Introduction to Addiction Psychiatry

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Disclosure

I do not have any financial interest, relationships, or other potential conflicts, with respect to the material which will be covered in this presentation.
Case 1

You assess a 43 year-old female in the emergency room, who presents with nausea, vomiting, and diffuse body aches. Her medical history is unremarkable, other than for chronic low back pain, which has been managed with MS Contin 60 mg BID for the last 8 years.

She reports that her 19 year-old daughter stole her entire supply of morphine, and she has been without the medication for the 72 hours.

You assessment confirms that the patient is suffering from severe opioid withdrawal, which necessitates IV fluids, antiemetics, and clonidine. A UDS is positive for THC.

She asks you: “Doctor, does this mean I’m an addict?”

What do you tell her?
Case 2

- Your working on a Labor and Delivery service, and are managing a 32 year-old female who just delivered a baby boy at 39 weeks by vaginal delivery.

- The mom has a history of opioid addiction, and is receiving methadone through a local methadone clinic, at a dose of 120 mg daily.

- Following delivery, the baby exhibited irritability, high-pitched crying, and hyperactive reflexes. The infant was diagnosed with neonatal abstinence syndrome, admitted to the NICU, and treated with Morphine.

- The mother asked you: “Is my baby addicted?”

- What do you tell her?
Addiction Definition

* A primary, chronic disease of brain reward, motivation, memory and related circuitry.
* Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations.
* This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.
Addiction is characterized by:
- inability to consistently abstain from drug use.
- impairment in behavioral control.
- craving.
- diminished recognition of significant problems with one’s behaviors and interpersonal relationships.
- a dysfunctional emotional response.

Like other chronic diseases, addiction often involves cycles of relapse and remission.

Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death.
Addiction Definition

The 4 “C’s”
- Loss of Control
- Compulsive use
- Use despite Consequences
- Cravings
Some clinical points

- Addiction is more than just the compulsive use of a drug.
- Addiction is a BEHAVIORAL SYNDROME, which involves, personality changes, functional decline, and lapses in judgement, insight, and decision making.
- Addiction may be VERY DIFFICULT to diagnose in some cases.
Definitions

* DSM IV terminology: Addiction = Dependence
  * Often confused with “physical dependence,” which does NOT infer addiction.

* DSM-V terminology: Addiction = Substance Use Disorder

* NOTE: The word “Addiction” is not used.
Physical Dependence

An altered state of physiology resulting from prolonged drug exposure, resulting in tolerance and/or withdrawal.

Example: a patient experience opiate withdrawal after stopping morphine 72 hours ago.

It is a normal physiological response, and is NOT indicative of addiction, by itself.

Is NOT necessary to make a diagnosis of addiction (substance use disorder).
Substance Use Disorder

- Is simply another way of saying “addiction.”
- Criteria are universal for ALL substances. (ex. Nicotine Use Disorder has the same diagnostic criteria as Cocaine Use Disorder).
- The behavioral phenotypes of addiction are very similar, regardless of class of drug is being used.
- Example: Behaviors associated with opiate addiction mirror those of cocaine addiction.
- This indicates a central and common disease process or pathway.
A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by 2 (or more) of the following, occurring within a 12-month period:

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

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

3. Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance.
Substance Use Disorder (cont’d)

4. Tolerance

5. Withdrawal

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

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

8. A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects.
Substance Use Disorder (cont’d)

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

10. 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.

11. Craving or a strong desire or urge to use a specific substance.
Substance Use Disorder (cont’d)

- Severity specifiers:
  - Mild: 2-3 positive criteria
  - Moderate: 4-5 positive criteria
  - Severe: 6 or more positive criteria

Specify if:
- With Physiological Dependence: evidence of tolerance or withdrawal (i.e., either Item 4 or 5 is present)
- Without Physiological Dependence: no evidence of tolerance or withdrawal (i.e., neither Item 4 nor 5 are present)
What Drugs Can Cause Addiction?

- Only certain drugs are addictive, and are able to stimulate the addiction circuitry.
  - Opiates/opioids
  - Cannabinoids (marijuana)
  - Psycho-stimulants (Adderall, cocaine)
  - Sedative/hypnotics (Benzodiazepines)
  - Nicotine
  - Alcohol

- Relative very few chemical compounds can stimulate the addiction circuitry, in comparison to all the drugs known.
When the patient tells you that she is too “easily upset,” think of Mebaral. Overreaction to everyday occurrences may be a threat to this patient’s well-being. Mebaral reduces restlessness and irritability; it has a familiar sedative effect. But Mebaral has the advantage of “... extremely low incidence of toxicity ...” and does not produce sedative daze. Often physicians prefer the sedative effects of Mebaral to those of phenobarbital.

For daytime sedation — ½ grain, ¾ grain, and occasionally 1½ grains three or four times daily.
Historical Perspective

You can't set her free. But you can help her feel less anxious.

You know this woman. She's anxious, tense, irritable. She's felt this way for months. Boost by the seemingly insurmountable problems of raising a young family, and confined to the home most of the time, her symptoms reflect a sense of inadequacy and isolation. Your reassurance and guidance may have helped some, but not enough. Serax (oxazepam) cannot change her environment, of course. But it can help relieve anxiety, tension, agitation and irritability, thus strengthening her ability to cope with day-to-day problems. Eventually—as she regains confidence and composure—your counsel may be all the support she needs.

Indicated in anxiety, tension, agitation, irritability, and anxiety associated with depression.

May be used in a broad range of patients, generally with considerable dosage flexibility.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in children.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. One patient exhibiting drug dependency by selling a classic ordering developed upon cessation questionable withdrawal symptoms. Carefully supervise dose and amount prescribed, especially for patients prone to overdose; excessive prolonged use in susceptible patients (psychotics, ex-addicts, etc.) may result in dependence or hallucinations. Reduce dosage gradually after prolonged excessive dosage to avoid possible withdrawal symptoms. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is established. Warn patients of possible reduction in alcohol tolerance. Safety for use in pregnancy has not been established.

Not indicated in children under 6 years; absolute dosage for 6 to 12 year-olds not established.

Side Effects: Transient and mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently, syncope, rarely. Mild gynaecological reactions (vulvitis) (rare): tremor, drowsiness, hypotension, gastrointestinal reactions (nausea) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lassitude, drowsiness, blurred vision, diplopia, incoordination, fever, malaise and dermatitis.

Availability: Capsules of 10, 15 and 30 mg, oxazepam.

To help you relieve anxiety and tension

Serax

(Wyeth Laboratories
Philadelphia, Pa.)
Patient Interpretation of the Problem

- They will minimize or deny the problem.
- This is a **SYMPTOM of the disease, and is to be expected.**
- Patients may “protect” their relationship with the drug, and will block any intervention that attempts to interfere with their drug use.
- Addiction causes patients to undergo a **personality metamorphosis.**
- Manipulation, lying, and illegal activities, are driven by addiction.
Patient Assessment: Social Behaviors

- Social cues:
  - Lying
  - Stealing
  - Manipulative behaviors
  - Various complaints from family members
  - Relationship turmoil/breakup
  - Family reports large amounts of money missing.
  - Decreased work performance or job termination.
Patient Assessment
What to Ask

Be empathetic, non-judgmental, and open ended.

- “How do those around you feel about your drug use?”
- “You appear to be struggling to me. What do you think is going on?”
- “It seems like you’re making some bad choices. Why do you think that is?”
Treatment

- Levels of treatment
  - Out-patient treatment
    - Weekly therapy (individual or group, or both)
    - Psychiatric care, if needed.
  - Intensive out-patient program (IOP)
    - Day treatment program (daily 9AM - 1PM)
    - Typically 3-5 weeks
  - Inpatient – detoxification
    - May be 3-6 months
Treatment support

- **Community Meetings**
  - **Alcoholics Anonymous/Narcotics Anonymous**
    - Daily meetings: typically recommend “90 and 90” which is 90 meetings in 90 days, to those early in treatment.
    - Meetings are free
    - Offer support to patients, NOT treatment.
    - Can be a life-line for many patients.
    - Is quite helpful, despite what critics say.
    - Patients work through 12 steps.
    - Encourage patients to get a sponsor, which is essentially a mentor.
Antabuse (disulfiram)

- Approved for use in 1949
- Typical dose: 250mg qd
- Inhibits aldehyde dehydrogenase, which converts acetaldehyde to acetic acid.
- Elevates blood acetaldehyde concentration, resulting in a disulfiram-ethanol reaction.
- Best used in a supportive or monitored environment.
- MAY CAUSE HEPATIC FAILURE; Monitor liver function every 2 weeks for first two months, then at 3-6 months intervals thereafter.
Antabuse (disulfiram)

- **Disulfiram-Ethanol Reaction (DER)**
  - Warmness and flushing of the skin
  - Tachycardia, palpitations, hypotension
  - Sweating
  - Nausea/vomiting
  - Dizziness, blurred vision, confusion.
ReVia (naltrexone)

- Approved for use in 1994
- Typical dosing: 50mg qd
- Mechanism: Opioid antagonist
- Decreases the reinforcing effects of alcohol, and diminishes cravings.
- This is also used in the treatment of opioid dependence.
Naltrexone

- "Black-box warning for hepatotoxicity
- Draw initial liver enzymes/LFT
- On-going monitoring is necessary only if warranted.
- Should be started at the time psychosocial treatment is initiated
- Starting dose: 50 mg daily.
- Desire to drink is targeted effect.
- No evidence for efficacy at doses greater than 50mg daily.
Naltrexone

Side effects:
- Nausea, and other GI side effects early in treatment
- Liver toxicity
- Neuropsychiatric side-effects are often transient, and include: headache, dizziness, light-headedness, and weakness.
Vivitrol (naltrexone)

- Approved for use in 2006
- Used for both alcohol and opioid addiction.
- Long acting, injectable formulation of naltrexone
- Typical dose: 380mg IM every month
- Increases adherence in non-compliant patients.
- Evidence suggests better outcomes than with oral naltrexone, possibly due to steady-state blood levels as opposed to daily fluctuations.
Other drugs for the Treatment of Alcohol Dependence

- Topomax (topiramate)
- Zofran (ondansetron)
- Baclofen
- Campral (FDA Approved)
Buprenorphine

- A partial mu opioid agonist
- Used in opioid maintenance therapy (OMT)
- Is a potent analgesic
- Dispensed in two forms:
  - Suboxone (buprenorphine/naloxone)
    - 4/1 ratio
    - Naloxone has no bioavailability in the SL route. It is placed here to deter addicts from dissolving and injecting the tablet, which will result in precipitated withdrawal.
    - Starting dose typically 8mg/2mg; max daily dose is 32mg/8mg.
  - Subutex (buprenorphine)
    - Used in pregnant females on OMT
    - Can be used solely as an analgesic.
Buprenorphine

* Can be prescribed for OMT in an office, as opposed to methadone, which can also be given in designated methadone clinics.
  * This is a strong advantage, since it diminishes barriers to treatment.
    * Methadone clinic are plagued with strong negative social stigma.

* Providers wishing to give buprenorphine for OMT must have an “X” number from the DEA.
  * You must take an online course (8 CME credits)
Methadone

- Used in opioid maintenance therapy (OMT)
- Mechanism: full mu opioid agonist
- It is also a very potent analgesic, and is used extensively in pain management.
- Prescribing guidelines:
  - **You cannot prescribe methadone for OMT**
  - You can; however, prescribed methadone as an analgesic, for the management of pain.
Methadone Dosing

- Has a long elimination half-life, > 36 hours, yet a very short analgesic effect, about 6 hours
- This difference can lead to unintentional overdose and possibly death.
- BE CAREFUL when dosing this medication, and be aware of this principle.

- Dosing for OMT is typically qd
- Dosing as an analgesic is typically TID
Thank you!

* Please email me with any questions.
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