

SECTION 1

Children and Adolescents with Depressive Disorder:

Summary of Findings

from the Literature and Clinical Consultation in Ontario

Children and Adolescents with Conduct Disorder: Findings from the Literature and Clinical Consultation in Ontario

SUMMARY

Conduct disorder (CD) is characterized by a pattern of behaviour that violates the basic rights of others or age-appropriate norms and rules of society. Conduct disorder can be extremely challenging for parents, teachers, and mental health professionals. Clinical experience at children's mental health centres in Ontario indicates that children with early-onset conduct disorder consume the most resources and they are the most expensive clients to serve. Early identification, accurate assessment, and effective treatment are essential to reduce the burden of suffering caused by conduct disorder for children, families, and society.

EPIDEMIOLOGY

The prevalence of conduct disorder is estimated at between 1.5% and 3.4% of the general child and adolescent population. Although only 3% to 5% of all youth with conduct disorder have onset before adolescence, these young people appear to consume the most resources in the mental health system and to be responsible for at least half of the illegal offenses committed by juveniles.

CD appears from 3 to 5 times more often in boys than girls, but the gap between boys and girls closes at adolescence. By mid-adolescence, girls surpass boys in the onset of conduct disorders. Boys more likely to exhibit aggressive behaviour and girls to commit covert offenses and prostitution, but gender differences in type of behaviour tend to disappear in the youth who are the most severely disturbed.

CLINICAL CHARACTERISTICS

Conduct disorder involves a pattern of disturbed behaviour that causes significant impairment in social, academic, or occupational functioning. Conduct-disordered behaviours include aggression to people and animals, deliberate destruction of property (including fire-setting), stealing and lying, and truancy from school. Research shows that there are different profiles for conduct disorder based on age of onset and severity.

In **childhood-onset conduct disorder**, a combination of biological and psychosocial factors appear to interact to cause the disorder. Disruptive behaviours emerge early in childhood, usually as negative, hostile, and defiant behaviour characteristic of oppositional defiant disorder (ODD). As the child grows, there usually is an escalation to behaviours more characteristic of conduct disorder, especially lying, fighting, and stealing. These children are more likely to have attention-deficit disorder/hyperactivity disorder (ADHD), learning disabilities, and poor academic achievement. In terms of developmental progression, ADHD tends to be followed by ODD and then by conduct disorder. Children with childhood-onset conduct disorder tend to be mostly male and incidence is not strongly related to socioeconomic class or ethnic group.

In **adolescent-onset conduct disorder**, sociocultural factors, such as the influences of poverty and peer groups, appear to be largely responsible for the resulting behaviours. Youth with adolescent-onset conduct disorder usually do not have serious problems before adolescence.

During the preschool and school-age years, they tend not to show oppositional behaviour or social, academic, or community problems. Oppositional and illegal behaviour begins during adolescence and tend to take place in a group environment. Whereas childhood-onset CD involves mostly boys, girls are also involved in the adolescent-onset group. Adolescent-onset CD is likely to involve urban, poor, and minority youth. They do not have the severe learning problems, developmental disabilities, neuropsychiatric problems, or family history of antisocial behaviour demonstrated by youth with childhood-onset CD. The problem behaviours demonstrate less aggression, especially aggression aimed at others, and they tend to stop as the youth mature into adulthood.

In general, children with childhood-onset conduct disorder may be distinguished from adolescent-onset by their long history of aggression and antisocial acts such as fighting at school, truancy, stealing, early substance abuse, being taken into care, and placement breakdowns. Overall, the prognosis is good for youth with adolescent-onset CD, but less favorable for those with childhood-onset type of conduct disorder. This situation makes early identification and treatment of childhood-onset CD extremely important.

RISK FACTORS AND PROTECTIVE FACTORS

Research suggests that there is a gradual accumulation of risks and interaction among risk factors that lead to CD, balanced by a parallel accumulation of protective factors. Overall, the greater the number of risk factors and earlier they appear, the higher the risk for serious conduct.

Risk factors for CD include early age of onset (pre-school and early school years), conduct problems that occur in multiple settings (home, school), frequency and intensity of conduct problems, diversity of conduct problems and covert problems (lying, firesetting, stealing) at younger ages, and family and parent characteristics. Children with conduct disorder tend to come from large, low-income, urban families led by single mothers. Fathers of conduct disordered children have a greater incidence of antisocial personality disorder and substance abuse, and they are often absent from the home. The mothers of CD children have high rates of depression, antisocial personality disorder, substance abuse and somatization disorders. Parents of children with conduct disorder tend to use corporal punishment coupled with a high rate of neglect and physical abuse.

Protective factors include higher levels of intelligence, good social skills, relaxed temperament, positive work habits in school, areas of competence outside school, and a positive relationship with an adult. Given the strong association of environmental and family factors in CD, some children and youth may adopt CD traits as a protective strategy. It is important, therefore, that clinicians consider the socioeconomic context when assessing the presence of CD.

ASSESSMENT

A diagnosis of conduct disorder is made when DSM-IV-TR target symptoms are present or reported in the child's history, and other disorders have been eliminated. Target symptoms include aggressive behaviour, deliberate destruction of property, deceitfulness and theft, and serious violations of society's rules (e.g., truancy). It is important to know that DSM-IV-TR does not consider one specific criterion alone necessary for diagnosis and that any combination of three or more criteria are sufficient. The number of conduct problems and the harm they cause to others determine the severity of CD.

Since CD is a complex mental health problem affecting multiple domains of functioning and showing a high rate of comorbidity with other disorders, suspicion of CD requires a comprehensive assessment. Assessment information should be obtained from multiple sources, including the child, family, school, peers, and community. Information from these sources will help the clinician determine whether the child has conduct disorder, identify the type of conduct disorder (childhood- or adolescent-onset), determine if a psychiatric or medical problem is causing the disorder, and detect if there is an additional comorbid disorder.

DISORDERS COMORBID WITH CONDUCT DISORDER

Between half and three-quarters of children who have conduct disorder also have ADHD at the same time (comorbid disorder). About half of the children with CD also have an internalizing disorder such as depression or anxiety disorder. Children with CD and comorbid depression are at higher risk of suicide than children with depression alone. They also are more likely to harm themselves without intending suicide. As many as 90% of drug abusing young offenders have CD.

TREATMENT

Research and practice consensus indicates that successful treatment must address multiple domains in a coordinated manner over a period of time. Outpatient treatment of CD usually involves the child/youth, family, school and peer group. Some milder forms of CD, however, require minor intervention, usually **training for the child** (social skills, problem solving) and **training for the parents** (behaviour management, parenting skills) and **consultation to schools**. Moderate and severe CD often involve comorbid disorders that require treatment. Chronic CD, which is usually childhood-onset type, requires early intervention, extensive treatment in multiple domains and long-term follow-up.

Pharmacotherapy alone is not sufficient to treat conduct disorder. Although some psychiatric medications are used to treat CD youth with a comorbid disorder (e.g., antidepressants for mood and anxiety disorders, stimulants for ADHD), there is an absence of adequate efficacy studies in this area.

There is research evidence to support the effectiveness of **Cognitive Behavioural Therapy** for treating youth with CD, especially **Problem-Solving Skills Training**. These forms of therapy help to control antisocial behaviours and strengthen prosocial functioning. Although cognitive behavioural interventions and skills training appear helpful in the short-term, especially for older children and adolescents, their long-term efficacy has not been established.

Family intervention is an essential component for treating conduct disorder. For younger children, the family often is the primary target for intervention and a useful support for adolescent treatment, if the family is present and willing to participate. Before beginning interventions, children's mental health professionals may need to **collaborate with other systems** to ensure that there is a safe home environment, adequate housing and resources to meet basic needs, and parents' psychiatric or substance abuse issues are addressed. The overall approach for working with families is to identify and build upon the parent(s) strengths through **parent counselling, parent education, family therapy, and parent management training** programs. There are numerous studies that demonstrate the effectiveness of these programs for improving parenting skills and helping parents manage child behaviour effectively without the use of physical punishment. There also is evidence that **multi-systemic therapy** is an effective intervention for CD youth that may be delivered in family and community settings.

Children and adolescents with conduct disorder usually show poor academic achievement and may be disliked by their teachers and classmates. Faced with frustration and exclusion, the child or youth may resort to bullying and antisocial behaviour and associate with other students who are in a similar situation. Children with CD may be treated effectively in **day treatment programs**, but good follow-up and transition planning is necessary if treatment gains are to be maintained in regular classrooms. Two common school-based treatment approaches for CD children that have research support are **contingency management** and the use of **token economies** to reinforce positive behaviour and reduce negative behaviours. During the last 10 years, a number of school-based programs have been developed to address conduct problems, including **anger management, conflict resolution, social problem solving, and social skill training**. Only a few of these programs have empirical support for their ability to change problem behaviours or to maintain changes after the program ends.

Adolescent-onset CD is often associated with membership in a group of antisocial youth. To avoid conduct-disordered behavior, **peer intervention** may be necessary to remove the youth from an antisocial group and help them to develop a new peer group. Several evidence-based peer group intervention programs have proven effective. There also has been research support for **multi-systemic therapy** that treats conduct-disordered adolescents (including serious and violent offenders) in their social settings while combining family and community interventions.

TREATMENT SETTINGS

Treatment of CD usually takes place in outpatient and community settings, although **residential treatment** may be indicated by severe family dysfunction, marked noncompliance, or persistent involvement with a deviant peer group. Many children with severe CD have been rejected by their families and have experienced a high level of placement breakdowns. These children are very difficult to manage outside of a residential treatment program. Although the effectiveness of different types of residential treatment have not been thoroughly tested, **treatment foster care** appears to be the preferred residential treatment option for children under 12 who commit moderate to severe offenses and require out-of-home placements. CD youth who are sexual perpetrators may need placement in a **specialized sex offenders program**.

Research supports the use of **home-based or community-based multi-systemic therapy** as an alternative to emergency psychiatric hospitalization or residential care in reducing the symptoms of youth with severe CD problems. Multisystemic therapy involves changing the multiple systems that affect the child's behaviour, including the child, family, school, peers and community. This form of therapy also appears to be effective for CD youth who have substance abuse problems. Criteria for CD usually do not justify **hospitalization** unless there are symptoms of substance abuse, self-destructive or suicidal behaviour, or homicidal or aggressive behaviour that warrant the concurrent diagnosis of ADHD, intermittent explosive disorder, mood disorder, bipolar disorder, or substance abuse disorder.

ADDITIONAL RESOURCES:

See the CMHO website at <http://www.cmho.org> for the full paper "Children and Adolescents with Conduct Disorder: Findings from the Literature and Clinical Consultation in Ontario" and for links to other helpful resources regarding conduct disorder.