Managing Addiction in Offenders through
Court-Mandated Treatment

Ekaterina Pivovarova, Ph.D.
Assistant Professor of Psychiatry
University of Massachusetts Medical School

Research Supported by KL2TR001455-03 through UMass Center for Clinical & Translational Science Award 5UL1TR001453
Overview

- Addiction and the criminal justice system
- Description of drug treatment court (DTC)
- Pilot research examining quality of life, chronic conditions, and perceptions of addiction in DTC
- Discussion and Q&A
Addiction Disproportionately Affects CJ Populations

- Up to 65% of current or past offenders were estimated to meet criteria for Substance Use Disorders (SUD) \(^1\)
- Perpetual cycle of drug use, illicit activities, and failing to engage in and remain in SUD treatment
Addiction and criminal behavior

- Inherent relationship between addiction and drug use
- According to NIDA Principles of Drug Abuse Treatment for CJ populations, drug abuse is implicated in at least 3 types of drug related offenses:
  - 1. defined by drug possession or sale (e.g., distribution)
  - 2. related to drug abuse (e.g., stealing, driving under influence)
  - 3. offenses related to lifestyle associated with addiction (e.g., trespassing, conspiracy)
Drug offenses are the most common reason for incarceration in prisons.

State and federal prison admissions by offense type, 1993-2009

Note: Federal admissions data not included prior to 1998 because data were unavailable. Source: Author analysis of various sources from the Bureau of Justice Statistics. 1993-2009 state admissions data from National Corrections Reporting Program and "National Corrections Reporting Program: Most serious offense of state prisoners, by offense, admission type, age, sex, race, and Hispanic origin"; 1998-2009 federal admissions data from Federal Criminal Case Processing Statistics.
Addiction and Criminal Behavior

- Reduced drug use is associated with decreased criminal activities\textsuperscript{3-5}
- Therefore, we should treat inmates for SUDs, in part, to improve public safety

“Not treating a drug-abusing offender is a missed opportunity to simultaneously improve both public health and safety” Chandler et al., (2010, JAMA)\textsuperscript{4}
Addiction and Overdose in CJ populations

- Individuals with CJ involvement are at increased risk for death from overdose
  - Nationwide, offenders are 12x more likely to die of drug overdoses in the first 2 months of release\(^6\)
  - Death from overdose was 129 times higher in the first 2 weeks after release from prison compared to general population\(^6\)
  - Offenders in MA were 55 times more likely to overdose than community members within 3 months of release from prison\(^7\)
  - Overdose is the leading cause of death in recently released offenders, with women at increased risk\(^8,9\)
Yet...

- Most offenders who are incarcerated do not receive any SUD treatment

- According to the National Center for addiction and Substance Abuse report (2010)\textsuperscript{10} only 11% of those incarcerated and who have SUD receive treatment for addiction
Why don’t incarcerated offenders receive SUD treatment?

- Barriers to provision of treatment\textsuperscript{11-13}, including
  - Acceptance from corrections
  - Lack of resources
  - Inadequate infrastructure
  - Stigmatization associated with drug use
  - Limited continuity of care
- More likely to receive treatment in federal prisons than in local jails\textsuperscript{14}
- Facilities can provide a range of treatment if willing (e.g., group and individual therapy, AA/NA, and MAT)
Medication Assisted Treatment (MAT) during incarceration

- MAT is the gold standard for treatment of opioid use disorders
- Should be used long-term as unsupervised discontinuation can lead to reluctance to engage in future treatment and produce severe and extended withdrawal symptoms
- But correctional facilities are concerned about
  - Diversion especially with Suboxone (Buprenorphine)
  - Substituting one addiction with another
  - Costs
  - ...
MAT in Correctional Settings

- In 2009, 55% of US prison systems reported that they offered methadone treatment\textsuperscript{16}
  - BUT more than 50% did so only for pregnant women
  - Only 14% offered buprenorphine
- In recent years, there has been a shift, with increased willingness to offer MATs, especially close to discharge
- Rhode Island Department of Corrections now offers all inmates all types of MAT
  - Preliminary research indicates drop in overdoses, with fewer percentages of recently released offenders overdosing\textsuperscript{17}
Summary

- Even though individuals in the criminal justice are at great need for addictions treatment, it is not readily available.
- Research suggests that there are effective interventions.
- Some indication that there may be a trend towards increased acceptance by Corrections of offering empirically based treatments during incarceration.
What other solutions are out there?
Drug Treatment Courts (DTC) programs

- Originated in 1989 to provide addictions treatment to CJ involved individuals with intent to minimize incarceration and re-offense rates
- More than 2,700 nationwide, with 25 DTCs in MA
- DTCs mandate offenders charged with drug related offenses to drug and alcohol treatment in exchange for avoidance of jail/prison time
- Program length ranges from 15 to 24 months or more
- Failure to complete the program results in incarceration
Total Drug Courts Operating in the United States
(Adult, Juvenile, Family, Tribal and Veterans Programs)
* based on information compiled by the BJA Drug Court Technical Assistance Project at American University
Who enrolls in drug courts?

- Individuals with a history of drug and alcohol abuse and who are accused of crimes related to addiction
- Courts aim to enroll high risk/high need offenders
- Usually exclude individuals with distribution charges or serious felonies
- There are some documented racial disparities, such that Black and Hispanic offenders enroll at lower rates than Whites, but no good nationwide data exist
- Reasons for racial discrepancies are unclear but likely due in part to:
  - Systematic prejudice via selection bias
  - Lack of standardization in procedures
  - Greater mistrust about the process by minorities
  - Differences in drug use patterns
Standards for Drug Courts

- National Association for Drug Court Professionals developed best practice standards that courts that want certification must follow\textsuperscript{20-22}, including:
  - Use of incentives, sanctions, and therapeutics adjustments
  - Provide evidence based SUD treatment
  - Complementary treatment and social support services
  - Conduct regular drug and alcohol testing
  - Use multidisciplinary teams
- Major change in 2015, when NADCP made it mandatory that courts allow use of MAT
MA Drug Courts

- Drug court manuals were developed for adult and juvenile drug courts by the Executive Office of the Trial Court
- Trial Court and MA Center of Excellence for Specialty Courts provides certification to courts that meet criteria (based largely on NADCP guidelines)
- [www.macoe.org](http://www.macoe.org)
DTCs are generally effective...

- Meta-analyses have shown that DTCs decrease SUDs, likelihood of drug and alcohol relapse, and re-offense\textsuperscript{23,24}
- Attrition (dropout) rates can be as high as 75%, with on average only 49% completing the program
- Those who fail to complete the program are usually incarcerated and often must serve the full length of their original sentence (i.e., possibly longer than if they were to take a plea)
- Those who fail to complete the program also have higher rates of relapse and re-offense
What impacts DTC attrition?

- Past research has focused on demographics or program features, with limited success of identifying who will succeed or fail and subsequently developing a program to improve retention\textsuperscript{25-27}.

- Predictors include
  - inadequate length of treatment
  - intensity of treatment
  - younger age at enrollment
  - low motivation
  - heroin use
  - cocaine/stimulant use
  - being male
  - being of minority race/ethnicity
  - comorbid psychiatric conditions
  - not being compliant with medication
  - extensive criminal history
  - education
Summary

- Drug Treatment Courts can be an effective solution to reducing rates of drug use and recidivism
- National and state guidelines exist to help to ensure some consistency and evidence based implementation in program administration
- Yet, many individuals who start DTC programs don’t finish drug court and are back in the cycle of use and incarceration
Research aimed at improving retention rates

- This study proposes that health-related quality of life (QOL), social support, and self-efficacy are driving some of the attrition rates and thereby drug/alcohol relapses
Figure 2. Relationship between QOL, psychosocial variables, and attrition from DTC
Why is QOL relevant to attrition from DTC and retention in SUD treatment?

- QOL → self-perceived physical and mental health and it’s effects on wellness & functioning
- QOL is one of the best predictors of morbidity and mortality\textsuperscript{28}
- NIDA, FDA, CDC call for greater focus on QOL in addiction\textsuperscript{29-31}
- QOL has been shown to predict treatment adherences in conditions from cancer to infectious diseases\textsuperscript{32-35}
- QOL can be measured reliably, validly, & efficiently
- Disease specific QOL leads to identification of actionable and individualized focus for treatment\textsuperscript{36,37}
Methods

- Evaluate 75 DTC participants enrolled in DTCs at three time points
  - 1) within four month of enrollment
  - 2) 6 to 9 months of enrollment,
  - 3) 12 to 15 months
- Participants will complete a semi-structured interview and self-reports measures, including SF-8 and disease specific QOL (QDIS)
- Mixed-methods analyses will examine the impact of QOL and other psychosocial variables on rates of attrition, as well as on the use of disease specific QOL to inform referrals to medical care
Pilot Data

- 30 participants from 2 MA DTCs completed semi-structured interviews and self-report instruments
  - TCUDS (drug use/addiction diagnosis)
  - SF-36
  - QDIS
  - Multidimensional Scale of Perceived Social Support
  - Drug and Alcohol Abstinence
Demographics

- Predominantly male (n=18, 60%), white (n=25, 86.2%)
- Mean age 35.8 (range 20 to 61)
- Educational Background
  - Less than high school n=12 (41.4)
  - High school diploma/GED n=12 (41.4)
  - Some college n=3 (10.3)
  - Associates degree n=2 (6.9%)
- Mostly unemployed (n=20, 66.7%), with n=7 (23.3%) working full time
- Most have been homeless or lived in a shelter at some time (n=20, 69.1%)
Demographics continued

- 73.3% (n=22) were arrested for a violent offense
- Charges include violation of probation, drug offenses, assault, larceny, breaking & entering, prostitution

History of addiction services
- All have had multiple detoxes and inpatient rehab
- Currently on medication assisted treatment (MAT) n=10 (34.5%)
- Ever on MAT n=18 (60%)
  - Most identify opiate/heroin as drug of choice
  - 30% did not meet current SUD criteria (on TCUDS)
Demographic continued

- Self-report re: access to medical care
  - Have PCP (n=21; 87.5%)
  - Have dentist (n=15; 62.5%)
  - Have mental health provider (n=19; 79.2%)
  - Currently on meds (n=16; 66.7%)
Quality of Life and Chronic Disease

- Assessed using
  - SF-36
  - Chronic diseases checklist and impact on QOL
- Self-report re: access to medical care
  - Have PCP (n=21; 87.5%)
  - Have dentist (n=15; 62.5%)
  - Have mental health provider (n=19; 79.2%)
  - Currently on meds (n=16; 66.7%)
Chronic Conditions in DTC Participants

<table>
<thead>
<tr>
<th>Chronic Condition</th>
<th>N   (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liver Infection/Hepatitis C</td>
<td>22 (73.3)</td>
</tr>
<tr>
<td>Clinical depression</td>
<td>17 (56.7)</td>
</tr>
<tr>
<td>Dental</td>
<td>16 (53.3)</td>
</tr>
<tr>
<td>Allergies</td>
<td>8 (26.7)</td>
</tr>
<tr>
<td>Joint problems in foot</td>
<td>6 (20.0)</td>
</tr>
<tr>
<td>Chronic back pains</td>
<td>6 (20.0)</td>
</tr>
<tr>
<td>Hypertension</td>
<td>4 (13.3)</td>
</tr>
<tr>
<td>Dermatitis</td>
<td>4 (13.3)</td>
</tr>
<tr>
<td>Limitation in use of leg or arm</td>
<td>4 (13.3)</td>
</tr>
<tr>
<td>Anemia</td>
<td>4 (13.3)</td>
</tr>
</tbody>
</table>
Chronic Conditions in DTC Participants

- No chronic conditions
- 1 to 2 chronic conditions
- 3 to 4 chronic conditions
- 5 or more chronic conditions
SF-36® Scales Measure Physical and Mental Components of Health

Physical Component:
- Physical Function
- Role Physical
- Bodily Pain
- General Health

Mental Component:
- Mental Health
- Role Emotional
- Social Function
- Vitality

Variance Estimates:
- Physical
- Unique
- Mental
- Error

Source: Ware, Kosinski, and Keller, 1994
SF-36 Total, Component, Scale Scores

Scores for Total Sample

<table>
<thead>
<tr>
<th></th>
<th>PCS</th>
<th>MCS</th>
<th>PF</th>
<th>RP</th>
<th>BP</th>
<th>GH</th>
<th>VT</th>
<th>SF</th>
<th>RE</th>
<th>MH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>52.7</td>
<td>47.44</td>
<td>52.25</td>
<td>51.09</td>
<td>50.25</td>
<td>50.24</td>
<td>52.8</td>
<td>49.99</td>
<td>47.58</td>
<td>46.94</td>
</tr>
</tbody>
</table>

Physical Health Scores

Mental Health Scores
What do these findings mean?

- DTC participants’ QOL is as good as the general pop related to physical health but worse on mental health
- Some explanations...
  - Queries about past 4 weeks and most are currently living in residential or sober houses and therefore possibly getting any medical needs address; also most have PCP
  - Minimizing (possible but not likely)
  - Medical conditions that they do have may not necessarily impact QOL (e.g., mobility issues, pain?)
Disease-specific Health related Quality of Life

Impact of Chronic Conditions on QOL

- Liver infection/Hep C
- Clinical Depression
- Dental
- Allergies
- Joint problems in foot
- Chronic back problems
- Hypertension
- Dermatitis
- Limitation in use of leg or arm
- Anemia

Legend:
- Grey: Limited Impact on QOL (none or little)
- Red: Significant Impact on QOL (some, a lot, extremely)

# of respondents (N = 30)
Chronic Conditions

- Absence of conditions is as important to consider. No participants reported the following:
  - HIV/AIDS
  - Diabetes
  - Kidney Disease
  - Obesity
  - Hypothyroidism
  - Heart attack/congestive heart failure
  - Angina
  - Stroke
Follow Up Topics in Subsequent Research

- Hepatitis C Virus and seeking treatment
  - When and where were they diagnosed?
  - Have they received treatment? Why or why not?
  - How are they currently managing it?
  - Will participants seek treatment for issues that do not impact their QOL?
- What’s participants' understanding of how it impacts their health?
Perceptions on Addiction as a Disease

1. Addiction is a disease or a chronic condition that is a hereditary and biologically based with physical symptoms.

“You have the genes and you start using... I feel like I would like it more than someone who doesn’t [have the genes]” (#07)

“It’s not a choice because ... you’re getting physically sick” (#12)

“It rewires certain nerve endings in your brain... I’ve found myself wondering why I’m doing it and telling myself a million times that I’m not gonna do it, and I still end up feeling it [cravings]” (#16)

2. Addiction is a choice, especially relative to diseases like cancer.

“You don’t have a choice of having cancer or diabetes... You have a choice to pick up a needle” (#14)

“If you’re a drug addict, like a heroin addict, ...you put heroin in your body the first time, and it’s your decision to keep on doing it...I know it sucks, it’s hard to stop ...but it’s not a disease... Like if you got cancer you can’t say, ‘Alright I don’t want it anymore...’” (#23)

“My dad’s a heroin addict, so I think that it’s all what you choose to do with it, because my brother and sister aren’t” (#17)
Perceptions on Addiction as a Disease

3. Addiction starts out as a choice and then becomes a disease.
   “At first, if you’re abstinent from drugs and alcohol, absolutely it comes down to a choice. But I feel like once you take that choice away... For me, if I put a drink or a drug in my system, that choice is gone...” (#18)

   “…It’s a disease to a point...the way I look at it is the second you stop using, it’s choice go back out there” (#03)

4. Addiction is influenced by the environment.
   “It all depends on the environment you’re around when you grow up. If your parents are addicts or they’re just always around liquor, it gets...in your mind that it’s normal.” (#28)

   “I wasn’t born an addict, I didn’t start doing heroin ‘till I was 26 years old in jail... And the only reason why I did was because everybody else was doing it.” (#05)

   “If I didn’t have people [positive peers] around me, I definitely would be using.” (#19)
5. Addiction is socially constructed.

“If it was a disease how [can] they lock you up in jail?” (#21)

“I hate to even say this but do you know how much money is in addiction facilities? ...Sober houses, halfway houses, it’s a [expletive] market, okay? They’re making more money putting us through this program than they are keeping us in jail ... Realistically it’s all about money and it’s put as a disease to make money.” (#25)
Follow Up Topics in Subsequent Research

- What’s the impact of different perceptions on initiation and retention in treatment?
- May impact a range of issues
  - Willingness to partake in MAT
  - Compliance with MAT
  - “Buy in” to what the court is “preaching”
  - Attendance at AA and NA?
  - Participation in outpatient SUD groups
Summary

- Preliminary research suggests that even though DTC participants deal with a range of chronic conditions, many of them do not impact their QOL.
- Future research will examine the relationship between QOL and initiation and retention in treatment.
- DTC probationers do not necessarily perceive addiction as a disease. This may have important implications for the type of treatment they will be willing to engage in.
Thank you for your time and attention!

Contact information:  
Ekaterina.Pivovarova@umassmed.edu

References available upon request