Improving Quality of Care through Implementation of Evidence Based Interventions in Real World Settings

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Helping Families Change Conference
February 20, 2014
Outline

• The need for empirically supported interventions, such as Triple P, to treat and prevent child behavior problems among vulnerable families
• The gap between research and community based practice
• Bridging that gap
Child Behavior Disorders

- 8.9% of children in the US meet diagnostic criteria for behavioral or impulse control disorders\(^1\)
  - (i.e., Oppositional Defiant Disorder, Conduct Disorder, Attention Deficit Hyperactivity Disorder, and Intermittent Explosive Disorder)

- This is an underestimation of child disruptive behavior problems
Early Onset Behavior Problems

• Childhood behavior problems are associated with later adverse outcomes
• Trajectory must be disrupted as early as possible when behavior patterns are most malleable
• OR provide support to parents early to prevent the development of problems!
Behavioral Parent Training (BPT)

- Interventions where parents’ behaviors are targeted for change

- Most empirically supported means to intervene to reduce child behavior problems
Why Triple P?

- Strong evidence base
- Self regulatory framework
- Normalization of questions about parenting
- Universal, population based approach
THE GAP BETWEEN RESEARCH AND COMMUNITY BASED PRACTICE
Translating Research to Practice

• The Road Ahead: Research Partnerships to Transform Services
• Bridging Sciences and Service
• President’s New Freedom Commission Report
• National Institute of Mental Health’s Strategic Plan
Mapping the Gap in one Midwestern US City\textsuperscript{3,4}

- Identified and described parenting programs and the agencies in which they are embedded
- Mapped the gap between usual care approaches to parent training and evidence based parent training
- Assessed organizational context of agencies providing parent training
Mapping the Gap Findings

- Information was collected about 35 parenting programs
  - 37% were programs developed locally by the agency
  - 63% were externally developed curriculums
  - Only three were well established with strong empirical support

- Professional development training
  - Of those using externally developed curriculums, 82% sent practitioners to be trained outside of the organization

- 77% of programs were funded all or in part by program specific grants
Mapping the Gap Findings (2)

• Attitude toward evidence based interventions
  – Empirically supported interventions were appealing
  – Open to using them with their clients

• Organizational readiness to change
  – Most reported being open to change
  – But felt no motivation to change

• Adequacy of resources to support change
  – Had mostly consistent technology available (computers, internet)
  – Lacked adequate professional and support staff
Mapping the Gap Conclusions

- Disconnect between attitudes and behavior
- Changing usual care to new and innovative interventions may require strategic implementation efforts
TRIPLE P AND CHILD PROTECTIVE SERVICE INVOLVED FAMILIES
Why Bring Triple P into Child Welfare?

• To improve mental health outcomes of children in this system of care
  – Children in child protective service systems are at high risk for disruptive behavior problems and the development of conduct disorder
    • 45% of children in the child welfare system score in the borderline or clinical levels on the Child Behavior Checklist\(^5\)
Behavioral Problems and Child Safety

- Children with borderline or clinical behavior problems are more likely to have a new maltreatment report over an 18-month period than children without behavior problems\(^6\)
Parent Training in CPS

- Parent training is included as a component of child welfare case plans in at least half of all cases served by county agencies, but evidence-based parenting programs are rarely provided\(^7\)
Preventing Conduct Disorder among Children in the Child Welfare System

PATHWAYS TRIPLE P AND CPS TRIAL
Pilot Study

• Conducted a small feasibility pilot study of Pathways Triple P delivered to parents in the child welfare service sector

• Findings
  – Parents liked the intervention
  – Found the diverse methods useful
  – Qualitatively reported changes in how they responded to their child’s behaviors
Pathways Trial (in brief)

- Families whose case is opened to child protective services following a maltreatment investigation in the metro-St. Louis region
  - Child is between ages of 3 and 11
  - Target child remained in home following the investigation

- Sample size = 144

- Randomly assigned to two conditions: Pathways or treatment as usual

- Triangulated data: parent, teacher and child report
Study Aim 1

Test the effects of Pathways Triple P, compared to treatment as usual, on child disruptive behavior

- Hypothesis 1: Parents receiving PTP will exhibit better intermediary outcomes (more positive parent behaviors and attitudes) than parents receiving TAU.

- Hypothesis 2: On average, children whose parents receive PTP will demonstrate fewer behavior problems at follow-up time points than children whose parents receive TAU.

- Hypothesis 3: Intermediary outcomes will mediate the relationship between treatment condition and child behavior outcomes.

- Question 1: Do parent and family characteristics common among the child welfare population result in significantly different child behavior outcomes?

Test the effects of Pathways Triple P, compared to treatment as usual, on child disruptive behavior
Aims 2 and 3

Aim 2: Test the effects of Pathways Triple P, compared to TAU, on maltreatment recidivism and foster care placement.

Aim 3: Measure and evaluate the costs and benefits associated with Pathways Triple P and treatment as usual.
## Parent Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>%</th>
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<tbody>
<tr>
<td>Parent Gender</td>
<td>Male</td>
<td>7.7</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>92.3</td>
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<tr>
<td>Parent Married</td>
<td>Married or Living Together</td>
<td>33.1</td>
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<td></td>
<td>All other situations</td>
<td>66.9</td>
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<tr>
<td>Parental Race</td>
<td>Black/biracial</td>
<td>66.4</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>33.6</td>
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<tr>
<td>Education</td>
<td>&lt; High School</td>
<td>32</td>
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<td></td>
<td>High School</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>&gt; High School</td>
<td>40</td>
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Mean parent age = 32.3 years
## Child Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Child Gender</td>
<td>Male</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>43</td>
</tr>
<tr>
<td>Child Race</td>
<td>Black/biracial/other</td>
<td>72</td>
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<tr>
<td></td>
<td>White</td>
<td>28</td>
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</table>

Mean child age = 7.3 years
# Economic Indicators

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<tr>
<th></th>
<th>Value</th>
<th>%</th>
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<tr>
<td>Difficulty with Bills</td>
<td>Yes</td>
<td>66</td>
</tr>
<tr>
<td>Employed outside the home</td>
<td>Yes</td>
<td>43</td>
</tr>
<tr>
<td>Own your Home</td>
<td>Yes</td>
<td>12</td>
</tr>
<tr>
<td>Own your Car</td>
<td>Yes</td>
<td>36</td>
</tr>
<tr>
<td>Qualify for Free Lunch</td>
<td>Yes</td>
<td>86</td>
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</table>
Moderators

- **Intimate Partner Violence**
  - Never: 17.7%
  - Remote: 31.2%
  - Recent: 57.1%

- **Depression**
  - Mean score of 19.3 on CES-D

- **Anxiety**
  - Mean score of 5.7 on DASS Anxiety subscale
Qualitative Findings

• Parent change
  – …I mean it taught me how to not look at the situation for what it is, but to rethink it or respond to it in a different way than I had used to handle it.
  – I would stop, breathe, rewind and then I would respond to the situation.

• Parent-child relationship change
  – “[Triple P] helped me to, you know, to get closer to him… and both of them [child and his brother].”

• Household change
  – …And, you have to learn how to do it and as I learn how to do it with my kids, its more peaceful in this house.
Triple P with urban African American Fathers

FATHERS
Purpose

• To develop a strategy to engage urban African American fathers in Triple P (*Engaging Fathers*)
  – To determine if adaptations are necessary when using Triple P with this population

• Conduct a pilot test of Triple P plus *Engaging Fathers* compared to Triple P alone with this population
Father-Child Relationships and Child Outcomes

- Father involvement in their children’s lives has been linked to children’s cognitive, social and emotional development.

- Among children of African American fathers living in urban environments, those who experience positive father-child relationships have been shown to have fewer behavior problems, and to be less likely to engage in risky or antisocial behaviors than those who experience negative father-child relationships.\(^9\)
Fathers and Services

- Some evidence suggests that father involvement in services is associated with a reduction in behavior problems among youth with disruptive behaviors reported at baseline\textsuperscript{10}
- Yet, fathers are often excluded from BPT aimed at improving child behavioral outcomes
Triple P and Fathers

- Evidence of effectiveness of Triple P with multiple, diverse populations
- Less is known about effectiveness with fathers
  - As with other parenting interventions, more mothers than fathers participate in Triple P\textsuperscript{11,12}
- Even less is known about with African American fathers
  - Race of fathers often not reported
  - With other interventions, when race is reported most father participants are white\textsuperscript{13,14}
Adaptation Framework: Map of the Adaptation Process\textsuperscript{10}

Five action steps\textsuperscript{15}

1. Assess for goodness of fit between the target population, stakeholders, the intervention and the organization
   - Need input from key informants -- specifically from members of the target population and other key stakeholders providing services to the population

2. Use what was learned in step one to determine whether to implement the intervention with or without adaptation

3. Prepare, including making any necessary changes to the empirically supported intervention

4. Pilot test

5. Implement the adapted intervention
Study Design

Phase I: Formative Research (data collected from key stakeholders)

- Fathers
  - Focus Groups (n=29)
  - Semi-structured interviews (n=19)
  - Informational Groups (n=11)

- Fatherhood Program Providers
  - Telephone Interviews (n=19)

Phase II: Develop Strategy to Engage Fathers

Develop Engaging Fathers Strategy

Phase III: Field Test

5 Treatment Condition Groups
Triple P plus Engaging Fathers
4 Comparison Condition Groups
Triple P only (n=68)
Topics, Themes, & Engagement Strategies

**Topics**
- Fathers and Parenting Interventions
- Views of Fatherhood
- Fathers and Triple P

**Themes**
- Awareness
- Not for Fathers/Not a priority
- Stigma
- Desire to be in child’s life/parent different than father
- Desire to be a better parent
- Relevant material/exposure to material decreased reluctance
- Want to see their unique circumstances reflected in the material
- Social networks
- Facilitator like them

**Strategies**
1. Strength based motivation orientation
2. Tailor examples to fathers
3. More time for informal discussions
4. Facilitated by someone like them

Adaptations to content and teaching techniques unnecessary
# Sample of African American Fathers (N=68)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>M (SD) or %</th>
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<tbody>
<tr>
<td>Parent Age (Years)</td>
<td>35.55 (9.29)</td>
</tr>
<tr>
<td>Marital Status:</td>
<td></td>
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<tr>
<td>Divorced/Single</td>
<td>82%</td>
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<tr>
<td>Living with a Partner/Married</td>
<td>18%</td>
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<tr>
<td>Employment Status:</td>
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<tr>
<td>Employed</td>
<td>28%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>72%</td>
</tr>
<tr>
<td>Monthly Income</td>
<td>1080 (1111.33)</td>
</tr>
<tr>
<td>Child Age (Years)</td>
<td>7.04 (2.86)</td>
</tr>
<tr>
<td>Child Gender:</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>51%</td>
</tr>
<tr>
<td>Male</td>
<td>49%</td>
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</table>

**Non-Resident Fathers 60%**

**Resident Fathers 40%**
Results

- 15% of children met clinical significance for behavioral disordered behavior ($n=10$)
- 70% Completed the Triple P intervention and posttest ($n=48$)
- No differences between treatment and comparison conditions
- Tested for differences between pre and post-test for all fathers in the study
# Parents’ and Children’s Pre and Posttest Means (SDs) and t-test Statistics

<table>
<thead>
<tr>
<th>Domain</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Difference</th>
<th>Effect Size</th>
<th>σ</th>
<th>t</th>
<th>d</th>
<th>p</th>
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<tbody>
<tr>
<td></td>
<td>M(SD)</td>
<td>M(SD)</td>
<td>M(SD)</td>
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<tr>
<td><strong>Parent Behaviors</strong></td>
<td></td>
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<tr>
<td>Corporal Punishment</td>
<td>4.97(1.99)</td>
<td>4.50(1.70)</td>
<td>-0.63(1.78)</td>
<td>0.35</td>
<td>-2.43</td>
<td>47</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Inconsistent Discipline</td>
<td>13.97(4.35)</td>
<td>12.22(3.57)</td>
<td>-1.45(3.76)</td>
<td>0.38</td>
<td>-2.68</td>
<td>47</td>
<td>.01</td>
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<tr>
<td>Involvement</td>
<td>36.94(6.97)</td>
<td>37.47(6.51)</td>
<td>0.53(6.2)</td>
<td>0.24</td>
<td>1.68</td>
<td>47</td>
<td>.10</td>
<td></td>
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<tr>
<td>Poor Monitoring</td>
<td>13.14(3.64)</td>
<td>12.95(3.71)</td>
<td>0.18(2.92)</td>
<td>0.06</td>
<td>0.44</td>
<td>47</td>
<td>.65</td>
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<tr>
<td>Positive Parenting</td>
<td>26.16(3.56)</td>
<td>25.56(3.43)</td>
<td>-0.20(3.83)</td>
<td>0.05</td>
<td>-0.38</td>
<td>47</td>
<td>.70</td>
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<tr>
<td><strong>Parental Stress</strong></td>
<td></td>
<td></td>
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<tr>
<td>Child Behavior</td>
<td>27.36(7.74)</td>
<td>26.55(8.60)</td>
<td>-0.65(7.19)</td>
<td>0.09</td>
<td>-0.63</td>
<td>46</td>
<td>.53</td>
<td></td>
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<tr>
<td>Parenting Competence</td>
<td>26.62(7.40)</td>
<td>24.81(6.99)</td>
<td>-1.82(6.79)</td>
<td>0.26</td>
<td>-1.84</td>
<td>46</td>
<td>.07</td>
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<tr>
<td>Parent-Child Dysfunctional Interaction</td>
<td>22.26(6.64)</td>
<td>21.61(6.21)</td>
<td>-0.66(5.08)</td>
<td>0.01</td>
<td>-0.09</td>
<td>46</td>
<td>.93</td>
<td></td>
</tr>
<tr>
<td><strong>Child Behaviors</strong></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of Disruptive Behaviors</td>
<td>96.32(35.04)</td>
<td>85.41(30.36)</td>
<td>-9.77(33.13)</td>
<td>0.29</td>
<td>-2.04</td>
<td>47</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>Parent Perception of Behaviors as Problematic</td>
<td>9.07(8.22)</td>
<td>7.68(8.09)</td>
<td>-1.08(1.13)</td>
<td>0.95</td>
<td>-1.05</td>
<td>47</td>
<td>.29</td>
<td></td>
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</tbody>
</table>
Conclusion

- Fathers and their children can benefit from participation in Triple P
- Triple P is robust
- The service needs of urban African American fathers are likely very different from this majority population
  - despite the differences, Triple P likely fits well with this population
**Implications**

- Careful consideration should be given to the decision to adapt or not adapt evidence-based interventions.
- Tests of adapted interventions may need to be compared to the unadapted version.
Acknowledgements

• Funding
  – Centers for Disease Control and Prevention, National Center for Injury Prevention and Control (1U01 CF001627-03).
  – National Institute for Child Health and Human Development (1R01HD061454-04)
  – National Institute for Mental Health (R03MH082203)
  – Implementation Research Institute (IRI) through an award from the National Institute of Mental Health (R25 MH080916-01A2) and the Department of Veterans Affairs, Health Services Research & Development Service, Quality Enhancement Research Initiative (QUERI)
• Collaborators and Community Partners
  – Missouri’s Children’s Division
  – Fathers’ Support Center in St. Louis
  – CDC: Linda Ann Valle and Colby Mosley
• Colleagues
  – Wendy Auslander
  – Arlene Stiffman
  – John Landsverk
• Team
  – Debra Robinson
  – Sharon Kramer
  – Peter Dore
  – Past and Current Students: Paul Lanier, Kristen Seay, Meg Feely, Ericka Lewis, Allison Dunnigan, Mary Jo Stahlschmidt
References


