A Family-Based Substance Abuse, Delinquency and HIV Prevention Intervention for Detained Adolescents

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## Introduction

- Compared to peers, teens who have been arrested are:
  - More than twice as likely to have used alcohol
  - More than 3.5 times more likely to have used marijuana
  - More than 3 times more likely to have used prescription drugs for non-medical purposes
  - More than 7 times more likely to have used ecstasy
  - More than 9 times more likely to have used cocaine
  - More than 20 times more likely to have used heroin

## Introduction

- 60-75% of incarcerated teens have a psychiatric disorder
- 80% of incarcerated teens have a learning disorder
- 20% of incarcerated teens +STD; 75% multiple partners
- Young offenders generally face multiple interrelated risk factors in the home, peer group, school, and community
- They often lack resources in the community, school, and family to counteract these risk factors
- Comprehensive, intensive intervention is needed at multiple levels to lower risk and bolster protective factors

Steinberg, 2004 ; CASA 2004; Teplin et al., 2005 ; Canterbury et al., 1995; D'Angelo & DiClemente, 1996; Pack, et al., 2000; Magura et al., 1994

## Rationale for the "Detention to Community" Model and Study

• Existing services for substance using young offenders:

- Frequently unavailable or insufficient
- Rarely evidence-based; sometimes shown ineffective
- Generally fragmented, with little coordination of systems
- Effective, multiple systems, coordinated services recommended by expert panels and workgroups
- Need powerful interventions to impact multiple problems
- Adaptation and implementation of existing evidencebased treatment may have potential to bridge systems

Drug Strategies, A Blueprint for Juvenile Reform, Models for Change: Systems Reform in

## **Detention to Community Study Aims**

- Aim 1 Intervention Development. Develop an integrated cross-context intervention for substance using youth in detention and upon release (MDFT-DTC)
- Aim 2 Effectiveness. Evaluate the effectiveness of MDFT-DTC in comparison to ESAU (standard services)
- Aim 3 HIV/STD Prevention. Evaluate the effectiveness of a family-oriented HIV/STD prevention intervention

## Method

#### • Randomization to either MDFT or ESAU

Group	MDFT (Multidimensional Family Therapy) ESAU (Enchanced Services)
Service	HIV/STD education module
Assessment	Both adolescents & caregivers: intake of detention, discharge from detention, at 3, 6, and 9 months following release from detention
Outcome Variables	Substance use, delinquency (adolescent self-report & juvenile justice records), risk sexual activity, biological measures of sexually transmitted infection incidence

# **Study Sample**

- Total 154 teens recruited in detention and their parents
- 60% African American; 22% Hispanic; 17% White NH
- Average 3.9 lifetime arrests
- 61% cannabis use disorder, 20% alcohol use disorder, 10% other drug dependence or abuse
- 43% met criteria for conduct disorder, 20% ADHD
- 74% reported moderate-high risk sex
- 64% sing-parent homes; average income \$18,000
- 39% of parents with alcohol or drug abuse, 75% parent in criminal justice system

## Settings

- Juvenile detention centers in two South Florida counties, Miami-Dade & Pinellas
- MDFT Condition: following detention discharge, youths received outpatient treatment from the same therapists in the detention phase of the study
- **ESAU condition**: received group-based cognitive behavioral treatment from local substance abuse treatment agencies
- **Both conditions**: therapists received weekly supervision, including videotaped review of treatment sessions & fidelity to the respective intervention.

## **Multidimensional Family Therapy-DTC**

#### Stage 1. In Detention: Engagement and Motivation

- Meet with youth in detention and parents in the home
- Build relationships with detention staff, P.O., and attorneys
- Standard HIV prevention group intervention
- Stage 2. In the Community: Create Change
  - Parent sessions (functioning, parenting)
  - Adolescent sessions (self examination, behavior change)
  - Family sessions (change family interactions)
  - Multifamily HIV prevention intervention
  - Case management reduces stress and treatment barriers

## **MDFT HIV Prevention Intervention**

- Three 2-hour multifamily group sessions integrated into the ongoing MDFT treatment
- Parents and teens engage in some separate activities to facilitate self examination and knowledge acquisition
- Part of each group brings all parents and teens together to open lines of communication, face teens' actual risk level, and develop plans/commitment to keep teens safe
- Content and themes discussed in groups are brought into and deepened further in ongoing MDFT sessions

## **Enhanced Services as Usual (ESAU)**

- Stage 1. In detention: Included crisis intervention as needed, group psychoeducation, and standard HIV prevention group
- Stage 2. In the Community: Referred to communitybased drug treatment facilities
  - Services based on cognitive-behavioral treatment
  - Both programs offered 2 CBT groups per week
  - Individual sessions to motivate and engage
  - Random drug testing
  - Referrals for additional services as needed

## Results

 Relative to Miami-Dade County, Pinellas County participants had:

- More female participants
- More White, Non-Hispanic participants
- Higher family incomes
- Higher number of lifetime arrests
- More likely to meet substance dependence criteria
- Higher number of comorbid diagnoses
- More likely to have family members with substance use problems or CJ involvement

#### Results

- Treatment differences favoring MDFT more pronounced in Pinellas County
  - Substance use
  - Delinquent behavior
  - Total number of sex acts
  - Unprotected sex acts
  - No treatment differences in STI incidence

#### **Explanation for Site Effects**

- First hypothesis: Client Severity
  - Henderson et al. (2010) shows MDFT more effective with higher severity youth
  - Pinellas County: More juvenile justice involvement, more severe substance use, more comorbidity, more family problems (substance use, CJ involvement)
  - However, it is not true that MDFT is not effective with low severity youth (Liddle et al., 2009)
- Second hypothesis: JPO-Treatment provider collaboration
- Third hypothesis: Treatment fidelity not as strong in Miami-Dade County

## Conclusions

- MDFT-DTC impacted wide range of outcomes
- Site differences must be taken into account (more on this momentarily)
- MDFT significantly impacts intervention targets, and change in these targeted variables is, in turn, related to change in unprotected sex
- Juvenile justice-treatment systems collaboration may be critical in predicting adolescents' outcomes

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