Pharmacotherapy for Addictive Disorders (Withdrawal Management)

Three Goals for Withdrawal Management

- Avoidance of potentially hazardous consequences of discontinuation of drugs of dependence
- Facilitation of the patient's completion of detoxification and timely entry into continued treatment
- Promotion of patient dignity and easing discomfort during the withdrawal process

THE BEST PREDICATOR OF CURRENT AND FUTURE WITHDRAWAL PROBLEMS ARE PAST WITHDRAWAL PROBLEMS

Assessment Instruments for Withdrawal by Substance

Alcohol:

 Clinical Institute Withdrawal of Alcohol, Revised (CIWA-Ar)

Benzodiazepines:

 Clinical Institute Withdrawal of Benzodiazepines, Revised (CIWA-Br)

<u>Cocaine</u>: Cocaine Selective Severity Assessment (CSSA) <u>Opioids</u>:

- Subjective Opiate Withdrawal Scale (SOWS)
- Objective Opiate Withdrawal Scale (OOWS)
- Clinical Opiate Withdrawal Scale (COWS)

The CIWA-Ar

(Clinical Institute Withdrawal Assessment of Alcohol, Revised)

- It requires <u>under two minutes</u> to administer
- It requires no medical knowledge
- It provides you with a quantitative score that predicts the severity of withdrawal from alcohol

Downloadable from the Internet

Addiction Research Foundation Clinical Institute Withdrawal Assessment for Alcohol, Revised (CIWA-Ar)

NAUSEA AND VOMITING: Ask "do you feel sick to your stomach? Have you vomited? Observation

- o No Nausea and no vomiting
- 1 Mild Nausea with no vomiting

3 4 Intermittent nausea with dry

heaves

6

7 Constant nausea, frequent dry heaves and vomiting

TREMOR: Arms extended and fingers spread apart.
Observation

- o No tremor
- 1 Not visible but can be felt fingertip to fingertip

2

4 Moderate, with patient's arm extended

2

7 Severe, even with arms not extended

Pharmacotherapy For Withdrawal Management

Alcohol Withdrawal

- Benzodiazepines
- Phenobarbital

Opioid Withdrawal

- Methadone
- Buprenorphine
- Clonidine

<u>Stimulant Withdrawal</u> (no medications FDA approved)

- Amantadine (antiviral & anti-parkinsons)
- Modafinil (anti-narcolepsy agent)

Insomnia Disorder

- Difficulty initiating Sleep
- Difficulty maintaining Sleep
- Early morning awakening with inability to return to sleep
- At least 3 nights/week for at least 3 months
- Occurs despite adequate opportunity for sleep
- Not better explained by another sleep disorder (e.g., narcolepsy), the physiological effects of a substance or a co-occurring mental health disorder
- Common in early recovery from SUDs

The Messages We Give

- "You'll never die from lack of sleep!"
- Insomnia is genuine suffering. The patient is awake, night after night, and then drowsy in the daytime, snoozing in group therapy and often given "check marks" or "write ups" by treatment center staff for "not participating."

BUT

- It can lead to symptoms of depression
- It causes people to become irritable and moody
- It can make the individual more accident prone
- Associated with substance use disorder relapse

Pharmacotherapy for Insomnia in Early Recovery

Insomnia and Early Recovery

- Insomnia may lead to an increase in the risk of relapse for people in the early phases of recovery from addiction
- The researchers say the incidence of insomnia in early recovery may be five times higher than in the general population.
- Treatment can include Trazadone and CBT
- Because of the risk of relapse, we need to weigh the slight risks of these medications against the risk of relapse

Smoking and Insomnia

- Recent research has documented the importance of heavy chronic smoking as contributing to insomnia
- Participants were assessed over 7 waves of data collection that spanned approximately 29 years, from mean ages 14.1 years to 42.9 years

Medications for Insomnia

- <u>Doxepin (Sinequan)</u>, a tricyclic antidepressant, is often prescribed in doses of 100mg or more for depression. But at very low doses this medication acts as a soporific
- Trazodone (Desyrel), which is one of the most popular medications used to treat insomnia. Trazodone in low doses (50mg to 100mg) can provide the side effect of sedation without this effect carrying over to the next day.

Medications for Insomnia (OTC)

- Hydroxyzine, or benadryl as with most antihistamines, have a very sedative property, which makes it useful for treating insomnia.
- Melatonin is an over-the-counter natural remedy that has gained popularity in recent years. Melatonin is a natural hormone produced by the pineal gland that is activated at night, but inactive during the day, the use of Melatonin may help reset the cycle.

Sexual Dysfunctions

Sexual Dysfunctions

- <u>Erectile Disorder</u> Inability to have or maintain an erection sufficient for sexual intercourse persistence of the problems for 6 months, 75% of the time
- Female Orgasmic Disorder same persistence; removal of "normal excitement phase;" recognition that orgasm is "not all or nothing;" allows for comorbid diagnosis of Arousal Disorder and Orgasmic Disorder – 25% of females do not experience orgasm
- Delayed Ejaculation cardiac and hypertensive medications?
- <u>Premature Ejaculation</u> ejaculating before or within one minute of intromission (ICD-10 is 15 seconds)

Premature Ejaculation

- No medicines specific for this problems
- SSRIs sometimes prescribed because the mechanism of action for depression can also slow down premature ejaculation
- There are OTC "desensitizing" medications that might help

Medications for Erectile Dysfunction

- Cialis (daily use, and as needed)
 - "Two bathtubs required"
- Levitra
- Viagra
 - All of the above are have a transient effect on enzymes that allow erection by causing smooth muscle relaxation when sexually stimulated.
 They are taken before anticipated sexual contact; are vasodilators which require the male to be stimulated)

Viagra



Sexual Dysfunctions

- <u>Female Sexual Interest/Arousal Disorder</u> –
 Estimated to affect 10% of US women
- Flibanserin
- Works on neurotransmitters in the brain and needs to be taken daily. It works on the same neurotransmitters that are associated with anxiety and depression
- Questions about efficacy
- Sometimes erroneously referred to s "female Viagra" or the "little pink pill" (reference to Viagra called (the little blue pill")

Sexual Dysfunctions

- Male Hypoactive Sexual Desire Disorder
- Genito-Pelvic Pain/Penetration Disorder- this diagnosis will likely be made for those previously diagnosed with either Vaginismus or Dyspareunia
 - <u>Vaginismus</u>: involuntary spasming of the vagina when there is an attempt to insert anything
 - Dyspareunia: painful sexual intercourse
- Substance/Medication Induced Sexual Dysfunction

Dyspareunia Medications

- Most frequently caused by lack of vaginal lubrication
- Topical non-estrogen applied directly to vagina (Osphena)
- Estrogen to increase natural estrogen comes presenting risks for post-menopausal women (Premarin)
- OTC Topical lubricants ("K-Y Jelly")

Drug Induced Sexual Dysfunction

- Some studies found alcohol addiction is associated with sexual dysfunction (particularly inhibited orgasm while others find no association).
- Nicotine use is associated with sexual arousal dysfunction in both men and women
- Marijuana use is often intended to stimulate sexual desire and pleasure, but can significantly impair orgasmic ability and intensity
- Cocaine is a stimulant and is often used to increase sexual desire and energy; however it can inhibit sexual arousal and subsequently lead to painful sex, particularly for women
- Heroin use is associated with decreased sexual desire in men
- However, the rates of sexual dysfunction in methadone and buprenorphine users is no different from the general

Relapse Prevention for Addictive Disorders

The Best Chance

The best chance for recovery for people with alcohol and opioid disorders is the combination of:

- Psychosocial treatment
- Recovery Support Services (RSS)
- Pharmacotherapy (Medication Assisted Treatment or MAT)



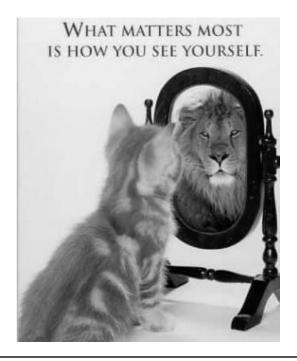
Recovery Support Services (RSS)

Rather than treatment interventions, they are case management to provide assistance with:

- Housing (for the homeless)
- Transportation
- Childcare
- Vocational Training (for the unemployed)
- Employment (for the unemployed/ex-felons)
- Education (for those without a H.S diploma or GED)
- Financial Counseling/Aid
- Legal Aid
- Parenting Training
- Literacy training

Demographic Predictors of Poor Treatment Outcome (both MH & SA)

- 1. Under 25 years of age
- 2. Never-married or having lived as married
- 3. Unemployed
- 4. No high school diploma or GED



RECOVERY SUPPORT SERVICES (RSS)

- The importance of assessment for the need for RSS
- The need to provide or arrange for RSS
- CSAT & computerized RSS assessment

Peer Counselors

- Growing movement
- Certification
- Pay

Without these needed services, here is where we are:

This improves outcome, but still not enough

Why Should We Consider Pharmacotherapy?

Evidence-Based Treatments for Opioid Addiction

- Three classes of medications have been approved for the treatment of opioid addiction:
- (1) agonists, e.g. methadone, which activate opioid receptors;
- (2) partial agonists, e.g. buprenorphine, which also activate opioid receptors but produce a diminished response;
- (3) antagonists, e.g. naltrexone, which block the opioid receptor and interfere with the rewarding effects of opioids

Comparison of Opioid Treatment Medications



Methadone

Dolophine, Methadose

Methadone activates opioid receptors in the brain, fully replacing the effect of whichever opioid the person partially replacing the is addicted to



Buprenorphine

Suboxone, Subutex Probuphine

Activates opioid receptors in the brain, effect of whichever opioid opioid the person is addicted to



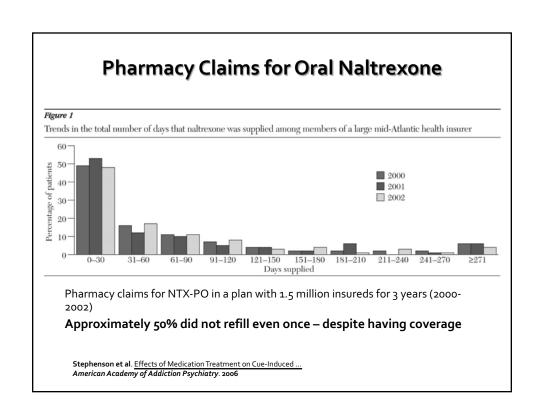
Naltrexone

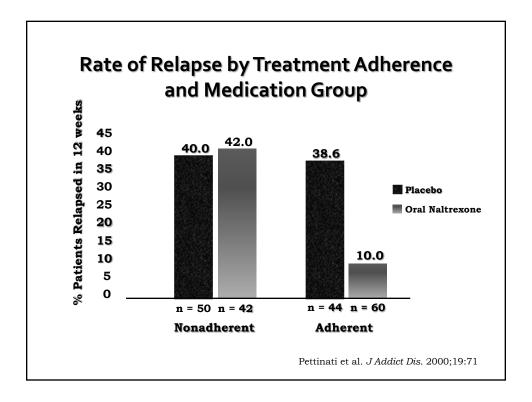
Vivitrol

Naltrexone binds to the opioid receptors in the brain, blocking the effects of the

The Problem of ADHERENCE!

- Of all of the FDA approved drugs for alcohol and opioid dependence*, all except Vivitrol are oral medications requiring the patient to take 1 to 2 pills, 1 to 3X/day.
- In addition to the usual causes of medication noncompliance, for the alcohol or opioid dependent person, the daily ambivalence about giving up the alcohol or opioid is another reason not to take the medications.
- *Implantable buprenorphine; injectable buprenorphine





Challenges of Current Therapies

- High relapse rate with psychosocial support alone¹
 - Approximately 90% at 48 months (alcohol)
- Poor adherence is common with daily oral medications^{2,3}
 - Difficult social environment
 - Forgetting to take the medication
 - Adverse effects as with all medications
- Alcohol dependence drives a yearning for intoxication

References

- 1. National Institute on Alcohol Abuse and Alcoholism. Alcohol Alert 6. October 1989.
- 2. Garbutt JC, et al. JAMA. 2005;293(13):1617-1625. Errata in: JAMA. 2005;293(16):1978. JAMA. 2005;293(23):2864.
- 3. Dean RL. Front Biosci. 2005;10:643-655. 71-83.

Challenges of Psychosocial Treatment Alone for Opioid Dependence

- Psychosocial support alone has high relapse rate¹
 - Opioid dependent patients treated in abstinencebased inpatient treatment - had early relapse post-discharge (i.e., a return to daily opiate use).
 - Follow-up interviews 91% reported a relapse, and the initial relapse occurred within one week in 59% of cases
- Dependence drives a desire for intoxication
- For opioid dependent individuals, high rates of AMA discharges (inpatient) & drop-out (outpatient) from treatment makes success more difficult

References

1. National Institute on Alcohol Abuse and Alcoholism. Alcohol Alert 6. October 1989

Vivitrol

- Developed with a grant from NIAAA because if compliance issues
- Once a month injectable naltrexone
- Blocks the effects of alcohol and opioids
- Reduces craving
- Minimizes adherence problems

Common Medical Contraindications

- on opioids for pain management (opioid antagonists;
- end stage liver disease
- allergic to any of the ingredients.

Other contraindications exist specifically for the use of the aversive medication disulfiram (Antabuse®)

- psychosis
- coronary artery disease
- diabetes
- severe pulmonary disease
- chronic renal failure, seizures
- cirrhosis with portal hypertension
- patients who have recently received metronidazole (Flagyl®)
- significant impulsivity
- over age 6o.

Pharmacotherapy
should be considered
a treatment tool
as others
like
group therapy or CBT

For alcohol dependence, consideration should always be given to anti-addiction medications along with psychosocial treatment

- Disulfiram ("Antabuse"®)
- Acamprosate ("Campral"®)
- Oral Naltrexone ("Revia"® & "Depade"®)
- Sustained release injectable naltrexone ("Vivitrol"®)

Suggestions re: Anti-addiction Medications for Alcohol Dependence Antabuse

(Disulfiram)

- an abstinence goal and no more than moderate impulsivity
- patient would likely avoid drinking if there were more concrete, immediate and predictable consequences to drinking
- potential consequences to the patient of drinking are imminently dangerous and/or potentially devastating
- Above to be used with suitable adherence enhancement measures
- Can be used for "short-term insurance"

Suggestions re: Anti-addiction Medications for Alcohol Dependence

Campral

(Acamprosate)

- reports of relief of discomfort or dysphoria with drinking (negative reinforcement)
- experience of significant protracted abstinence symptoms (Post Acute Withdrawal)
- the risk of relapse is related to the patient's reports of apprehension or anxiety about withdrawal
- Major Drawback: Dosing is 2 pills, 3X/day

Oral Naltrexone

- Naltrexone is used to treat alcohol or opioid drug dependence. It reduces the pleasurable effects of alcohol and as an opioid antagonist, it helps block the effects of narcotic (opioid) drugs, such as heroin and other opioids.
- It may help reduce cravings for opioids & alcohol.
- Diminished desire for substance use is an optimum outcome of naltrexone treatment and response if use.
- Most studies show that naltrexone significantly reduces the chance for relapse after the person has stopped drinking or using opioids
- It also appears particularly effective for people with a family history of alcoholism

Kiefer F, et al. (2003). Comparing and combining naltrexone and acamprosate in relapse prevention of alcoholism: A double-blind, placebo-controlled study. <u>Archives of General Psychiatry</u> 60(1): 92-99.

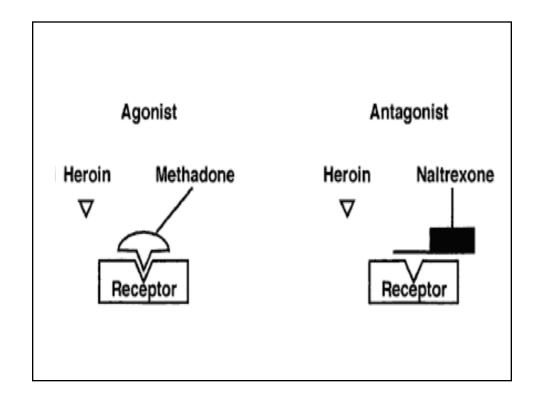
Pharmacotherapy for Opioid Dependence

Agonist Drugs (replacement or substitution)

- Methadone
- Subutex (Buprenorphine)
- Suboxone (Buprenorphine + Naloxone) -Partial agonist

Antagonist Drugs (block the effect of opioids)

- Oral naltrexone
- Vivitrol



Evidence-Based Tx. for Opioid Addiction

- The evidence strongly demonstrates that methadone, buprenorphine, naltrexone and extended injectable naltrexone (e.g., Vivitrol) all effectively help maintain abstinence from other opioids and reduce opioid abuse-related symptoms
- These medications have also been shown to reduce injection drug use and HIV transmission and to be protective against overdose

Evidence-Based Tx. for Opioid Addiction

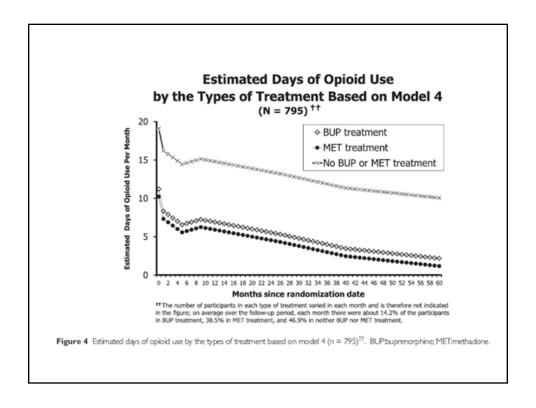
These medications should be administered in the context of behavioral counseling and psychosocial supports to improve outcomes and reduce relapse. , the results of studies give further evidence that substitution treatment is a safe and effective treatment for drug dependence. Methadone and Buprenorphine are equally effective.

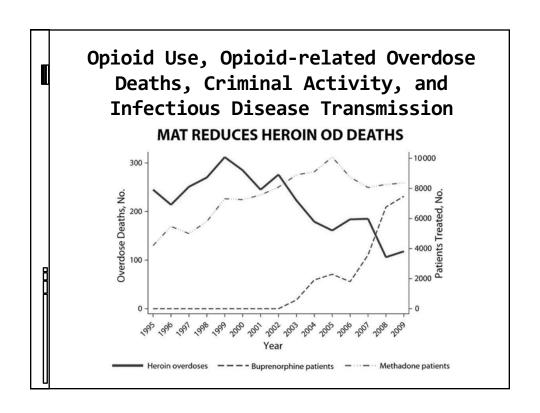
Evidence-Based Treatment

- Patients on methadone were over four times more likely to stay in treatment and had 33 percent fewer opioid-positive drug tests compared to patients treated with placebo;
- Methadone treatment significantly improves treatment outcomes alone and when added to counseling; longterm (beyond six months) outcomes are better for patients receiving methadone, regardless of counseling received;

Evidence-Based Treatment

- Buprenorphine treatment significantly decreased the number of opioid-positive drug tests; multiple studies found a 75-80 percent reduction in the number of patients testing positive for opioid use;
- Methadone and buprenorphine are equally effective at reducing symptoms of opioid addiction; no differences were found in opioid-positive drug tests or self-reported heroin use when treating with these medications.





Why Is MAT Necessary?

- Failure to understand addiction as a chronic, relapsing brain disease
- Need to heal the brain after prolonged drug use because of injury to brain circuits involved in:
 - reward
 - impulsivity
 - decision making

AGONIST DRUGS

Methadone

- Used for detoxification or maintenance
- Any physician with DEA number can prescribe methadone for pain management
- Only a federally licensed methadone clinic can use methadone for maintenance
- Methadone was the drug of choice for pregnant opioid addicts, now Subutex

Priority for admission to the following

- Pregnant patients;
- Individuals at risk for relapse;
- Previously treated patients;
- Patients just released from jail and/or hospital.

Who Are These Patients?

- May have unsuccessfully tried abstinence treatment, many multiple times
- Significant co-occurring disorders
- Significant histories of antisocial/criminal behavior
- Usually poor
- At 'the end of the line," last stop

Desired Outcomes Determine Choice of Agonist or Abstinence

Abstinence

- Total cessation of use
- When this is the measure of outcome, it may or may not include improved functioning

Opioid Substitution

- Decreased/elimination of criminal behavior
- Increased employment
- Enhanced social and family functioning

My Solution to the Drug Problem

- Make all drugs legal
- Require users to obtain their drugs from Comcast customer service!

Buprenorphine

- Used for detoxification or maintenance
- Lower abuse potential than methadone
- Lower level of physical dependence (less withdrawal discomfort)
- Ceiling effect doses
- Less likely to overdose
- Qualifying physicians (8 hour course) can prescribe/administer in office practice
- New current limit is 275 patients
- Qualifying NPs and PAs require 24 hrs. course

Probuphine

- A 6 month implantable buprenorphine
- An attempt to deal with the compliance problems and diversion
- Should be used patients who have achieved and sustained prolonged clinical stability on low-to-moderate doses of a transmucosal buprenorphine-containing product (i.e., doses of no more than 8 mg per day of Subutex or Suboxone

Sublocade

- A once a month injectable buprenorphine
- Helps with the adherence issues
- Because of the serious risk of potential harm or death from self-injecting SUBLOCADE into a vein (intravenously), it is only available through a restricted program called the SUBLOCADE REMS Program.
 - SUBLOCADE is not available in retail pharmacies.
 - Your SUBLOCADE injection will only be given to you by a certified healthcare provider.

Agonist Diversion

- Methadone: Most methadone found on the street does not come from methadone clinics but rather from physicians writing pain management prescriptions
- <u>Buprenorphine</u>: Most buprenorphine found on the street is used by opioid addicts to manage withdrawal symptoms rather than as their primary drug

Long-Term Follow-Up of Suboxone

- Addiction to opioid pain relievers
- 50% reported abstinence 18 months after starting therapy
- After 3.5 years, 61% reported abstinence
- Fewer than 10% met current criteria for dependence
- At follow-up, those still engaged on opioid agonist therapy were much more likely to report abstinence than those who stopped

NIDA Clinical Trials Network, Prescription Opioid Addiction Treatment Study, , Potter, J.S., Dreifuss, J.A., Marino, E.E., 2015

NIATx.com

Buprenorphine Organization Readiness Tool (toolkit)

Major Risks for Opioid OD

Risk of return to use and overdose after opioid abstinence or treatment:

- After release from criminal justice facilities
- After discharge from abstinencebased addiction treatment
- After conclusion of agonist or antagonist treatment

Criteria for Use of Pharmacotherapy (WHO?)

Alcohol and/or opioid dependence (required); and

- High addiction severity; or
- High levels of craving; or
- History of relapse after treatment; or
- History of AMA discharge or drop-outs from treatment; or
- Potential for serious consequences or imminent danger if use again; and
- Willingness to use pharmacotherapy; and
- Absence of medical contraindications (required)

Pharmacotherapy & WHEN?

- There is the perception among patients, families, and clinicians alike that medications should be used as a last resort.
- That we should wait until things get worse is a discarded approach ("You can't help an alcoholic until the person asks for help").
- It is imperative that we prevent and identify risky use and use disorders, then intervene early and offer timely, evidence-based treatment

Pharmacotherapy & HOW LONG?

- A frequently asked question is "How long does the the person have to be on "it" (the agonist drug)
- When explored, it is sometimes found to be a thinly veiled opposition to ANY use of the drug
- People should "be on it" as long as it is working and they feel the need to continue
- Any negative effects from anti-addiction medications are clearly less than those from the drugs which the medications treat

Counselor
Objections
to the Use of
Agonists

Still Addicted???

- Some people object to the use of methadone or buprenorphine for opioid dependent patients because if they use them, "they are still addicted"
- <u>THIS IS FLAT OUT WRONG!</u>
- Addiction includes:
 - Loss of control
 - Compulsion
 - Continued use in spite of adverse consequences
 - Craving
- If they are not abusing methadone or other psychoactive drugs, they remain physiologically dependent, not addicted.

ANTAGONIST DRUGS

Opioid Antagonist Drugs

- Oral Naltrexone
- Vivitrol (injectable, long-acting naltrexone)

FDA approved for both alcohol & opioids

What is VIVITROL?

VIVITROL is:

- A once-a-month, injectable, extended-release formulation of naltrexone
- Avoids the compliance problems of daily dosing
- Compatible with counseling and AA & NA
- Is an opioid blocker (i.e., antagonist)
- Administered by a healthcare professional
- Compatible with psychiatric medications

VIVITROL is NOT:

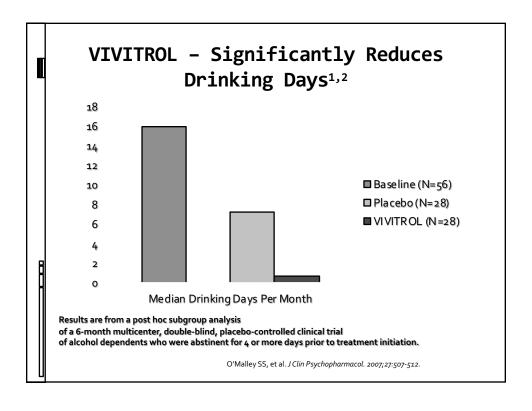
- Euphorigenic (i.e. pleasure producing)
- Addictive (no withdrawal if stopped)
- Aversive (e.g. disulfiram "Antabuse"®)
- •VIVITROL is NOT an agonist (e.g., methadone) or partial agonist (e.g., buprenorphine)

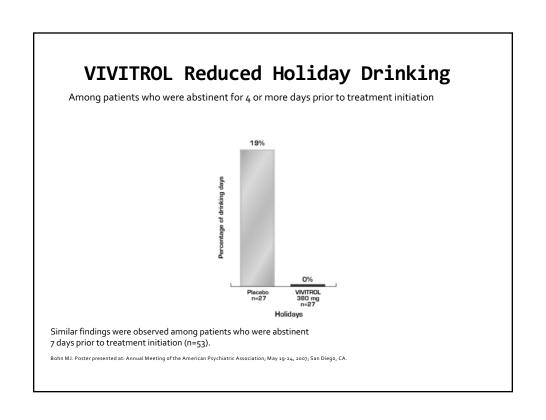
Urschel HC. A better way to recover: innovative support and science-based treatment, a presentation of EnterHealth. 2007.

VIVITROL

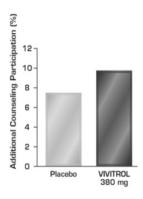


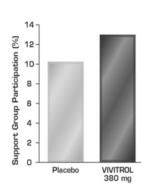
Some
Research
Results
for Vivitrol





Impact on Participation in Counseling and Mutual Support Groups^{1,2}





Garbutt JC, et al. JAMA. 2005;293(13):1617-1625.
 Gromov et al. AMERSA, 2008.

Implementing Medication Assisted Treatment
With Vivitrol
Florida Systems Development - RWJ Foundation Grant

Results 2006-2008

- Improved client outcomes in small demo
 - · Continuation of substance abuse treatment
 - · Increased independent living
 - · Improved employment and
 - Decreased recidivism (2/3)
- Began to demonstrate business case
 - 64% decrease in cost vs. prior treatment1

¹Alc Drug Abuse Weekly 12/2/2010

204

Summary of Efficacy Results

In clients who were abstinent from alcohol for the week before treatment initiation, VIVITROL and counseling, as compared to placebo and counseling, provided:

- Rapid & substantial reduction in drinking days
- Sustained continuous abstinence over 6-month study
- Sustained reduction in heavy drinking days for 18 months
- Substantial reduction in holiday drinking

O'Malley SS, et al. J ClinPsychopharmacol. 2007; Garbutt JC, et al. JAMA. 2005

Vivitrol Opioid Treatment Pivotal Trial: Krupitsky et al, Lancet 2011

- 24 week double-blind, placebo-controlled, randomized trial following inpatient detox, N=250
- Clear superiority vs. placebo at preventing lapses and sustained relapse/dependence
- No ODs or deaths
- FDA approval of Vivitrol for opioid dependence October, 2010

Northeast Recovery Division (CRC) Vivitrol Client Outcomes

Includes clients admitted and discharged between 1/1/11 through 9/30/11 at White Deer Run -Allenwood, Cove Forge, Bowling Green at Brandywine, Wilmington Treatment Center and Life Center of Galax

	Opiate Clients Enrolled	Opiate Clients Denied	All Other Opiate Clients	Variance (Denied)	Variance (All Other)
	Lilioned	Defiled	Ciletto		
No. of Clients:	358	460	8,053	1	-
Average Length of Stay:	23.11	17.96	15.94	29%	45%
% Treatment Complete:	87.3%	69.8%	66.5%	25%	31%
% AMA:	10.7%	24.6%	26.6%	57%	60%
Readmission Rate:	8.0%	13.4%	15.8%	40%	49%

Cost for Vivitrol

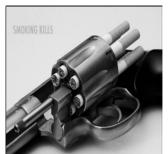
- \$900 \$1,100 each injection
- Most commercial insurance companies and Medicaid programs now increasingly paying for it
- Alkermes, the maker of Vivitrol, will pay up to \$500/month in copay assistance for those who have commercial insurance, with no time limit

Of all of the FDA approved medications for the treatment of opioid dependence,
Vivitrol (naltrexone) is the only one that does not produce or continue physiological dependence.
However, it does require initial abstinence of 7-14 days

Pharmacotherapy for Nicotine Dependence

Smoking & Relapse

- More people die from the use of tobacco and second hand smoke than die from the use of alcohol and other drugs, AIDS, car accidents, suicide, homicide and WW II combined!
- Tobacco use is the leading cause of preventable heart disease, cancer and death in he US
- Smoking serve as a trigger for relapse to other drugs
- When the route of administration of the drug of choice is smoking (e.g., "crack"), that risk is increased



Smoking Cessation Myths

- "You can't stop more than one thing at a time"
- Therefore . . . If the patient is dependent on alcohol, benzodiazepines and cocaine, we should choose one of the drugs to treat and leave the others for later after the patient is stable in their recovery from the first drug disorder!!!!!!!!

Diagnosis

- In the DSM-5, the diagnosis of nicotine dependence found in the DSM-IV was changed to Tobacco Use Disorder
- Nicotine in the addicting substance
- One of the most compulsively used psychoactive substances due to:
 - speed of effect
 - dosing schedule

The <u>Facts(?)</u> About E-Cigarettes

- E-cigarettes are less carcinogenic than smoking tobacco because there is no combustion
- It reduces the problems of second had tobacco smoke
- The extent of danger is not currently known
- E-cigarettes have helped some people to stop smoking
- Many become dual users
- Some non-smokers, particularly adolescents, who never smoked, have started vaping
- NO psychoactive substance use is appropriate for the adolescents developing brains

Smoking vs. Vaping

- CURRENT general agreement that electronic nicotine delivery systems are safer than smoking
- Safer does not = safe (e.g., during the AIDS crisis in the 1980s, language changed from safe sex to safer sex)
- Come in flavors like tobacco, menthol, vanilla, cherry, coffee, chocolate, grape, apple, cotton candy and bubble gum as well as alcoholic drinks
- New book of business for the tobacco companies

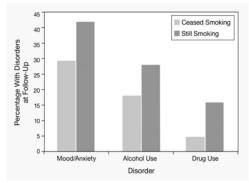
The "E-Joint"

- A new device known as an "e-joint" brings together marijuana and an e-cigarette
- A brand of e-joint, JuJu Joint, holds 100 milligrams of THC, the psychoactive ingredient in marijuana—twice as much as a traditional joint
- It is disposable and comes filled with 150 hits.
- The device produces no smoke and has no smell.

Recent Study

- Psychiatric patients who took part in a smokingcessation program while they were in the hospital for treatment of mental illness were more likely to quit smoking and less likely to be hospitalized again for mental illness, a new study shows
- 224 patients at a smoke-free psychiatric hospital in California
- Eighteen months after leaving the hospital, 20
 percent of those in the treatment group had quit
 smoking, compared with 7.7 percent of those in the
 control group
- Forty-four percent of patients in the treatment group and 56 percent of those in the control group had been readmitted to the hospital.

Smoking Cessation Is Linked to Reduced Prevalence of Substance Use and Mood/Anxiety Disorders



Some survey* participants with current or past histories of the disorders quit smoking during the 3-year period between initial and follow-up interviews. Compared with participants with such histories who continued to smoke at or near their initial intensity, these people who quit were less likely to have current diagnoses of the disorders at the follow-up interview.

* NESARC, 2001-2002

Pharmacotherapy for Nicotine

<u>Antidepressants</u>

- Sustained-release bupropion
 - Zyban
 - Wellbutrin (commonly prescribed as an antidepressant)
 - Chantix

Nicotine Replacement (Anticraving)

- Chantix
- Nicotine gum
- Nicotine transdermal patches
- Nicotine nasal sprays

Recent Research

 Abrupt cessation of smoking is more successful that gradual cutting down

Where Are You RE: Behavioral Health Patients Continuing Tobacco Use?

IF THE SCIENCE IS THERE, why is pharmacotherapy not being used more commonly?

•Lack of commitment of the administrative and senior clinical staff
•But the commitment of the administrative and senior clinical staff to the se of pharmacotherapy is no grantive that it will work

• Must get but in from the line clinical staff and avoid the following



Mixed Messages About Pharmacotherapy

223

Innovations don't sell themselves

In 1601...

Capt. James Lancaster evaluates the effectiveness of lemon juice to prevent scurvy. Results excellent.

In 1747...

Dr. James Lind carries out a second study. Results excellent.

■ In 1796 ...

British Navy **finally** adopts use of lemon juice to prevent scurvy.

224

Erroneous Beliefs

- Erroneous beliefs that:
 - ✓ Medication is meant to replace psychosocial treatments
 - ✓ Medication is incompatible with AA/NA
 - ✓ Vivitrol is psychoactive or addictive

Types of Mixed Messages

- "If your using drugs, you're not really sober"
- "AA doesn't support using drugs"
- "I did it the hard way"
- "If you just work the program, you won't need any drugs"
- "My sponsor would never have approved it for me"
- "You can't treat a drug problem with a drug"
- "If you are on drugs, you can't speak at a meeting"

H. Westley Clark, M.D., J.D., M.P.H., CAS, FASAM Director, Center for Substance Abuse Treatment (CSAT)

At the opening plenary session of the 2011 Cape Cod Symposium on Addictive Disorders (1,100 attendees), Dr. Clark said the following:

"Failing to offer and use Medication Assisted Treatment, particularly Vivitrol, is tantamount to malpractice!"

The Veteran's Administration

The VA has determined that the use of pharmacotherapy in the treatment of addictions:

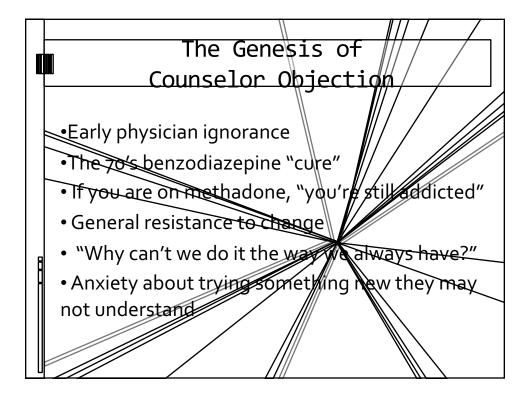
IS THE STANDARD OF CARE!

United Nations March, 2013

"A particular form of ill-treatment and possibly torture of drug users is the denial of opiate substitution treatment," the report says, adding this is considered a human rights violation when it occurs in jails and prisons

There has been/still is(?) a bias by some clinicians in the field against the use of medication

Until recently (and sometimes still) it also included the use of psychiatric medications



Probably, this may be similar to:

- The slow acceptance of psychiatric comorbidity
- The slow acceptance of psychiatric medications
- The growing awareness of the role of trauma in the development of SUDs
- The growing recognition of the need for Recovery Support Services and case management
- The replacement of the need to "hit bottom" with early intervention
- The replacement of "confrontation" with Motivational Interviewing
- The movement toward a recovery model

There Is No Magic Bullet!

All of the oral anti-craving and opioid substitution medications and Vivitrol work best in conjunction with psychosocial treatment and/or recovery support services.

Srisurapanont M, Jarusuraisin N (2005). Opioid antagonists for alcohol dependence. <u>Cochrane Database of</u> Systematic Reviews .

Oral Naltrexone, Vivitrol & Suboxone Are SUPPLEMENTS, Not REPLACEMENTS!

IF I believe that Addiction is
 a chronic, relapsing brain
 disease,

which means consideration of the use of medications as would occur with other chronic diseases such as hypertension and diabetes.

Putting It All Together



The Worst Reason for Doing Anything in the Present Is Because That Is the Way We Did It In the Past

Good Advice for Providers www.Jokeworm.com "Some days you just have to look at the world in a different way!"





Remember

- All treatments work for some people
- No one treatment works for everyone!