Treating the Addicted Patient
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Why Discuss Addiction?

- Major Health Problem: 2.4 M total deaths in USA in 2000 (Tobacco - 440,000, Alcohol - 105,000, other drugs - 40,000) 1 out of 4 deaths related to substance abuse

- Cost to Society: Half a trillion dollars

- Significant Number of Abusers: Tobacco - 71.5 M; Alcohol drinkers - 120 M; Binge Drinkers 54 M, 15.9 heavy drinkers; Other addictive Drugs - 19.5 M
Why discuss Depression in Addicted Patients?

80% of alcoholics complain of depressive symptoms
48% of opiate addicts has a lifetime history of depressive disorder

Dually Diagnosed Patients

- People living in the community - 3 to 4%; Residing in mental health treatment settings - 40 to 60%; Residing in substance abuse treatment centers - 50 to 60%.

- Diagnosis includes Depression and other affective disorders (Bipolar), Anxiety Disorder (PTSD and Panic Disorder), Psychotic Disorder, ADD/ADHD, eating disorders and personality disorder (anti-social and borderline personality disorder).

- Increased risk for psychiatric and substance use relapse

- Higher rates of treatment failure

- Higher levels of psychological distress;

- Poorer quality of social networks

- Poorer treatment engagement

- Worse treatment retention

- Poorer medication compliance

- Higher rates of violence, suicide, legal difficulties, medical problems and family stress

- Higher Utilization of health care services e.g. ER, Inpatient services.
The addict can be your friend, your relative, or someone you admire ...
What is Addiction?

- Repeated, compulsive seeking or use of a substance, despite adverse social, psychological, and/or physical consequences

- It's all about the REWARDS system in the brain: Mesolimbic Dopaminergic Pathway. The more rapid the rise in dopamine levels, the more addictive the substance is.
The Pleasure-Reward Pathways

PET Neuroreceptor Imaging

Cyclotron Radiotracer Annihilation


PET scanner detects the gamma rays Image (D2/3 receptors)
D2 receptors in the human striatum

[11C]Raclopride in human brain - labels the dopamine type 2/3 (D$_{2/3}$) receptor

Dopamine neuron (from midbrain)

Medium Spiny GABA neuron of striatum

Striatal Synapse
D2 receptors are decreased in addiction

In each case, the addicted group has a 15-20% reduction in D2 receptors measured with PET.

However, it is unclear whether the decrease in D2 receptors is present before years of drug use (a risk factor for addiction) or the result of chronic drug exposure.

Volkow and Wang et al, 1990-2000
Treatment: increase D2 receptors?

Animal studies show that low D2 binding is associated with higher likelihood of cocaine intake. In monkeys, low D2 receptor binding was associated with low social status, high social stress.

Our group investigated the correlation between D2 receptor binding and social status in humans (healthy controls) and found similar results.

Barrat Simplified Measure of Social Support ($r = .71, p = .004$, age-corrected $p = .007$)

Multidimensional Scale of Perceived Social Support ($r = .73, p = .005$, age-corrected $p = .02$)
How much is too much? What is the law?

- Surgeon General recommends to take alcohol only in moderation: no more than two drinks a day.

- One drink is defined as a 12 ounce beer, a 5 ounce glass of wine, 1.5 fluid ounces (one jigger) of distilled spirits, each of which contains about 1 ounce of alcohol (will be equivalent to 0.15 -0.20 g/dl BAC).

- All 50 states & the District of Columbia define it as crime to drive above proscribed level, 0.08 percent.

- Body metabolizes approximately one drink (0.15 g/dl) per hour.
Alcoholism in the Philippines
Alcoholism in the Philippines

- Little or not enough data. Alcoholism is probably not considered a medical problem by most Filipinos. Most Filipinos with an alcohol problem do not submit to medical treatment even if the condition is chronic.

- Alcohol Rehabilitation centers have low admission rates.

- 1995 - Filipinos were number one wine drinkers in Asia consuming 146,000 bottles that year. 1998- Filipinos consumed 3.9 billion bottles of beer. 1994 - survey done by the University of the Philippines, 60 percent of the 5.3 million youths are drinking alcoholic beverages (4.2 M are males, 1.1 M are females).

- San Miguel Beer spent $15.2 million on advertising in 1997.
San Miguel Beer Stockholders in Seattle, WA
What's a standard drink?
1 standard drink =

1 can of ordinary beer or ale 12 oz.
a single shot of spirits 1.5 oz. whiskey, gin, vodka, etc.
a glass of wine 5 oz.
a small glass of sherry 4 oz.
a small glass of liqueur or apertif 4 oz.
Are Women More Vulnerable to Alcohol Effects?

- Women achieve higher concentrations of alcohol in the blood and become more impaired than men after drinking equivalent amount of alcohol.

- Women have less body water than men of similar body weight — so they achieve higher concentrations of alcohol.

- Women eliminate alcohol from blood faster than men because of higher liver volume per unit body mass because alcohol is metabolized in the liver.
What are the Red Flags?

When do you start screening?
START SCREENING WHEN YOU GET THESE FROM THE HISTORY

- elevated blood pressure or heart rate
- unexplained falls or bruising
- tremors, poor coordination
- poor hygiene, self neglect
- sleep disorders
- anxiety, irritability, depressed
- seizures, near syncope or syncopal spells
- heartburn, nausea, vomiting
- cognitive impairment
- abnormal liver function test
- family or work related problems
- making an earlier appointment to get more narcotic medications
- malnourished, poor dental care,
Questionnaires

- AUDIT (Alcohol Use Disorders Identification Test) - 10 items scored on a 0-4 scale about alcohol use and related problems.

- MAST (10 or 25 item Michigan Alcohol Screening Test) - 4 or more alcohol-related problems indicates potential alcohol use disorder

- CAGE
C - Have you ever felt you should cut down on your drinking?
A - Have people annoyed you by criticizing your drinking?
G - Have you ever felt bad or guilty about your drinking?
E - Have you ever had a drink first thing in the morning to steady your nerves or get rid of hangover (eye opener)?
DSM-IV-TR Diagnostic Criteria for Substance Dependence
A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at anytime in the same 12-month period

1. Tolerance, as defined by either of the following: a) a need for markedly increased amount of the substance to achieve intoxication or desired effect b) markedly diminished effect with continued use of the same amount of the substance

1. Withdrawal, as manifested by either of the following: a) the characteristic withdrawal syndrome for the substance b) the same (or closely related) substance is taken to relieve or avoid withdrawal symptoms

1. The substance is often taken in larger amounts or over a longer period than was intended

1. There is persistent desire or unsuccessful efforts to cut down or control substance use

1. A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects

1. Important social, occupational or recreational activities are given up or reduced because of substance use

1. 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
DSM-IV-TR Diagnostic Criteria for Substance Abuse

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

1. Recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or at home

1. Recurrent substance use in situations in which it is physically hazardous

1. Recurrent substance-related legal problems

2. Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance

B. The symptoms have never met the criteria for substance dependence for this class of substance.
CARING FOR THE ADDICTED PATIENT

- Record sobriety date in the patient chart -- confirm date at every visit
- Be supportive, nonjudgmental, supportive, open, encourage trust
- Use non-pharmacologic treatment as first line of therapy
- Avoid mood-altering or addictive medications
DRUGS FOR COMMON MEDICAL CONDITIONS FOR THE ADDICTED PATIENT

- Use nonsedating antihistamines: Loratidine, Cetirizine, Fexofenadine if necessary - use nasal steroids, Azelastin nasal spray. Avoid Sedating antihistamines

- Use Triptans. Avoid Midrin, Fioricet or migraine meds containing Butalbital

- Use Orphenadrine (Norflex). Avoid Carisoprodol

- Use Saline spray, sinus irrigation. Avoid Decongestants

- Use Orlistat. Avoid Phentermine, Ephedra, Sibutramine

- Use Tylenol, NSAIDs. Avoid opiate medications

- Use Dicyclomine. Avoid Donnatal.

- Use Immodium or Pepto Bismol. Avoid Lomotil

- Use Trazodone or Mirtazapine. Avoid Benadryl, Zolpidem or Zalephon

- Use Benzonatate for cough, guaifenesin for expectorant. Avoid Dextromethorphan or opiate cough meds
Major Drug Groups Being Abused

- Sedatives
- Stimulants
- Opioids
- Hallucinogens
- Inhalants
- Anabolic Steroids
SEDATIVES

- Alcohol

- Barbiturates - amobarbital, pentobarbital, secobarbital, butalbital, butabarbital, aprobarbital

- Benzodiazepines - Short acting: triazolam, midazolam; Intermediate Acting - oxazepam, lorazepam, temazepam, alpazolam; Long acting - diazepam, chlordiazepoxide, chlorazepate, flurazepam. (Type I receptors mediate the anxiolytic & sedative effects. Type II receptors mediate the anticonvulsant and muscle relaxant effects. Type I & II -potentiates the effects of GABA (inhibits neuronal activity))
STIMULANTS

- Amphetamines
- Cocaine - blocks dopamine re-uptake
- Nicotine - interacts with nicotine-cholinergic receptors and releases dopamine
- Crystal Metamphetamine - “Shabu” - 90% of substance abusers in the Philippines
Amphetamine - Pharmacodynamics

Releases dopamine (DA) by reversing DA uptake transporters
Effects of Drugs on Dopamine Levels

adapted from: Di Chiara & Imperato, *Proceedings of the National Academy of Sciences USA*, 1988; courtesy of Nora D Volkow, MD.
Natural Rewards and Dopamine Levels

Food Sex

% of Basal DA Output

0 60 120 180

Time (min)

0 50 100 150 200

Empty

Box Feeding

DA Concentration (% Baseline)

Sample Number

1 2 3 4 5 6 7 8

Female Present

Adapted from: Di Chiara et al., Neuroscience, 1999
Adapted from: Fiorino & Phillips, J Neuroscience, 1997
Methamphetamine

- increases alertness, concentration, energy and in high doses can induce euphoria, enhance self-esteem and increase libido
- activates psychological reward system by triggering a cascading release of dopamine in the brain
- approved for treatment of ADHD and exogenous obesity
- addiction can lead to a psychosis resembling schizophrenia
- Other effects: anorexia, hyperactivity, dilated pupils, flushing, restlessness, dry mouth, headache, tachycardia, bradycardia, tachypnea, hypertension, hypotension, hyperthermia, diaphoresis, diarrhea, constipation, blurred vision, dizziness, twitching, numbness, palpitations, arrhythmias, tremors, dry and itchy skin, acne, pallor and with chronic high doses: convulsions, heart attack, stroke and death.
- Psychological effects: euphoria, anxiety, increased libido, sociability, irritability, aggressiveness, delusions of grandiosity, hallucinations, repetitive and obsessive behaviours
Methamphetamine

- Neurotoxic, increased risk for Parkinson's Disease, cognitive deficits, impaired attention, and depression

- Dextroamphetamine can be used to break addiction cycle and Monoamine reuptake inhibitors to block action of amphetamine. Fluoxetine, Bupropion and Imipramine may reduce cravings. Modanifil more successful to treat post-withdrawal cravings. Phentermine is also effective due to its selectivity to norepinephrine vs dopamine release.

- Illicit methamphetamine — made by the chemical reduction of ephedrine or pseudoephedrine to produce the more active d-methamphetamine isomer. Maximum conversion rate is 92%. Comes in a variety of forms, as colorless crystalline solid.
SHABU

- Introduced in the 1980’s as the smokable form of methamphetamine. Like crack cocaine, it is smoked in glass pipes, emitting no odor, effects lasting 12 hours +

- 1972- 20,000 users and in 2004-6.7 Million users. Shabu and marijuana are the illegal drugs preferred by one in every 29 Filipinos aged 10-44 years old.

- One “pingi” or 0.1 gram cost P100. One mongo-sized “gram” costs P 1,000-2,000.

- Main source or supplier are China-based syndicates (1 billion-a-day industry)
OPIOIDS

- Opiate receptors: Mu (β-endorphin, endomorphins 1 & 2), Kappa (dysnorphins A & B) and Delta (leu- and met-enkepalins)

- Mu and Delta agonist increase the activity of the dopaminergic neurons originating in the Ventral Tegmental Area (VTA) by inhibiting the GABA-ergic interneurons

- Morphine, Heroin (lipophilic and reaches brain quickly), Oxycodone, Hydrocodone, Meperidine and Methadone
Primary non-heroin opiates/synthetics admission rates, by State (per 100,000 population aged 12 and over)

1999
(range 1 - 50)

- < 8
- 8 - 14
- 15 - 18
- 19 - 44
- 45 or more
- Incomplete data

SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.
Primary non-opioid/heroin admission rates, by State (per 100,000 population aged 12 and over)

2001
(range 1 – 71)

SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.
Primary non-opioid/heroin opiates/synthetics admission rates, by State (per 100,000 population aged 12 and over)

2003 (range 2 – 139)

SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.
Primary non-heroin opiates/synthetics admission rates, by State (per 100,000 population aged 12 and over)

2005
(range 0 – 214)

SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.
Primary non-heroin opiates/synthetics admission rates, by State (per 100,000 population aged 12 and over)

2007
(range 1 – 340)

SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.
Primary non-heroin opiates/synthetics admission rates, by State (per 100,000 population aged 12 and over)

2009 (range 1 – 379)

SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.
Rates of ED visits for nonmedical use of selected opioid analgesics increased significantly in the US.

* Indicates a rate that was significantly less than the rate in 2008.

Note: Drug types include combination products, e.g., combinations of oxycodone and aspirin.
Number of drug-induced deaths compared with other types of deaths, US, 1999-2006

Causes of death attributable to drugs include accidental or intentional poisonings by drugs, drug psychoses, drug dependence, and nondependent use of drugs. Drug-induced causes exclude accidents, homicides, and other causes indirectly related to drug use. Not all cause categories are mutually exclusive.

1996, United States
Unintentional Injuries and Adverse Effects
Ages 19–50, White, Non–Hispanic*, Both Sexes
Total Deaths: 28,661

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NEC means Not Elsewhere Classifiable.

WISQARS™ Produced by Office of Statistics and Programming, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System.
1998, United States
Unintentional Injuries and Adverse Effects
Ages 19–50, White, Non-Hispanic*, Both Sexes
Total Deaths: 29,600

Cause of Death

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Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System
### 2000, United States
Unintentional Injuries
Ages 19–50, White, Non–Hispanic, Both Sexes
Total Deaths: 30,661

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Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System
2002, United States
Unintentional Injuries
Ages 19–50, White, Non-Hispanic, Both Sexes
Total Deaths: 34,469

Cause of Death

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WISQARS™️ Produced by Office of Statistics and Programming, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention
Data Source National Center for Health Statistics (NCHS), National Vital Statistics System
2004, United States
Unintentional Injuries
Ages 19–50, White, Non-Hispanic, Both Sexes
Total Deaths: 36,303

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Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System
2006, United States
Unintentional Injuries
Ages 19–50, White, Non–Hispanic, Both Sexes
Total Deaths: 39,971

Cause of Death

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<tr>
<td>Overexertion</td>
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NEC means Not Elsewhere Classifiable.

Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System.
2008, United States
Unintentional Injuries
Ages 19–50, White, Non–Hispanic, Both Sexes
Total Deaths: 39,081

Cause of Death

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<th>Cause of Death</th>
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<td>Fall</td>
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<td>Drowning</td>
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Number of Deaths

NEC means Not Elsewhere Classifiable.

WISQARS™ Produced by: Office of Statistics and Programming, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention
Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System
Unintentional overdose deaths involving opioid analgesics now exceed the sum of deaths involving heroin or cocaine.

Source: National Vital Statistics system, multiple cause of death dataset
Unintentional overdose deaths involving opioid analgesics parallel per capita sales of opioid analgesics in morphine equivalents by year, U.S., 1997-2007

Rates of prescription painkiller sales, deaths and substance abuse treatment admissions (1999-2010)

New York Consumption of Oxycodone 1980 - 2006

Sources: U.S. Dept of Justice, Drug Enforcement Administration, Office of Diversion Control
New York Consumption of Hydrocodone
1980 - 2006

Mg/capita

Sources: U.S. Dept of Justice, Drug Enforcement Administration, Office of Diversion Control
Figure 1: Promotional Spending for Three Opioid Analgesics in First 6 Years of Sales

Absolute dollars in millions

Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6
--- | --- | --- | --- | --- | ---
Industry-influenced “Education” on Opioids for Chronic Non-Cancer Pain Emphasizes:

- Opioid addiction is rare in pain patients.

- Physicians are needlessly allowing patients to suffer because of “opiophobia.”

- Opioids are safe and effective for chronic pain.

- Opioid therapy can be easily discontinued.
“Only four cases of addiction among 11,882 hospitalized patients treated with opioids”


Cited 677 times (Google Scholar)
ADDICTION RARE IN PATIENTS TREATED WITH NARCOTICS

To the Editor: Recently, we examined our current files to determine the incidence of narcotic addiction in 39,946 hospitalized medical patients\(^1\) who were monitored consecutively. Although there were 11,882 patients who received at least one narcotic preparation, there were only four cases of reasonably well documented addiction in patients who had no history of addiction. The addiction was considered major in only one instance. The drugs implicated were meperidine in two patients,\(^2\) Percodan in one, and hydromorphone in one. We conclude that despite widespread use of narcotic drugs in hospitals, the development of addiction is rare in medical patients with no history of addiction.

JANE PORTER
HERSHEL JICK, M.D.
Boston Collaborative Drug Surveillance Program
Waltham, MA 02154

Boston University Medical Center

Urine Tox Results in Chronic Pain Patients on Opioid Therapy

Primary Prevention

- Implement a campaign to better inform physicians about actual risks & benefits

- Implement a campaign to better inform the public about risks

- Social marketing campaign to target teenagers and young adults
Secondary Prevention = Treatment

Consequences of untreated opioid addiction:

- Death
- Transition to Heroin use
- Transition to injection use
- Social Problems
  - Family disintegration
  - Crime
We need to change the culture of how we prescribe opiate medications.

- More than 5 million Americans are currently using prescription pain relievers nonmedically and another 2.5 million have used heroin at some time in their lives.

- Studies reveal “household sharing” of drugs, primarily narcotics in 60% of families surveyed. 30% children under 18 years old -- first exposure with experimentation of opiates -- source is the medicine cabinet at home.

- Prescribe small amounts of narcotics. See your patients frequently.

- If patients need to be on long term narcotic use, let them sign a patient contract which includes agreement on routine and/or random urine drug screening.

- There should be no weekend or after office hours “calling in” of prescriptions. If they lost their medications or if stolen, request a police report.
UNITED STATES DEPARTMENT OF JUSTICE
DRUG ENFORCEMENT ADMINISTRATION

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HALLUCINOGENS

- **BATH SALTS** (Mephedrone) - mainly a serotonin releaser: 950% increase in serotonin and 500% increase in dopamine; causes severe agitation, paranoia, psychosis, delusions.

- **LSD** - acts on serotonin receptors

- **PCP** (Angel Dust) - NMDA receptor antagonist

- **MDMA** (Ecstasy) - Removes serotonin from the synapse and cause excessive release of serotonin. It induces euphoria, sense of intimacy with others and diminished anxiety. Had been used for psychotherapy for PTSD and anxiety until 1977.

- **Marijuana** - binds to cannabinoid receptors in brain that causes euphoria, impaired short term memory, impaired sense of time, coordination, etc

- **Ketamine** - NMDA receptor antagonist
“Naked cannibal attack” due to bath salts intoxication

Ronald Poppo, from Miami FL, after face eaten by bath salts addict, Rudy Eugene later shot dead by police after the attack, May 26, 2012
Courtesy of www.streetdrugs.org.
DETOX STAFF
St Peters Addiction Recovery Center
St Peters Addiction Recovery Center
Albany, New York.

We Care. We never give up.
St Peters Addiction Recovery Center (SPARC) Since 1972, SPARC has been providing comprehensive care and services for people affected by drug and alcohol abuse:

1. Detoxification Services at St Peters Hospital, Albany NY
2. Inpatient Rehabilitation in Guilderland, NY
3. Outpatient Clinic Locations: SPARC Central Avenue (Albany); SPARC Second Avenue (Albany); SPARC Cohoes; SPARC Latham; SPARC Rotterdam; SPARC and Ballston Spa

1. Youth Assistance Program
2. Drinking and Driver program
3. Men’s Community Residence
4. Winter Shelter Care
SPARC Detox Admissions in Jan - Nov 2006:
1st Visit: 78%  2 or 3 Visits: 20%  3 or more: 2%

SPARC Discharges Jan - Nov 2006

- 78%
- 20%
- 2%
Pharmacotherapy for Detox

- **Opiate Withdrawal** - Buprenorphine/Naloxone (Suboxone) or Use Buprenorphine (Subutex) if pregnant, Clonidine, Ibuprofen, Dicyclomine, Promethazine, Trazodone, Gabapentin, and Hydroxyzine. SPARC is not licensed to use Methadone unless patient is pregnant and care will be transferred to a Methadone Maintenance Program.

- **Alcohol Withdrawal** - Chlordiazepoxide (Librium) or Lorazepam (Ativan)

- **Nicotine Withdrawal** - Nicotine Patch (Nicotrol Inhaler if pregnant), Varenicline (Chantix)
Pharmacotherapy for Alcohol Dependence

- **DISULFIRAM (Antabuse)** - blocks the enzyme aldehyde dehydrogenase, causing build up of acetaldehyde: nausea, vomiting, flushing, sweating, tachycardia, dysnea.

- **ACAMPROSATE (Campral)** - inhibits glutamate overactivity, reduces the overactivation of postsynaptic NMDA receptors. Side Effects: flatulence, diarrhea

- **ORAL NALTREXONE (ReVia)** - Mu receptor Antagonist thereby inhibiting the positive reinforcement of increased B-endorphins with alcohol use (reduces craving)

- **INJECTABLE EXTENDED-RELEASE NALTREXONE (Vivitrol)** - Given every 28 days IM and improved compliance (Patients should be screened for opiate abuse since naltrexone is an opiate antagonist and this will precipitate severe opiate withdrawal)
Pharmacotherapy for Opiate Dependence

• Methadone Maintenance Programs - Need to be certified by state and federal government agency. Two programs exist in the Capital District. There is a waiting list. Individuals should be at least 18 years old with documented 1 year of opiate dependence.

• Suboxone Maintenance Programs (Office Based) - Physician’s should have a current state medical license, valid DEA #, subspecialty board certification and 8 hours of training. Limit for Year 1 = 30 Year 2 = 100.

• Injectable Extended-Release Naltrexone - Can be given after Opioid detoxification (should be opioid free for 7-10 days before administration). Contraindicated in acute hepatitis and liver failure and caution in patients with moderate to severe renal impairment.
SUBOXONE

- Composed of Buprenorphine and Naloxone. Buprenorphine is a partial opioid agonist—high affinity for the Mu receptor

- Buprenorphine causes limited euphoria compared to full agonist; at adequate doses, block the effects of subsequently administered opioids, since Buprenorphine remains bound to the Mu receptors

- Less risk of fatal respiratory depression because of a “ceiling effect”

- Caution with use with CNS depressants (benzodiazepines)

- Role for Naloxone - if suboxone is misused (snorted, etc) naloxone attenuates the effects of buprenorphine and precipitates withdrawal. Prevents Diversion and Abuse.

- Comes in 8/2 mg and 2/0.5 mg Sublingual tablets and Films
Psychosocial Interventions

- Brief Interventions
- Cognitive Behavioral Therapy
- Motivational Enhancement Therapy
- Community Reinforcement Approach
- Twelve-step Facilitation Therapy
- Contingency Management
- Behavior self-control training
- Behavior contracting
- Social Skills Training
- Behavior marital therapy
- Case management
REFERRAL SOURCE:
Andy’s Sport Bar
The most common mental health disorders preceding suicide have consistently been found to be a depressive illness and alcohol misuse.

Drug overdoses are frequently taken in association with large quantities of alcohol.

Likelihood of suicide in diagnosed alcoholics have been estimated at between 60 to 120 times that for those without a psychiatric illness.

Substance Induced Depressive Disorder

Are depressive symptoms and disorder caused by substance misuse?

“At presentation to an alcohol treatment program, 42% of alcoholic men had significant depressive symptoms, but only 6% were clinically depressed after 4 weeks of abstinence.”

Post intoxication effects from Amphetamine and Cocaine, particularly depression, should be borne in mind with these drugs, as they can be more devastating than acute effects.

Depressed mood is frequently severe following the use of ecstasy.

Do depressive illnesses cause people to self-medicate with alcohol and drugs?

People with psychiatric symptoms are motivated to take alcohol or drugs to relieve their symptoms.

For women, depression may predate alcohol use.

Stimulants such as cocaine or amphetamines produce a transitory lifting of mood but with rebound depression.

Alcohol relieves anxiety and some blunting of concern about depressing circumstances, but these effects are short lived.

Berglund, M & Ojegahagen A. (1998) The influence of alcohol drinking and alcohol use disorders on psychiatric disorders and suicidal behavior. Alcoholism: Clinical and
“Wait 2-4 weeks post alcohol cessation before commencing antidepressant treatment to ensure that the mood effects of alcohol cleared the system”
(Raimo & Schuckit, 1998)

VS

“Drug and alcohol abuse should not be a barrier to the treatment of depression upon diagnosis”
(Nunes & Levin, 2004)
Treatment of Depression in Patients with Alcohol or Drug Dependence: A Meta-analysis

(JAMA, April 21, 2004 Volume 291 No 15 1887-1895)

- 300 citations extracted, 44 placebo-controlled clinical trials (14 selected for analysis and included 848 patients); 5 studies of tricyclic antidepressants, 7 of selective serotonin-reuptake inhibitors, and 2 from other classes

- Principal measure of effect size was the standardized difference between means on the Hamilton Depression Scale

- Antidepressant medication exerts a beneficial effect for patients with combined depressive and substance-use disorders. This is not a stand alone treatment and CONCURRENT therapy directly targeting the addiction is also indicated.
Commonly Used Medications

- Sertraline (Zoloft)
- Fluoxetine (Prozac)
- Citalopram (Celexa)
- Escitalopram (Lexapro)
- Duloxetine (Cymbalta) -- cannot be used for patients with abnormal liver function test
- Bupropion (Wellbutrin)
- Venlafaxine (Effexor)
UPMASA NY-NJ-CT Members
“ We are still not on medications !”
Summary

- Discussed the definitions of Addiction and Substance Abuse

- Discussed the red flags and screening tools

- Reviewed drugs commonly abused and pharmacotherapy available for substance abuse treatment.

- Discussed controversies when to start treatment of depression in patients with substance abuse

- Reviewed current medications for the depressed addicted patient.