribed sedative use
- BEHAVIORAL ADDICTION

Warning signs of Addiction in patients  
presenting with Chronic Pain: red flags ◀

- Tobacco addiction!
- Legal history (esp DUI) ◀
- MAPS (Michigan Automated Prescription Service) discrepancies
- MJ use
- Family history
- Non-prescribed/prescribed sedative use
- BEHAVIORAL ADDICTION

Warning signs of Addiction in patients  
presenting with Chronic Pain: red flags ◀

- Tobacco addiction!
- Legal history (esp DUI)
- MAPS (Michigan Automated Prescription Service) discrepancies ◀
- MJ use
- Family history
- Non-prescribed/prescribed sedative use
- BEHAVIORAL ADDICTION

Warning signs of Addiction in patients  
presenting with Chronic Pain: red flags ◀

- Tobacco addiction!
- Legal history (esp DUI)
- MAPS (Michigan Automated Prescription Service) discrepancies
- MJ use ◀
- Family history
- Non-prescribed/prescribed sedative use
- BEHAVIORAL ADDICTION

## Warning signs of Addiction in patients presenting with Chronic Pain: red flags ◀

- Tobacco addiction!
- Legal history (esp DUI)
- MAPS (Michigan Automated Prescription Service) discrepancies
- MJ use
- Family history ◀
- Non-prescribed/prescribed sedative use
- BEHAVIORAL ADDICTION

# [ Family history - Genetics? ] (Shuckitt, et al)

- The biological children of alcoholics are more likely to become alcoholics.
- If they are raised by another family, they are **STILL** more likely to become alcoholics.
- Non-alcoholic offspring raised in alcoholic homes are **NOT** more likely to become alcoholics.

# Warning signs of Addiction in patients presenting with Chronic Pain: red flags ◀

- Tobacco addiction!
- Legal history (esp DUI)
- MAPS (Michigan Automated Prescription Service) discrepancies
- MJ use
- Family history
- Non-prescribed/prescribed sedative use ◀
- BEHAVIORAL ADDICTION

[ The trouble with opioids is: BENZOS? ]



## [ The trouble with opioids: benzos? ]

- Frequently prescribed with opiates
- Purpose: decrease anxiety → decrease pain perception
- BUT:
  - High risk of side effects in combination
  - may paradoxically lower pain threshold:

# [ Downhill Spiral Hypothesis: ]

- Initially ascribed to opiate use
- “Long-term opiate use leads to a downhill spiral associated with loss of functional capacity and a corresponding increase in depressed mood”
- Multivariate analysis performed on poorly functioning patients in a pain clinic:

- Schofferman, 1993

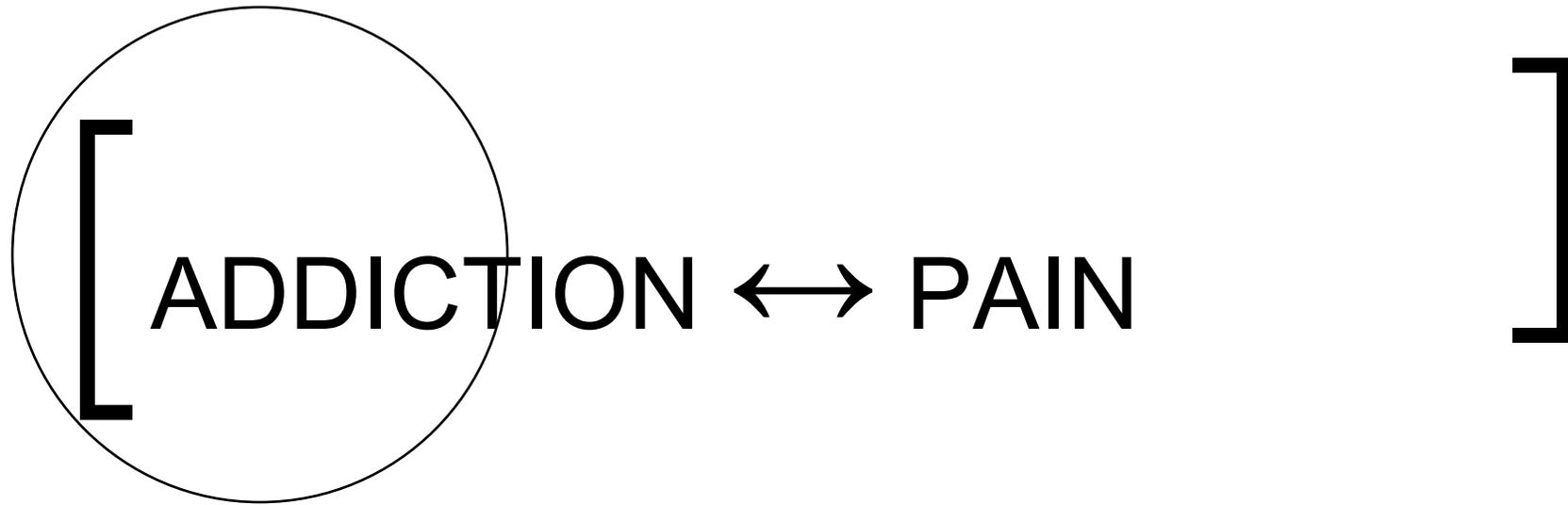
## [ The trouble with opioids: benzos? ]

- In a retrospective review of a pain clinic, benzodiazepines were associated with:
  - Decreased activity level
  - Increased medical visits
  - Increased disability
  - Depression
- Opioids: were NOT.

Ciccone, 2000

Warning signs of Addiction in patients  
presenting with Chronic Pain: red flags ◀

- Tobacco addiction!
- Legal history (esp DUI)
- MAPS (Michigan Automated Prescription Service) discrepancies
- MJ use
- Family history
- Non-prescribed/prescribed sedative use
- BEHAVIORAL ADDICTION ◀



How do you recognize when you are fueling addiction rather than treating pain?

III: Making the Diagnosis

# Techniques to Evaluate for signs of addiction in your pain patient

- Review of Medical Records (refusal?) ◀
- Physical exam:
  - Stigmata of addiction: nicotine, opiates, cocaine
  - Obvious intoxication/withdrawal
- UDS
- MAPS
- Family interviews
- Multiple visits, evaluate for reliability

# Techniques to Evaluate for signs of addiction in your pain patient

- Review of Medical Records (refusal?)
- Physical exam: ◀
  - Stigmata of addiction: nicotine, opiates, cocaine
  - Obvious intoxication/withdrawal
- UDS
- MAPS
- Family interviews
- Multiple visits, evaluate for reliability

# Techniques to Evaluate for signs of addiction in your pain patient

- Review of Medical Records (refusal?)
- Physical exam:
  - Stigmata of addiction: nicotine, opiates, cocaine
  - Obvious intoxication/withdrawal
- UDS ◀
- MAPS
- Family interviews
- Multiple visits, evaluate for reliability

# [ Urine Drug Screens ]

- Check for meds that you have been prescribing. (missing meds = malingering)
- Check for meds that indicate abuse (MJ, cocaine) = addiction
- Remember your medication may not show up (methadone, fentanyl, suboxone)
- **TELL THE PATIENT YOU ARE TESTING THEM FOR SAFETY' S SAKE**
- **TELL THEM YOU PRACTICE UNIVERSAL SCREENING!**

# Techniques to Evaluate for signs of addiction in your pain patient

- Review of Medical Records (refusal?)
- Physical exam:
  - Stigmata of addiction: nicotine, opiates, cocaine
  - Obvious intoxication/withdrawal
- UDS
- MAPS ◀
- Family interviews
- Multiple visits, evaluate for reliability

# [ Michigan Automated Prescription Service (MAPS) ]

- <https://sso.state.mi.us/>
- Anyone with a DEA number can enroll
- Confidential, cannot be used for legal purposes

# Michigan Automated Prescription System (MAPS)

- A 23 year old was diagnosed with an IUFD at 22 weeks.
- **She denied any use of opioids before or during the pregnancy.**
- A D&E was attempted, but perforation was suspected.
- Successful dilation and evacuation was performed under laparoscopic guidance.
- Postoperatively, the patient complained of severe pain, screaming in the RR, prompting workup for bowel perforation.
- The patient then requested high doses of IV hydromorphone (Dilaudid®) for pain control. (“Its the only thing that works for me!”)

**Michigan Automated Prescription System**  
**Selected Prescriptions Detail Report**

Run Date & Time 11/3/2006 23:07:03

Practitioner DEA # :	Patient Last Name : ██████	Fill Date : 11/1/2005	To 11/3/2006
Customer Id :	Patient First Name : ██████	Issue Date :	To
NDC Code :	Patient Date of Birth: 3/29/1977	Dispenser DEA # :	

Patient Name/Address	Birth Date	Medication	Practitioner Name	Drug Store	
	Issue Date	Form/Qty	Practitioner DEA#	Dispenser DEA#	
	Date Filled	Strength	Practitioner City,State,Zip	Dispenser City,State,Zip	
██████████ M 4709 CRESCENT MI-483270000	3/29/1977 11/15/2005 11/15/2005	APAP/OXYCODONE TAB 100 325 MG-10 MG	0480806	ANTUNANO EMILIO E MD BA1312141 WATERFORD , MI , 48327	CVS/PHARMACY #8049 BA1810755 WATERFORD , MI , 483280000
██████████ 345 LAURENT MI-483830000	3/29/1977 1/22/2005 11/22/2005	SUBOXONE TAB 12 8 MG-2 MG	1954631	GAMMONS DWIGHT TIMOTHY DO BG6735166 BLOOMFIELD , MI , 48302	ST JOHN PHARMACY BS7038967 MADISON HEIGHTS , MI , 480710000
██████████ 4709 CRESCENT POINT RD MI-483272725	3/29/1977 12/13/2005 12/13/2005	APAP/HYDROCODONE BITARTRATE TAB 12 500 MG-5 MG	1014397	POTHOVEN KEVIN J MD BP8789286 PONTIAC , MI , 483439971	RITE AID DISCOUNT PHARMACY #43 AP5259468 WATERFORD , MI , 483283009
	3/29/1977 12/15/2005 12/15/2005	APAP/HYDROCODONE BITARTRATE TAB 60 500 MG-10 MG	0839453	ANTUNANO EMILIO E MD BA1312141 WATERFORD , MI , 48327	RITE AID DISCOUNT PHARMACY #43 AP5791719 WATERFORD , MI , 483271404
	3/29/1977 12/15/2005 01/04/2006	APAP/HYDROCODONE BITARTRATE TAB 60 500 MG-10 MG	1014826	ANTUNANO EMILIO E MD BA1312141 WATERFORD , MI , 48327	RITE AID DISCOUNT PHARMACY #43 AP5259468 WATERFORD , MI , 483283009
	3/29/1977 01/24/2006 01/24/2006	APAP/HYDROCODONE BITARTRATE TAB 60 500 MG-10 MG	0843246	ANTUNANO EMILIO E MD BA1312141 WATERFORD , MI , 48327	RITE AID DISCOUNT PHARMACY #43 AP5791719 WATERFORD , MI , 483271404

**WARNING: This Report contains confidential information, including patient identifiers, and is not a public record. The information should not be provided to any other person or entity except by order of a court of competent jurisdiction.**

# Techniques to Evaluate for signs of addiction in your pain patient

- Review of Medical Records (refusal?)
- Physical exam:
  - Stigmata of addiction: nicotine, opiates, cocaine
  - Obvious intoxication/withdrawal
- UDS
- MAPS
- Family interviews ◀
- Multiple visits, evaluate for reliability

# [ Family interviews ]

- Look for confirmation of patient's history (remember, addiction is a mental illness!)
- Look for secondary gain (in the patient)
- Look for TERTIARY gain (in the family)
- Look for enabling!
- Will be a barrier to treatment for pain OR addiction.

# Techniques to Evaluate for signs of addiction in your pain patient

- Review of Medical Records (refusal?)
- Physical exam:
  - Stigmata of addiction: nicotine, opiates, cocaine
  - Obvious intoxication/withdrawal
- UDS
- MAPS
- Family interviews
- Multiple visits, evaluate for reliability ◀

# [ How do you make the diagnosis of addiction? ]

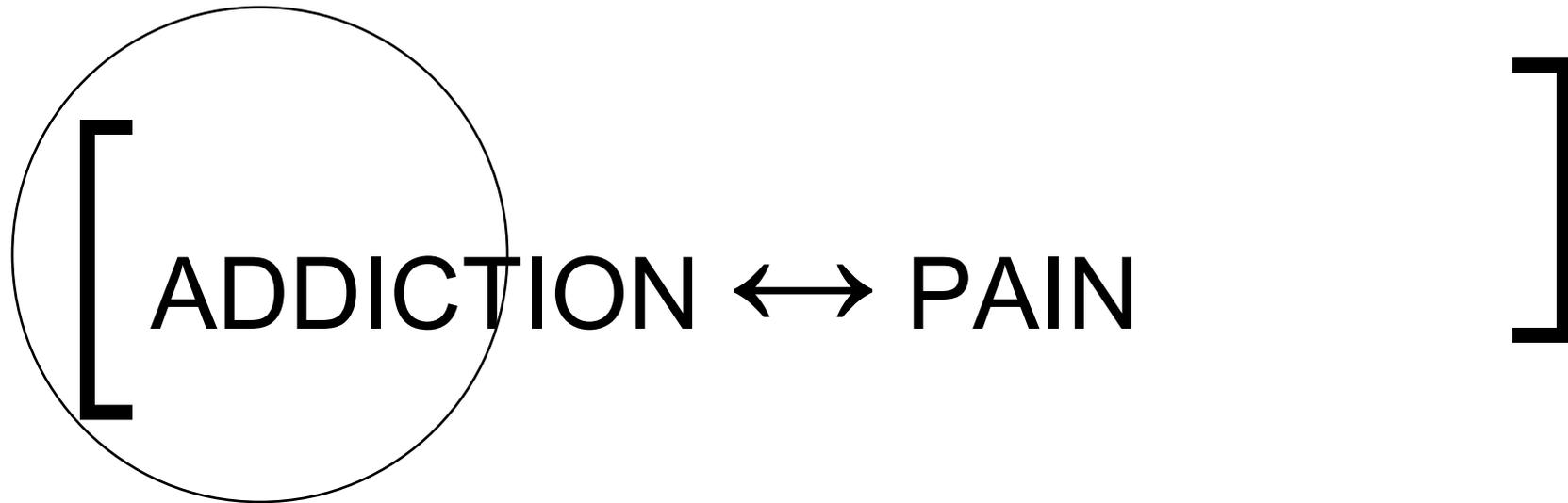
- Rule out a pain disorder
- Rule out malingering
- Rule out pseudoaddiction
- Use the DSM IV criteria or the 4 Cs.
- **Keep asking yourself if you made the right diagnosis**

## [ Even addicts become ill ]

- A 25 year old with a 10 year history of chronic pain, “fibromyalgia”, opiate and benzodiazepine dependence, and a history of DWI complains for two years of right lower colicky pain.
- She is referred to multiple gynecologists and psychiatrists, diagnosed with CD and CPS.
- She finally undergoes laparoscopy.

# [ Even addicts become ill ]

- A carcinoid of the appendix is diagnosed.



How do you recognize when you are fueling addiction rather than treating pain?

III: Treatment????

# [ How do *you* treat addiction? ]



[Once you make a diagnosis of addiction in your pain patient...]

- You are allowed to TAPER the medication
- You are not allowed to MAINTAIN the medication
- You are not allowed to PRESCRIBE METHADONE
- You may prescribe buprenorphine with a DATA 2000 waiver ([Suboxone.com](http://Suboxone.com))

# [ Treatment of Addiction I ]

- A “biopsychosocial” disease:
  - The body/brain
  - The person (mind, soul)
  - The environment
- You are not just removing a drug, you are treating a chronic, progressive, relapsing disease
- Treatment for chronic diseases must be chronic: diabetes, hypertension, obesity: “quick fixes lead to quick problems”

# [ Treatment of Addiction II ]

- Abstinence: removes the drug, doesn't treat the disease (prison)
- Cognitive Behavioral Therapy: thoughts → emotions → behavior (relapse)
- Motivational Enhancement Therapy: variation of Motivational Interviewing (MI): enhances the patient's motivation to change
- Twelve Step Programs: primarily behavioral therapy, relies on "higher power".
  
- The above are somewhat difficult to accomplish when you are in opioid withdrawal and soiling your pants.

# Pharmacology of Opioid Addiction Treatment

- Antagonists:
  - Used to prevent relapse once withdrawal is over
  - Naltrexone: prevents euphoric effect of opioids if taken: Provides NO relief from craving or withdrawal
- Agonists: prevent withdrawal and craving
  - Methadone
  - Buprenorphine

# [ Methadone ]

- Has been the “gold standard” for addiction treatment
- Shown to reduce morbidity/crime/mortality
- Pros: funded by CA
- Cons: potential toxicity, stigmatization, federal requirements.

# [ Buprenorphine ]

- Available in 3 4 forms:
  - Buprenex: injectable for pain, not approved to treat addiction.
  - Suboxone\*: combined with Naloxone to prevent IV use
  - Subutex\*: single agent
  - Butrans: approved for pain, not for addiction

# [ Buprenorphine ]

- Acts as a  $\mu$  agonist:
  - Partial agonist; ceiling effect for analgesia and respiratory depression
  - Slower dissociation = milder withdrawal
  - High affinity: will displace other  $\mu$  agonists and precipitate withdrawal
- Acts as a Kappa (ant)agonist:
  - May have anti-dynorphin/dysphoric effects
  - Relieves some of the misery of withdrawal.

# [ Buprenorphine (Suboxone®) ]

- Reduces craving and withdrawal
- Safer than methadone?
- Doesn't require a methadone clinic (DEA)
- Primarily for withdrawal/detox; cravings
- DOESN'T treat the disease of addiction: discontinuing associated with relapse.
- Medication w/o recovery = relapse.

# [ Naltrexone ]

- Antagonist therapy
- Available in 2 forms:
  - Rivea (oral)
  - Vivitrol (injection)
- Being promoted as alternative to agonist (methadone/buprenorphine) therapy
- No euphoria

# WHY BOTHER TO TREAT ADDICTION?



# Why Treat Addiction?

## **Drug Dependence, a Chronic Medical Illness: Implications for Treatment, Insurance, and Outcomes Evaluation**

A. Thomas McLellan; David C. Lewis; Charles P. O'Brien; et al.

*JAMA*. 2000;284(13):1689-1695 (doi:10.1001/jama.284.13.1689)

## [ Drug Dependence, a Chronic Medical Illness: McLellan 2000 ]

- Only about 40% of patients will be abstinent at one year after treatment.
- Failure rates may be due to lack of aftercare, often due to insurance difficulties
- Low economic status, psych comorbidity and lack of family/social supports also predict relapse.
- Relapse is often viewed as “inevitable” and drug dependence as “hopeless”\*

# [ Drug Dependence, a Chronic Medical Illness: McLellan 2000 ]

- ONLY 60% OF TYPE I DIABETICS ADHERE TO MEDICATION SCHEDULE
- LESS THAN 40% OF ASTHMATICS ADHERE TO TREATMENT REGIMEN
- LESS THAN 40% OF HYPERTENSIVES ADHERE TO THEIR TREATMENT REGIMEN
- DRUG DEPENDENCE =40 TO 60% ADHERENCE

# [ Addiction: a chronic illness ]

- If you were to stop taking your insulin, and you wound up in a coma in the ICU, your provider would say:
  - “you need to go back on insulin! You could have died!”
- If you were to stop your Suboxone/methadone/12 step treatment, and wind up in the ICU, your provider would say:
  - “You’re an addict. You’re hopeless!!!!!!”

# Benefits of Opioid Maintenance Therapy (OMT)

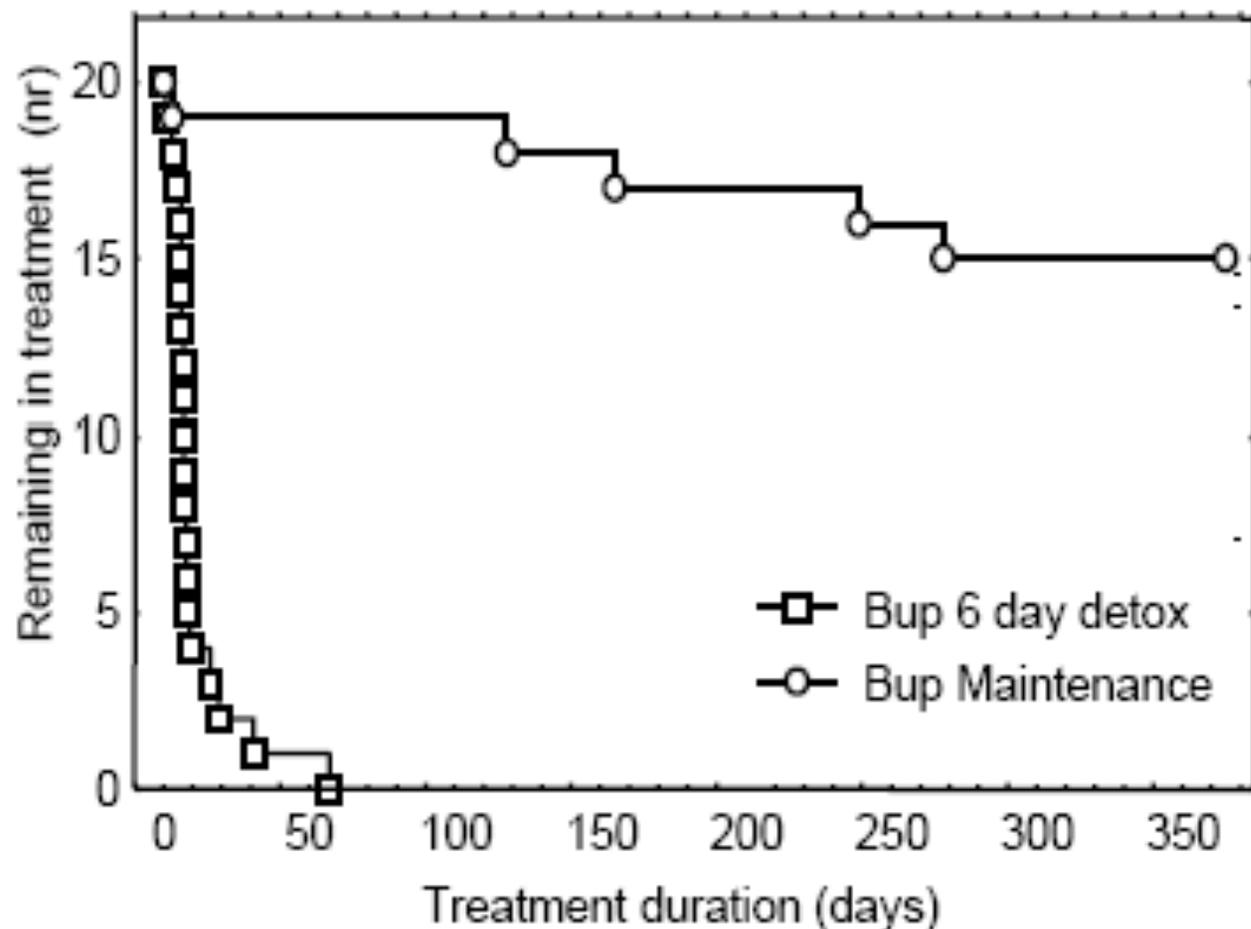
- Decreased HIV infection rates
- Decreased incarceration
- Decreased drug use
- Decreased mortality

■ McLellan, 2000

# [ Drug Dependence, a Chronic Medical Illness: McLellan 2000 ]

- “There is little evidence of effectiveness from detoxification or short-term stabilization alone without maintenance or monitoring such as in (opioid) maintenance or AA.”

# Medical Withdrawal vs Maintenance



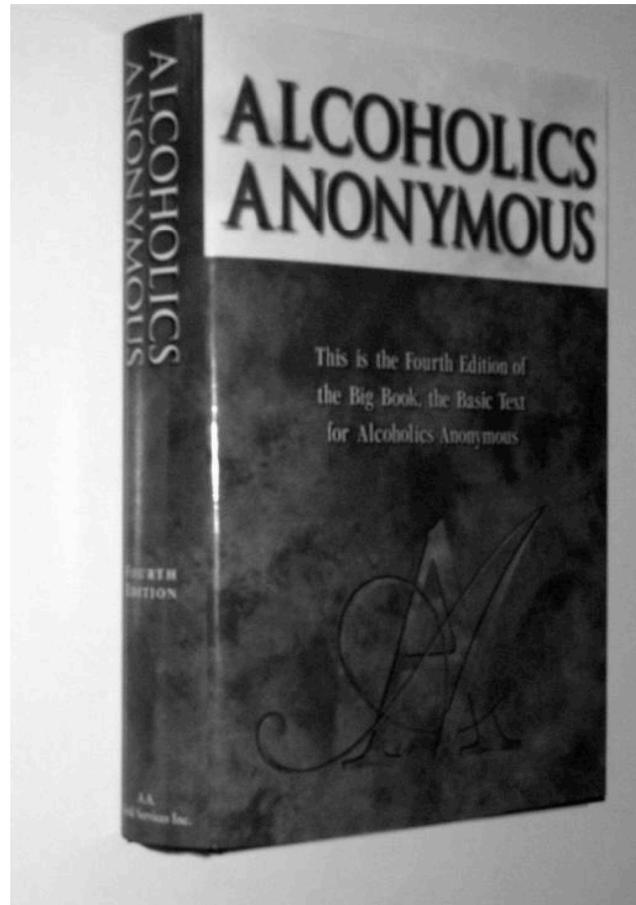
- N=20
- Both groups received counseling
- High mortality rate in detox group (20%, n=4)

Kakko et al., Lancet; 361:662-668, Feb 22 2003

Alcoholics Anonymous:

<http://aa-semi.org>

<http://aa.org>



[ What's his diagnosis? ]





Dawn Farm; November 28 2006

# [ Contact info: Carl Christensen ]

[ccmdphd@mac.com](mailto:ccmdphd@mac.com)

- Voice mail: 734 448 0226
- Fax: 313 447 2244
- Pain Recovery Solutions (A2): 734 434 6600
- Jefferson Avenue Research Clinic: 313 993 3964
- Eleonore Hutzel Recovery Center 313 745 4380