Aberrant Drug-taking Behaviors: What Do We Know?

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Where Will The Pendulum Stop?

**Avoidance**
- “Will not prescribe opioids for any reason”
- Driven by fear of regulatory action or being “burned”

**Balance**
- Rational pharmacology
- Driven by continued prescribing with close monitoring

**Widespread Use**
- “Less than 1% will ever become addicted”
- Prescribing without recognition of dangers
The Four “A’s” of Pain Treatment Outcomes

- Analgesia (pain relief)
- Activities of Daily Living (psychosocial functioning)
- Adverse effects (side effects)
- Aberrant drug taking (addiction-related outcomes)

Passik & Weinreb, 1998
Pain Assessment and Documentation Tool and Guidebook

Janssen Pharmaceutica Products, L.P. would like to thank you for your commitment to the management of chronic pain. Welcome to the Pain Assessment and Documentation Tool (PADT) Guidebook. This guide has been designed to explain the purpose of the PADT and clarify how to use it.

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Aberrant Drug-taking Behaviors: The Model

- Probably more predictive
  - Selling prescription drugs
  - Prescription forgery
  - Stealing or borrowing another patient’s drugs
  - Injecting oral formulation
  - Obtaining prescription drugs from non-medical sources
  - Concurrent abuse of related illicit drugs
  - Multiple unsanctioned dose escalations
  - Recurrent prescription losses

- Probably less predictive
  - Aggressive complaining about need for higher doses
  - Drug hoarding during periods of reduced symptoms
  - Requesting specific drugs
  - Acquisition of similar drugs from other medical sources
  - Unsanctioned dose escalation 1 – 2 times
  - Unapproved use of the drug to treat another symptom
  - Reporting psychic effects not intended by the clinician

Passik and Portenoy, 1998
### Potential Aberrant Drug-Related Behavior

*Please check any of the following items that you discovered during your interactions with the patient. Please note that some of these are directly observable (e.g., appears intoxicated), while others may require more active listening and/or probing. Use the “Assessment” section below to note additional details.*

- Purposeful over-sedation
- Negative mood change
- Appears intoxicated
- Increasingly unkempt or impaired
- Involvement in car or other accident
- Requests frequent early renewals
- Increased dose without authorization
- Reports lost or stolen prescriptions
- Attempts to obtain prescriptions from other doctors
- Changes route of administration
- Uses pain medication in response to situational stressor
- Insists on certain medications by name
- Contact with street drug culture
- Abusing alcohol or illicit drugs
- Hoarding (i.e., stockpiling) of medication
- Arrested by police
- Victim of abuse

**Other:**

- 
- 
- 

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**Assessment**

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## Physician-Ranking of Aberrant Behaviors

<table>
<thead>
<tr>
<th>Rank</th>
<th>Aberrant Behavior</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Selling prescription drugs</td>
<td>4.0 (3.5)</td>
</tr>
<tr>
<td>2</td>
<td>Forging prescriptions</td>
<td>4.4 (3.6)</td>
</tr>
<tr>
<td>3</td>
<td>Altering route or drug delivery system (ie, crushing sustained release tablets for snorting or injecting)</td>
<td>4.7 (3.6)</td>
</tr>
<tr>
<td>4</td>
<td>Concurrent abuse of related illicit drugs</td>
<td>5.1 (2.9)</td>
</tr>
<tr>
<td>5</td>
<td>Stealing or borrowing medications from others</td>
<td>5.2 (2.9)</td>
</tr>
<tr>
<td>6</td>
<td>Obtaining drug from non-medical source</td>
<td>5.8 (3.0)</td>
</tr>
<tr>
<td>7</td>
<td>Frequent prescription losses</td>
<td>6.2 (2.7)</td>
</tr>
<tr>
<td>8</td>
<td>Multiple unsanctioned dosing</td>
<td>7.4 (2.9)</td>
</tr>
<tr>
<td>9</td>
<td>Aggressive demand for more drug</td>
<td>7.6 (3.4)</td>
</tr>
<tr>
<td>10</td>
<td>Unapproved use of drug to treat non-pain symptoms</td>
<td>7.7 (3.1)</td>
</tr>
<tr>
<td>11</td>
<td>Drug hoarding</td>
<td>8.6 (3.3)</td>
</tr>
<tr>
<td>12</td>
<td>Unsanctioned dose escalation once or twice</td>
<td>9.8 (3.6)</td>
</tr>
<tr>
<td>13</td>
<td>Unkempt appearance</td>
<td>11.0 (3.2)</td>
</tr>
</tbody>
</table>

Aberrant Behaviors (n = 388)
(Passik, Kirsh et al, 2005)

% of Patients exhibiting behs.

0 (n = 215)

0.8 (n = 33)

25.3 (n = 98)

8.8 (n = 26)

6.7 (n = 26)

4.1 (n = 16)

Number of Behaviors Reported

0 2 to 3 3 to 4 5 to 7 8+

60 50 40 30 20 10 0
Aberrant Behaviors in Cancer and AIDS (Passik, Kirsh et al, 2005)
## AIDS Patients and Aberrant Behaviors

<table>
<thead>
<tr>
<th></th>
<th>Adequate Analgesia (n = 49)</th>
<th>Inadequate Analgesia (n = 24)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # aberrant behaviors</td>
<td>305 (6.2)</td>
<td>152 (6.3)</td>
</tr>
<tr>
<td>Aberrant behaviors “probably less predictive of addiction”</td>
<td>239 (78%)</td>
<td>116 (74%)</td>
</tr>
<tr>
<td>Aberrant behaviors “probably more predictive of addiction”</td>
<td>66 (22%)</td>
<td>40 (26%)</td>
</tr>
</tbody>
</table>
Aberrant Behavior vs. Abuse

Aberrant Behavior: 40%

Abuse: 20%

Addiction: 2% - 5%

Total Pain Population
Differential Diagnosis of Aberrant Drug-Taking Attitudes and Behavior

- Addiction (out of control, compulsive drug use)
  - Compton et al number of behaviors and perception as self as addict
- Pseudo-addiction (inadequate analgesia)
  - Elander certain behaviors linked to pseudo-addiction in sickle cell patients
- Other psychiatric diagnosis
  - Organic Mental Syndrome (confused, stereotyped drug-taking)
  - Personality Disorder (impulsive, entitled, chemical-coping behavior)
  - Chemical Coping (drug overly central)
  - Depression/Anxiety/Situational stressors (self-medication)
    - Inflexxion data links aberrant behavior to psychiatric comorbidity
- Criminal Intent (diversion)
  - Jung and Reidenberg: MDs cannot detect actors

(Passik & Portenoy 1996)
Predictors of Opioid Misuse in Patients with Chronic Pain: A Prospective Cohort Study.

Ives, et al., BMC Health Serv Res. 2006 Apr 4;6(1):46

- Prospective, cohort study to examine one year prevalence of “opioid misuse” in chronic non-cancer pain pts (n=196)
- Opioid Misuse defined as:
  - Negative urine toxicological screen for prescribed opioids;
  - UTS positive for opioids or controlled substances not prescribed by our practice;
  - Evidence of procurement of opioids from multiple providers;
  - Diversion of opioids;
  - Prescription forgery; or
  - Stimulants (cocaine or amphetamines) on UTS
Predictors of Opioid Misuse in Patients with Chronic Pain: A Prospective Cohort Study.

Ives, et al., BMC Health Serv Res. 2006 Apr 4;6(1):46

- Mean patient age was 52 years, 55% were male, and 75% were white.
- Sixty-two of 196 (32%) patients committed opioid misuse.
  - Detection of cocaine or amphetamines on UTS most common (40.3% of misusers).
  - Misusers more likely than non-misusers
    - Younger
    - Male
    - Past alcohol abuse
    - Past cocaine abuse
    - Previous drug or DUI conviction
    - Race, income, education, depression score, disability score, pain score, and literacy not associated with misuse
    - No relationship between pain scores and misuse
**Surprise Urine Drug Test**  
*(Katz and Fanciullo, CJP, 2002)*

<table>
<thead>
<tr>
<th>Issues--→ UDT Results</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>10 (8)</td>
<td>26 (21)</td>
<td>36 (29)</td>
</tr>
<tr>
<td>-</td>
<td>17 (14)</td>
<td>69 (57)</td>
<td>86 (76)</td>
</tr>
<tr>
<td>Total</td>
<td>27 (22)</td>
<td>95 (78)</td>
<td>121</td>
</tr>
</tbody>
</table>

A total of 53 (43%) had a “problem” so identified.
Assessment of Addiction Risk

• Measures for Screening for Addiction Risk
  – STAR/SISAP
  – CAGE AIDD
  – Opioid Risk Tool (Emerging Solutions in Pain)
  – SOAPP (see painedu.org)

• Psychiatric Interview Assessment of Risk
  – Chemical
  – Psychiatric
  – Social/Familial
  – Genetic
  – Spiritual
Opioid Risk Tool (ORT)

Administration
• On initial visit
• Prior to opioid therapy

Scoring
• 0-3: low risk (6%)
• 4-7: moderate risk (28%)
• > 8: high risk (> 90%)

Mark each box that applies: Female Male
1. Family history of substance abuse
   Alcohol □ 1 □ 3
   Illegal drugs □ 2 □ 3
   Prescription drugs □ 4 □ 4
2. Personal history of substance abuse
   Alcohol □ 3 □ 3
   Illegal drugs □ 4 □ 4
   Prescription drugs □ 5 □ 5
3. Age (mark box if between 16-45 years) □ 1 □ 1
4. History of preadolescent sexual abuse □ 3 □ 0
5. Psychological disease
   ADO, OCD, bipolar, schizophrenia □ 2 □ 2
   Depression □ 1 □ 1
Scoring totals: _______ _______

<table>
<thead>
<tr>
<th>Question</th>
<th>Caution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) How many alcoholic drinks/day?</td>
<td>Men: ≥ 5 drinks/day or ≥ 17/wk</td>
</tr>
<tr>
<td>2) How many alcoholic drinks/week?</td>
<td>Women: ≥ 4 drinks/day or ≥ 13/wk</td>
</tr>
<tr>
<td>3) Use of marijuana/hashish in last year?</td>
<td>Admission of recent use</td>
</tr>
<tr>
<td>4) Have you ever smoked cigarettes?</td>
<td>Persons who are younger than 40 years and smoke</td>
</tr>
<tr>
<td>5) What is your age?</td>
<td></td>
</tr>
</tbody>
</table>

Screener and Opioid Assessment for Patients in Pain (SOAPP)

- 14-item, self-administered form, capturing the primary determinants of aberrant drug-related behavior
  - Validated over a 6-month period in 175 chronic pain patients
  - Adequate sensitivity and selectivity
  - May not be representative of all patient groups
- A score of $\geq 7$ identifies 91% of patients who are high risk

Smoking: Predictor of Aberrant Drug Use?

- The SISAP and SOAPP include tobacco use as a factor in determining risk\(^1\),\(^2\)
- Tobacco use is highly prevalent among substance misusers\(^3\)
  - Smoking increased desire to abuse drugs in an addict population (N = 160)\(^3\)
  - Smoking may be used as a form of substance replacement in those trying to abstain\(^3\),\(^4\)

Smoking and Persistent Pain

• Chronic pain patients smoke at significantly higher rates than the general population
• Smoking is associated with nonspecific low back pain, fibromyalgia, and headache disorders.\textsuperscript{1-4}
• Strong dose response relationship exists between cigarette consumption and persistent low back pain.\textsuperscript{5}

\begin{itemize}
  \item \textsuperscript{1}Jamison et al. \textit{Addictive Behaviors}. 1991. 16: 103-10.
  \item \textsuperscript{2}Hahn et al. 2006. Submitted.
  \item \textsuperscript{3}Payne et al. \textit{Headache}. 1991. 31: 329-32.
\end{itemize}
Smoking and Aberrant Drug-taking Behaviors

- Pseudo-addiction (inadequate analgesia)
  - Smokers may require higher doses of opioids because of nicotine-opioid interactions
- Substance use disorders
  - Smoking may be a more socially acceptable form of substance use or a proxy for other forms of substance use
- Chemical coping/self-medication of pain
  - Smoking may be a means of self-medication for stressors related to persistent pain

Dhingra and Passik, Practical Pain Management (CME Supplement) 6(2) p A-D, 2006.
NIDA Study: Adherence Therapy for Opioid Abusing Pain Patients

- 40 Patients
- 2 sites in Virginia and New York
- Pain: evidence of efficacy of opioid therapy for diagnosis, > 6 months duration, and constant, moderate-severe intensity (VAS >7 despite daily opioids)
- Substance Abuse Co-morbidity: opioid abuse or dependence, > 2 on “problems with pain meds”, no current substance dependence, and lifetime dependence or current abuse permissible
- Psychiatric Co-Morbidity: no unstable major psychiatric disorders, current suicidal/homicidal ideation or medication dose considerations
- Medical Co-Morbidity: no unstable or very severe medical conditions or planned surgery within study period and not taking medications that interact with methadone

Haller D. Adherence Therapy for Opioid Abusing Pain Patients “PROJECT PAIN”. NIDA (Grant #R01DA1369) Presented at 2006 CPDD Conference.
NIDA Study: Adherence Therapy for Opioid Abusing Pain Patients

Haller D. Adherence Therapy for Opioid Abusing Pain Patients “PROJECT PAIN”. NIDA (Grant #R01DA1369) Presented at 2006 CPDD Conference.
Patient: Frequently Endorsed Aberrant Medication Taking Behaviors

- 64% increased dose without permission
- 64% continued to take opioid although relief was minimal
- 52% were concerned about use of pain medication
- 52% felt they were treated like addict
- 44% borrowed pain medication from others
- 40% frequently requested additional or stronger dose of medication
- 36% used pain medications to treat problems other than pain
- 36% argued with physician about medications
- 32% were overly concerned about access to pain medication
- 32% used pain medications not authorized by physician

Haller D. Adherence Therapy for Opioid Abusing Pain Patients “PROJECT PAIN”. NIDA (Grant #R01DA1369) Presented at 2006 CPDD Conference.
Physician: Frequently Endorsed Aberrant Medication Taking Behaviors

- 48% increased dose without permission
- 44% were overly concerned about access to opioids
- 40% argued with physician about pain medications
- 40% manipulated doctors to get more pain medications
- 40% went to ER to obtain pain medications
- 36% frequently requested additional or stronger dose of medication
- 36% use of pain medications is out of control
- 32% used recreational drugs
- 32% used more pain medications than warranted
- 32% felt they were treated like addict

Haller D. Adherence Therapy for Opioid Abusing Pain Patients “PROJECT PAIN”. NIDA (Grant #R01DA1369) Presented at 2006 CPDD Conference.
Decreases in Opioid Use**

For methadone, opioids, and oxycodone p’s < .01
Summary

• Empirical data has been accruing on aberrant behaviors

• These studies are beginning to tell us:
  – ADTBs are common
  – Frequency of ADTBs relates to addiction risk in the sample
  – ADTBs can be predicted; smoking a predictor?
  – Not impacted by adequacy of pain control in the dual diagnosis group of patients(?)
  – They can be managed with highly structured approaches