Preliminary Outcomes from the Building Stronger Families Program: Ecological Treatment for Co-Ocurring Parental Substance Abuse and Child Maltreatment

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- National Institute on Drug Abuse (NIDA)

Substance Abuse and the Child Protection System
- Parental substance abuse identified as 1 of the top 2 reasons for child abuse and neglect [CAN] (CWLA, 1998) and is a known factor in 33-66% of all substantiated cases (USDHHS, 1999)
- Issues associated with parental addiction create unique safety concerns for the child – e.g., exposure to parent’s drug using peers, drunk driving
- Parental addiction often results in other problems including:
  - Health problems
  - Criminality
  - Unemployment, poverty
  - Lack of extended family social support

Substance Abuse and the Child Protection System
- Traditionally, families with substance abusing parents have poorest outcomes among all CPS cases
  - 2.5 times more likely to result in foster care placement
- As many as 10 providers may be called into the picture to help resolve the problem
  - Difficult for parents to meet CPS goals
  - Process alone may be iatrogenic
Traditional Treatments for Adult Substance Abuse are Incompatible with Parent Needs

- Inpatient detoxification facilities and recovery housing remove parents from children
- Treatment models focus on individual needs using individual and group treatments, rather than on family needs using family-based treatments
- Prevailing attitude is that “you can’t take care of anyone else until you take care of yourself” – Not an option for parents

Building Stronger Families

- Targets Families with Co-Occurring Parental Substance Abuse and Child Physical Abuse and/or Neglect
- Integration of 3 empirically-supported treatment models:
  - Multisystemic Therapy (MST)
  - MST for Child Abuse and Neglect (MST-CAN)
  - Reinforcement Based Therapy (RBT) for substance abuse

Cost of Substance Abuse Treatment Episode

<table>
<thead>
<tr>
<th>Treatment Model</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>Screening &amp; Brief Int., (1-2 days)</td>
<td>$407</td>
</tr>
<tr>
<td>In-prison Therap. Com., (28 weeks)</td>
<td>$1,249</td>
</tr>
<tr>
<td>Outpatient (18 weeks)</td>
<td>$1,132</td>
</tr>
<tr>
<td>Intensive Outpatient (12 weeks)</td>
<td>$1,384</td>
</tr>
<tr>
<td>Treatment Drug Court (46 weeks)</td>
<td>$2,486</td>
</tr>
<tr>
<td>Residential (13 weeks)</td>
<td>$2,907</td>
</tr>
<tr>
<td>Methadone Maintenance (87 weeks)</td>
<td>$4,277</td>
</tr>
<tr>
<td>Therapeutic Community (33 weeks)</td>
<td>$14,818</td>
</tr>
</tbody>
</table>

Source: French et al., 2008; Chandler et al., 2009; Capriccioso, 2004

Multisystemic Therapy (MST)
What is MST?

- A Blueprints Program, originally developed for serious juvenile offenders (see Henggeler et al., 2009)
- Youth aged 12-17 within the juvenile justice system
- Comprehensively addresses the individualized risk factors for juvenile offending
- Based on ecological and family-systems theory:
  - Youth / parent behavior is determined by the systems in which the individual is embedded (family, peer, school, community)

What is MST?

- In-home model of service delivery
- Therapists have small caseloads and provide intensive interventions (multiple times a week) for 4-6 months
- 24/7 availability
- Well-specified quality assurance system
- Present-focused and action-oriented
- Uses family strengths as levers for change

What is MST?

- Within ecological framework, delivers empirically-supported interventions:
  - Structural/strategic and behavioral family and couples therapies
  - Cognitive-behavioral therapy
  - Behavioral therapy
  - Parent training

MST for Child Abuse and Neglect (MST-CAN)
What is MST-CAN?

- All components of Standard MST (e.g., home-based service delivery, 9 principles, ecological focus, empirically-supported interventions)
- Applied to families involved in the child protective service system
- Enhance / adapted to meet the needs of this population

MST-CAN Model Adaptations

Population
Abused and Neglected Children
Youth Ages 6-17

Caseload
Maximum 4 Families
Greater Focus on Adult Treatment
Greater Focus on Needs/Treatment of All Family Members

Treatment Length
6-9 Months

Risk Factors

The Fit -- Problems That Drive Child Physical Abuse and Neglect

CHILDMPT
Aggression
Noncompliance
Difficult Temperament
Age
Delayed Development

PARENT
Depression
Substance Abuse
Low Self-Esteem
Poor Impulse Control
Antisocial Behavior
Poor Knowledge of Child Development
Negative Perception of Child
History of Maltreatment as a Child

SOCIAL NETWORK
Social Isolation
Dissatisfaction with Social Supports
Low use of Community Resources
Limited Involvement in Community Activities

FAMILY
Marital Status-Single
Unsatisfactory Marital/Partner Relationship
Spouse/Partner Abuse

MST Adaptations

Key Systems Involved
Child Protective Services
Family Court

Additional Empirically-Supported Components to Standard MST to Address Problems Commonly Found in CAN Families
MST-CAN Clinical Adaptations
- Family Safety Planning
- Functional Analysis of the Use of Force or Physical Discipline
- Treatment for Anger Management
- Treatment for PTSD
- Treatment for Substance Abuse
- Family Communication Training
- Clarification of the Abuse
- Evidence-Based Psychiatric Care (dedicated 20% psychiatric time)
- Involving CPS in Treatment

Reinforcement-Based Treatment (RBT)

What is RBT?
- An incentive-based drug-free treatment program for adults who abuse opiates, cocaine, or other substances
- Derived from the Community Reinforcement Approach (CRA) to substance abuse treatment
  - Enhanced reinforcement
  - Incorporates Motivational Interviewing techniques
- Typically administered using a day-treatment program model of service delivery
- Short-term (4 - 6 months) and intensive (6 days/week initially)
- Highly individualized interventions

Assumptions Underlying RBT
- Substance abuse (SA) is a learned behavior that can be changed
- SA is “logical” in the sense that it is maintained by reinforcement principles and classical conditioning
- Positive reinforcement can effectively modify behavior – must find reinforcing activities and experiences that will compete with drug use
- Removing environmental cues also helps prevent relapse
- Relapse-prevention philosophy – “everyone is abstinent” at intake (strength-based)
- Abstinence requires the support of the natural ecology
RBT Treatment: Functional Analysis, Motivational Interviewing, and Detoxification

- Functional analysis of use patterns to determine the needs met by SA (e.g., social interaction, anxiety reduction, avoidance of negative experiences)
- Functional analysis of client’s longest period of sobriety to determine behaviors that have competed with drug use in the past (e.g., NA/AA attendance, different set of friends)
- Feedback session to motivate clients to “sample sobriety”
- 3-5 day inpatient detoxification if necessary (in the case of physical dependence)

RBT Treatment: Engaging in Activities that Compete with Drug Use

- All clients have individualized goals for 2 major competing activities:
  - Employment – e.g., job skill development, job attainment
  - Recreation – learning how to have fun without substances, anxiety reduction, etc.
- Some clients have goals for other activities that have supported sobriety in the past, e.g.:
  - Attendance at AA/NA
  - Psychiatric medication use
- All competing activities are monitored, graphed, and discussed by the therapist and the client several times per week, and goal attainment is reinforced by the therapist and members of the natural ecology

RBT Treatment: Creating an “Atmosphere of Reinforcement” for Sobriety

- Substance use is monitored through urine screening and breathalyzer tests at least 3xs/week and graphed with client
- Client receives $10 voucher for each clean drug screen for the first 14 weeks of treatment
- Sobriety graphs (“streaks”) are reinforced regularly with intangible (e.g., verbal praise) and tangible (e.g., stickers and stars) rewards
- Client receives a certificate and group reinforcement for sobriety once per week at “Social Club”
- Members of the client’s natural ecology are enlisted to also provide positive reinforcement of sobriety and sobriety-related behaviors

RBT Treatment: Addressing Classically Conditioned Cues for SA

- Focus on safe, drug-free, and sustainable housing
  - Strong working relationships with recovery houses and detoxification centers
  - Coordinating funding for housing from various sources
- Individualized contracts with clients to avoid other SA cues. E.g.,
  - No contact with SA friends
  - Agreement to take an alternative route home so as not to pass by drug dealer’s corner
**RBT Treatment: Other Components**

- Functional Analysis of Relapses
- Sobriety Contracts – used initially in treatment and after relapses
- Day planning to fill and structure time (completed in individual sessions and at Social Club)
- Other skill development modules as needed (e.g., assertiveness skills training, anger management, health education)
- Attention to serious medical needs / grief and loss issues

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**Building Stronger Families: The Integration of MST-CAN and RBT**

**Building Stronger Families**

- Families
  - Parental Physical Abuse and/or Neglect of Child
  - Parental Substance Abuse
  - Youth Ages 6-17
  - Child at Risk of Removal or Has Been Removed
- Staff
  - Supervisor
  - 3 Therapists
  - Crisis Case Manager
  - Psychiatrist – 20% time – services for adults and youth
- Strong Partnership with CPS
  - CPS conducts screening and referral
  - Caseworkers dedicated to the MST Team
  - CPS receives MST and BSF training
  - Caseworker participate in key family sessions
  - Weekly therapist / caseworker consultation sessions

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**BSF: Outcomes from Pilot Study**
Eligibility and Feasibility

Eligibility criteria:
- Maltreatment report within last 180 days
- Parental substance abuse indicated in report
- Child age 6-17

First 26 families served by BSF (2005-2006):
- 87% of families approached successfully recruited
- 93% of those enrolled completed treatment

Continuous funding from Connecticut DCF since 2005
Excellent retention of caseworkers working with BSF therapists and therapists themselves

Clinical Outcomes: Study Design

- First 26 families served by BSF (2005-2006)
  - Self-report measures at pre/post treatment
- An additional 26 families who did not receive BSF identified within CPS records and matched to BSF families on key variables:
  - Parent: age, gender, ethnicity, number of previous CPS reports
  - Youth: age, gender, ethnicity, number of previous out of home placements
- Matched group not significantly different from BSF group except parents were significantly more likely to be male
  - Gender controlled for in all between-groups analyses

Participants

- Representative of cases served by DCF in New Britain, CT
- 81% Caucasian, 15% Hispanic, 4% African-American
- 83% of parents were female; 44% of target youth were female
  - More female parents in BSF (96.2%) than in TAU (69.2%; \( p = .02 \))
- Age: Parent \( X = 38.9 \) (SD = 6.3), Child \( X = 11.9 \) (SD = 3.7)
- Primary substance abused:
  - Cocaine
  - Marijuana
  - Heroin
  - Alcohol
- Parent prior reports: \( X = 4.0 \) (SD = 4.0)
- Child prior number of days in out-of-home placements: \( X = 30.6 \)

Pre/Post BSF Outcomes, parent (P) & child (C) (n = 26)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Pre M (SD)</th>
<th>Post M (SD)</th>
<th>p</th>
</tr>
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<tbody>
<tr>
<td>Beck’s Depression Inventory (P)</td>
<td>21.92 (12.07)</td>
<td>11.14 (9.51)</td>
<td>.001</td>
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<tr>
<td>Addiction Severity Index, Alcohol (P)</td>
<td>0.24 (0.20)</td>
<td>0.12 (0.16)</td>
<td>.003</td>
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<tr>
<td>Addiction Severity Index, Drugs (P)</td>
<td>0.07 (0.09)</td>
<td>0.03 (0.06)</td>
<td>.010</td>
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<tr>
<td>Conflict Tactics Scale, Psychological Aggression (P)</td>
<td>3.36 (2.57)</td>
<td>1.75 (2.02)</td>
<td>.001</td>
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<tr>
<td>Trauma Symptom Checklist, Anxiety (C)</td>
<td>47.33 (6.81)</td>
<td>43.81 (6.45)</td>
<td>.012</td>
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</table>
Effect Sizes, pre/post outcomes

Effect Size Interpretation:
Small > .2; Medium > .5; Large > .8

Substantiated Maltreatment Reports (Reabuse) and Child Out-of-Home Placements, 24 Months Post-Referral (N = 52)

<table>
<thead>
<tr>
<th></th>
<th>BSF M (SD)</th>
<th>TAU M (SD)</th>
<th>p</th>
<th>η</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent (of any child)</td>
<td>0.2 (0.5)</td>
<td>1.0 (1.1)</td>
<td>.001</td>
<td>.25</td>
</tr>
<tr>
<td>Child (by any caregiver)</td>
<td>0.2 (0.4)</td>
<td>0.9 (1.0)</td>
<td>.01</td>
<td>.17</td>
</tr>
<tr>
<td>Number of out of home placements</td>
<td>0.4 (1.5)</td>
<td>0.7 (1.6)</td>
<td>ns</td>
<td>---</td>
</tr>
<tr>
<td>Days in placement</td>
<td>50.9 (148.7)</td>
<td>79.0 (156.2)</td>
<td>ns</td>
<td>---</td>
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</tbody>
</table>

Note. TAU = Treatment As Usual. Analyses control for parent gender.

Next Steps for BSF

- Randomized clinical trial currently underway in New Britain, CT
  - Funded by the National Institute on Drug Abuse (NIDA)
  - Eventual N = 120 families randomly assigned to receive BSF or Comprehensive Community Treatment
  - Range of substance abuse, clinical, child welfare, and cost outcomes examined
- Dissemination pilot studies to be conducted in collaboration with MST Services, Inc.

Implications for Child Welfare, Treatment Systems, and Families

- “Culture shift” within child welfare system
  - Broader and deeper view of substance abuse and interventions to address
  - Increased compassion for people in recovery
  - Wider range of options available
  - Shared risk model
  - Improved staff morale and retention
- “Culture shift” within treatment systems
  - Fully sharing the responsibility for risk and protection of children
  - Working partnerships with child welfare
  - Increased flexibility in treatment provision (e.g., detoxification facilities, recovery houses)
- Families: increased trust and partnership with child protection, less adversarial
For more information:

- Cindy Schaeffer: schaeffe@musc.edu
- Cynthia Swenson: swenocc@musc.edu

Additional resources: Scholarly articles and websites


Website: www.mstservices.com

Additional resources: Books
