Prevention of behavioral disorders in primary care

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Purpose of review

This article reviews selected parenting programs for children aged 2–8 years old to inform primary-care pediatricians about options for families of children with behavior problems.

Recent findings

Young children with aggressive and oppositional behavior are at risk for serious antisocial behavior that may persist into adolescence and adulthood. Most parents wish to discuss parenting difficulties and their child's social and emotional development during well-child visits. Parent training programs are an effective option to promote positive parenting and discipline strategies and enhance a child's social skills, emotional self-regulatory skills, and problem-solving ability. Key parenting principles can be incorporated into developmental surveillance and anticipatory guidance during periodic well-child visits to prevent disruptive behavior problems, address parenting concerns, and nurture the optimal development of children's social-emotional competency.

Summary

The literature on the effectiveness of evidence-based parenting programs is growing. This information can enhance practicing pediatricians' understanding of available community resources and parenting support. These programs are feasible with families of various cultures and those at risk for parenting difficulties. Pediatricians can easily incorporate positive parenting principles into primary-care visits and developmental surveillance.

Keywords

behavior, evidence-based intervention, parenting, prevention, social-emotional competence

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Introduction

Early-onset oppositional and aggressive behavior in preschooler children is troublesome for parents and a known precursor to more serious and costly antisocial behaviors (e.g. delinquency, substance abuse) that may persist into adolescence and adulthood [1•,2]. Up to 25% of school-age children have an identifiable emotional or behavioral problem [3] and are a common presenting concern to the pediatrician during well-child visits. Children with disruptive behaviors are at risk for peer rejection, school absences, and academic problems, such as underachievement and school drop-out [4].

Certain risk factors have been linked to the development of childhood aggression and include parental mental health problems (e.g. depression), substance use, marital discord, and exposure to domestic violence [5–8]. In addition, parents who are young, single, socially isolated, or living in poverty may employ harsh and inconsistent parenting styles that further compound a child's disruptive behavior. Parents often have concerns about development and how to manage their children's misbehavior, yet pediatricians face several barriers to integrating screening and behavioral interventions in primary care. Pediatricians do not systematically screen for these issues due to a lack of community resources, inadequate training, and time constraints [3]. In addition, reimbursement mechanisms further restrict opportunities to identify and address behavioral concerns.

Evidence suggests early intervention (prior to age 8) may be beneficial and can mitigate the escalation of child behavior problems [4]. Improved outcomes for these behaviorally challenging children have been demonstrated through the use of evidence-based parenting programs. Many of these programs incorporate strategies to empower parents to deal with day-to-day stressors by teaching them more effective coping, communication, and parenting techniques. This article reviews several parenting prevention programs targeted at supporting parents' use of positive parenting skills to promote young children's social and emotional competence and decrease problem behaviors.

Evidence-based parenting programs for 2–8-year-olds

Parent training programs are designed to help parents develop positive relationships with their children by teaching them to use nonviolent discipline methods to reduce children's behavior problems as well as strategies

to promote their social skills, emotional self-regulatory skills, and problem-solving ability. We briefly outline three group-format programs targeted specifically for young children, which have been shown in randomized controlled trials to be effective.

Triple P: Positive Parenting Program

Triple P (www.triplep.net/), the Positive Parenting Program, takes a multilevel framework to permit one to offer parenting information universally through brief tip sheets or telephone contact for minor problems (level 1), brief advice (80 min or one or two sessions) for a discrete child problem (level 2), more intensive training (10 h or four sessions) for more moderate behavior problems (level 3), or individually tailored, group, or self-directed programs (8–10 sessions) for families with severe child behavior problems (level 4). The program targets all age ranges from birth to adolescence and has been offered in a variety of settings including community centers, schools, and churches.

The Triple P program teaches child-management skills. Additionally, it takes into account parental cognitions, expectancies, and beliefs as factors relating to self-efficacy and decision-making. Risk factors of poor parenting practices, marital conflict, and parental distress are targeted for some levels of intervention.

A number of randomized controlled trials have been conducted comparing various levels of intervention and their effectiveness for reducing oppositional behavior in young children, including an adaptation for its use with parents of children with developmental disabilities [9••]. In addition, the program has been evaluated following universal implementation in one region of Australia to examine its feasibility and effectiveness for use in the context of health service delivery. Eligible parents with 3–4-year-old children participated in weekly group meetings for 4 weeks, followed by 15-min telephone support sessions weekly for 4 weeks. Significant reductions in parent reports of child behavior problems as well as positive effects on parent mental health and marital adjustment were observed over a 2-year period [10••].

Incredible Years parenting series

This parenting series is delivered in a weekly group format and, like Triple P, includes child behavior management training as well as other cognitive, behavioral, and emotional approaches such as mutual problem-solving strategies, self-management principles, and positive self-talk [11]. This content is embedded in a relational framework including parent group support and a collaborative relationship with a trained group leader. There are two versions of the Incredible Years BASIC parent program, one for preschool children (2–6 years) and one for early school-age children (5–10 years). The BASIC program lasts 12–14 weeks (2–2.5 h/week). The series utilizes videotaped examples to foster group discussion about topics such as child-directed play skills including parent coaching in social skills, emotional language building, and problem solving. In addition, basic parenting principles such as differential attention, praise, effective commands, limit setting, natural and logical consequences, and time out are taught. Parents are afforded time to practice these positive parenting skills in role-play opportunities and to develop empathy for the child when parents demonstrate how their child would respond. In addition, parents are paired with rotating buddies (other members in the group) for additional support outside of the weekly sessions to strengthen social networks, intended to persist beyond the intervention. A supplemental ADVANCED parent program addresses a number of parental stressors in greater depth [12] and is a component of the more intensive training for parents of children diagnosed with conduct problems or attention-deficit hyperactive disorder.

The efficacy of the Incredible Years parent program (www.incredibleyears.com) as a treatment program for children (2–8 years) with conduct problems has been demonstrated in seven published randomized controlled trials by the developer [13]. Incredible Years has also been studied extensively by other investigators who have independently replicated findings of the developer with young children with oppositional behavior problems (see www.incredibleyears.com). In addition, the program has been adapted for use as a prevention program with low-income, multiethnic families. A recent study delivering the program to parents of kindergarten and grade one children identified as high risk found similar improvements in parent–child interactions in previous studies in the Head Start Population (M.J. Reid, C. Webster-Stratton, and M. Hammond, unpublished work).

Other studies have also documented comparable decreases in reported children's (24–56 months) internalizing symptoms (e.g. depression and anxiety) comparable with decreases in levels of disruptive behavior over a 6-month period [14•]. The program has inspired other investigators to use it with children entering foster care [15••] and preschool-age children with adjudicated siblings [16••], with similar positive findings for both parents and children, demonstrating the feasibility of its use in real-world settings with other at-risk and multiethnic subpopulations of families. The Incredible Years series offers separate standardized curricula and manuals to teach children social skills and enhance teachers' classroom-management skills. However, this is beyond the scope of this review. When used in conjunction with the parent-focused curriculum, the comprehensive approach has been shown to significantly enhance outcomes for diagnosed children in multiple settings.

Community Parenting Education program

Another group-based parenting program for parents of young children is the Community Parenting Education (C.O.P.E.) program developed by Charles Cunningham and colleagues [17] (and see www.communityed.ca/training/cope.cfm). The curriculum includes problem-solving, attending to and rewarding pro-social behavior, transitional strategies, when-then strategies, ignoring, disengaging from coercive interactions, advanced planning for difficult situations, and time out. Mixed groups of parents of diagnosed and typically developing children meet weekly for 12 sessions. Similar to the Incredible Years program, it uses a coping problem-solving model in which parents view videotape models of parenting strategies for dealing with common child-management problems and then use these to generate solutions. Leaders model solutions suggested by participants, and parents role play the solutions and set homework goals. Families who attended the parenting groups reported significantly greater improvement in child behavior at Post-test and after a 6-month follow up. The parenting groups were significantly less expensive than the clinic-based intervention offered to the same number of families [17].

Other studies have adapted or modeled programs using positive parenting practices for families of other ethnicities and cultures [18,19]. Table 1 [20–27] outlines the key features of the above parenting programs for quick review. Pediatricians interested in making referrals to parenting groups should determine which programs are offered in their community. For additional details on the above parenting programs, please see the References section.

Recommendations for integrating effective parenting principles

By gaining an understanding of the components of evidence-based parenting programs, pediatricians will be better equipped to provide parenting guidance during well-child visits and to make referrals for their families. Several key parenting-program principles can easily be interwoven during primary-care well-child visits.

Use a collaborative, systems-based approach

Taking the time to develop a relationship with families over a course of several primary-care visits, or a longer visit booked at the end of the workday, may enhance the pediatrician's ability to discuss troublesome parenting risk factors or to help parents troubleshoot problematic behavior [28]. Collaboration with nurse practitioners, social workers, child developmental specialists, psychologists, and child psychiatrists can alleviate the burden on the primary-care provider [29], exemplified by innovative models of developmental and behavioral screening such as Healthy Steps [30,31] and Bright Futures [32].

Take a collaborative approach with parents to identify their goals

Help parents identify what aspects of parenting they would like help with or whether there are aspects of their children's behavior they have questions about. By opening conversations and letting parents set the agenda for the well-child visit, pediatricians will more likely facilitate parents' disclosure of the issues of most concern to them [33]. The pediatrician might say, 'What are the two things you want to make sure we cover today in regard to your parenting needs?'

Be supportive and nurturing

Parenting young children can be physically and emotionally exhaustive, especially when parents experience other stressors such as divorce, economic disadvantage, or language barriers. Children with difficult temperaments (such as hyperactivity, impulsivity, and attention problems), developmental disabilities or delays, concurrent

Table 1 Summary of empirically validated prevention programs for young children (2–8 years)

Program type and name	Age of children (years)	Target and format of intervention	No. of hours	Populations studied: Selective intervention (S)	Populations studied: Indicated intervention (I)	Child outcome
Helping the noncompliant child [20]	3–8	Individual parental skills training	6–12 h per family		I	↓Noncompliance
Parent–child interaction therapy [21,22]	2–6	Individual parent and child training	14 h per family		I	↓Conduct problems
Positive Parenting Program (Triple P) [23]*	7–14	Individual parental skills training, self-administered	6–12 h per family		I	↓Conduct problems
Incredible Years parenting program [24–26]*	2–8	Group parent training, self-administered	20–44 h per group (12–14)	S	I	↓Child conduct problems
Community Parenting Education (C.O.P.E.) program [17]*	2–5	Large-group parent training	24 h per group (18–28)	S	I	↓Behavior problems
DARE to be You [27]	2–5	Group parent training	20–24 h per group	S		↓Oppositional behavior

Under Populations studied, S stands for selective prevention programs (targeting children at risk because of socio-familial and environmental factors) and I stands for indicated interventions (targeting children diagnosed with oppositional defiant disorder or conduct disorder).
* Programs highlighted in the current paper.

mental health disorders, and/or learning disabilities require a great deal of patience and effective parent-management skills. Such families and children should be identified and offered additional parenting support (e.g. regular telephone check-ins, additional visits, parenting group referral). Acknowledging concerns and praising parents for their efforts models the power of praise between adults/spouses, and subsequently, parent and child.

Screen and identify families at higher risk

Assess the parent's support network – spouse/partner, extended family, and friends – and help parents develop these linkages by referring to a group-based parenting program. The presence of domestic violence, child abuse, and parental substance abuse are additional red flags that practitioners need to be prepared to identify and refer families to appropriate service agencies. Table 2 lists possible parenting red flags that warrant additional assessment.

Help parents understand their children's behavior in the context of normal development and common day-to-day 'ups and down'

Parents may express a myriad of feelings such as frustration, disappointment, anger, guilt, or hopelessness when talking about their children's behavior problems. Make sure parental expectations match the child's developmental level. Elicit contextual factors, patterns, and exacerbating or alleviating factors surrounding the misbehavior. Sometimes only reassurance is needed. Highlighting specific parenting principles is best when framed in terms of normal child development and can begin in the nursery. Teaching parents to recognize aspects of their baby's behavior that invite interaction (e.g. relaxed body posture, cooing) will start the foundation to learning how to interpret their baby's nonverbal cues. Pediatricians can begin discussions about how to engage in child-directed play and descriptive commenting (narrating/labeling actions and objects) around 12–15 months when the child is acquiring more language and fine-tuning motor skills. Toddlerhood often marks the time when children begin to assert their independence and test limits. Pediatricians can advise parents to encourage their toddler to use words to express feelings and to use differential attention and praise to shape desired behaviors and extinguish unwanted ones. By emphasizing how parents can engage in social and emotional coaching during child-directed play interactions, pediatricians can promote the development of a child's feeling literacy and social skills needed to interact successfully with peers. Teaching parents how to set limits using directions that are firm but not angry, realistic, and age-appropriate can reduce parental and child frustrations. Parents can be coached to use transition warnings, give their children choices and use distractions as possible strategies to prevent problems from occurring in the first place.

Table 2 Possible parenting red flags warranting further assessment

'My child disobeys me most of the time'
'If I give a command to my child, s/he refuses to do what I ask, more than 80% of the time'
'I can't teach my child'
'My child is having trouble with peers in daycare or school'
'The teacher says my child is having difficulty learning at school'
'I don't feel my discipline and parenting approaches are working'
'My partner and I disagree about how to discipline our children'
'I am feeling stressed and burnt out'
'I can't handle him/her'

Emphasize nonpunitive discipline approaches for misbehavior

Parenting programs emphasize building and nurturing positive parent–child interactions. By ignoring minor misbehavior and using incentives and enthusiastic praise for acceptable behavior, parents shift their responses to the child's strengths, rather than the negative aspects. Most children will test their parents and occasionally misbehave. Have parents focus on one or two behavior issues at a time and counsel parents to respond with nonpunitive discipline approaches and effective limit-setting strategies, as advocated by the American Academy of Pediatrics [34], such as redirections, natural or logical consequences, ignoring, or time out strategies. For example, teaching parents of preschool-aged children which behaviors they can ignore (e.g. whining, picky or messy eating, pouting) compared with ones better suited to time out (e.g. aggression) or loss of privileges is beneficial.

Emphasize the power of parental attention and how both positive and negative attention can reinforce behavior

It is not uncommon for parents to overlook the importance of using praise, affection, and attention for appropriate child behavior, because either they are tired and stressed or do not feel praise is important. Yet, positive parental attention is one of the most powerful ways of teaching and motivating children to be socially competent. Children who do not receive consistent praise and attention for positive behaviors may act out. Likewise, parents who react by yelling and showing intense anger inadvertently reinforce the child's misbehavior by giving the child negative attention. Help parents understand the importance of catching their children being good by giving praise that is positive, specific, and enthusiastic. In doing so, parents encourage a child's persistence in learning a difficult or complex skill, boost the child's self-esteem, and reinforce the praised behavior.

Use techniques such as 'show me' to help parents explain current parenting difficulties and 'practice' alternative parenting skills

Help parents learn key positive parenting techniques (e.g. child-directed play, praise, incentives) by having parents practice how to respond to common childhood misbehaviors. After parents have described the misbehavior,

including its antecedents and consequences (parent's handling of the misbehavior), ask the parent to show you how they would like to respond to the child. Afterwards, discuss possible fine tuning or provide information about the applicable child development principle and replay the scenario. This actual practice helps build the parent's confidence of how to respond to the misbehavior. Ask the parents to show how their child responds in order to help them understand their child's point of view. This process allows parents and pediatricians to find solutions to the problem collaboratively. Follow-up calls after the visit will be helpful to determine whether the approach has been successful.

Emphasize the parent's ability to model appropriate behaviors

Parents have the ability to model appropriate behaviors through their interactions with children as well as with other family members and adults. Parent coaching of social skills during play with puppets and toys, or play dates can be useful and promote positive parent–child experiences. Parents can help young children to self-regulate by introducing emotion language into play to build their child's vocabulary.

Offer socio-economically sensitive parenting programs

Families of low-income and, to a lesser degree, low levels of education and maternal psychopathology (e.g. maternal depression) are vulnerable to parenting-program drop-out [35]. Programs offered after work hours, occurring in community settings (e.g. health centers, schools, doctors' offices), and including dinners and day care will likely attract more families.

Teach parents coping techniques

Teaching parents to be aware of negative feelings and thoughts is the first step to breaking a negative interchange between child and parent. Encourage parents to use positive self-talk to deal with negative, self-deprecating thoughts ('I am a good parent,' 'All children go through this, he will get better,' 'Tomorrow will be another chance to try again'). Help parents generate alternative solutions to highly charged situations or scenarios, such as advance planning, asking for help, and anticipating transitions. Giving stressed parents permission to carve out adult time for a dinner date or movie and make arrangements for the occasional babysitter can help.

The future of parenting programs in primary care

The literature supporting the effectiveness of parenting programs for prevention and treatment of behavior problems and real-world applicability with certain subpopulations and cultures continues to grow [9••,15••,18,36•,37,38•]. Studies that rigorously examine program implementation fidelity and effectiveness are critical as the debate over the delivery of well-child care continues [39]. Yet, in order to satisfactorily meet parents' expectations of their child's developmental and behavioral needs, it is essential to think not only of how to screen and treat, but how to prevent behavioral problems from developing in the first place.

Developmental surveillance and screening are among the primary tasks pediatricians are well positioned to perform due to the frequency of well-child visits during the first 5 years of a child's life [33,40]. These years are critical to a child's social-emotional competence and are the ideal time to discuss parenting skills. Since community resources for parenting support are variable and may have long waiting lists, pediatricians will face the need to take on formal screening and brief counseling for behavioral problems. We have made recommendations for the integration of effective parenting principles from parenting programs that can be incorporated into clinical practice. Moreover, the Incredible Years series and Triple P come with extensive manuals and reproducible handouts that may be used by the pediatrician or other office staff for distribution. Offering parenting groups at physician offices is another option for practicing pediatricians to deal with behavioral problems but would involve a reorganization of clinic practices. If resources allow, parenting groups can be started under the direction of other qualified clinical staff such as nurse practitioners, child-development specialists, or a social worker. Group well-child care has been shown to be equally efficient in terms of provider time when compared with the time spent with individual patients [41]. Lastly, teaching resident physicians how to screen and counsel patients on routine behavioral issues is imperative so that the future generation of primary-care practitioners will have the skills and training upon completion of residency training. A pilot study is planned by the authors using the incredible years parenting program materials to supplement resident training experiences in the developmental behavioral pediatrics rotation to promote residents' self-efficacy in handling behavioral and parenting issues.

Access to care (e.g. living in a remote area, lack of insurance) is an important barrier to obtaining preventive services. The feasibility of offering services through telephone parenting support or by providing books, CDs, and videotapes or DVDs of parenting programs has been examined [42•,43]. As innovations in telemedicine grow, adaptation of parenting programs as a self-study computer-based program is yet another avenue to reach families and evaluation of this approach is currently being conducted using the Incredible Years program.

Conclusion

The literature on the effectiveness of evidence-based parenting programs is growing. This information can

enhance the practicing pediatrician's understanding of available community resources and parenting support. These programs are feasible with families of various cultures and those at risk for parenting difficulties. Pediatricians can easily incorporate positive parenting principles into primary care visits and developmental surveillance.

References and recommended reading

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