

Conduct Disorder: An Overview

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ABSTRACT: *Conduct disorder (CD) is a psychological problem analysed in childhood or adolescence that introduces itself through a redundant and steady example of conduct in which the essential privileges of others or significant age-appropriate norms are violated. These behaviours are often referred to as "antisocial behaviours."*

KEYWORDS: *Conduct Disorder, Delinquency, Risk Factors, Protective Factors, Genetics, Subtype.*

INTRODUCTION

Conduct disorder (CD) is 1 of 3 disruptive behaviour disorders, the others being oppositional defiant disorder (ODD) and attention-deficit hyperactivity disorder (ADHD). As indicated in the DSM-I V, CD con notes a severe externalizing disorder comprising serious aggressive and anti-social behaviours such as fighting, bullying, cruelty, robbery, forcing sexual activity, fire set ting, theft, conning, truancy, and other rule viol at ions. Anti-social behaviour describes actions contrary to the rights of others and rules of society. Adolescent anti-social behaviour that breaks the law (and gets caught) may result in contact with police and the courts; the terms –delinquentll and –young of fender would then apply (Yeager & Lewis, 2000). Thus, CD represents a cons tell action of anti-social behaviours; a subgroup of youths with severe CD will be de linquents. We will also use the terms –aggressionll and –violencell in this overview. Aggress ion is de fined as outward destructive behaviour that results from the confluence of longer- term factors (for example, biological, psychological and personality, family, peer, school, and community), short- term influences (for example, internal states of anger, boredom, or intoxication) and situational opportunity. Violence—a particular form of overt and intentional aggression—uses or credibly threatens to use physical force such as beating, kicking, choking, using a weapon, forcing sex, and throwing objects (Lewis & Yeager, 2000).

EPIDEMIOLOGY

CD is the most common reason for psychiatric evaluation

of children or adolescents. Between 30% and 50% of all child psychiatry referrals tend to involve CD. The Ontario Child Health Study indicated that for ages 4 to 16 years, 5.5% suffered from this condition.

Not all youths with CD have a criminal record, and not all youths with a criminal record have CD. Crime statistics therefore can be in formative but extremely controversial. Inflated statistics could result from population growth, police reporting practices, or growth of police forces. Equally possible, underreporting may occur. This could be due to the existence of special youth crime units and more community-based policing, along with conflict resolution strategies rather than form AL prosecution. In any event, Statistics Cana da data indicate that youth offences increased steadily until 1991 but have declined since. In 1986, there were 136 787 charges laid against youth in Canada; in 1991, there were 171 673; by 1994, these had declined to 143 337. By 1998–1999, courts heard 106 665 ado les cent cases in Canada (Kazdin, 2000). While this decline in overall numbers is comforting, another disturbing trend is occurring. The proportion of youth charged with violent offences seems to be increasing. In 1986, 408 youths per 100 000 were charged with a violent crime (that is, homicide, at tempted murder, assault, sexual offences, abduction, and robbery). In 1995, the rate was up to 938, representing a growth rate of 13% per annum. We expect a 31% increase in the juvenile population over the next 2 decades (9). Accordingly, CD is and will continue to be a fairly significant public health problem, warranting much attention from both the mental health community and the juvenile justice system (American Psychiatric Association, 1994).

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PROTECTIVE FACTORS

Protective factors are not simply the absence or opposite of risk factors, although this is sometimes the case. In fact, despite exposure to multiple known risk factors, many children avoid serious anti-social behaviour. Protective factors are best defined as those variables that offset the effects of risk factors. Research, however, has largely ignored these factors in favour of elucidating risk. It is quite likely that more emphasis on these variables could significantly influence practice and policy (Werry, 1997).

INDIVIDUAL PROTECTIVE FACTORS FEMALE SEX

Being female may be protective via different parenting or socialization patterns; also, girls generally mature and acquire skills more quickly.

HIGH INTELLIGENCE

This is as measured by standard IQ testing. Such testing, however, has been criticized as too limited with respect to types of intelligence and cultural diversity (Zoccolillo et al. 1992).

POSITIVE SOCIAL ORIENTATION

This would likely include the absence of anti-social attitudes and cognitive biases, such as interpreting social cues as necessarily hostile or threatening (Kazdin, 1985).

RESILIENT TEMPERAMENT

This usually means possessing good coping skills and the ability to endure stress, hardship, or trauma without mental de-compensation. Competence at a Skill attaining at least 1 area of good ability at a skill, hobby, or interest has been noted to be protective, perhaps leading to other pro-social activities and interactions.

ANXIETY

According to some research, having anxiety, worry, and guilt tends to protect against the development of anti-social behaviour. Social Factors Warm, Supportive Relationships with Adults. Positive interactions, warmth, or mentorship from adults has been found to be greatly beneficial in influencing away from CD (Offord et al. 1989).

Individual and Family Commitment to Social Values Such As Pro-social Norms or Academic Achievement. Aspiring to universal values such as positive social interactions with others and school success helps children decrease their risk of conduct problems and increases their achievements and opportunities (Pagani et al. 1999).

Recognition for Involvement in Positive Extracurricular Activities. Not just being involved in pro-social activities but

actually being acknowledged, and even rewarded, helps perpetuate such positive behaviour. Societal Factors Increased Economic Equality and National Social Program Support. Developed countries with larger social-program spending tend to have lower homicide rates (Moffitt, 1993).

SOCIAL ORGANIZATION

Strong and stable community in situations (for example, church, neighbourhood organizations, and extended families), as opposed to disorganized, chaotic, and crumbling communities, tend to be protective.

GENETIC CONTRIBUTIONS

It is well known that psychiatric disorders often run in families. Simple Mendelian inheritance, however, is not found with such complex conditions. Given the diagnostic heterogeneity of CD, a more appropriate phenotype, such as aggressiveness or violence, is used in research. Genetic studies can be broadly categorized into 2 types: those using twin, adoption, or familial methods, and those using molecular biology methods. Discussing the science behind these is beyond the scope of this article. One excellent representative twin study looked at the relation between child behavior checklists (CBCL) syndromes such as mood and anxiety disorders, attention deficits, anti-social behavior, and aggressive behavior and temperament ratings using the Emotionality, Activity, and Sociability Temperament Survey (Nagin, & Tremblay, 2001).

The study looked at heritability (the relative impact of genes as opposed to environment) and operated under the assumption that temperament consists of stable and largely genetically determined traits. Emotionality in boys and high activity scores—particularly in younger children—were found to predict aggressive behavior. Further, aggressive behavior, but not general anti-sociality, was found to have significant association with temperamental traits and higher heritability. Among the drawbacks of such studies, however, are reporting biases and environmental influences on gene expression.

Some of these problems are addressed by molecular approaches such as association studies, candidate gene studies, and linkage analysis. This discussion will focus on the search for candidate genes, which entails educated guesses about known genes that may be related to the study of aggression (Elliott, 1994).

There have, for example, been 2 reports finding an association between novelty seeking (characterized by qualities such as being impulsive, quick tempered and seeking stimulation) and the dopamine receptor gene DRD4. Unfortunately, this association was not replicated in another study (Offord, 1989).

A later study looked at catechol-O –methyl transferase (COMT). This enzyme is involved in the breakdown of the neurotransmitters norepinephrine, epinephrine, and dopamine. Strous found that having 2 copies (homozygosis) of the low-activity allele of the COMT gene was associated with medium-to- high risk of dangerous behaviour in subjects with schizophrenia. Monoamine oxidase (MAO) activity is also genetically controlled by a gene on the X chromosome. Low MAO activity has been associated with violent offenders and, in a large family, with several male subjects displaying mental retardation and aggression (Toupin et al, 2000; Tremblay, 2000).

CONCLUSION

Finally, the gene for tryptophan hydroxylase (the rate limiting enzyme in serotonin production) has also been studied. This genotype has also been associated with impulsive aggression in male patients with personality disorders and in violent suicide attempters.

There are some tantalizing early findings in this field; however, more work is needed. We are progressing on genetic markers, as well as on specific phenotypes: in the future, it is likely that specific genes will be linked with, and provide information about, risk factors for aggressive and violent behaviours. Early identification can then lead to more successful prevention.

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