Preventive Intervention for Early Childhood Behavioral Problems: An Ecological Perspective

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Abstract

The purpose of this paper is to highlight the importance of preventive interventions targeting parents when addressing early childhood behavior problems. We briefly review evidence-based parent management training programs (PMT), focusing on one particular program, the Incredible Years Series (IY). Next, we discuss the barriers to embedding evidence-based practice like IY in community contexts, and demonstrate how early childhood mental health consultation can be used to enhance community capacity to adopt evidence-based practice and improve outcomes for the large number of young children and their families in need.

Keywords

early childhood; behavioral problems; preventive interventions; parent training; mental health consultation

The early childhood period is associated with profound development across cognitive, social, emotional, behavioral, and physical domains.(1,2) Early childhood mental health is characterized by social-emotional competence and behavior regulation within healthy and supportive relationship contexts.(3) However, children may demonstrate significant disruptions in social, emotional and behavioral functioning from early on, with approximately 12% of preschoolers in the general population and up to 30% in high-risk, low income samples identified as having serious behavioral difficulties.(4–6) These challenges are associated with an elevated risk of future emotional, academic, and relationship problems.(7) Specifically, children exhibiting early-onset behavioral problems are at especially high risk for life-course delinquency, substance use, violent behavior, academic failure, and depression.(8,9) Although conduct problems are the most frequent reason children are referred for mental health services,

(10) young children's mental health problems remain under-recognized and under-treated. (11–13) When not addressed early, conduct problems that emerge in early childhood are the most resistant to treatment later in childhood and adolescence.(14)

The purpose of this paper is to highlight the importance of parenting-focused early preventive interventions to address early childhood behavior problems. We briefly review evidence-based parenting programs, focusing on one particular program, the Incredible Years Series (IY). We discuss the barriers to embedding evidence-based practice like IY in community contexts, and demonstrate how early childhood mental health consultation can be used to enhance community capacity to adopt evidence-based practice and improve outcomes for the large number of young children and their families in need.

The Importance of Parenting-Focused Early Preventive Interventions

Early childhood mental health problems are associated with a host of family factors including poor parent-child relationship quality and negative/harsh parenting practices.(15–17) Often, families experience co-occurring risks such as parental depression, substance use, unhealthy adult relationships, parenting stress, and socio-demographic challenges such poverty, lack of access to community resources, and social isolation. Accumulation of family risk has serious consequences for parenting and parent-child relationships, and in turn for the child's early functioning across multiple domains.(18–22) We know that in high risk families, the capacity to provide an environment conducive to promoting behavior regulation and social emotional competence may be seriously limited. In particular, children developing in high risk family contexts are more likely to have core deficits in forming and engaging in interpersonal relationships, regulating affect, and developing positive sense of self; the very deficits that may set the stage for life-course juvenile delinquency, substance use, violent behavior, academic failure, and depression.(8,23,24)

Early-onset, persistent antisocial trajectories can be identified as young as 18 months of age, typically for children raised within the context of multiple family stressors, disrupted parent-child attachments, parental maladjustment (e.g., maternal depressive symptoms, antisocial behavior), and nonresponsive, rejecting, or abusive caregiving.(9,15,17) One proposed mechanism to explain the poor mental health outcomes in these young children is that child behavior challenges combine with parenting risk factors to set the stage for coercive cycles that maintain and exacerbate chronic conduct problems.(25) In the context of child behavior challenges, poor parent-child relationships and parent family management practices may unintentionally reinforce early disruptive behaviors. The coercive interaction cycles that result are more prognostic of problem behavior trajectories than children's behavior problems alone. (20) This "early-starter" model of antisocial behavior underscores the importance of providing family-based interventions focused on parenting in the early childhood years to disrupt these negative developmental trajectories before parent-child interaction cycles become entrenched and behavior problems difficult to treat (26,27)

Unfortunately, families do not always receive effective or sufficient support that would promote healthy development in their children. The community-based standard of care often falls short of effectively supporting parents to provide the foundations children require for positive developmental outcomes. For example, although families may be offered parenting classes, these programs are rarely evidence based, and estimates are that less than half of families complete the training.(28) Further, families may be offered case management services, but a number of factors limit the effectiveness of these services in promoting positive parenting skills including 1) delays in accessing services (e.g., due to long wait lists); 2) services focused only on immediate crises (such as lack of food or shelter); 3) lack of expertise to address unique factors related to parenting in early childhood; and 4) services are not integrated.

PARENT MANAGEMENT TRAINING

Parent management training (PMT) programs in particular are the most well-established treatments available for reducing child disruptive behaviors in families.(29) The primary goals of PMT programs are to change the child's behavior and adaptive functioning by increasing parental involvement and responsivity as well as promoting positive caregiver practices and effective discipline. Indeed, 2/3 of families who participate in PMT experience clinically significant improvements in their child's behavior directly following intervention, with levels of problem behaviors falling into the normal range following intervention and with significant effects lasting up to 4 years.(27,30)

Routed in learning theory (i.e., operant conditioning), PMT emphasizes specific behavioral principles and teaches associated techniques including reinforcement techniques to increase desired behaviors and reduce undesired behaviors, and non-punitive punishment (e.g., loss of privileges or time out) and extinction (e.g., ignoring) to also reduce undesired behaviors. In addition to these specific techniques, PMT content also typically addresses the parent-child relationship with an emphasis on enhancing parents' skill at engaging in child-directed play, as well as strategies to support and encourage children' socioemotional and cognitive development in the context of the play.(27,29) For further detail on the conceptual foundations and distinguishing features of PMT, as well as a review of its strong empirical support, Kazdin's book (29) reviewing PMT is highly recommended.

In PMT, parents are considered the change agents and therefore are the focus of the intervention. In sessions, parents are taught techniques to modify their child's behavior such that most of the "treatment" of the child is conducted indirectly through the parents outside of sessions in the family's daily life.(29) In each PMT session, child management principles and techniques are introduced (e.g., through written materials as well as direct instruction and/or modeling) and practiced via experiential methods (i.e., role play or during live practice and feedback with the child in session). This active training with parents occurs within the context of a collaborative relationship with a skilled, supportive therapist who facilitates and guides parents' experiential learning. Parents are given practice activities to conduct at home with their child, which are reviewed in session and during telephone contacts between sessions.

Most PMT is delivered in individual sessions in clinic settings. Two well known, widely adopted examples of evidence-based PMT programs specifically targeting early childhood that are delivered in an individual format are Parent-Child Interaction Therapy (PCIT) and the Positive Parenting Program (Triple P). In addition to targeting parent behavior management skills, one notable feature of PCIT in particular is that parent-child attachments and communication are direct targets of intervention. The defining feature of PCIT is that therapists deliver direct coaching and reinforcement during live parent-child interactions through a communication device placed in the parent's ear (i.e., the "bug in the ear" system). This weekly observation of parent-child interactions also allows for ongoing assessment of progress and performance-based treatment planning.(31) Triple P is notable for the provision of a continuum of services in which variations of PMT can be delivered based on problem severity. Parent training variations range from universal, community-based prevention to brief advice (1 to 2 sessions) for a discrete child behavior to individual, clinical intervention with families facing more serious child behavior problems. Ongoing assessment and individualized feedback on parenting skills, along with parent support and stress coping skills, also are core features of Triple P individual, therapist-assisted interventions with parents.(32)

Although PMT is an effective treatment for reducing child disruptive behaviors, current prevalence rates of conduct problems and the vast number of families identified as high-risk have created a need that taxes available resources for standard, individual service delivery in

clinic settings. One alternative to individual, clinic-based PMT is delivery in a group format, which is a cost-effective approach that can serve large numbers of families and therefore has potential for decreasing the overall prevalence and incidence of behavior problems in the community at large.(27,29,30) Low-income families facing multiple stressors have been served in this group format,(33) and some evidence suggests that minority families in particular are more likely to participate in services delivered in groups than in individual treatment.(34) One such example is the Community Parent Education (COPE) Program, a large group-based (on average, groups include 18 families or 27 adults) PMT intervention delivered in community settings (e.g., schools). Parent training content in COPE is similar to that covered in other, individually administered PMT programs in clinics. A coping problem-solving model is applied, where parents meet in groups to view video models of parents making less optimal, ineffective parenting choices for addressing child behavior problems and then work together to generate and practice more optimal solutions based on the parenting principles taught.(34) Another outstanding example of a group-based program for parents that reduces early child behavioral problems and increases social-emotional competence, the Incredible Years (IY) Series,(35) will be reviewed in depth below.

The Incredible Years Parent and Children Series

IY has been identified as an exemplary best practice program by the Office of Juvenile Justice and Delinquency Prevention's (OJJDP) Family Strengthening Project (35) and has met criteria as a well-established mental health intervention for children with conduct problems by the American Psychological Association Task Force on the Promotion and Dissemination of Psychological Procedures.(36) The IY program is effective with parents of varied economic and education levels and is available in several languages. IY is now implemented in over 40 states and at least 15 countries worldwide.(35) It is delivered as an indicated intervention for parents of children demonstrating early-onset conduct problems and oppositionality, as well as a selected prevention program for high-risk samples. Although there are a number of components within the IY series that target children, teachers, and parents, we focus on the IY group-based PMT program designed for parents of young children.

The main goals of the IY Parents and Children Series are to (1) strengthen parenting competencies and confidence; and in turn to (2) promote children's social, emotional, and academic competence in order to reduce or prevent socioemotional and behavioral problems in children.(35) Several IY programs are relevant in the early childhood years. The recently updated IY Basic Preschool/Early Childhood program is designed for children between ages 3 and 6 years,(37) and is also available as a manualized home-visiting program for parents who are not able to attend groups or for parents who wish to supplement their group participation with guided practice with a parenting coach in their home.(38) In addition, two new IY parent group programs have recently been developed for younger children, the Parents and Babies Program (birth to 12 months) and the Parents and Toddlers Program for ages 1 to 3 years. (39)

The Parents and Babies Program is a 6-part program in which parents learn to read their child's cues and to provide nurturance and responsive care. Parents develop skill at observing their babies and understanding their developmental needs. They learn to provide physical, tactile, and visual stimulation, verbal communication, and establish predictable routines. The Parents and Toddlers Program and the updated Basic Preschool/Early Childhood Program extend parents' development of positive parenting skills, including components to develop child-directed play and coaching to promote language, social and emotional competence, and school readiness. This content is significantly expanded in this update of the original Basic Parent and Children Series, with a number of sessions devoted to academic, persistence, social, and emotional coaching. Both the Toddler and Basic Preschool programs also cover how to

encourage cooperative behavior through praise, encouragement and incentives, and positive discipline (rules, routines, and effective limit setting), as well as handling misbehavior. The Toddler program has an additional component in which parents learn about handling separations and reunions. In the updated Basic Preschool/Early Childhood program, parents also learn a number of strategies for handling misbehavior, including ignoring, time-outs, natural and logical consequences, and teaching their children problem solving and self regulation. All programs also promote parents' abilities to maintain self control and to calm down, and encourage parents to develop and access support networks.(37,39)

The Parents and Babies Program is covered in approximately 8 sessions, and the Parents and Toddlers Program requires an additional 13 sessions.(39) The updated Basic Preschool/Early Childhood Preschool program extends the original Basic program from 12 session to 14 sessions (prevention samples) or 18–20 sessions for parents with children with behavioral diagnoses and in high-risk populations.(37) Sessions typically occur once per week for 2 to 2.5 hours. In general, the programs rely on collaborative group discussion, video modeling, and rehearsal as the primary teaching methods.(40) Sessions always include detailed review of home activities, approximately 25–30 minutes of video review (see below), and at least 4 or 5 guided role plays or "practices". Role plays allow participants to practice strategies generated through the group collaborative process, and to anticipate and overcome barriers to successful implementation at home. Additional rehearsal takes place during home activities assigned weekly, and group leaders make regular telephone contact with each member to support learning and application of skills to their home environments.

A key component to training is the use of video vignettes portraying parents and children interacting in typical family situations. The updated Basic Preschool/Early Childhood program contains the same vignettes from the original Basic program, supplemented with a number of new vignettes representing greater diversity, including families of African American, Asian, Caucasian, and Hispanic backgrounds. By using video models, parents observe ways to encourage their children's positive behaviors and discourage their inappropriate behaviors across a wide range of situations. Parents also view less successful interactions and witness the outcomes of less optimal choices, thereby fostering problem-solving discussions of alternative solutions and opportunities to rehearse alternative responses. Watching the videos of parent-child interactions also promotes parents' ability to observe their child's behavior, analyze situations, and to determine when and how best to intervene. As parents practice observing child behavior, they begin to identify problems when they are small and to be proactive in order to prevent larger disruptions that are more difficult to address. Through watching and discussing video vignettes, parents also have opportunities to become more aware of their child's positive behaviors and to identify opportunities to deliver praise and positive attention. Using the videos as the primary training method also standardizes group content to ensure coverage of specific content, increasing the feasibility of disseminating widely and delivering with fidelity.(29,35)

The program is designed to include 10 to 14 parents in a group. The collaborative group process is intended to build parents' confidence in their own ideas, and their ability to solve problems and handle difficult situations that arise with their child. The group format encourages parents to give and get support from peers, fosters supportive connections and reduces parents' feelings of isolation.(35) Participants are asked to make a "buddy call" each week to check in with another participant in order to further encourage the development of social connections and sources of support for participants.(35)

Detailed manuals for leaders prescribe the sequence of topics. General group process strategies are discussed in the manual and each video vignette is reviewed, including provision of specific questions to encourage parents to draw out relevant parenting principles. Background content

on parenting principles and information on normative child development also is provided for leaders, as well as are specific guidelines and recommendations for group discussion topics and rehearsal activities. Additional materials provided include DVDs of approximately 280 video vignettes of parent-child interactions, homework assignments, and handouts.

A Review of the Evidence: IY Efficacy and Effectiveness

Webster-Stratton and colleagues conducted 6 randomized control trials of the original Basic Parenting series for families with children ages 3 to 8 referred for oppositionality and early-onset conduct problems, and 3 randomized control prevention trials for families with children enrolled in Head Start.(as reviewed in 35) To date, there have been no randomized trials of the new Babies and Toddler programs. However, preliminary evidence derived from an application of the original preschool curriculum for parents with children ages 2 and 3 years enrolled in daycare centers serving low-income urban families supports its adoption.(41) The efficacy of the updated Basic Preschool/Early Childhood program currently is under investigation.

In both treatment and prevention samples, parent participation in the original IY Basic parenting program resulted in sustained improvement in parents' self reports and independent observations of their behavior management skills compared with control groups, replacing use of harsh, ineffective parenting strategies with positive parenting, and improved observations of parent-child interactions and self reports of parent involvement. In turn, program participation led to reductions in observed and reported child conduct problems at home and school and increased compliance to parental commands among children ages 3 to 8 referred for treatment due to high levels of noncompliance, aggression, and/or oppositionality. Children in Head Start whose parents participated in the IY Parent groups, particularly those with initially elevated behavior problems, demonstrated enhanced social competence and reductions in negative affect, noncompliance and disruptive behaviors.(42–44) Children with comorbid attentional problems, including inattention, impulsivity, and hyperactivity, were especially responsive to their parents' participation in the IY Basic parenting program, as demonstrated by declines in observed and parent-reported, but not teacher reported, conduct problems.(45) Finally, studies show that the IY Basic parenting program delivered in a group format is as effective, if not more effective, than individual, personalized parent therapy applying IY practices and principles in individual sessions with parent-child dyads; it is considerably more cost-effective, and parents report higher satisfaction ratings with the IY Basic parenting group program relative to the individual treatment.(46,47)

A number of independent replications of the original IY Basic parenting program with both treatment and prevention samples report similar positive outcomes for parents and children's behavior at home and in daycare settings, improvements that were maintained up to two years following participation.(41,46,48–50) These replications demonstrate the feasibility and effectiveness of implementing the IY program in applied community settings serving high-risk, low income inner city families from ethnic minority backgrounds (41,46,49,50) and extend its' applicability to parents with children as young as 2 years of age.(41,49) In addition, results of one study(51) demonstrate the power of this parenting program for altering one proposed biological underpinning of children's conduct problems, cortisol levels during social challenges; Relative to controls, high-risk children who demonstrated atypical (low) cortisol responses in anticipation of social challenges at baseline demonstrated more typical responses of normally developing, low risk children (i.e., normal increases in cortisol levels) following their parents' participation in the parenting program.(51) Finally, results of two replication studies demonstrate positive changes in families that generalize beyond the target child; both found that improved parenting behaviors were accompanied by reductions in problem behavior for siblings who are not the direct target of the intervention.(49,52)

Studies consistently demonstrate that families facing multiple stressors including poverty, single parent status, social isolation, family conflict, substance use and psychological distress can be served in this group format and make measurable gains.(33) For example, IY program effects are robust among parents who experience depression, anger problems, or antisocial behavior, and among parents with a prior history of child maltreatment.(33,48,49,53) Even when parents' adjustment (i.e., depression) does not change with the intervention, depressed parents are still able to make positive changes to their parenting behaviors following IY, which in turn are associated with reductions in child negative behavior.(49) However, children whose parents continue to report high levels of depression following the IY parent groups are less likely to maintain treatment gains over time.(54)

Parent Engagement and Treatment Responsiveness

Group-based PMT is typically delivered in fairly fixed doses, but the number of sessions required to make meaningful change is not well understood.(55) Examining the dosage question with respect to the original IY Basic parenting program in particular, some researchers report that parents begin to demonstrate parenting skill improvements after attending three sessions,(33) whereas others found that attendance at 50% of IY sessions discriminated parents who benefit.(56) Although IY program developers find that parents who agree to participate attend, on average, as many as 87% of sessions in treatment samples, the rate is much lower in prevention samples (participants attend, on average, 58% of sessions) and in replication studies conducted in community settings where the average is closer to approximately 60% of sessions. Further, level of engagement as defined by number of sessions attended, homework completion, and participation in group discussion is related to amount of progress made in a dose-response fashion with the strongest outcomes found for parents who attended at least two thirds of sessions.(33,41) The impact of expanding the original IY Basic parenting program to 20 sessions on initial enrollment, attendance and adherence, and outcomes remains to be determined, although one adaptation of IY that expands the program to 22 sessions reports that families, on average, attend only 55% of sessions, although results were strongest for those families who attended over 50% of sessions.(48) Preliminary data on the updated, extended version of the Basic program suggests that parents who participated in the 20-week group report feeling more confident in handling their children's behavior and report fewer, and less intense, child behavior problems and better child emotion regulation than did families who participated in a shorter (10 week) version.(57)

Indeed, inconsistent attendance, poor treatment adherence, and premature termination remain major obstacles to fully realizing the benefits of PMT. Several strategies are consistently recommended to support attendance given our current understanding of the stressors families face (for review, see 58). These include running groups in convenient community locations at a variety of days and times that best fit parents' schedules. Providing transportation and childcare may also make it more feasible for parents to attend. Making meals available reduces another burden to participants, particularly when group schedules overlap with mealtimes.

Even when families are helped to overcome these pragmatic barriers, the high demands placed on parents in PMT relative to other forms of treatment must also be appreciated. For example, there can be a mismatch between parents' expectations for therapy for their child's behavior problems and the realities of PMT. A number of treatment supplements have been developed to enhance attendance and adherence by addressing parents' expectations for treatment and incorporating motivation-enhancing strategies.(55,59) Motivational strategies have been incorporated into intake procedures, including initial phone contacts with parents and initial sessions, in order to increase the likelihood of attendance and promote stronger treatment adherence.(60,61) Typically, this involves engaging parents in problem solving regarding identified barriers to treatment, like lack of familial support for attending. Parents' perceptions

of treatment demands and beliefs about treatment relevance or efficacy also are addressed. Clarifying the helping process, including a focus on parents as the agents of change, also is an important element of engagement-enhancing procedures. Using brief, motivation-enhancing strategies (i.e., 5 to 15 minutes in length incorporated in up to 3 of the first few treatment sessions) enhances parents' desire to participate in treatment to change their parenting behaviors, which in turn leads to higher attendance and adherence to individually-administered PMT.(61) The extent to which these approaches engage parents in group-based PMT, particularly when encouraged on a preventive basis, has not been examined.

Given that parent, family, and contextual risk factors associated with early-onset conduct problems also influence treatment responsiveness and maintenance of gains, some parents may require additional services beyond parent training to address these undermining factors.(29) Parent stress, psychopathology and family conflict all have the potential to compromise parents' adherence and responsiveness to treatment.(62) Supplementing traditional programs with strategies to address these issues may reduce attrition and increase adherence and treatment responsiveness. For example, incorporating focus on non-parenting specific, family and adult concerns (e.g., marital discord, family conflict, job stress, health problems) throughout parenting programs helps families cope with life stress while remaining in treatment, which in turn leads to reductions in dropout rates.(28) IY in particular includes a supplemental series of 10–14 weeks to address the family stressors that tend to diminish effective parenting and treatment responsiveness. The ADVANCE program, which can be offered following completion of the Basic program, is designed to directly target parental stress and communication, problem solving, and collaboration among parents.(63)

Building Capacity to Meet the Need

The need for service for young children with conduct problems far exceeds current capacity to provide high quality, evidence-based service. Meeting this need requires innovative approaches to service delivery, particularly for families otherwise not willing or able to engage in group-based treatment. This includes making available self-administered programming and capitalizing on technology to identify new service delivery formats (i.e., television programming, distribution of video vignettes and instructional content on DVD, internet delivery). Such strategies are more cost effective, reduce the need for highly trained therapists, and build capacity for a greater number of families to access the treatment.(64,65) Several efforts to develop self-administered programs for parents yield clinically significant parent and child behavior changes, including parents' independent review of IY video vignettes.(64,65) In addition, the provision of self-help workbooks adapted from empirically supported programs (e.g., Triple P) combined with professional telephone consultation and, more recently, delivering parenting program content via primetime television coverage coupled with the self-help workbooks and web-based support both led to improved parenting skills and reductions in children's disruptive behaviors.(67,68) Another innovative approach, delivering IY curriculum via the internet combined with opportunities for parents to gain social support through internet blogs and a home visiting program to provide direct coaching and practice to parents, currently is under investigation.(69)

However, reaching those families with children at highest risk for conduct problem trajectories who require more intensive services than these self-administered options remains a formidable task. To meet the need, service delivery must be expanded beyond traditional mental health clinics. One approach may be for empirically-supported programs to be embedded within other existing service structures that serve the largest proportion of families.(70) For example, providing PMT in community daycares and Head Start, schools, and other community settings may considerably increase the number of families who can be served, particularly those families who otherwise might not have access to good quality mental health services. Recent

attempts to embed IY parent groups in medical homes have also been successful in reaching families, and provide an opportunity to identify eligible families not enrolled in daycare or school.(71,72) Recruiting for parenting interventions through the Women, Infant, and Children (WIC) Nutritional Supplement Program is another way to identify, recruit and engage families at high risk who are not yet known to educational or social service programs and who may not attend regular primary care wellness visits.(73) Offering services in these settings increases access and reduces barriers to participation like concern regarding stigmatization, transportation, and mistrust of mental health providers. Another innovative approach to wide dissemination of PMT that currently is under investigation is to incorporate behavior management training into training programs for pediatric residents so that pediatric providers may integrate relevant content and principles in primary care visits when behavioral or parenting issues are raised.(74)

PARENT MANAGEMENT TRAINING IN REAL-WORLD SETTINGS

Despite the abundance of evidence supporting PMT programs like IY, the ways in which these manualized curricula are implemented in the community requires local adaptation not necessarily addressed in the context of strictly controlled university-based research trials. Real-world barriers in community settings have the potential to undermine successful implementation of evidence-based treatments and diminish their efficacy.(75,76) Program effectiveness may be diluted because of a lack of resources (i.e., funding, time, administrative support), infrastructure, and personnel with "buy-in" to program principles and processes and the need to adhere to a manualized curriculum. In addition, personnel in community settings often lack the training and background in early childhood mental health principles needed to deliver the programs with fidelity and to support what may be significant mental health needs of parents and children that co-occur with presenting behavioral problems in young children.

Early childhood mental health consultation can address some of these barriers. Mental health consultation specifically includes relationship building between consultants and programs; enhancing staff capacity through training and on-going support; identifying and addressing program needs, and incorporating family, caregiver, and contextual factors to provide a comprehensive perspective that supports social-emotional competence and behavior regulation of young children.(77) When community-based programs serving young children have access to high quality mental health consultation, children do better. For example, lower rates of expulsion from pre-kindergarten are found when programs have access to mental health consultation.(78) Although specific mechanisms have not been adequately studied, mental health consultation may improve early childhood outcomes by increasing developmentally appropriate practices and expectations; enhancing early identification of problem behaviors; reducing staff stress and turnover; addressing programmatic issues that affect service delivery; and otherwise supporting the child care community, families, and children who are manifesting (or are at-risk for) problematic behaviors.(79) In our program, we augment PMT with mental health consultation to address barriers typically associated with implementation of evidence-based practice in the community.

Example of Parent Management Training Implementation with Local Adaptation

The Bradley/Hasbro Early Childhood Clinical Research Center (BECCRC), affiliated with Brown Medical School, has worked in the community for 20 years developing an ecologically-based consultation model integrating early childhood mental health principles and evidence-based practice into a continuum of mental health consultation services. All service delivery is embedded in research focused on high risk children, emotion regulation, social competence, parenting, and family process. We illustrate below how we provide mental health consultation in conjunction with evidence based PMT to enhance service delivery and achieve optimal outcomes for young children and their families in community settings. For ease of narrative,

we have synthesized and integrated our collective experiences with numerous community partners, including community family support agencies, Head Start programs, and other childcare settings. We use the factitious name "Child Care Academy" to refer to this collection of experiences.

Child Care Academy (CCA) is a community-based support service for families with children birth to age 5 years growing up in contexts that put them at significant risk of behavior problems and maladjustment. Their mission is to 1) promote healthy parent-child relationships including sensitivity to children's developmental needs; 2) facilitate healthy family environments that promote effective childcare routines and family management practices; and 3) decrease family isolation. Their program director was eager to move beyond provision of general support services to deliver evidence-based programs to help accomplish their goals. Establishing a relationship with the BECCRC was motivated by their intrinsic desire to expand their capacity to meet the needs of the children and families they serve, and an awareness that they lacked the necessary knowledge-base, training, and infrastructure to select and provide such services.

BECCRC worked with the CCA program director to select a program that best fit the agency culture, goals and practices. The director's goal was to identify a program to promote effective family management strategies in enormously high-risk families who have children with high rates of behavioral difficulties. She was looking for a program that was culturally relevant, could service their large caseloads, and that had empirical support. Through discussions with staff at various levels of the agency and structured observations, we identified IY Basic and Advance parenting programs as the best fit. However, in the face of limited resources, overburdened staff lacking requisite mental health training, and high turnover, it was deemed neither cost-effective nor feasible to train her staff to be able to independently maintain a high standard of IY delivery.

The partnership between BECCRC consultants and CCA staff was necessary to enhance CCA's emergent capacity to offer high quality services to their families. Community settings like CCA typically do not employ mental health professionals with advanced degrees who can lead IY groups with fidelity, and they often lack sustainable funding to support leaders' training and ongoing supervision. The IY program developer recommends that group leaders, who have at least a masters-level degree, participate in a 3-day, standardized training provided by IY certified trainers and mentors. Ongoing consultation and tape review by IY trainers and mentors, and attendance at consultation workshops at least every 2 years, also are strongly encouraged to maintain program fidelity.(32,41) High staff turnover rates that plague agencies serving high-risk children and families like CCA diminish the cost-effectiveness of such training, further undermining sustainable delivery.

Instead, CCA case managers are experts in family engagement and support and have longstanding relationships with families through their home visiting program. CCA provides individualized home visiting services ranging from daily to monthly to help stabilize families, meet their basic needs, and improve parent-child interactions. They also provide educational and social programming for families, and have a state-of-the-art playroom that is staffed by trained CCA personnel and available for daily use by families. Their program therefore was well-suited for adopting the IY parenting programs and supporting successful, sustainable outcomes, although expertise to do so was limited. The partnership determined that BECCRC consultants, who already deliver IY programs in a number of community agencies across our state, were better poised for direct IY delivery. At the same time, much of the 8–10 hours per week required to run IY groups involves support activities that could be more cost-efficiently, and effectively, implemented by CCA case managers and staff who were well connected with families. Their IY delivery responsibilities are described below.

BECCRC consultants are formally trained to deliver IY programs and receive ongoing consultation by the IY program developer as part of a longer-term academic and service agenda. All BECCRC consultants are clinical psychologists, offering expertise in early childhood development in high risk contexts and an understanding of the influence of multiple levels of context and organizational structures and processes. BECCRC therefore was uniquely suited to help CCA embed IY into their current service delivery model and to integrate IY principles into existing program elements that would support its efficacy and sustainability. At the same time, BECCRC was afforded the opportunity to disseminate evidence-based practice on a larger scale in community settings, extending our clinical-research agenda.

Local IY delivery—All CCA case managers participated in IY groups as co-leaders in order to train them on IY principles. Involving case managers in group delivery also established consistency in follow-up supporting activities. That is, CCA case managers serving as group co-leaders reviewed and provided feedback on weekly home activities. They made planned phone contacts with each family between sessions to follow-up on homework completion and addressed barriers to implementing strategies at home. They made a second reminder phone contact the night before or morning of each session. In this way, families experienced the continuity of a relationship with their case managers inside and outside of the group. CCA case managers previously trained in IY principles and strategies then provided childcare while parents attend groups in order to enhance the quality and continuity of care that all family members received.

Similar to others who have extended the IY curriculum for especially high-risk families (48), we supplemented delivery of the IY Basic parent program with guided parent-child interactions during family meals and family play time before and after each session. Parents were supported in practicing skills learned in the group during this family time in the CCA playroom. BECCRC and CCA co-leaders provided coaching, guidance, and modeling of skills. In addition, observation during this time allowed for ongoing assessment of progress and needs with respect to the group. CCA staff also sponsored additional family "play dates" in their playroom both during and after completion of the IY group. Parents attended these "play dates" primarily to maintain the social connections formed in the group, but the guidance and support provided by trained case managers and staff provided booster IY training.

In CCA, already established home visits also provide opportunities to reinforce parents' learning of the IY program content. CCA case workers' involvement in the IY groups prepared them to help families integrate IY content to meet their specific family needs and values. They worked intensively with families between sessions to individualize learning and generalize skills, and then shared with the group examples of each family's successes observed during home visits. By bridging home and IY group experiences in this way, CCA case workers provided further reinforcement for participation and built parents' sense of self-efficacy and confidence. Following parents' completion of the group, ongoing CCA home visits served as booster training to support continued learning and practice.

Indeed, successful IY program delivery relied heavily on caseworkers' trusting relationships with families; Caseworkers became the linchpin to ongoing attendance and engagement. The core CCA components of family-driven case management and regular home visits further supported IY delivery by addressing factors that may undermine attendance and the likelihood that parents would engage in learning and adapt new strategies. For example, they worked with families on problem-solving and prioritizing to avoid allowing other obligations and crises that inevitably emerge during groups to impede attendance and engagement.

Augmenting IY with early childhood mental health consultation—BECCRC provided early childhood consultation on a variety of levels to address issues that emerged with

children and families, staff needs, and programmatic or systems concerns as related to delivery of evidence-based programs. We describe these consultation services and illustrate how embedding IY within a continuum of mental health consultation supports positive outcomes for families and sustainable agency practice.

Enhancing IY delivery: mental health consultation with families: The following 3 vignettes illustrate how mental health consultation augmented implementation of the IY program in CCA to meet individual family needs.

Example 1. Mother 1 was a teenage mother with a significant trauma history who had been living in foster care for much of her life; she was participating in IY as one of many requirements imposed by Child Protective Services to help her regain custody of her own son, who also was living in foster care. She requested private consultation with the IY leader following the first session to discuss additional steps she might take to increase the likelihood of reunification. Mother 1 also expressed concern about the status of her visits with her son; that a lack of consistent, predictable visits in a setting conducive to positive, developmentally appropriate interactions could undermine her efforts to build their relationship and inhibit her ability to practice what she was learning in the IY program. The consultant leading her IY parent group advocated for Mother 1 and her son to have regular, weekly visits in the safety of the CCA playroom during which the consultant provided parent-child dyadic coaching. The focus of their work was relationship building; helping Mother 1 read her son's cues and develop positive attributions regarding his behaviors in order that she provide nurturing, responsive care. The consultant guided Mother 1's practice of IY skills, and helped her understand her son's developmental needs and make sense of his behaviors within the context of attachment disruptions. The consultant also helped Mother 1 learn coping strategies and positive self talk to remain calm in response to her son's distress. Facilitating intensive dyadic treatment in the context of the IY group was critical for helping this young mother adopt effective skills and re-establish a healthy relationship with her son.

Example 2. During the course of an IY group, it became clear that a number for family context issues were interfering with Mother 2's ability to make progress toward her explicit goal of reducing sibling conflict in her family. Consultation sessions were scheduled to help Mother 2, in her 3rd trimester of pregnancy, address the significant marital conflict and stressors (i.e., their impending eviction) that were undermining her efforts to address her sons' aggressive behaviors. Mother 2's partner did not support her participation in the group, and was not willing to attend IY sessions. Consultation sessions helped Mother 2's partner gain trust and "buy-in" to allow her continued participation in the IY group, and helped the couple establish clear communication around IY principles and problem solving strategies to establish consistency. Additional consultation meetings involved both parents practicing IY principles with their sons, and helping Mother 2 develop the confidence she needed to implement consistent, effective limit setting strategies.

Example 3. Mother 3 shared in her IY parent program that her daughter was at risk of expulsion from preschool due to severe behavioral disruptions in the classroom, and that her own level of distress about the situation had led to a number of volatile exchanges with the teacher and school personnel. The BECCRC consultant attended meetings between Mother 3 and school personnel to improve communication and establish a constructive working relationship; Describing Mother 3's efforts in the IY group improved the view the school personnel held of this mother and increased their willingness to work together to support her daughter. School-based consultation was then provided to build consistency between the home and school environment. The consultant worked with Mother 3 and the teacher to develop a behavior plan to support progress across contexts, including educating the teacher on IY principles and strategies in order to facilitate a "common language" and

common approach to implementing the behavior plan. Finally, the consultant attended the celebration planned by the mother at the end of the year when her daughter was named Student of the Year.

These examples illustrate how early childhood mental health consultation to community partners can augment IY delivery by helping families apply program principles to the specifics of their daily lives and their individual goals, thereby increasing its relevance for parents. By addressing non-parenting specific parent, family, and contextual issues beyond what CCA case managers can address with families, consultation services can also address factors that otherwise risk undermining program engagement and treatment responsiveness.

Enhancing IY delivery: mental health consultation with staff: Initial buy-in of agency front line staff for IY was low, despite the provision of an extensive description of the IY series and its objectives and a thorough review of its research efficacy by BECCRC consultants prior to adopting the program. CCA staff enthusiasm for new services was tempered by their concern regarding additional job responsibilities, distress over the amount of change introduced, and their guard for whether IY would be respectful of their families and applicable for meeting their needs. We quickly learned that garnering their full support required tangible experience; Enthusiasm developed organically through their own participation in the group as co-leaders and in observing first-hand the progress families were making in the context of their home visits.

> "When I went for my visit this week, the television was off for the very first time! Maria was on the floor playing with her son, talking with her son. I saw him smile for the very first time that day. I have noticed since that time he has been talking a lot more; he has a lot more words now that his mom has been trying so hard. This group made a huge difference for this mother, and her son."

Notably, as case managers gained an appreciation for the group through their own participation, retention rates increased. Once they saw its cultural relevance and the extent to which parents were respected and empowered, case workers were more willing to do the work required to recruit families and support their ongoing participation, and retention rates improved from 75% to as many as 90% of parents attending enough sessions to be considered "meaningful attenders" (i.e., enough to be able to make measurable gains(79)). The passion for the program they then exuded had a contagion effect on the families, and this enthusiasm was critical for embedding IY programs.

Additional staff consultation focused on training caseworkers and childcare workers on IY principles and strategies to increase consistency across all service providers within CCA. Following initial training, the consultant met weekly with childcare providers to support their individual work with families. Consultants also attended regular family case management reviews to provide reflective supervision and psychoeducation on early childhood mental health principles, thereby increasing understanding of families' mental health needs and enhancing their capacity to address concerns beyond the delivery of the parenting group (as well as understanding when best to refer a family to the mental health consultant).

Enhancing IY delivery: mental health consultation with program management: A variety of constraints may lead an agency to alter a program they plan to adopt in order that the program fit within its existing service structure and available resources. For example, by shortening the length of sessions or changing the duration of the group, reorganizing the order of topics or omitting specific content, or omitting components like buddy calls or midweek phone calls. Because making such adaptations runs the risk of diluting its effects and undermining the delivery of empirically supported practice, a critical consultation component was helping CCA identify their unique needs and generating viable solutions with the least likelihood of

undermining fidelity to the IY curriculum. However, some flexibility for local adaptation and choice also is important to "make it their own" and ensure a good fit with their agency culture and therapeutic style.(80) At the inception of our partnership, a Collaborative Working Group (CWG) was formed of key agency leaders representing agency, staff, and parent perspectives and the BECCRC consultant. The CWG met to establish coordinated plans for IY delivery. This included the consultant advising the careful balance between adapting IY to meet local needs and adhering to the curriculum.

Program management consultation also was used to improve CCA organizational functioning in order to advance their capacity to provide evidence-based services. CCA lacked experience needing to adhere to a prescribed curriculum, and the CWG required significant support to prioritize requirements for effective delivery given competing demands on staff time and agency resources. Critical work involved revising their program mission and staff job descriptions in order to integrate IY delivery and supporting activities. This included evaluating the "fit" between IY and other program practices to reduce duplication of efforts. Responsibilities had to be reorganized such that new IY support activities were an integrated, rather than additional, part of their job. Carving out the time in order to offer support services detailed above and finding the time for regular case management reviews and group supervision required significant shifts in personnel responsibilities.

The BECCRC consultant also provided weekly reflective supervision to the program director to enhance her leadership abilities and help her recognize and address aspects of the organizational climate and structure that undermine successful implementation. For example, the consultant worked with the director on time management skills to help her prioritize her own regular attendance at IY group sessions over other demands. Through reflective supervision, she became aware of her own ambivalence about implementing evidence-based practice and how her ambivalence negatively influenced staff efforts. She became aware of how staff motivation to do the work improved as her own appreciation for the process grew. She also learned to identify communication patterns and practices that led to deteriorations in staff engagement and morale. One outcome of this work was the initiation of individual supervision with staff to provide the support needed to feel comfortable with their new job responsibilities; ongoing supervision advanced her capacity to provide that support to her staff.

Summary

The partnership we describe has a number of important advantages to combat the challenges agencies face in adopting evidence-based practice. First, this arrangement profits from community expertise in engaging and supporting families and increases cost-efficiency. Second, contracting with trained mental health consultants for direct delivery of the manualized curriculum allows under-resourced agencies with high turnover rates who typically employ staff who lack advanced backgrounds in mental health fields to be able to offer high quality, evidence-based practice. Third, provision of consultation services to support delivery can help agencies integrate program principles into all service delivery and build capacity for coordinated services. Finally, building upon agency expertise and resources for providing families with ongoing support in turn builds mental health consultants' capacity to simultaneously meet the service delivery needs of multiple agencies.

The model we describe also has the potential to build capacity for delivering evidence-based practice in a variety of settings beyond the one described. For example, we are about to begin a project integrating IY parent programs into family's medical homes. Mental health consultants will provide consultation services and IY training to practioners to integrate principles into primary care visits, and will offer IY Basic and Advanced parenting programs on site. We also adopted a similar model for implementation in early childcare settings. Taken

together, this model therefore has great potential for increasing community capacity to provide high quality, sustainable evidence-based PMT like IY.

CONCLUSIONS

PMT is the treatment of choice for families with children with early-onset behavior problems, and programs like IY that are delivered in group format in community settings have potential for providing highly effective prevention and intervention services to the large number of families in need. IY is now being offered in diverse settings to further expand service capacity, including medical homes, child care settings, and social service/support agencies in addition to traditional mental health clinics. However, overcoming the barriers to reaching and serving the large number of families in need remains a formidable task. We believe a key to successful transfer of evidence-based PMT practice into community-based PMT requires unique service delivery models and partnerships between applied delivery settings and mental health consultants that capitalize on the expertise and resources each provide.

Acknowledgments

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