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Conduct problems in children and adolescents present a serious concern for agencies dealing with youth. These problems range from annoying and disruptive behaviors such as non-compliance to more serious antisocial and delinquent behaviors. It is the persistent display of antisocial behaviors such as physical aggression, lying, and stealing, and violation of family, school, and societal rules that characterize youth with a Conduct Disorder diagnosis. Conduct Disorder has been found in 2% to 9% of various non-clinic population samples. They make up the single largest group of referrals for child mental health services, accounting for one-third to one-half of all referrals. Studies of incarcerated juveniles found that 87-91% had Conduct Disorder. Clearly, a significant proportion of the mental health and juvenile justice resources are being directed towards these youth. In addition, considering the cost to others who are victims of aggressive and antisocial acts, this disorder is one of the most costly mental disorders in the United States.

Conduct Disorder has a relatively poor long-term prognosis and is displayed by family members over multiple generations. Once the pattern of behavior becomes chronic, it is very resistant to change, as demonstrated by high rates of recidivism of juvenile delinquents and the failure of most treatment programs to maintain change in serious adolescent antisocial behavior over time. Studies have reported that approximately two-thirds of youth with Conduct Disorder will continue to display antisocial behaviors into adulthood.

PROMISING TREATMENT MODELS

A number of different interventions have been used to treat youth with conduct disorder, however, the majority have not been well evaluated. Two recent reviews of psychosocial interventions for conduct disorder among children and adolescents found several promising treatments that met strict criteria¹ for demonstrating effectiveness in controlled studies. While somewhat different criteria were used in the two reviews, both required the treatment to have demonstrated that it can create change in problem behaviors. Three types of treatment met this criterion and were evaluated on youth with clinical levels of conduct disorder: parent management training, problem-solving skills training, and multisystemic therapy (see *Table 1* for a list of specific therapies).

FAMILY-BASED INTERVENTIONS

Family-based interventions have consistently demonstrated their ability to impact the behavior of a youth with conduct disorder. These interventions require ongoing involvement of a parent or family member and they require the parent to complete tasks or practice skills outside the treatment session.

Parent Management Training. A number of treatment models have been developed to train parents to alter their child's behavior in the home. The immediate goal of the program is to develop specific skills in the parents that will alter the interactional patterns maintaining aggressive and antisocial behavior. The core elements of the parent training approach include the following:

- Parents are trained to change their focus from a preoccupation with conduct problems to an emphasis on prosocial goals.
- The programs typically include instruction in the social learning principles underlying effective parenting techniques, including: positive reinforcement, mild punishment, negotiation, and contingency contracting.
- The programs use didactic instruction, modeling, role playing, behavioral rehearsal, and structured homework exercises extensively.

¹ Criteria included the following: at least two studies demonstrating that the treatment is more effective than another treatment (e.g., usual community services) or a waiting list control, and specification of the treatment model and processes leading to therapeutic change.

There is considerable evidence to support the use of parent training techniques based on social and behavioral learning theory for children with conduct disorder. These interventions have been successfully implemented in the clinic and in the home using individual or group sessions. Books such as *Living with Children* by Gerald Patterson (1976), Webster-Stratton's videotapes, and treatment manuals, are available to support the training curriculum.

Parent training is more effective in reducing behavior problems in younger children than in older children. Optimal effects are achieved if the intervention occurs before these children finish the fourth grade, when such behaviors appear to become firmly entrenched through association with deviant peers. Family therapy models that incorporate parent management training, such as Functional Family Therapy, have been shown to be more effective with adolescents with conduct disorder.

Multisystemic Therapy. The intervention model with the most empirical support for treating adolescents with Conduct Disorder is Multisystemic Therapy (MST). Problem behaviors are conceptualized as being linked with individual characteristics and with various aspects of the multiple systems in which the adolescent is embedded, including the family, peers, schools, and neighborhood. MST is designed to intervene at all levels using treatment techniques most likely to: (a) promote disengagement from deviant peers, (b) build stronger bonds to conventional groups such as the family and school, (c) enhance family management skills such as monitoring and discipline, and (d) develop greater social and academic competence in the adolescent.

The specific treatment techniques used in a particular case are individualized to the needs of that youth and his/her family. The treatment plan is based on an extensive assessment of all systems and their interrelationships to identify the most salient contributors to the problem. Therapists use a variety of proven therapy techniques to change the systems supporting the problem behaviors, including family therapy, school consultation, and the other behavioral and cognitive-behavioral techniques described in this paper.

Results of studies with extremely aggressive and antisocial youth have demonstrated MST to be superior to "usual" court services and community treatment in reducing conduct problems and improving family functioning. Follow-up studies over a 2-5 year period have shown that these youth continue to have lower arrest rates than youth who receive traditional services. In addition, a study demonstrating the effectiveness of MST with younger children who were abused or neglected suggests that this model may be applicable to young children with conduct problems as well.

INDIVIDUALLY FOCUSED INTERVENTIONS

The majority of the interventions that focus on the youth as the primary participant are designed to address the social skill and problem-solving deficits seen in youth with conduct problems. Many of these programs have not been well researched; however, initial findings using these programs with groups of adolescents in residential settings (i.e., corrections or inpatient programs) appear promising for reducing problem behaviors as well as increasing social and problem-solving skills. For example, the EQUIP program combines social skills training, moral reasoning, and problem solving in group meetings that emphasize positive peer culture. Behavioral homework assignments are also included. Participants in one controlled study were reported to have fewer staff-filed incident reports while incarcerated and to have a lower recidivism rate than the control groups one year post-release.

Problem-Solving Skills Training. The Problem Solving Skills Training model has been well researched. It is based on literature that demonstrates that youth with disruptive behaviors often show cognitive deficits and distortions that can lead to aggression. By altering the way the youth perceives environmental events and interprets the intent of the behavior of others, aggression is reduced. A youth works individually with the therapist to learn appropriate self statements for interpersonal situations that lead to effective solutions to a problem. Prosocial solutions are fostered through the therapist's active role in treatment that can include modeling, role playing, coaching and practice, direct reinforcement, and mild punishment (e.g., loss of points). Over the course of treatment, the youth increasingly uses the new skills in real-life situations.

Several outcome studies with pre-adolescents in clinic and inpatient settings have demonstrated significant reductions in aggressive and antisocial behavior at home, at school, and in the community. These gains were still evident at one year follow-ups. However, this model has been relatively untested with the delinquent adolescent population.

Table 1. Summary of Empirically Evaluated Treatment for Conduct Disorder

Reference	Description	Age	Participant	Setting	Modality ¹
Family-Based					
Parent Training					
Eyberg	Parent-Child Interaction Therapy	3-8 years	Parent-child	Clinic	Individual
Forehand	Helping the Non-Compliant Child	3-8 years	Parent-child	Clinic	Individual
Patterson	Living with Children	3-12 years	Parent-child	Clinic	Individual
Webster-Stratton	BASIC & ADVANCE	3-8 years	Parent	Clinic	Group
Family Therapy					
Alexander	Functional Family Therapy	Adolescent	Family	Clinic	Individual
Henggeler	Multisystemic Therapy	Adolescent	Family	Natural	Individual
Family/Community-Based					
Gibbs	EQUIP	Adolescent	Youth	Residential	Group
Goldstein	ART	Adolescent	Youth	Residential	Group
Kazdin ²	Problem Solving Skills Training	Pre-adolescent	Youth	Clinic/Inpatient	Individual
Community Systems-Based					
Chamberlain	Treatment Foster Care	Adolescent	Youth	Residential	Individual
Kirigin	Teaching Family Model	Adolescent	Youth	Residential	Group

¹Modality refers to whether the treatment is individualized or applied to groups of unrelated individuals.

²Increased effectiveness when combined with parent training

COMMUNITY SYSTEMS BASED INTERVENTIONS

Community-based residential programs (i.e., group homes, wilderness programs) for aggressive and delinquent adolescents have been the treatment of choice for many decades. However, few are subjected to rigorous evaluation to determine if they are effective. There are several drawbacks to the use of residential treatment. First, these programs are quite expensive and require the development of a service that provides for control and security. Second, research has shown that behavior-problem adolescents assigned to groups composed of other deviant peers do not evidence a decrease in delinquent behavior and may, in fact, expand their repertoire of delinquent behavior. Finally, the behavior changes that occur during the program frequently do not generalize beyond the treatment center. Even a program like the Teaching-Family Model, with over 250 "certified" group homes and multiple outcome evaluations demonstrating significant effects while the youth is in the program, has not been able to consistently show long-term treatment effects. As a result of these disappointing outcomes, treatment foster care models are beginning to have wider use for youth who can not live at home.

Treatment Foster Care. Chamberlain and her colleagues have developed a multicomponent treatment foster care program for youth with conduct problems that utilizes parent management training techniques for the foster parents. The key components

include: (1) recruitment and up to 20 hours of preservice training for foster parents; (2) ongoing case management including individualized consultation, weekly group foster parent meetings, and 24-hour on-call back up services; (3) daily structure and telephone support; (4) teaching foster parents to work with schools; (5) family therapy with the biological family, if possible; and (6) individual therapy for skills training. While implementation of this program has varied widely, initial studies suggest this might be an effective and cost-efficient intervention for conduct disordered youth who require out-of-home placement.

IMPLICATIONS FOR BEST PRACTICES

Juvenile Justice Settings

- Use of behavioral management programs and skills training can be very helpful in promoting a decrease in aggressive behaviors and an increase in prosocial behaviors in residential/correctional settings. However, intensive community-based services will be needed upon release to facilitate long-term effects of the program.
- Increasing lengths of stay in residential or correctional facilities will not decrease the amount of services required in the community. For youth committed to correctional facilities, longer stays may translate to a need for more community services to offset the deleterious effects of close contact with other deviant peers.
- Parents or foster parents can benefit from some behavior management training prior to the youth's release. However, in order to benefit fully from the intervention, they will need ongoing support and training once the youth is in the home.

Community-Based Service Delivery

- Better results are likely with comprehensive, early interventions.
- Long-term changes in conduct disorder behaviors are maintained better with family-based interventions.
- Due to the overwhelming evidence for the positive effect of family involvement in treatment, it may be helpful to court-order parents into treatment along with the youth.
- Parenting skills training can be helpful, especially for younger children. However, more complex treatment models using family therapy techniques may be required for adolescents.
- If the youth must be placed out of home, therapeutic foster care with intensive case

management and individualized services may be a better alternative than a group home.

- Programs that provide skills training to groups of youth may have better results if the groups include competent, non-deviant peers.
- Interventions requiring homework or tasks from participants have shown better results than interventions that allow participants to be passive.

CONCLUSION

There is considerable evidence to suggest that an early and intensive response by authorities (parents, teachers, juvenile justice system) to a youth's delinquent behavior is needed. Evidence of conduct disorder in young children is more frequently associated with Attention Deficit Hyperactivity Disorder (ADHD) and has a poor long-term prognosis. Therefore, rather than ignoring the problem and hoping the child will "grow out of it", parents and teachers should refer these youth to one of the effective treatments reviewed here. If it is determined that the child also has ADHD, medication could prove very helpful. Juvenile justice authorities should also respond to the first offense with a referral for evaluation and treatment, rather than the traditional "slap on the wrist". However, referral to traditional treatments that have not demonstrated their effectiveness with this population may be worse than no treatment, if families become frustrated and conclude that psychosocial interventions do not work.

Interventions are likely to be most successful if they are individualized, family-based, and delivered in the community. Collaborative involvement by significant adults from all systems in treatment will provide the necessary structure to maintain the youth safely in the community. Due to the fact that families of youth with conduct disorder frequently leave treatment prematurely, having a court order mandating treatment can assist the service provider to involve family members who otherwise might resist treatment. In addition, court service workers and probation officers serve a very important case management function, especially when an out-of-home placement is needed. Appropriate placements need to be identified and a treatment plan developed that will provide effective services. Frequent and ongoing monitoring of participation and compliance with the treatment plan are essential.

Two major barriers to providing the needed treatment for children with conduct problems exist in Virginia. First, there are inadequate numbers of service providers who use proven treatment strategies. Many communities do not have providers with skills in behavioral techniques and even fewer are able to provide Multisystemic Therapy. Intensive therapeutic foster care as described here is almost non-existent. Second, while intensive community-based treatment is less expensive than residential placement or incarceration, it is still expensive. Youth with conduct disorder are typically excluded from those groups

eligible for services funded by the Comprehensive Services Act (CSA)² and most families do not have the financial resources to obtain these services privately. Therefore, even if the services are available, families may not be able to access them.

SUGGESTED READINGS

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² Federal mandates exist requiring that CSA funds serve youth in foster care or special education. Public Law 94-142 and its amendments (P.L. 99-457) specifically exclude children who are "socially maladjusted unless it is determined that they are seriously emotionally disturbed." Under this law, most youth with conduct disorder are found to be technically ineligible for special education assistance.

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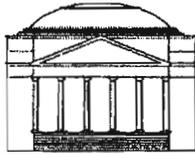
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