Developmental-Behavioral Interventions in Primary Care Settings

Parent Training Groups
Pediatric Primary care activities

- Support and reassurance
- Screening
- Prevention
- Anticipatory guidance
- Referral

Pediatric primary care offices do very little intervention in any sphere
Disruptive Behaviors in Toddlers

- Common
- Wide range
- Those with high levels at risk for:
  - ADHD, ODD
  - Academic & social consequences
- Can be identified early
- Responsive to changes in parenting
“Advanced Parenting Education in Pediatrics”

APEP

An Intervention for Toddlers at risk for ODD or ADHD
Parenting groups

- Strong Evidence:
  - Children age 5 to 10 with disruptive behavior disorders
  - Prevention of child abuse

- Unknown feasibility, effectiveness:
  - Parents of toddlers
  - Pediatric setting
Why Pediatrics?

- Primary professional contact for toddlers
- Frequent and regular contacts
- Familiar and trusted context
- Preventive focus
- Non-pathologizing
- Easy access to care
AYPEP: Clinical Protocol

- 4 FQHC, 7 suburban practices
  - All > 6 pediatricians
- Brief screener for disruptive behavior at 2- and 3-year well child visit
- If elevated symptoms, eligible for participation
- 10 week parent education group
- All group meetings in pediatric practice
Parenting Groups

- Used abbreviated “Incredible Years” curriculum: [www.incredibleyears.com](http://www.incredibleyears.com)
  - Documented fidelity
- Ten 2-hour weekly sessions
- Both parents encouraged to attend
- Light dinner and refreshments served
Eye towards sustainability

• Trained 2 staff members in each office
  – Nurse
  – Nurse practitioner
  – Social worker
  – Pediatrician
  – Administrative staff

• No child care
• No transportation
APEP: Research Design

- Randomized controlled trial
  - “Immediate” parent training group OR
  - One year wait list
- Enrollment slower than expected in several practices
  - All participants assigned to PTG
- Logistical demands resulted in intervention group larger than control group
APEP: Sample

- Of parents who acknowledged disruptive behaviors, 41.6% enrolled (n=273)
  - 26% Hispanic or minority race
  - 34% high school or less
  - 26% family income < $20,000

- Children:
  - 2nd to 4th birthday
  - 63% male

- Three groups:
  - Immediate PTG: 89
  - Delayed (waiting list) PTG: 61
  - Non-randomized PTG: 123
APEG: Assessment Procedure

- Primary outcome measures
  - Early Childhood Behavior Inventory (Eyberg 1999)
  - Parenting Scale (Arnold et al. 1993)
  - Objective observations:
    - Structured tasks; 20 minutes
    - Videotaped parent-child interaction
    - Validated coding system (DPICS; Gross et al. 2003)

- Assessment schedule
  - Before the intervention
  - After the intervention
  - 6 months later
  - 12 months later

- Coders unaware of group or assessment schedule
APEP: Analyses

• Intent-to-treat
  – 80% assigned to PTG participated in at least 3 sessions
  – 73% participated in 7 sessions or more
  – 90% provided follow-up data
ECBI problem scale

Pre Post 6 mo 1 Yr
Assessment
Waitlist
ECBI problem scale

Assessment

PTG

Waitlist

Pre       Post       6-mo       1-yr

6-mo                   1-yr
ECBI problem scale

- No sig differences at Pre
- Significant change in both PTG conditions
- Interaction still significant at 1 year
- Significant time X condition interaction for both PTG conditions

No sig change in Waitlist

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Pre</th>
<th>Post</th>
<th>6-mo</th>
<th>1-yr</th>
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</thead>
<tbody>
<tr>
<td>Mean Raw Score</td>
<td>16</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>
Parenting Scale - Total Score

- No sig differences at Pre
- No sig change in Waitlist
- Interaction still significant at 1 year
- Significant time X condition interaction at Post for both PTG conditions
- Significant change in both PTG conditions
Videotaped Observation - Negative Parenting

No sig differences at Pre

sig change in Waitlist

Significant time X condition interaction at Post for both PTG conditions

Significant change in both conditions

Interaction not significant at 1 year

Mean Standardized Score

Assessment

Pre  Post  1-yr
Feedback...

From parents:
- “This group has been like the ‘manual’ everyone talks about not getting...I wish it didn’t end.”
- “This group has changed my life. I deal with my children in a totally different way.”

From pediatricians:
- “The parenting program has been such a help to parents, and therefore to me.”
- “I would love to have these groups be a regular part of what we offer at the health center.”
Summary

- Eleven urban and suburban practices
- Large and diverse sample
- Inclusion based on screening tests
  - Thus, ‘secondary’ or ‘indicated’ prevention
- Practice staff trained to co-lead groups
- Implemented PTGs in pediatric practice
  - evidence-based protocol
  - with fidelity
- Follow-up one year after intervention
  - Documented improvements in child and parent behavior
Summary of Costs

• Start-up (training, materials):
  – One leader: $6210
  – Two leaders: $9430

• 10 sessions, 10 parents, no frills
  – One leader: $265
  – Two leaders: $505

• 10 sessions, including food, child care, book
  – One leader: $722
  – Two leaders: $962
Implications

- It is feasible to run parenting groups in pediatric offices
  - Parents pleased
  - Pediatricians pleased
  - Space usually available
  - Pediatric staff with some mental health training can run PTGs

- Requires large practice and/or wide age range

- Results replicate findings with older children and from mental health settings

- Modest cost after start-up

- Billing constraints → limited sustainability
Related needs for adoption in pediatrics

Successful parenting groups require infrastructure, e.g.

– Identification of need (screening)
– On-site clinical resources (co-located MH clinician)
– Payment system (?ACA)
Survey of Wellbeing of Young Children

• Short parent-report checklist
• Tagged to pediatric visit schedule
• Easy to administer and to score
• Freely accessible

• Integrated
  – Social/emotional/behavior
  – Cognitive/language/motor development
  – Autism
  – Parental depression and other family risks

• Amenable to electronic format
• www.TheSWYC.org
Co-located mental health care

• Evidence base for adults; emerging in pediatrics
• Documented benefits for patients
  – Access; reduced stigma
  – Integrated medical/mental health care
• Documented benefits for pediatricians
  – Responsibility for screening and follow-up
  – Ongoing communication
  – Facilitated referrals
  – Joint encounters
  – Knowledge of community resources
• Opportunity for numerous preventive interventions
• Payment streams uncertain
Julius Richmond taught that for effective social change we need
— Knowledge base
— Social strategy
— Political will
Costs of Intervention

I. Start-up costs:

- Leader training: $400.- pp
  - Flight to Seattle: $300 pp
  - Hotel & meals X 3 d: $600.- pp
- Wages (3 days @ $80/hr): $1920- pp
- Materials
  - Baby and Toddler Program: $1395.-
  - Preschool Program: $1595.-

• TOTAL: $6210.- (one leader)
  – $9430 for 2 leaders
Costs of Intervention

II. Ongoing Costs

- Leader(s): 3+ hours/week @ $80/hr = $240/week
  - Face-to-face 2 hrs
  - Preparation, homework 1 hr
- Administrative tasks: 1 hr/wk @ $25/hr = $25/wk
  - Generate list of interested parents
  - Remind parents of meetings
  - Photocopying/email
  - Arrange for appropriate space
  - Arrange food

- **TOTAL:** $265/wk (1 leader) or $505/wk (2 leaders)
Costs of Intervention

III. Additional costs (per participant)

– Books for parents @ $19.95
  • Or Audio CD @ $40
– Food @ $5/week pp
– Photocopying handouts @ $.50/week pp
– Child Care @ $40/week pp
– Transportation (??)

• Pediatrician’s time: negligible
• Office staff time: negligible
Costs of Intervention: Summary

• Assume 10 parents, 10 sessions, 1 leader:
  – $722 per session
  – $265 w/o book, child care, food

• Assume 10 parents, 10 sessions, 2 leaders:
  – $962 per session
  – $505 w/o book, child care, food