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# Risk Assessment of Addiction and Abuse in Pain Patients

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Nedeljkovic SS, Wasan A, Jamison, RN. (2002).  
Assessment of Efficacy of Long-term Opioid Therapy in  
Pain Patients with Substance Abuse Potential. Clin J Pain,  
18:S39-51.

*“Currently, no validated measure exists that is  
useful in predicting opioid abuse in persons with  
chronic pain. The “gold standard” assessment is  
a comprehensive evaluation by a psychologist or  
psychiatrist ... unfortunately, not all caregivers  
have access to this ... for their patients. There  
has been a call for screening tools to assess  
addiction in persons with organic pathology who  
are considered candidates for opioid therapy (p.  
S40).”*

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# With respect to chronic opioid therapy and the patient with chronic non-malignant pain,

- How does one identify addiction in the patient on chronic opioid therapy?
  - How does one identify the patient at risk for becoming addicted to chronic opioid therapy?
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# Assessment for addiction

## Diagnostic and Statistical Manual of Mental Disorders\*

### Substance Abuse

- One or more within a 12 month period
  - Failure to fulfill major role obligation
  - Recurrent use in hazardous situations
  - Recurrent legal problems
  - Recurrent social or interpersonal problems

### Substance Dependence

- Three or more within a 12 month period
  - Abuse criteria, plus:
  - Tolerance
  - Withdrawal
  - Larger amount/longer time than intended
  - Persistent desire to control use
  - Great deal of time spent in activities related to use

# Which opioid abuse behaviors are of concern?

Any non-prescribed use of a drug  
(NIDA, 2002 & DEA, 1970)

Non-medical use of a substance for  
psychic effect, dependence, or suicide  
attempt or gesture (SAMHSA, 2002)

Any harmful use, irrespective of  
whether the behavior constitutes a  
“disorder” in the DSM-IV diagnostic  
nomenclature (IOM, 1996)

A maladaptive pattern of substance use,  
leading to clinically significant impairment  
or distress, as manifested by one or more  
behaviorally-based criteria (APA, 1994)

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# Limited validity of DSM criteria in patients with chronic non-malignant pain

## ■ **False-positives**

- ❑ May develop tolerance and physical dependence
- ❑ May desire to cut down use, or to be using in larger amount/for longer period than intended (Sees & Clark , 1993)

## ■ **False-negatives**

- ❑ Source of opioid is neither illegal nor illicit
  - ❑ Behavioral dysfunction may be attributed to pain as opposed to addictive disease (Miotto et al., 1996)
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# Addiction in the presence of pain

- Adverse consequences associated with opioid use
- Loss of control over the use of opioids
- Preoccupation with obtaining opioids despite the presence of adequate analgesia

*Consensus Statement,  
American Society of Addiction Medicine,  
American Academy of Pain Medicine  
American Pain Society (2001)*

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## Published rates of abuse/addiction in chronic pain populations are ~ 10% (3-18%)\*

- Suggests that known risk factors for abuse or addiction in the general population would be good predictors for problematic prescription opioid use
  - History of early substance use
  - Personal/family history of substance abuse
  - Co-morbid psychiatric disorders

\*Adams et al., 2001; Brown, 1996;  
Fishbain, 1986, 1992; Kouyanou et al., 1997

# Screening tool for addiction in patients with chronic nonmalignant pain

- Developed for use in patients with physician identified “problematic” substance use
  - drug-seeking, medication hoarding, doctor shopping, frequent ER visits
- Designed to be used in conjunction with DSM and ASAM/APS/AAPM criteria to assess for presence of addiction
- Organized into six assessment categories w/ 42 items
  - based upon extensive literature review
  - qualitative analyses of records of pain pts with addiction

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# Six Assessment Categories

1. Patient's description of the pain syndrome
  2. Opiate analgesic use patterns
  3. Social and/or Family Factors
  4. Family history of substance abuse
  5. Patient history of substance abuse
  6. Psychiatric History
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# Tool evaluation

- Questionnaire administered by trained research assistant to 52 opioid-treated pain patients
    - Consecutively referred from university-based multidisciplinary pain clinic for psychiatric evaluation of “problematic narcotic use” or “drug-seeking” behaviors
  - Patients concurrently evaluated by trained addiction medicine psychiatrist for presence of addictive disease
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# Sample

female	60%	age	$X = 41.4$ yr $SD = (9.55)^*$
suffer from 1+ painful condition	65%	length of opioid treatment	$X = 53.7$ mo ( $SD = 49.85$ )
Based on clinician diagnosis:	38.5% (n = 20) met DSM criteria for substance abuse	26.9% (n = 14) met DSM criteria for substance dependence	34.6% (n = 18) had no substance use disorder

\*Differ between non-abusers and others ,  $p < 0.05$

# Opiate analgesic use patterns

## ■ Impaired Control

- ✓ Multiple prescription providers
- ✓ Early prescription refills
- ✓ ER visits for analgesics

## ■ Compulsive Behavior

- ✓ Independently and rapidly increases analgesic dose/frequency
- ✓ Use analgesics for non-pain symptoms
- ✓ Saves or hoards unused medication
- ✓ Supplements with alcohol/psychoactive drugs
- ✓ Route of administration preference

( $p < 0.05$  between non-abusers and others)

# Social and/or Family Factors

- ☑ **Family believes patient is addicted**
- ☑ **Patient takes family analgesics**
- ☑ **Family interaction sustaining illness behaviors**
- ☑ **Family obtains opioid analgesics for patient**

( $p < 0.05$  between non-abusers and others)

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# Patient history of substance abuse

- ✓ **MD/DDS has limited care in the past**
- ✓ **Referring physician believes patient is addicted**
- ✓ **Patient has a personal history of addiction**
- ✓ **Previous opioid detoxification**
- ✓ **Patient believes he/she is addicted**

( $p < 0.05$  between non-abusers and others)

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# Items predictive of addictive disease:

- ☑ Patient believes he/she is addicted
  - ☑ Tendency to increase analgesic dose/frequency
  - ☑ Preferred route of administration
- 
- correctly classified 92.9% of patients\*

\*Stepwise logistic regression likelihood-ratio test (removal criteria,  $p$ -in = 0.05,  $p$ -out = 0.10); Goodness of fit = 6.0; model  $\chi^2 = 47.502$  ( $p=0.000$ ); Cronbach's  $\alpha = 0.79$

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# Prescription Abuse Checklist

Chabal et al., 1997

1. A focus on opiate issues during clinic visits impeding progress with other treatment issues and persisting beyond the third appointment.
  2. A pattern of early refills or escalating drug use in the absence of any clinical change.
  3. Multiple telephone calls or visits about opiate prescriptions.
  4. A pattern of prescription “problems” (e.g., lost, spilled, stolen).
  5. Supplemental sources of opiates.
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# Behaviors indicative of aberrancy:

Kirsh et al., 2002

## *Behaviors less indicative:*

- Drug hoarding during periods of reduced symptoms.
- Acquisition of similar drugs from other medical sources.
- Aggressive complaining about the need for higher doses.
- Unsanctioned dose escalations one or two times.
- Reporting psychic effects not intended by the clinician.
- Requesting specific drugs.

## *Behaviors more indicative:*

- Prescription forgery
- Concurrent abuse of related illicit drugs
- Recurrent prescription losses
- Selling prescription drugs
- Multiple unsanctioned dose escalations
- Stealing or borrowing drugs from others
- Obtaining prescription drugs from non-medical sources

# The Four “C’s”

Savage, 2002

- Adverse *C*onsequences/harm due to use
  - Intoxicated/somnolent/sedated; declining activity; labile mood; increasing sleep disturbance; increasing pain complaints; increasing relationship dysfunction
- Impaired *C*ontrol over use/*C*ompulsive use
  - Reports lost or stolen prescription or medications; frequent early renewal requests; urgent calls or unscheduled visits; abusing other drugs or alcohol; cannot produce other medications on request; withdrawal noted on clinic visits; observers report overuse or sporadic use
- Preoccupation with use due to *C*raving
  - Frequently misses appointments unless opioid renewal is expected; does not try nonopioid treatments; cannot tolerate most medications; requests medications with high reward; no relief with anything but opioids

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# What else did we learn? Traditional indicators of addiction aren't perfect.

- Up to 20% of non-addicted pain patients evidenced “drug-seeking” behaviors
  - Illegal activities (prescription forgery, buying on street) rare in addicted subsample, perhaps due to legal opioid access
  - Presence of a psychiatric history did not distinguish non-addicted from abusing and dependent patients
  - Of non-addicted patients, 27% had previous substance abuse history (60% of whom received drug abuse treatment), and 50% had positive family history
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# A History of Substance Abuse/Dependency as a risk factor

- Recent review reports rates of substance abuse/dependence in remission between 17 - 26% in chronic pain populations (Strain, 2002).
  - Random sample of 300 veterans charts and pharmacy records, 21% of those with CNMP and regularly filling an opioid prescription had a documented past history of substance abuse but no current indication of abuse or dependence (Clark, 2002).
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# Correlates of analgesic abuse in chronic nonmalignant pain patients with a history of addiction

- Absence of family support
- Lack of 12-step involvement
- Recent history of polysubstance abuse (not alcohol abuse alone)
- Previous history of chronic opioid therapy
- Failure in improvement of pain symptoms

(Dunbar & Katz, 1996)

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# Addicts, like patients with poorly treated pain, do not function very well.

- If pain is opioid responsive, patient should improve in functional domains
    - If patient is addicted, improvement will not occur
      - Unable to demonstrate gains, and in fact may demonstrate losses, in multiple (physical, psychological, social, patient, vocational) domains
  - An individual with chronic pain AND untreated addictive disease will not get better with opioid prescription
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# Assessing for addiction in pain patients

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  - **Impaired Control over use/Compulsive use**
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# Aberrant Drug-Related Behaviors

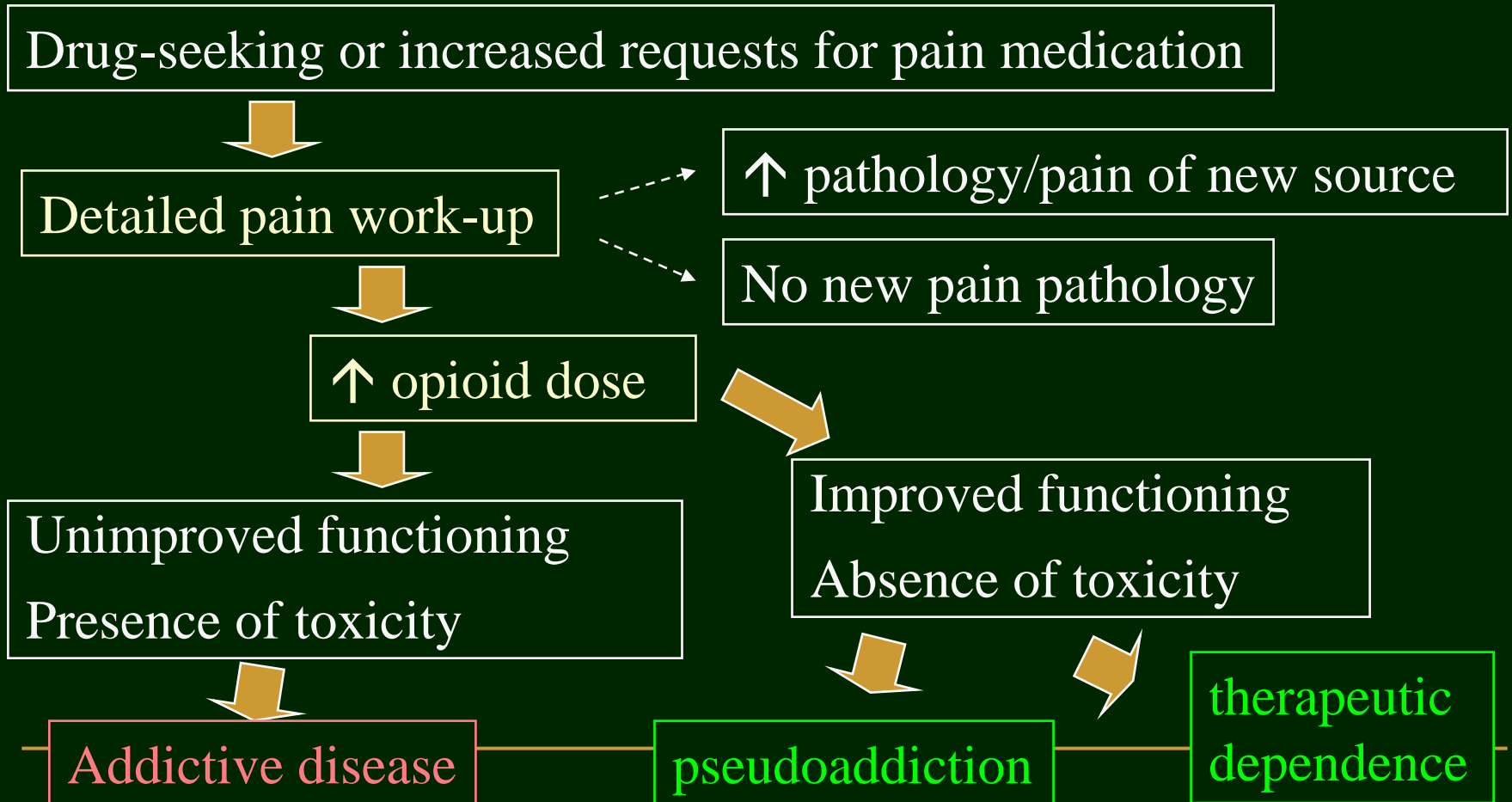
Potenoy & Payte, 1997

*Behaviors more suggestive of an addictive disorder:*

- Evidence of deterioration in the ability to function at work, in the family, or socially that appear to be related to drug use
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# Is the pain patient addicted?

(*“Drug-seeking” ≠ Addiction*)



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# Evaluation of Functional Restoration

- physical capabilities
  - psychological intactness
  - family and social interactions
  - Relationships with healthcare professionals and therapeutic outcomes
  - degree of health care utilization
  - drug use for symptom control
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# Difficulties in developing a screening tool to predict which chronic pain patients will develop opioid addiction

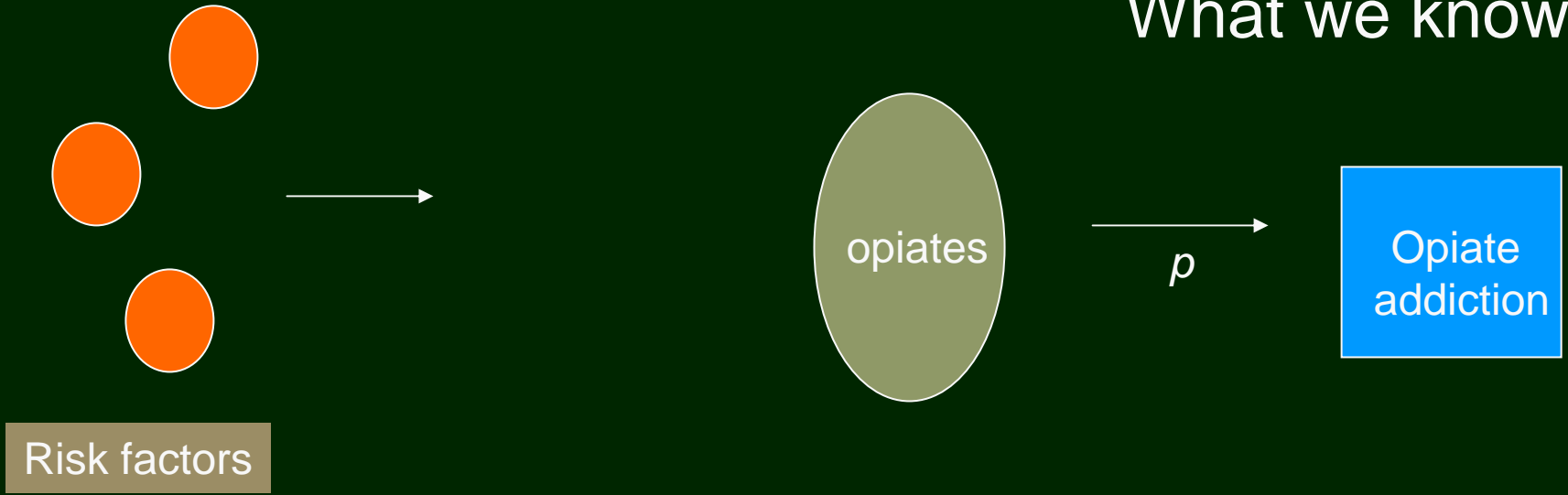
- Imprecision/inconsistencies in measurement and/or identifying cases of abuse/addiction
- Are we more concerned about avoiding false positives (specificity) or false negatives (sensitivity)?
- Exposure rate to opioid therapy in pain patients is severely truncated, such that base-rate risk estimates are difficult to ascertain

# Patterns of opioid analgesic prescription for chronic nonmalignant pain patients

- From a sampling frame of 83,000 charts, only 0.2% (n=209) patients identified with both CNMP and receiving chronic opioid analgesics
- 27% of providers did not have a single such patient in practice; most had one or two
- The most commonly prescribed (30%) drug was oxycodone/acetaminophen (mean dose 231mg morphine equivalents)
- Rates of drug and alcohol abuse diagnoses in the sample was low (3% and 6% respectively)

(Adams et al., 2001)

# What we know



# What we don't know

