Implementing EBIs in Family Drug Treatment Courts to Enhance Services for Substance Abuse Affected Families: Process, Outcomes, and Cost Savings

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Agenda

What do we know about family drug treatment courts (FDTCs)?

Where do family-based services fit into FDTCs?

Strengthening Families Program + Celebrating Families! Program
  1. Implementation Process
  2. Child Welfare Outcomes
  3. Cost Analysis

Putting it all together
Substance Abuse in Child Welfare

18-24% of all reported cases of maltreatment &

50-79% of child abuse/neglect cases in foster care

involve parental substance abuse (Testa & Smith, 2009)
Substance Abuse in Child Welfare

Families in foster care due to parental substance abuse are some of the most challenging cases to serve:

- Spend more time in foster care (Lewis, Viovannoni, & Leake, 1997; Brook, McDonald, Gregoire, Press, & Hindman, 2010)
- Less stable placements (Smith, Johnson, Pears, Fisher, & DeGarmo, 1997)
- Less likely to reunify (Akin, Brook, & Lloyd, 2015; Brook, et al., 2010; Brook & McDonald, 2007; Courtney & Hook, 2012; Miller, Fisher, Fetrow, & Jordan, 2006)
Substance Abuse in Child Welfare

Lloyd & Akin, 2014
Family Drug Treatment Courts

Started in 1994 in Washoe County, NV and Miami-Dade County, FL

Focus on timely access to, and court monitoring of, parents’ substance abuse treatment

Key features:
- 10 Key Components of Drug Courts
- Shared focus on parent and child
Prior Research on FDTCs

FDTC families spend fewer days in foster care and are less likely to reunify

Fast entry into FDTC = enter treatment faster = ↑ reunification (Worcel, Green, Furrer, Burrus, & Finigan, 2007)

↑ court appearances and UAs = ↑ reunification (Worcel et al., 2007)

↑ meetings with treatment counselor and ↑ positive relationship = complete treatment = ↑ Reunification (Worcel et al., 2007)

↑ time in treatment = complete treatment = ↑ reunification (Green, Furrer, Worcel, Burrus, & Finigan, 2007)

BUT, no randomized controlled trials.
7 Ingredients of FDTCs

The National Center on Substance Abuse and Child Welfare (2015) identified 7 important ingredients of FDTCS:

(1) System of identifying families
(2) Earlier access to assessment and treatment services
(3) Increased management of recovery services and compliance
(4) Improved family-centered services and parent-child relationships
(5) Increased judicial oversight
(6) Systematic response for participants – contingency management
(7) Collaborative non-adversarial approach across systems & court
# Adult, Child, and Parent Needs in Family Drug Treatment Courts

<table>
<thead>
<tr>
<th>Domain</th>
<th>Adult</th>
<th>Child</th>
<th>Parent</th>
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</thead>
<tbody>
<tr>
<td>Risks &amp; Needs</td>
<td>• Severe SUD</td>
<td>• Prenatal substance exposure</td>
<td>• Prior foster care experiences</td>
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<tr>
<td></td>
<td>• MH issues</td>
<td>• Trauma</td>
<td>• Insecure parent-child relationship</td>
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<tr>
<td></td>
<td>• Case management issues</td>
<td>• Behavioral and developmental problems</td>
<td>• Poor communication skills</td>
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<tr>
<td></td>
<td></td>
<td>• Insecure parent-child relationship</td>
<td>• Ineffective supervision and discipline practices</td>
</tr>
<tr>
<td>Primary Service Provider</td>
<td>• SA Tx</td>
<td>• Pediatric medical care</td>
<td>• Parenting services provider</td>
</tr>
<tr>
<td></td>
<td>• MH services</td>
<td>• Foster care provider</td>
<td></td>
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<tr>
<td></td>
<td>• Case mgmt. services</td>
<td>• Children’s MH Tx</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Parenting services provider</td>
<td></td>
</tr>
<tr>
<td>Best Practices</td>
<td>• Quick entry into Tx</td>
<td>• Early intervention</td>
<td>• Family-based skill building</td>
</tr>
<tr>
<td></td>
<td>• Frequent UAs</td>
<td>• Placement stability</td>
<td></td>
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<tr>
<td></td>
<td>• Good Tx relationship</td>
<td>• Trauma-informed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Matched services in Tx</td>
<td>• Family-based skill building</td>
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</table>
Family-based Skill Building

Kaminski, Valle, Filene, & Boyle (2008):

- Meta-analysis of 77 studies on parent training programs for children ages 0-7
- Predictors of parenting skill outcomes:
  - Positive interactions with child
  - Emotional communication
  - Practicing with own child
- Predictors of child behavioral outcomes:
  - Positive interactions with child
  - Time out
  - Consistent responding
  - Practice with own child
Our Research

(1) Implementation of two family skills-based programs in two FDTCs: SFP & CFP (Akin, Brook, Byers, & Lloyd, 2016)

(2) Child welfare outcomes in a FDTC (Brook, Akin, Lloyd, & Yan, 2015)

(3) Cost analysis in a FDTC (Brook, Akin, Lloyd, Johnson-Motoyama, & Yan, in press)
Study Sites

- Tulsa County, OK FDTC
- CAM Project
- Integrated FDTC
- Implemented SFP + CFP

- Wapello County, IA FDTC
- RPG Project
- Integrated FDTC
- Implemented SFP + CFP, but dropped CFP
IMPLEMENTATION STUDY

- EBI may be associated with strong outcomes in one setting, but findings are not replicated.
- Implementation Science seeks to understand what factors influence successful intervention implementation.
Implementation Framework: 6 Key Factors

- Process
- Provider
- Organization
- Structure
- Innovation
- Client
Implementation Study

- N = 10
- Administrators (n = 3), Frontline Service Providers (n = 5), EBI Coordinators (n = 2)
- Implemented Strengthening Families Program (SFP) and Celebrating Families! Program (CFP)
- Modified Analytic Induction method for hypothesis testing (using 6 Implementation Factors)
- Interview guide: Open-ended questions on (1) practitioner background, (2) EBI training, (3) EBI coaching, (4) EBI practice with families, (5) families’ response to EBI, and (6) administrative and organizational supports.

Process Factors

❖ What Makes a Training Good?
  ❖ Interactive
  ❖ Hands-on
  ❖ Engaging

❖ Coaching after training was important

Well, the actual training in and of itself, I loved the role-play and I loved the very specific techniques. I mean, we got to practice.... I get a lot out of a training when you get to apply things and do things, as opposed to just read a book and take a test.
Provider Factors

- Varied experience with implementing EBIs
- Contrary to earlier research on child welfare workers’ attitudes about EBIs (Aarons, Green, & Miller, 2012; Gray et al., 2013), we found that most participants were interested in and satisfied with the EBIs.
Organizational & Structural Factors

Organizational Factors

- Mixed findings on buy-in from frontline workers
- Biggest challenge was adequate staff and facilities

Structural Factors

- Policies and turnover in other systems (i.e., court, CWS)
- FDTC decision-making (e.g., inpatient treatment or jail sanction)

This is probably the most rewarding thing that our counselors said that they had ever done, but it's a really intense program and when you do it for three years, two nights a week, it can lead to burnout of some of our staff.
Innovation Factors

- Using a manualized curriculum can be a challenge due to amount of content to cover and rigidity
- Consultation and experience delivering intervention helped with this
- Client and provider relationship and satisfaction with EBI were linked
- Clients’ enthusiasm about the programming and structure of the EBI that supported relationship-building positively influenced the provider’s program buy-in
Client Factors

- Challenges included children’s behavioral health needs, uneven parent participation due to inpatient treatment, and foster parent buy-in
- Parents’ responses were generally positive and engaged

Even if they’re failing UAs, even if they’re failing to do other things they almost always come to SFP. They almost always participate. I mean, like 99 percent of the time – even if they’re AWOL from everything else, they’ll show up. And, you know, I think that speaks to the program. And that’s been a little bit hard, because initially, the courts are designed to be punitive often, and so “well they can’t come if they’re not doing anything else.” So we’ve had to work through that.
CHILD WELFARE OUTCOMES STUDY

- N = 214 children in Oklahoma FDTC & 418 propensity score matched comparison cases
- January 2011 – September 2013
- PSM on 14 key variables known to influence time to reunification
- Administrative child welfare data
- Survival analysis (life tables and Cox regression)

<table>
<thead>
<tr>
<th></th>
<th>FDC n = 214</th>
<th>Comparison n = 418</th>
<th>Statistics Test and value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child's gender (female)</td>
<td>106 (49.53%)</td>
<td>186 (44.50%)</td>
<td>$\chi^2 (1) = 1.44, P = 0.23$</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
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<tr>
<td>African American</td>
<td>12 (5.61%)</td>
<td>36 (8.61%)</td>
<td>$\chi^2 (3) = 3.76, P = 0.29$</td>
</tr>
<tr>
<td>White</td>
<td>93 (43.46%)</td>
<td>168 (40.19%)</td>
<td></td>
</tr>
<tr>
<td>American Indian</td>
<td>22 (10.28%)</td>
<td>31 (7.42%)</td>
<td></td>
</tr>
<tr>
<td>Other race</td>
<td>87 (40.65%)</td>
<td>183 (43.78%)</td>
<td></td>
</tr>
<tr>
<td>Ethnicity: Hispanic</td>
<td>27 (12.62%)</td>
<td>48 (11.48%)</td>
<td>$\chi^2 (1) = 0.17, P = 0.68$</td>
</tr>
<tr>
<td>Child's disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Retardation</td>
<td>2 (0.93%)</td>
<td>4 (0.96%)</td>
<td>$\chi^2 (1) = 0.001, P = 0.98$</td>
</tr>
<tr>
<td>Emotional Disturbance</td>
<td>21 (9.81%)</td>
<td>45 (10.77%)</td>
<td>$\chi^2 (1) = 0.14, P = 0.71$</td>
</tr>
<tr>
<td>Removal reason</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Neglect</td>
<td>101 (47.20%)</td>
<td>204 (48.80%)</td>
<td>$\chi^2 (1) = 0.15, P = 0.70$</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>4 (1.87%)</td>
<td>6 (1.44%)</td>
<td>$\chi^2 (1) = 0.17, P = 0.68$</td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>7 (3.27%)</td>
<td>19 (4.55%)</td>
<td>$\chi^2 (1) = 0.58, P = 0.45$</td>
</tr>
<tr>
<td>Other Removal Reasons</td>
<td>105 (49.07%)</td>
<td>205 (49.04%)</td>
<td>$\chi^2 (1) = 0.001, P = 0.99$</td>
</tr>
<tr>
<td>Family structure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Mother</td>
<td>72 (33.64%)</td>
<td>143 (34.21%)</td>
<td>$\chi^2 (1) = 0.02, P = 0.89$</td>
</tr>
<tr>
<td>Current Placement Setting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kinship Care</td>
<td>53 (24.77%)</td>
<td>132 (31.58%)</td>
<td>$\chi^2 (1) = 3.17, P = 0.08$</td>
</tr>
<tr>
<td>Foster Care</td>
<td>59 (27.57%)</td>
<td>127 (30.38%)</td>
<td>$\chi^2 (1) = 0.54, P = 0.46$</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child's age at removal</td>
<td>3.42 (3.76)</td>
<td>3.42 (3.92)</td>
<td>$t(630) = 0.02, P = 0.98$</td>
</tr>
<tr>
<td>Number of placements</td>
<td>1.06 (0.23)</td>
<td>1.08 (0.28)</td>
<td>$t(630) = 1.44, P = 0.15$</td>
</tr>
<tr>
<td>Remove time (in months)</td>
<td>25.31 (11.09)</td>
<td>28.41 (11.50)</td>
<td>$t(630) = 3.25, P = 0.001$</td>
</tr>
</tbody>
</table>
Results

Time from Removal to Reunification

- Days in Placement
- Proportion Reunified
- 95% CI
- Comparison
- FDC

Graph showing the proportion of reunification over days in placement, with 95% confidence intervals and comparison to FDC.
Results

Time from FDC Program Start to Reunification

- Days in Placement
- Proportion Reunified
- 95% CI
- Comparison
- FDC

- Time from FDC Program Start to Reunification
- Days in Placement
- Proportion Reunified
- 95% CI
- Comparison
- FDC
|                  | Hazard Ratio | Standard Error | z     | P>|z|  | 95% Conf. Interval |
|------------------|--------------|----------------|-------|-----|-----------------|
| FDC              | 2.78         | 0.54           | 5.24  | 0.001| 1.90, 4.08      |
| Removal time (in months) | 1.07         | 0.01           | 5.06  | 0.001| 1.04, 1.10      |
| Female           | 0.74         | 0.14           | -1.56 | 0.12 | 0.51, 1.08      |
| Race             |              |                |       |     |                 |
| African American | 0.77         | 0.26           | -0.77 | 0.44 | 0.39, 1.51      |
| Caucasian        | 0.59         | 0.19           | -1.65 | 0.10 | 0.32, 1.10      |
| American Indian  | 0.71         | 0.15           | -1.58 | 0.11 | 0.47, 1.08      |
| Other racial group (reference group) | | | | | |
| Ethnicity: Hispanic/Latino | 1.62 | 0.47 | 1.65 | 0.10 | 0.91, 2.87 |
| Current Placement Settings | | | | | |
| Kinship care     | 0.16         | 0.05           | -5.47 | 0.001| 0.08, 0.31      |
| Foster care      | 0.11         | 0.05           | -5.30 | 0.001| 0.05, 0.26      |
| Other Settings (reference group) | | | | | |
| Number of placement | <.0001 | . | . | . | . |
| Child’s disability |              |                |       |     |                 |
| Mental Retardation | <.0001 | . | . | . | . |
| Emotional Disturbance | 0.32 | 0.15 | -2.37 | 0.02 | 0.12, 0.82 |
| Removal Reasons  |              |                |       |     |                 |
| Sexual Abuse     | 2.60         | 1.58           | 1.58  | 0.12 | 0.79, 8.54      |
| Physical Abuse   | 0.83         | 0.51           | -0.31 | 0.76 | 0.25, 2.76      |
| Other Reasons except for Neglect, Sexual | | | | | |
| Abuse and Physical Abuse | 1.41 | 0.29 | 1.69 | 0.09 | 0.95, 2.11 |
| Single Motherhood | 0.78         | 0.17           | -1.15 | 0.25 | 0.51, 1.19      |
| Child’s Age at Entry into Care | 1.04 | 0.03 | 1.47 | 0.14 | 0.99, 1.09 |
COST ANALYSIS STUDY

- Oklahoma FDTC
- Updated sample: FDTC (n = 227) & PSM comparison group (n = 378)
- January 2011 – April 2014
- Administrative child welfare data and cost measures
- Survival analysis

Survival Analysis Findings

The treatment group spent an average of 227 fewer days in foster care
## Cost Measures

Foster care = $82.05 per day

<table>
<thead>
<tr>
<th>Domain</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical</td>
<td>Program expenses SFP/CF! parenting program</td>
<td>$175,000 annually</td>
</tr>
<tr>
<td>Court</td>
<td>2 key court personnel, drug testing, children’s coordination</td>
<td>$244,000 annually</td>
</tr>
<tr>
<td>Court</td>
<td>Annual funding allocation for court</td>
<td>$373,635 annually</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$792,635 annually</td>
</tr>
</tbody>
</table>
Cost Findings

- Annual total costs of program operations ($792,635) and divided by the average number of children served annually by the FDTC (89), for a per child cost to serve of $8,906.

- The average days saved in foster care placement per child was 227. Using the per diem foster care rate of $82.05, participation in the FDTC yielded a savings or avoidance of approximately $18,625 per child served.

- The difference between cost avoidance per child ($18,625) and the cost to serve in FDTC per child ($8,906) was $9,719.

- Thus, FDTC participation resulted in a net cost savings per child of more than $9,700.
Research Limitations

- We studied two Midwestern FDTCs and cannot generalize findings to other FDTCs.
- For the qualitative work, we had a small sample size (n = 10) and these findings may not reflect the experiences of individuals in other settings.
- For outcomes studies, we used a quasi-experimental design.
- We cannot state that participation in the treatment group caused our outcomes because quasi-experimental design cannot control for the potential for selection bias.
Research Limitations

• We cannot know the unique effects of FDTC, SFP, or CFP, because the treatment group participants received all three interventions.

• We do not know the extent to which families experienced improvements in parent and family skills as measured by the SFP/CFP assessment.

• Our next steps are to analyze these SFP/CFP data.

• Future research using a multi-group rigorous design is needed to understand the effect of FDTC participation with and without the enhancement of SFP and CFP.
Putting It All Together

- Adding SFP and CFP services to FDTC addressed the overlapping needs of children and parents for family skills-based services.

- 6 Implementation Factors captured the strengths and challenges of SFP & CFP implementation.

- When planning or assessing implementation, consider Process, Provider, Organization, Structural, Innovation, & Client factors.
Putting It All Together

- Engaging training with coaching after training is important to workers.
- Client & provider experiences shape one another: Parents enjoyed SFP services and that enhanced workers’ satisfaction in delivering services.
- Having adequate space, staff, and leadership support are important.
- Consultation after beginning implementation helps overcome challenges associated with the manualized curriculum.
- Collaborating with FDC on implementation to remove as many structural barriers as possible.
Putting It All Together

- Combination of services was associated with 227 fewer days in foster care and ~200% increased likelihood of reunification.

- Even after the additional expenditures associated with the FDTC and enhanced services, we calculated over $9,700 in avoided costs per child through reduced foster care usage.
Thank you!
References


References


