

PREVENTION IN ACTION

Targeting Early-Onset Conduct Disorder

PERSPECTIVE

The Incredible Years program is aptly named. In an effort to prevent, reduce, and intervene in aggression and emotional problems, the Incredible Years seeks to promote the emotional and social competence of young children. The wealth of research on the Incredible Years makes it a true public health prevention intervention.

The program's success rests in its core of evidence-based foundational principles of family-centered prevention intervention. The program increases nurturing parenting, parent and school



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connectedness, and parental social skills, and decrease harsh discipline. Parents are taught critical skills, such as how to play with their children; coach their children's social, emotional, and academic growth; effectively praise and use incentives; establish and maintain household rules; manage misbehavior; promote a child's responsibility; bolster their own and their children's effective communication skills; and manage anger and depression in themselves and their children.

The program also addresses conduct disorders from the teacher front by providing teachers with the necessary tools for classroom management, dealing with difficult behavioral problems, being proactive rather than reactive, and establishing and maintaining good channels of communication between students and parents.

Finally, the Incredible Years intervention is effective because it seeks to increase children's social skills and their capacity to attract and maintain adult support systems, as well as the ability to show empathy, view situations from multiple perspectives, maintain friendships, navigate school rules, manage anger—in other words, how to be successful in school and in life.

The key elements of the intervention can and should be universally adopted. Most clinicians, teachers, and others should be able to understand the Incredible Years' basic principles of increasing nurturing and school and parental connectedness; decreasing harsh discipline; and increasing parental, teacher, and child social skills in an effort to provide children with the essential skills to live successfully in society.

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The most compelling argument in favor of interventions targeting children with early-onset externalizing disorders is the research documenting what happens in the absence of such intervention.

Preschool and school-age children who meet the diagnostic criteria for such externalizing disorders as oppositional defiant disorder and conduct disorder are at significantly increased risk for a range of adverse outcomes, including substance abuse, crime, mental illness, suicidality, and violence in adolescence and adulthood, as well as neglectful parenting.

According to the findings of a frequently cited longitudinal study reported in 2005, David M. Fergusson, Ph.D., and his colleagues at the University of Otago, Christchurch (New Zealand), observed a direct link between conduct disorder in middle childhood and poor psychological and social functioning in later life.

The investigators analyzed data gathered over 25 years from a birth cohort of 1,265 children, looking specifically at parent and teacher reports of child conduct problems at 7, 8, and 9 years old; measures of crime, substance use, mental health, sexual/partner relationships, and education/employment; and confounding factors such as childhood, family, and educational characteristics.

After controlling for confounding factors, statistically significant associations emerged between childhood conduct problems and the risk of adverse outcomes across all domains of functioning except education/employment. Those children with the most severe conduct problems at 7, 8, and 9 years old were up to 19 times as likely to exhibit these adverse outcomes, the authors reported (*J. Child Psychol. Psychiatry* 2005;46:837-49).

The association between early conduct disorder and specific adverse outcomes has also been examined. In a more recent report, Dr. Fergusson and his colleagues used data from the same birth cohort study to examine the association between conduct problems in middle childhood and adolescence and later substance use, abuse, and dependence. After controlling for confounding interpersonal factors, they found that conduct problems at 7-9 years and 14-16 years predicted substance use, abuse, and dependence at 18-25 years (*Drug Alcohol Depend.* 2007;88[suppl. 1]:S14-26).

In a study by Rolf Loeber, Ph.D., of the University of Pittsburgh and associates, boys diagnosed with conduct disorder in middle childhood were significantly more likely than their peers to carry a concealed gun in late adolescence.

Of 177 boys with behavioral disorders who were first interviewed between the ages of 7 and 12 years old, 20% of those with conduct disorder had carried a concealed gun by the time they were 18 years old. The researchers also found that adult crime was best predicted by gun carrying, conduct disorder, and lack of parental monitoring. "Of all psychiatric diagnoses, only [conduct disorder] was positively associated with gun carrying.

This specific link probably rests on the association between delinquent-type symptoms of [conduct disorder], reflecting a delinquent lifestyle, and gun carrying," wrote the authors.

"Conduct disorder, even when controlling for self-reported violent behavior, maternal psychopathy [being diagnosed with a psychiatric disorder], victimization, and [lack of] parental monitoring, increased the risk of gun carrying by a factor of five," Dr. Loeber and his associates reported (*Arch. Pediatr. Adolesc. Med.* 2004;158:138-45).

The findings of these and other studies "highlight the developmental importance of addressing conduct difficulties in childhood and adolescence," according to Dr. Fergusson. It is critical, he said, to devise effective interventions and treatments to address these problems in order to stem the tide of consequent longer-term problems.

In light of data suggesting the importance of the early years to a child's later social development—specifically, that the pathways to violence and crime might be laid down by age 2 or 3 years and that the earlier aggressive and oppositional traits are established, the worse the long-term outlook tends to be—such interventions should be implemented early, before aggression and violence become stable character traits, suggested Daniel S. Shaw, Ph.D., of the University of Pittsburgh and his associates (*J. Child Psychol. Psychiatry* 2005;46:931-42).

Toward this end, a number of promising interventions have been developed and implemented. Among these, the Incredible Years training series for parents, teachers, and children stands out as a model program. Developed by Carolyn Webster-Stratton, Ph.D., of the University of Washington, Seattle, the 12-week curriculum is designed to prevent, reduce, and treat conduct problems in children aged 2-10 years. The program uses group discussion, videotape modeling, and rehearsal intervention techniques to assist adults living and working with children in this age group to increase the children's social competence.

The Incredible Years is built on the developmental theory that multiple interacting risk and protective factors play a role in the emergence of conduct problems. The program's three complementary components (one each for parents, children, and teachers) are designed to promote consistency between home and school.

The Incredible Years parent training intervention focuses on strengthening parenting competencies to promote children's social and academic development and reduce delinquent behaviors. The child training curriculum also targets children's social and emotional competencies by focusing on such areas as understanding and communicating feelings, using effective problem-solving strategies, managing anger, practicing friendship and conventional skills, and modeling appropriate classroom behavior. Finally, the teacher training component addresses teachers' classroom management strate-

gies with the goal of promoting children's prosocial behavior and school readiness and reducing children's classroom aggression and noncooperation.

According to the National Registry of Evidence-Based Programs and Practices, a service of the Substance Abuse and Mental Health Services Administration, the Incredible Years program has been implemented in hundreds of sites worldwide and its efficacy has been proved in multiple randomized controlled trials.

The program has been associated with significant increases in parental positive affect such as praise and reduced use of criticism and negative commands, in parental use of effective limit setting with nonviolent discipline techniques, and in positive family communication and problem solving. It also has been associated with significant increases in parental self-confidence and children's positive affect and prosocial problem solving, as well as significant reductions in child conduct problems and parental depression (www.nrepp.samhsa.gov/program-fulldetails.asp?PROGRAM_ID=131).

In one of the most recent program evaluations, Judy Hutchings, Ph.D., of the University of Wales, Bangor, and colleagues assessed the impact of the Incredible Years program, delivered through the country's Sure Start program in socially disadvantaged areas, for 153 parents whose 3- to 5-year-old children were deemed at risk for significant behavior problems.

Compared with a wait-list control group, children of parents participating in the Incredible Years intervention showed significant reductions in antisocial behavior and hyperactivity, and their parents demonstrated significant improvements in self-control. In addition, intervention parents consistently perceived their problems to be less severe at follow-up, compared with controls, and they reported reductions in stress and depression (*BMJ* 2007;334:678).

According to Dr. Hutchings and her colleagues, the findings provide important lessons, particularly for England, where the Sure Start early-intervention programs have not been effective. The take-home message is that broad-based prevention efforts are more effective when they are organized around a single, proven intervention model, such as the Incredible Years.

"Unlike the disappointing results from the national evaluation of Sure Start, [this study] shows that choosing an evidence-based program can achieve remarkable outcomes in high-risk children whose parents generally fail to engage with services," they wrote. The results also point to the importance of targeting effective services to high-risk conduct-disordered children. Doing so, the authors wrote, is the best way to minimize the public health costs associated with the consequences of antisocial behavior. ■

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