How to Screen for Substance Abuse Potential before Prescribing Opioids or Anxiolytics

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Screening for Prescription Drug Abuse

1) Assessment of premorbid and comorbid disorders including psychiatric illness, SUDs, etc.
2) Assessment of aberrant drug-related behaviors
3) Urine drug testing
4) Prescription monitoring program
Types of Opioid Users (Difficult to Identify)

Nonmedical Use
- Recreational abusers
- Patients with addiction

Medical Use
- Pain patients seeking more pain relief
- Pain patients escaping emotional pain
Risk Factors for Prescription Drug Use Disorders

1) **Personal history of Substance Use Disorder (SUD)** including Nicotine Dependence

2) **Psychiatric illness** (Dual Diagnosis occurs in more than 50%)

3) **Adolescence** (a critical period of neurodevelopment)

4) **Lack of Parental Attachment** (i.e., chronic emotional neglect) \(\rightarrow\) emotional dysregulation, impulsivity, susceptibility to stress \(\rightarrow\) drugs used to emotionally detach

5) **Family history of addiction** (Genetic variation in behavioral phenotypes)
Substance Dependence
Maladaptive pattern leading to clinically significant impairment or distress within a year including three or more of:

1. Tolerance
2. Withdrawal signs
3. Substance is taken in larger amounts/longer period of time than intended (out of Control use)
4. Persistent desire/unsuccesful efforts to quit/cut back (Cravings)
5. Greater time spent is acquiring or using substance (Compulsive use)
6. Social, occupational, recreational activities are reduced or eliminated because of use (Continued use despite consequences)
7. Use continues despite knowledge of medical or psychiatric problem resulting from use

Addiction is a disease of motivation
Diverse Intoxicating/Withdrawal

DA, 5HT, NE transporters
prefrontal cortex, striatum

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Acetylcholine receptors
thalamus, striatum, frontal, parietal cortex

Cannabinoid receptors
Cingulate, palladum, hippocampus

Mu and Kappa receptors
Neocortex, thalamus, striatum, cerebellum, PAG

GABA and NMDA receptors
Everywhere!

Motivational Effects/Addiction

DA

Nucleus Accumbens

DA

Nucleus Accumbens

DA

Nucleus Accumbens

DA

Nucleus Accumbens

DA

Nucleus Accumbens

DA

Nucleus Accumbens

DA

Nucleus Accumbens

DA

Nucleus Accumbens

(too many investigators to credit: Thanks NIDA/NIAA)
Neurocircuitry of Motivation

Motivational Neurocircuitry is implicated in......

• Natural reward processing: food, sex, social status
• Addictive drugs
• Psychiatric illness
• Emotional component of pain processing
  (Prefrontal cortex, amygdala)

(Koob and Le Moal, 2001; Leknes and Tracy, 2008; Chambers et al, 2003)
Borderline Personality Disorder

- Due to the family environment being unsafe/unstable, depriving, harshly punitive/rejecting (chronic emotional neglect/abuse)
- **Instability** in interpersonal relationships, mood, behavior, & self-image
- Impulsivity, intense anger, acting out
- Emotions overwhelm cognitive functioning
- **Self-destructive behaviors**
- Intense fear of abandonment
- **Manipulation**
- Emotional detachment
Aberrant Drug-related Behaviors

- Selling, stealing, borrowing prescription drugs *(illegal)*
- Forging prescriptions *(illegal)*
- Frequently losing prescriptions
- Aggressive demand for opioids, Pushing for higher doses
- Contact with street culture, Injecting oral opioids
- Preference for immediate release (with higher street value) over sustained release preparations
- Non-compliance with non-opioid components of pain treatment
• Unsanctioned use of opioids/dose escalation
• Concurrent use of illicit drugs, Failing a drug screen
• Getting opioids from multiple prescribers
• Recurring ED visits for controlled substances (conditioned place preference)
• Appearing intoxicated, Accidents
• Decline in physical, psychological, or social function
• Increase in anxiety, sleep disturbance, or depression
• Reporting no effect from non-opioids (e.g., antidepressants)
• Showing up only for medication appointments

(Chabel et al., 1997)

Maintain a high index of suspicion!
Components of a Comprehensive Pharmacovigilance Approach

- **Patient history:**
  Try to elicit the following:
  i) Chaotic living environment
  ii) History of childhood emotional deprivation → mood swings & impulsivity & “Pain catastrophizing”
  iii) Nicotine dependence
  iv) Focused on opioids rather than pain relief
  v) Misrepresentation, inconsistencies in history
- Prescription drug monitoring programs
- Urine drug testing
- Collateral information from other providers
- Clinical judgment

(Gourlay et al., 2010)
COT is being used to treat a broader range of distress ("Adverse Selection")

- Psychiatric illness and/or SUDs patients are more likely to receive COT at higher daily doses and for longer duration
- Opioid treatment guidelines recommend caution in treating these patients
- RCTSs of opioids for CNCP excluded patients with psychiatric comorbidities (Chou et al., 2009)
- Opioids → feelings of emotional detachment (even when not in pain)
- Borderline personality disorder (Opioid-Deficit Theory)
  i) Common cause of tri-morbidity (chronic pain, psychiatric illness, SUDs)
  ii) Associated with childhood emotional neglect/abuse (unmet emotional needs) → emotional dysregulation, social dysfunction
  iii) Self-injurious behavior (method of endogenous opioid generation)
  iv) Associated with high rate of opioid abuse

(Sullivan, 2010; Sullivan and Ballantyne, 2012; New and Stanley, 2010)
Endogenous Opioid System (EOS)

EOS is implicated in:

i) Endogenous opioid analgesia and the effects of exogenous opioid analgesia ("physical pain")

ii) Facilitation of maternal-infant and other attachments ("social/emotional pain")

iii) Regulation of responses to salient stimuli, including drugs of abuse ("reward and reinforcement")

iv) Placebo effects during expectation of analgesia

v) Trait impulsiveness (feature of SUDs and psychiatric co-morbidity)

(Zubieta, 2011)
Chronic Pain or Addiction?

- Patients on COT will not manifest any aberrant behaviors because they are effectively receiving maintenance therapy, which suppresses craving.
- When opioids are suddenly not available,
  When tolerance occurs,
  When attempts are made to taper,
  → craving and addiction behaviors emerge.

Opioid dependence persists for months after a taper. (Ballantyne et al., 2012)
Myths about Chronic Opioid Therapy

COT for chronic pain is supported by strong evidence.

Fact:

• Evidence of long-term efficacy for CNCP (16 weeks or more) is poor & of low quality (Kalso et al., 2004; Papaleontiu et al., 2010; Martell et al., 2007; Chou et al., 2009).

• Opioids are effective for short-term pain management.

• Some studies suggest that COT may retard functional recovery (Turner et al., 2008; Braden et al., 2012).
Addiction is rare in patients receiving medically prescribed COT.

Fact:

- 4-26% of patients receiving COT have an opioid use disorder (Fleming et al., 2007; Becker et al., 2009; Boscarino et al., 2010).

- More than 1 in 10 misuse opioids by:
  - Intentional over-sedation
  - Concurrently using alcohol for pain relief
  - Hoarding medications
  - Increasing dose on their own
  - Borrowing opioids from their friends

(Banta-Green et al., 2009; Fleming et al., 2007)
Opioid overdoses only occur among drug abusers and patients who attempt suicide.

Fact:

• Patients using prescription opioids are at risk of unintentional overdose and death (Paulozzi and Ryan, 2006).

• The risk increases with dose and when opioids are combined with other CNS depressants like benzodiazepines and alcohol (Dunn et al., 2010).
Addiction is the only risk to be concerned about when prescribing opioids.

Fact:
• Besides addiction & misuse, opioids have significant risks including:
  i) **Respiratory depression & unintentional overdose death** (Paulozzi and Ryan, 2006; Dunn et al., 2010)
  ii) **Serious fractures from falls** (Saunders et al., 2010; Takkouche et al., 2007)
  iii) **Hypogonadism** (Vuong et al., 2010)
  iv) **Increased pain sensitivity** (Zhou et al., 2010)
  V) **Sleep-disordered breathing** (Walker et al., 2007)
  vi) **Chronic constipation, dry mouth** (Bell et al., 2009; Murray Thomson et al., 2006)
Extended-release opioids are better than short-acting opioids for managing chronic pain.

Fact:

• Extended-release opioids have NOT been proven to be safer or more effective than short-acting opioids for managing chronic pain (Chou et al., 2003).
Prescribing high-dose therapy (120 mg or more of morphine equivalents/day) is supported by strong evidence that benefits outweigh risks.

Fact:

• No RCTs show long-term effectiveness of high opioid doses for CNCP.
• Many patients on high doses continue to have substantial pain and related dysfunction (Franklin et al., 2009).
Dose escalation is the best response when patients experience decreased pain control.

Fact:

- When treating chronic pain, dose escalation has NOT been proven to reduce pain or increase function, but it can increase risks (Franklin et al., 2009).
Do’s for Chronic Pain Management

• Do initiate COT as a last resort only after other strategies for chronic pain have been exhausted.

• Do explain that opioids are for time-limited use.

• Do screen for psychiatric disorders before initiating COT.

• Do talk with patients about therapeutic goals (including pain relief, increased activity & improved quality of life), opioid risks, realistic benefits, & prescribing ground rules.
• Do realize that patients are reluctant to disclose a history of substance abuse.
• Do perform a thorough medical evaluation & a UDT before initiating COT.
• Do explain to patients that discontinuing opioids may be difficult.
• Do perform random UDTs on patients receiving COT.
Don’ts for Chronic Pain Management

• Don’t stock your patients’ medicine cabinets with unused opioids.
• Don’t start COT by accident.
• Don’t prescribe extended-release opioids for acute pain or to opioid-naïve patients.
• Don’t assume patients know how to use opioids safely.
• Don’t assume patients use opioids as you intend.
• Don’t start a treatment that you are not prepared to stop
• Don’t initiate COT before considering safer alternatives such as: primary disease management, cognitive-behavioral therapy (CBT), physical therapy, non-opioid analgesics and exercise.
• Don’t continue COT with patients who show no progress toward treatment goals.
• Don’t assume patients are doing well with COT without careful evaluation (“the good patient”)
• Don’t abandon patients with a prescription drug problem.
• Don’t prescribe PRNs (“pill popping behaviors”)
• Don’t prescribe benzodiazepines with opioids
• Don’t prescribe tramadol as a non-opioid alternative.
No well-tested, easily administered screening tool exists for detecting drug-seeking behaviors in primary care patients

- Current clinical guidelines make a strong recommendation based on weak evidence (Chou et al., 2009)
- There is high potential to purposefully misrepresent oneself on screening tools.
- They aid clinical decision making and should not be viewed as diagnostically accurate.

**Screening tools for opioid addiction**: SOAPP, ORT

**Screening tools for current/past substance abuse**: CAGE-AID, AUDIT

**Screening tools for depression, mental health**: PHQ-9, GAIN-SS

**Monitoring tool for opioid therapy**: COMM
Benzodiazepines

• Benzos \(\rightarrow\) feeling emotionally detached from stressors (masking of psychiatric symptoms)
• Rebound anxiety and rebound insomnia occur more with short-life benzos (e.g., xanax) \(\rightarrow\) rapid retaking of drug \(\rightarrow\) chronic benzo use \(\rightarrow\) addiction
• Benzos are not recommended beyond 2-4 weeks
• **No strong evidence to support long-term efficacy**
• For treating anxiety: **SSRIs + CBT** is the first-line treatment
• For treating insomnia: **CBT, relaxation techniques, sleep hygiene** are first-line treatment  (Cloos, 2010)
The need to integrate Behavioral Health with Primary Care

• The burden of mental illness is high
• The mind and the body can’t be separated
• Healthy behaviors decrease when mental health is poor
• The doctor-patient relationship is replaced by the team-patient relationship
• Consultation between providers will increase the skills of both
• Close collaboration between behavioral health and primary care in a fully integrated system is ideal for both the patients and the providers.
Conclusions

• Consider non-opioid treatment options for chronic pain
  • Take non-judgmental stance
  • Trust and respect (therapeutic alliance) are key
  • Use open-ended questions, Elicit history indirectly
  • Approach as if they have a relative contraindication to controlled substances (if not absolute contraindication)
• Use a comprehensive pharmacovigilance approach
THANK YOU