Evidence-Based Correctional Drug & Alcohol Evaluations: Critical Policy & Cost Containment Implications

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2012 ICCA Annual Conference
September 12, 2012
Agenda

- Review of methods of drug and alcohol assessments
- Risk and Needs assessments
- Substance misuse, abuse, and dependence
- Drug use and abuse among the correctional population and US public
- Supervision- Compliance and Responsiveness
- Accurate diagnosis and treatment=cost containment and better public safety results
- Future Direction-DSM-V Proposal
Assessment

- Why do an assessment?
- What should be assessed?
- Are some methods of assessment more reliable and valid than others?
Methods for Gathering Data For Drug/Alcohol Assessment

- **Self-Report**
  - Interview (ASI)
  - Self-Administered instruments (TCUDS-II, AUDIT)

- **Biological Methods**
  - Urinalysis
  - Hair Testing
  - Sweat Patch
  - Blood and Saliva

- **Collateral Sources**
  - Family and friends
  - Official files- “Jacket”, police reports, etc.
Drug and Alcohol Assessment

• Most are self-report based
• Addiction Severity Index (ASI)- most widely researched instrument- “gold standard”
• Screeners such as Texas Christian University Drug Screen-II (TCUDS-II) are useful. SASSI instruments have not been found reliable in research – high rate of false positives (Peters, 2000; Feldstein & Miller, 2006).
• Context of the assessment is important.
• Best to use multiple data gathering methods
Definitions

- **Substance misuse**: Use that is not repetitive or has not caused significant impairment.
- **Substance abuse**: Repetitive use of drugs or alcohol under dangerous circumstances that lead to clinically significant impairment.
- **Substance dependence**: Compulsive urge to use substances that reflect neurological or neurochemical damages to the brain as a result of repeated exposure to drugs or alcohol:
  - prototypical symptoms:
    - Intense cravings to use the substance
    - Uncomfortable or painful withdrawal symptoms
    - Uncontrollable binges that are triggered by ingestion of the substance

Is there a difference between drug abuse and drug dependence (addiction)?

Drug addiction is a **chronic** brain disease that affects behavior: relapse rates are similar to other chronic medical conditions.

- Drug users and abusers do not evidence the physiological and other neurobiological symptoms when the drug is withdrawn.
- Addicts spend most of their time engaged in activities related to their substance dependence needs.
- Recovery from drug addiction requires intensive treatment, followed by management of the problem over time.
Drug Addiction is a *Chronic* Disease:
Relapse Rates are Similar to Other Chronic Medical Conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percent Relapse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug Dependence</td>
<td>40 to 60%</td>
</tr>
<tr>
<td>Type I Diabetes</td>
<td>30 to 50%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>50 to 70%</td>
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<tr>
<td>Asthma</td>
<td>50 to 70%</td>
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</tbody>
</table>

• 8.9% of respondents age 12+ yrs (22.6M people) reported current use (i.e., month prior to survey) (up from 8.7% in 2009)

• 15.1% (37M) reported using illicit drug in year prior to survey

• 47.1% (118M) reported using illicit drug at some point

<table>
<thead>
<tr>
<th>Age</th>
<th>Ever</th>
<th>Past Year</th>
<th>Past month</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>10.5%</td>
<td>6.6%</td>
<td>3.6%</td>
</tr>
<tr>
<td>12-17</td>
<td>xx</td>
<td>xx</td>
<td>10.0</td>
</tr>
<tr>
<td>20</td>
<td>59.0</td>
<td>38.6</td>
<td>23.9</td>
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<tr>
<td>26-29</td>
<td>60.7</td>
<td>25.5</td>
<td>14.4</td>
</tr>
<tr>
<td>35-39</td>
<td>53.0</td>
<td>13.6</td>
<td>8.0</td>
</tr>
<tr>
<td>45-49</td>
<td>60.9</td>
<td>11.7</td>
<td>6.5</td>
</tr>
<tr>
<td>65+</td>
<td>14.9</td>
<td>1.4</td>
<td>.9</td>
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</table>
2010 National Household Survey on Drug Use

• Most common illicit drugs (current users over 12)
  • Marijuana: 17.4M (6.9%; up from 16.7M in 2009)
  • Psychotherapeutics: 7.0M (2.7%; including 5.1M uses of pain relievers, 2.2M tranquilizers, 1.1M stimulants, & 374K sedatives)

• Most common illicit drugs (lifetime)
  • Marijuana: 107.9M (41.5%)
  • Hallucinogens: 38.5M (14.8%)
  • Cocaine: 37.7M (14.5%)
2010 National Household Survey on Drug Use

- Use of Pain Relievers (users over 12)
  - 13.9% (36M) reported lifetime use
  - 4.9% (12.7M) reported use in the past year
  - 2.0% (5.1M) reported use in the past month

- Use of Alcohol (users over 12)
  - 51.8% (131.3M) reported use in the past month
  - 23.1% (58.6M) reported binge drinking (5+ drinks on same occasion in past month)
  - 6.7% (16.9M) reported heavy drinking (binge drinking 5+ days in past month)
2010 National Household Survey on Drug Use

- Initiation of Drug Use (users over 12 within past year)
  - 3.0M used illicit drug for first time in 2010 (8100 new drug users per day)
  - 61.8% reported first drug was marijuana, followed by pain relievers at 17.3% & inhalants at 9.0%

- Diagnoses (2010)
  - 22.1M (8.7%) met criteria for Substance Abuse or Dependence (DSM-IV-TR)
  - Rate is twice as high for males
Drugs of Abuse and Crime

- **Regular Drug Use**
  - 69% state, 64% federal prisoners

- **Drug Dependence/Abuse**
  - 53% jail; 53% state prison; 45% federal prison
  - 17% state; 16.8% abuse only

- **Drug Use at Time of Offense**
  - Violent crime: 28% state; 24% federal prison
  - Property crime: 39% state; 14% federal prison
  - Drug trafficking: 42% state; 34% federal prison

- **Alcohol Use at Time of Offense**
  - Violent crime: 37% state; 23% federal prison
  - Property crime: 37% state; 13% federal prison
  - Drug trafficking: 21% state; 19% federal prison

- **Costs**
  - $107 Billion for Drug Related Crime

**SOURCES:**
1: BJS 2004 Survey of Prisoners (Mumola & Karberg, 2006/7); 2: BJS 2002 Survey of Jail Inmates (Karberg & James, 2005); 3: ONDCP, 2004
Risk-Need-Responsivity (RNR)

- **Risk**: level of service varies with risk
- **Need**: Appropriate Intermediate targets of change (criminogenic/clinical needs)
- **Responsivity**:
  - General- use behavioral, social learning, cognitive behavioral strategies
  - Specific- match intervention modes and strategies to learning styles, motivation, and demographics of case
Risk/Needs Matrix

- Criminal Justice Population assessment requires an evaluation of not only substance abuse/dependence, but also general risk factors and other criminogenic needs.
- Instruments like the Level of Service/Case Management Inventory (LS/CMI) or the Risk and Needs Triage (RANT; Marlowe) provide valuable data beyond substance disorder levels for the criminal justice population.
- Risk/Need/Responsivity (RNR) as the backdrop for all assessments
Use of Risk/Needs Matrix

• Assess three primary domains:
  • Dangerousness/Violence – Use institutional infractions (prisoners), history of violent arrests/convictions, current attitude towards solving conflicts, hostile attribution bias
  • Criminogenic risk – risk to reoffend in general – (youth, male, prior felonies, treatment drop out/termination, early onset of drug use/antisocial behavior)
  • Clinical Needs – level of substance disorder (misuse, abuse, dependence), co-occurring disorders, family, criminal attitude, criminal associates.

1. See Marlowe-ibid- slide 6
A Proposed Matrix for Assessment and Treatment of Criminal Justice Population (Marlowe)

<table>
<thead>
<tr>
<th>High Risk/High Need</th>
<th>Low Risk/High Need</th>
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<tr>
<td>High Risk/Low Need</td>
<td>Low Risk/Low Need</td>
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- Setting and purpose of the assessment and treatment drive the supervision and treatment (e.g., drug court v. halfway house placement)
High Risk/High Need

• This group is very likely in need of intensive supervision and treatment (e.g. person with extensive and early felony conviction history, antisocial attitudes and associates, drug dependent, mentally ill, and no job skills.)

• Punishment or treatment alone will probably not work.
High Risk/High Risk

- Combination of treatment for addiction, mental illness, antisocial personality traits, close supervision, and swift, consistent consequences for non-compliance
- Substance use is compulsive for this population—abstinence is a long term goal; compliance with basic requirements should be rewarded and non-compliance punished.
High Risk/High Need

• Punishment is less effective than positive reinforcement. This group has been habituated to punishment.
• Populations that may respond to punishment:
  * non-impulsive, future-oriented
  * average to above-average IQ
  * minimal punishment history
  * cautious, avoids/minimizes excitement
High Risk/High Need

• In terms of medically assisted treatment (MAT) for this group as well as the other High Need group, they may benefit from agonist type of MAT.
  • Agonist medications, such as methadone, stimulate the brain and nervous system like illegal opiates, but controlled use of methadone allows the person to carry out daily living activities, while taking away the cravings and withdrawal symptoms.
  • Partial agonists such as buprenorphine (suboxone) may also work with less side effects than methadone.
Low Risk/High Need

- These individuals are often addicted to substances and their criminal behavior is directly related to their drug addiction. These folks may also have other needs such as mental illness, but do not have antisocial personality traits and lifestyle.
- Require intensive substance abuse treatment.
- Consequences should be for non-attendance at treatment.
- Do not need the same level of supervision as the High Risk/High Need group.
- Abstinence is long term goal;
- As already mentioned, use of agonist or partial agonist MATs may be useful.
High Risk/Low Need

- Individuals in this category may misuse or abuse drugs/alcohol, but are not dependent. They usually do not have severe mental illness, but have plenty of antisocial traits along with history of probation and parole violations.
- These individuals may eat up valuable substance abuse treatment resources and disrupt services with their antisocial attitudes and behaviors.
- Close supervision with swift consequences for non-compliance is recommended for this group (HOPE project as example).
High Risk/Low Need

- Drug and alcohol use is under this group’s control. Immediate and severe sanctions for positive urines (HOPE).
- Failure to comply results in rapidly ratcheted up sanctions including jail or prison for individuals who are at risk for violence.
- Non-violent offenders who are non-compliant may need electronic monitoring, home confinement, etc.
- Antagonist meds (naltrexone, naloxone) may work for this group, if warranted.
- Treatment focus on the criminogenic risks such as antisocial attitudes and associates.
Low Risk/Low Need

- Individuals in this category are not drug dependent and are at low risk for recidivism. They are usually naïve about the criminal justice system.
- Do not need rigid and intense supervision unless they become non-compliant.
- Services for this group tend to be in the early intervention/prevention category. Use of psychoeducational materials in an individual or group format.
- Mixing of this group and low risk/high need group with high risk offenders is not recommended and may increase their risk for recidivism.
Low Risk/Low Need

- Punishment or threats of punishment work best with this group. This group has not become habituated to prison or other severe sanctions so the threat of these sanctions is usually sufficient to gain compliance.
- Best to keep these individuals away from interactions with the criminal justice system.
- These type of clients may constitute a significant subgroup of drug court enrollees and probation services. Minimal resources should be applied to this group.
- However, due to their make-up, officers and counselors prefer to spend their time with this group as compared to the high-risk group.
Adaptive Programming

- Placing people in the appropriate treatment categories requires a rigorous assessment of their risks and needs.
- Offenders may be less than reliable sources of information.
- Evaluators may not have access to a good database to assist with making the initial proper recommendations.
- People’s lives change in unpredictable ways such that they may become more or less risky during the treatment timeframe.
- Individual treatment plans have to adapt to their clients’ changing circumstances.
Adaptive Programming

- Adaptive programming means that the supervision and treatment is adjusted based on the actual performance of the person in treatment.
- For example, a person originally classified as low risk/low need may exhibit behaviors that suggest a need for more intense supervision and treatment.
- One may determine that a person actually has symptoms of dependency and not just abuse or misuse. Punishing this individual for positive urines may not be the most effective method, rather increasing treatment services may make the most sense.
- Programs benefit from developing adaptive algorithms.
Adaptive Algorithms

• Algorithms or decision trees are useful to determine a structure for adaptive programming. Should not rely solely on the algorithm; (e.g structured professional judgment)

• In a drug court example, one may use decision tree to determine frequency of court hearings (more frequent for high risk), determine whether a person is acting non-compliant (number of missed counseling sessions, failures to provide urine samples) or non-responsive to the current level of treatment ( number of positive drug urines).

• Adaptive programming and the risk/needs matrix can be used in a variety of settings including drug court, intensive outpatient treatment, and residential treatment.
DSM-V for Substance Abuse Disorders

- The proposal for the DSM-V diagnosis for substance abuse disorders would collapse the abuse and dependence diagnoses.
- The legal problem criterion was removed.
- 11 symptoms representing a mixture of prior DSM criteria for abuse and dependence.
- Severity specifiers using number of criteria met
- Physiological dependence or not
- Course specifiers are described (e.g. in a controlled environment)
DSM-V Implications

• If the current proposal remains in its’ current form, then the differentiation between abuse and dependence will be essentially eliminated; changing substance use to a dimensional rather than categorical diagnosis.

• May make it more difficult to decide category of risk and treatment as abusers’ needs are different than people with substance dependence (addicts)

• Potential Impact of the change should be studied before full implementation
Policy Implications and Cost Containment

• Programs such as many drug courts often assume that the offender is addicted to a substance and therefore “one size treatment fits all.”

• The opposite approach is a program like HOPE that also uses a “one size fits all,” but treats probationers as non-addicts and punishes them for positive urines.

• The premise of this talk is that a proper assessment of risk/needs of the individual has to occur before supervision, sanctions, and treatment is determined.

• Also, treatment and supervision services have to adapt to the offender’s performance during treatment.
Policy Implications and Cost Containment

- The risk/needs matrix presented is based on the Risk/Need/Responsivity (RNR) Principles developed by Don Andrews, Jim Bonta, and others. Doug Marlowe and others have further refined RNR to accommodate the special needs of the substance abuse population.

- Designing services based on current levels of risk, number of criminogenic needs, and responsivity needs contains costs by delivering services that are matched to the offender. Providing low risk offenders with intensive services and supervision is a waste of taxpayer’s money; strains the tight State and County budgets; and may put the offender at higher risk (iatrogenic effects).