#### Use of Prescription Medication in Drug Court

Shane E. Wernsing, M.D. General and Forensic Psychiatrist

#### Outline

- >My background
- Seneral approach to diagnosis, difficulties
- >Treatment
- > Specific medication and drug thoughts
  > Questions, please



# Gustavus Adolphus College

S<sup>t.</sup> Peter, Minnesota



University of Minnesota Medical School Minneapolis, Minnesota



#### Anatomy partner



#### HCMC

Minneapolis, Minnesota



#### Regions Hospital St. Paul, Minnesota



Medical College of Wisconsin Milwaukee, Wisconsin



Minnesota Security Hospital

S<sup>t.</sup> Peter, Minnesota



## Oak Hill Forensic Psychiatry

Minnesota, Wisconsin, and Towa



## Leo A. Hoffmann Center

S<sup>t.</sup> Peter, Minnesota



#### Sioux Trails Mental Health Center S<sup>t.</sup> Peter, Minnesota

# E C C C **OAK HILL** PSYCHIATRY Oak Hill Psychiatry Clinic St. Peter, Minnesota

### Forensic Psychiatry

- >Medical school training and degree (M.D.) as any physician receives.
- One year of general medical internship (ER, neurology, surgery, delivering babies, et cetera).
- > Then, 3 years of residency training in psychiatry.
- >Additional training: fellowship in Forensic Psychiatry.

#### Forensic Psychiatry

>Most of my work is that which a general psychiatrist would be doing.

In my forensic role, the interface between medicine and the law is my focus.

> Mental illness diagnoses and substance use disorders are rarely "excuses" in the legal sense.

#### Forensic Psychiatry

Thus, my approach is that genetics or "the hand life deals you" is generally only one portion of your trajectory in life.

Another portion (most?) of a patient's trajectory is dependent on their day-to-day choices.

>My role perhaps limited?

#### Psychiatry and Drug Court

- > In "drug court," I also view my role as limited.
  > Medications are not the sole answer in most cases.
- > Patients accept this to varying degrees.
- So many other factors (AA, NA, family, friends, court, therapy, groups, outreach, work, school, etc.).

## Dual Diagnoses

- Dual diagnoses and comorbidity used interchangeably.
- Two (or more) illnesses in an individual at the same time.
- Sexamples: bipolar disorder and marijuana dependence, depression and alcoholism, anxiety disorder and cardiac disease.

## Dual Diagnoses

Today, we are using the term to indicate one or more psychiatric diagnoses co-morbid with one or more chemical abuse or dependence diagnoses.

Seach illness may affect the course, severity, manifestation, response to treatment, and other factors of other illnesses.

>Intoxication

>Withdrawal

Substance-induced mood disorder
Substance-induced psychotic disorder
Leave differential wide and in place for a time

>Mr. Braun is a 24-year-old man who has been committed as Mentally Ill and Dangerous (MI & D) due to killing his step-mother during an episode of mania with psychosis.

> He believed that she was going to Hell. Yet, he could save her due to being imbued with the power of God.

Complicating the picture, he rarely had more than a month of sobriety from alcohol and other drugs.

Now, he finds himself at Minnesota Security Hospital with an average of 5 - 9 years of a hospital stay.

On significant doses of an anti-psychotic mood stabilizer.

Discussion with patient --> tapering of medications. Had tried before the one-year mark without success (return of symptoms).

Over the coming months, appeared to be stable and without symptoms.

>Next, he underwent the long process of challenging his MI & D commitment.

Does he have bipolar disorder or a protracted substance-induced mood and psychotic disorder?

>We may never know "for sure."

#### Potential Psychiatric Dx.

Somatoform: conversion disorder, somatization disorder.

Cognitive: ADHD, dementia, autism.

>Mood: depression, bipolar, (anxiety d/o).

Psychotic: schizophrenia, delusional d/o, schizoaffective d/o.

#### Substance Diagnoses

Substance use: non-problematic use.

Substance mis-use: using in a manner not intended or prescribed.

Substance abuse: see DSM-IV-TR (DSM-5).
 Substance dependence: see DSM-IV-TR (DSM-5).

#### Co-Morbid

>In general across many settings:

- Patients in substance abuse programs have co-occurring mental disorders 1/2 - 3/4 (50 -75%) of the time.
- Patients in mental health programs have cooccurring substance use disorders 1/4 - 1/2 (25 - 50%) of the time.

#### Co-Morbid

In those with serious mental illnesses, over one in five had a substance use disorder in the past year. = 20.3 Million w/ SUD

#### 11.2 Million

#### 9.2 Million

#### 36.7 Million

#### = 45.9 Million w/ MI

#### Co-Morbid

> Why are they related? Why do they overlap?
> Many drugs of abuse affect dopamine and serotonin production, release, use, and effects.
> Psychosis (dopamine), anxiety and mood (serotonin).

>Withdrawal symptoms can last weeks to months (year or more?).

#### Co-Morbid

Diagnostic difficulties: >Drugs and alcohol can >cause psychiatric symptoms in anybody. Cause symptoms to last longer. > exacerbate pre-existing illness. >mask pre-existing illness.

Patient characteristics that might point toward co-occurring psychiatric diagnoses:

> Family history

Symptom onset before drug use or symptoms during a lengthy abstinence

The longer symptoms continue after last use, the more likely it is to be co-morbid dxs.

Senerally, I try to keep the differential wide and in-place for a while.

Axis I: Depression NOS (primary MDD versus substance-induced versus adjustment disorder versus [...])

Withdrawal mood problems: >normal in early abstinence >resolves w/ time > responds to behavioral and 12-step measures

**Psychiatric** mood problems: >not "normal" > won't resolve w/o treatment >behavioral and 12-step measures won't hurt

Visual hallucinations: Generally indicative of substance-induced problems (or medical-certain dementias, tumors, delirium, electrolyte disturbances).

Auditory hallucinations: More consistent with primary psychosis (schizophrenia, schizoaffective disorder).

Paranoia: less specific.

Substances: cocaine, stimulants, occasionally with THC

Axis I: mania, psychotic disorders
Axis II: paranoid personality disorder (not a common diagnosis)

## Clarifying Diagnoses

>Mania:

> Methamphetamine, cocaine
> Ecstasy (MDMA)
> Hallucinogens

>Rx medications: prednisone

>Medical causes

> Perhaps alcohol and benzodiazepine withdrawal

## Clarifying Diagnoses

Outside records are very helpful.
The time that I have with each patient is limited, especially at follow-up visits.

Senerally, avoid other drugs (prescribed) with similar effects.

Senzodiazepines: Ativan, Xanax, Valium, Klonopin, Librium, Restoril, Versed, Ambien, Sonata, Lunesta.

Stimulants: Adderall, Ritalin, Vyvanse, Concerta.

Sleep, how to address this?
Tincture of time.
Optimize sleep hygiene: diet, exercise, caffeine use.

Sleep medicine referral.

#### >Medical care:

Consider avoiding *elective* procedures during first year of recovery.

Coordination of care.

Avoiding prescribing outside one's scope or practice.

#### SADHD:

> Avoid stimulants, so other options include:

> bupropion (Wellbutrin), venlafaxine (Effexor), clonidine, guanfacine, atomoxetine (Strattera).

Controlled release stimulants have less abuse potential, but still not = 0!

#### SADHD:

Patients with *true* ADHD diagnosis in childhood, only 30% will carry significant symptoms into adulthood.

General thoughts:

> Avoid polypharmacy, a symptom for each drug and a drug for each symptom.

Solution Many patients with substance use disorders like to use drugs, Rx or otherwise, abusable or otherwise.

Is a symptom a "blip on the radar" or something needing treatment with an Rx?

#### General thoughts:

Decision to treat with medications should have a clear goal, should have considered other treatment options (therapy, groups, outreach, etc.) and one option can be doing nothing, "watchful waiting."

> Important to address both.
> If not, poorer outcomes.

### Suicide

To avoid suicide, would you rather have depression or cocaine addiction?

> Increase in odds of suicide attempt:
> alcohol use = 8 times more likely
> divorce = 11
> major depression = 41
> cocaine use = 62

## Specific Drugs

#### >Marijuana:

Depending on genetic make-up, can be associated with twice greater risk of developing schizophrenia.

Solution Loss of IQ points (up to 8) with dependence before age 18.

## Specific Drugs

>Marijuana adversely affects many areas:

> anxiety, depressive symptoms, suicidality, behavior problems, neurocognitive deficits (learning, memory, IQ drops), poorer sleep, respiratory problems, cancer.

## Specific Diagnoses

Antisocial personality d/o: highest likelihood of co-morbid substance use.

Sorderline personality d/o: substance use associated with predictable and significant clinical worsening.

## Specific Diagnoses

#### > Eating disorders

>50% of people with an eating disorder also have substance use disorders (compared to about 10% of the general population).

>35% of females with a substance use disorder report having an eating disorder (compared to 1 - 3% of the general population).

## Interesting Things I've Learned...

- > PCP epidemic in the St. Peter & Mkto. area?
  > Again outside records are very helpful, saves me from "re-inventing the wheel."
- A small set of patients seem wary of what I might "impose" onto them, medication-wise, and tend to respond to reassurance.

## Summary

> They generally are "just like any other patient."
> If sobriety continues, there can often be a paring down of the diagnostic list.
> Close monitoring of prescriptions.
> Most patients feel that the experience (drug court) as a whole is helpful.

# Thank-you!

forensicpsychiatry@mac.com www.oakhillpsychiatry.com

- 1<sup>st</sup> generation:
  - chlorpromazine (Thorazine)
  - prochlorperazine (Compazine)
  - fluphenazine (Prolixin)
  - haloperidol (Haldol)
  - loxapine (Loxitane)
  - thioridazine (Mellaril)
  - thiothixene (Navane)

- pimozide (Orap)
- perphenazine (Trilafon)
- trifluoperazine (Stelazine)

- 2<sup>nd</sup> generation:
  - aripiprazole (Abilify)
  - clozapine (Clozaril)
  - iloperidone (Fanapt)
  - ziprasidone (Geodon)
  - risperidone (Risperdal)
  - paliperidone (Invega)
  - lurasidone (Latuda)
  - asenapine (Saphris)

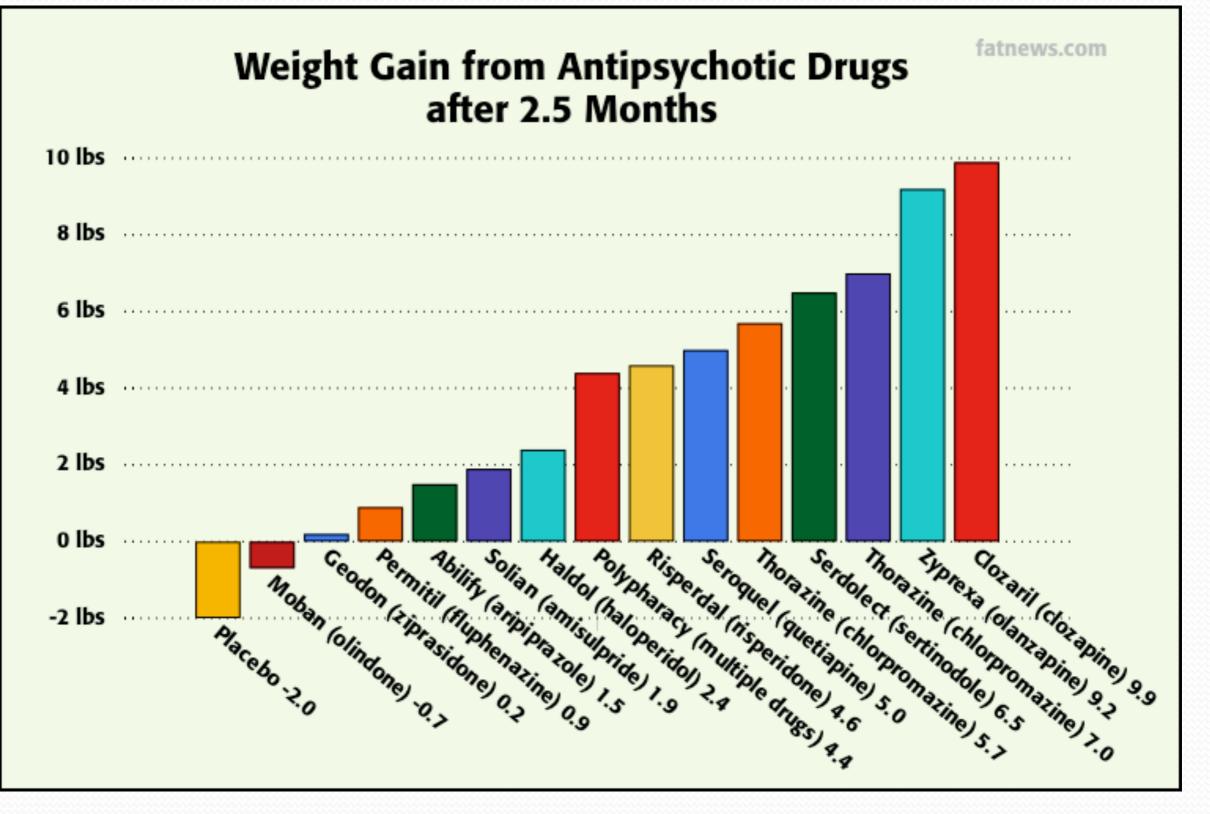
quetiapine (Seroquel)olanzapine (Zyprexa)

- Most are simple oral pills, some rapid-dissolve
- Saphris is a sublingual tablet (less effective if swallowed) that can be sublingual, between the cheek and gums, absorbed via mucosa
- 2<sup>nd</sup> generation anti-psychotics have some long-acting injected: Risperdal Consta (2 weeks), Invega Sustenna (4 weeks), Zyprexa Relprevv (2 – 4 weeks)

- Latuda is the only anti-psychotic (only psychotropic medication overall, actually) that is pregnancy class B. All others are class C.
- B = Animal reproduction studies have failed to demonstrate a risk to the fetus and there are no adequate and wellcontrolled studies in pregnant women OR Animal studies have shown an adverse effect, but adequate and wellcontrolled studies in pregnant women have failed to demonstrate a risk to the fetus in any trimester.

 C = Animal reproduction studies have shown an adverse effect on the fetus and there are no adequate and wellcontrolled studies in humans, but potential benefits may warrant use of the drug in pregnant women despite potential risks.

#### Anti-psychotics: Side Effects



### Anti-psychotics: Side Effects

- Weight gain: possible with any/all of them, but there are general patterns (see previous graph).
- Newer ones (Fanapt, Saphris, Latuda) are supposed to be more weight neutral.
- Likely from a combination of appetite stimulation and inducing more sedentary living (pill itself has negligible calories).

### Anti-psychotics: Side Effects

- Tardive dyskenisia and other movement disorders
- Sedation
- Cardiac conduction effects
- Metabolic effects (glucose, lipids)
- Leukopenia effects (Clozaril most notable)
- Sexual side effects

### Anti-psychotics: Action

- As with many of the psychiatric medications, exact mechanism is unknown.
- However, dopamine antagonism (blockade) appears to correlate to the anti-psychotic effect of the class.

### Mood-stabilizers

- (essentially all of the anti-psychotics again)
- The anti-seizure mood stabilizers: blocks or alters voltage-sensitive sodium channels, inhibits repetitive firing, stabilizes membranes, but "exact mechanism unknown"
- Lithium or Li+: also interacts with sodium channels, however... exact mechanism unknown

### Mood-stabilizers

- For the mood-stabilizers, likely all of the anti-seizure medications have been tried at one time or another.
- Frequently used are: Depakote, Lamictal, Tegretol, Trileptal, Topamax, Neurontin
- Most have weight gain (except Topamax), can affect sodium levels, sedation.
- Lamictal and rash

### Mood-stabilizers

#### • Lithium

- Side Effects: thirst, metallic taste, increased frequency or urination, fine head and hand tremor, drowsiness, and mild diarrhea
- Blood levels monitored (lithium toxicity severe diarrhea, vomiting, drowsiness, muscular weakness, and lack of coordination, withhold)

### Anti-depressant

- Most antidepressants block the re-uptake of a neurotransmitter of one or more of the bioamines: serotonin, norepinephrine, dopamine.
- SSRI = selective serotonin reuptake inhibitor
- SNRI = serotonin and norepinephrine RI
- Miscellaneous or other

#### Anti-depressant

- SSRI: Lexapro, Celexa, Paxil, Prozac, Prozac Weekly, Zoloft, Luvox
- SNRI: Cymbalta, Effexor, Pristiq
- Others: TCA, MAOI, Wellbutrin, trazodone, Oleptro, Remeron, Viibryd
- Many uses: depression, anxiety, OCD, PTSD, borderline PD, trichotillomania, premature ejaculation, chronic pain

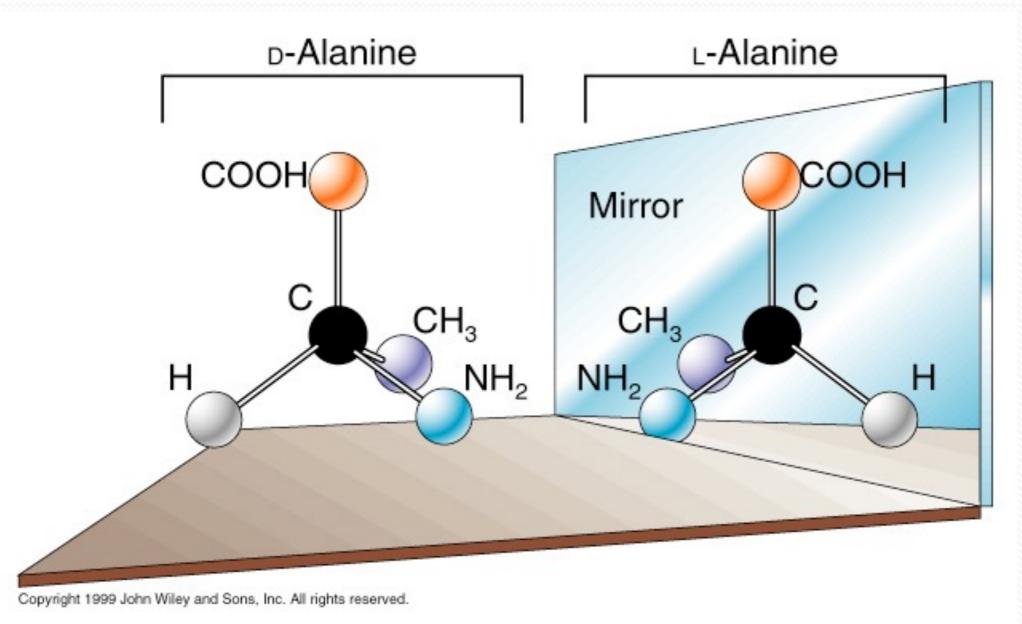
### Anti-anxiety

- Benzodiazepines
  - diazepam (Valium)
  - lorazepam (Ativan)
  - alprazolam (Xanax)
  - clonazepam (Klonopin)
- Nonbenzodiazepines
  - busipirone (BuSpar)
  - Benadryl, Vistaril, Gabapentin, blood pressure medications, etc.

### Stimulants, ADHD Medications

- Strattera (atomoxetine), Tenex/Intuniv (guanfacine), Wellbutrin, Effexor
- Stimulants are generally either Ritalin derivatives or Adderall derivatives.
- Stimulant side effects: weight loss, loss of appetite, sleep disturbance, psychosis, anxiety

#### • Lexapro (escitalopram)



• Lexapro (escitalopram)

 Celexa (citalopram) is actually a mixture of two molecules, mirror images of each other. One (Scitalopram) appeared to be the therapeutic molecule, the other (R-citalopram) interfering and side-effect promoting.

- Pristiq (desvenlafaxine)
- Effexor (venlafaxine) is converted in our bodies to many metabolites, including desvenlafaxine.
  - Blatant patent extender or useful drug filling a need, filling a void?

#### • Vyvanse (lisdexamphetamine)

- Is a "pro-drug," converted in the body (mostly red blood cells) to an active drug that is similar to Adderall
- Less abuse potential as the conversion is rate-limited, no "rush" with IV, snorting, inhaled/smoked, etc.
- Still is classified as a stimulant (one month's worth with no refills)

- Saphris, Latuda, Fanapt
  - Again, useful medications filling a void or "me too" medications?
  - Improvements in weight gain, metabolic effects.
  - "Hail Mary" attempts in non-responders.
  - Saphris with sublingual
  - Latuda with category B for pregnancy

#### • Viibryd (vilazodone)

Has only been out for about 5 – 6 weeks as of 8/11/11. The claim is that it has novel ways of acting (not just a reuptake inhibitor). I have only about 3 – 4 people on this and none have yet come for follow-up.