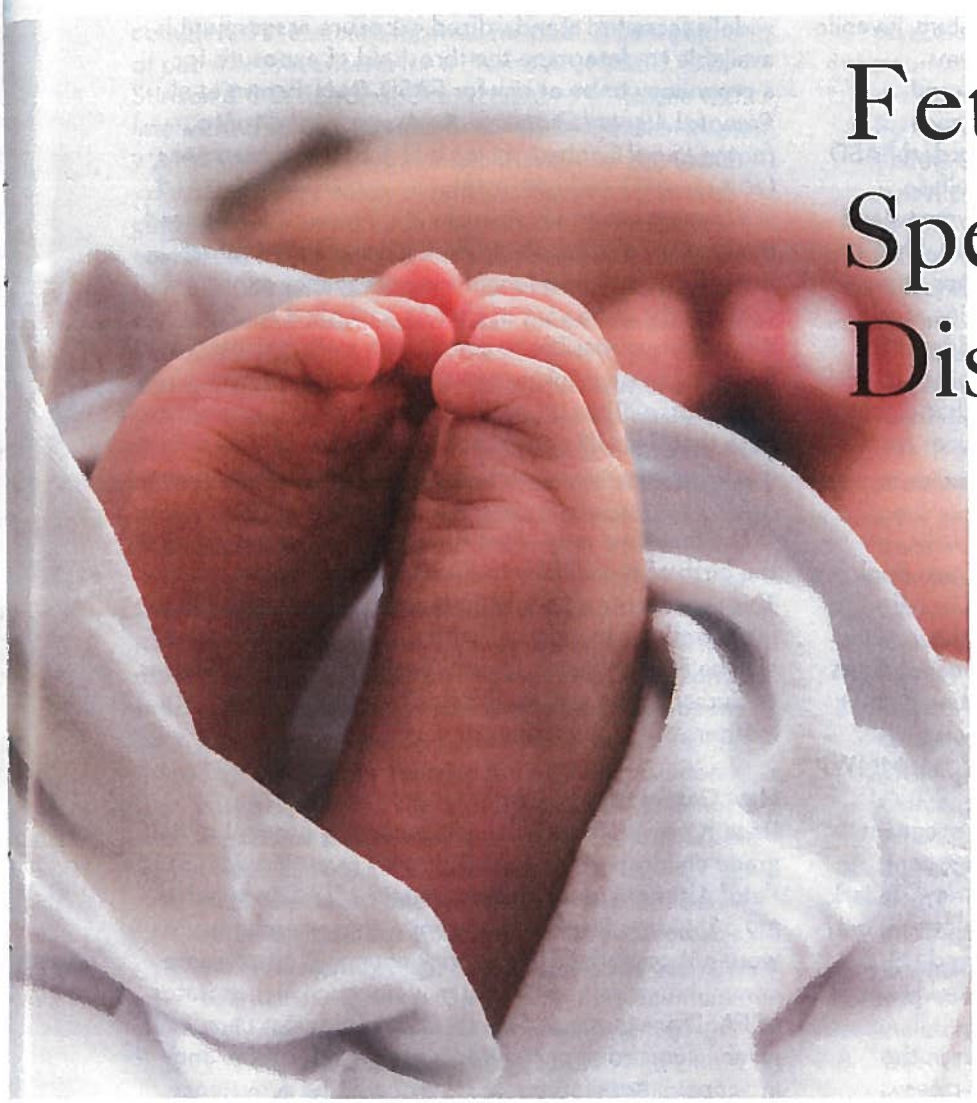

Fetal Alcohol Spectrum Disorders

Implications for Attorneys and the Courts

by LARRY BURD AND WILLIAM EDWARDS

Between one and five percent of people have fetal alcohol spectrum disorder (FASD). FASD is a developmental disability with onset prior to birth. The disorder is manifest as increasing risk for birth defects, growth impairments, intellectual disability, mental disorders, neuropsychological deficits, substance abuse, and sensory impairments. These are accompanied by life-impairing deficits in adaptive behaviors, which strongly influence the capacity for independent living.

Prenatal alcohol exposure is also associated with increased risk for mortality, which often occurs before a diagnosis of FASD is made. The mortality risk for people with FASD is more than doubled, and the mortality risk for siblings of people with FASD is increased 530 percent. (A. Thompson, D. Hackman & L. Burd, *Mortality in Fetal Alcohol Spectrum Disorders*, 4 Open J. Pediatrics 21 (2014).)

People with FASD have disproportionate rates of contact with child welfare, foster care, and juvenile and adult corrections. Nearly one out of four children in juvenile corrections has FASD, and prevalence estimates range from 23 percent to 60 percent. FASD prevalence in adult corrections ranges from 11 percent to 25 percent. Close to 100 percent of people with FASD in these systems have not been correctly diagnosed and, as a result, do not have a diagnosis-informed treatment plan.

A diagnosis is the first step in development and implementation of a diagnosis-informed treatment plan. Attorneys and the courts have a key role in identification and appreciation of FASD. This may be an important factor during arrest, interrogation, and any confession, and in the ability of a client to describe events, or a sequence of events, accurately and repeatedly. Advocacy for eligibility and services from special education and developmental disabilities service providers is essential.

In this article, we discuss the prevalence of prenatal alcohol exposure, detection of exposure, and diagnosis of FASD. We then review the implications of FASD for attor-

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neys and the courts in the child welfare system, juvenile corrections, and adult criminal justice systems.

In 2012, the American Bar Association passed a resolution advocating for "training to enhance awareness of [Fetal Alcohol Spectrum Disorder] FASD and its impact on individuals in the child welfare, juvenile justice, and adult criminal justice systems and the value of collaboration with medical, mental health, and disability experts." The resolution further urges "the passage of laws, and adoption of policies at all levels of government that acknowledge and treat the effects of prenatal alcohol exposure and better assist individuals with FASD." The Resolution further discusses why people with FASD should receive services from developmental disability organizations.

Prevalence of Fetal Exposure to Alcohol

Over 50 percent of women of childbearing age drink prior to pregnancy. (R. L. Floyd et al., *The Clinical Content of Preconception Care: Alcohol, Tobacco, and Illicit Drug Exposures*, 199 Am J. Obstet. Gynecol. S333 (2008); Ctrs. for Disease Control & Prevention (CDC), *Alcohol Use and Binge Drinking Among Women of Childbearing Age—United States*, 2006–2010, 61 MMWR Morb. Mortal. Wkly. Rep. 534 (2012).)

A recent study found that 11.5 percent of pregnant women reported current drinking, and 3.9 percent reported binge drinking during the past 30 days. (Clark H. Denny et al., *Consumption of Alcohol Beverages and Binge Drinking Among Pregnant Woman Aged 18-44 Years—United States*, 2015–2017, 68 CDC Weekly 365 (Apr. 26, 2019).)

For the four million pregnancies each year in the United States that result in live birth, these rates translate to 460,000 pregnant women drinking during pregnancy and about 156,000 with high levels of drinking throughout pregnancy. Thus, the cumulative number of prenatally exposed infants, children, and adolescents in the United States alone would be in the millions. There is no known safe level of alcohol consumption during pregnancy.

Exposure Assessment

Cigarette smoking, other drug exposure, and adverse life circumstances (abuse, homelessness, incarceration) modify the impact of fetal alcohol exposure. (K.N. Washington et al., *Morphometric Analysis in Ethnic Neonates from Multiple Substance Exposure*, 24 Frontiers in Biosci. (Landmark Ed) 527 (2019).) Many women who do drink, do not report drinking and underreport the amount of exposure. (S. Lange et al., *A Comparison of the Prevalence of Prenatal Alcohol Exposure Obtained Via Maternal Self-Reports versus Meconium Testing: A Systematic Literature Review and Meta-Analysis*, 14 BMC Pregnancy Childbirth 127 (2014).) Currently, no widely accepted standardized exposure assessment is available to determine the threshold of exposure for a pregnancy to be at risk for FASD. (N.N. Brown et al., *Prenatal Alcohol Exposure: An Assessment Strategy for the Legal Context*, 42–43 Int'l J. L. & Psychiatry 144 (2015).)

When possible, a maternal interview with a notarized declaration of alcohol use during pregnancy, the pattern of use, and how long during pregnancy exposure continued can be very useful. As a result, it is often difficult or impossible to complete a maternal interview. Information on drinking can also be obtained from a reliable source other than the birth mother. It is useful to note that if insufficient history is available to determine if fetal exposure occurred, it also is likely that exposure cannot be excluded.

The maternal mortality rate in the 10-year period after the birth of the child with FASD is about 4.5 percent. This represents a 35-fold increase in mortality risk for birth mothers of a person with FASD. (M. Schwartz et al., *The Hidden Face of Fetal Alcohol Spectrum Disorder*, 13 Current Women's Health Rev. 96 (2017).) Many birth mothers are also incarcerated or homeless.

How Common Is FASD?

Recent prevalence studies diagnose five percent of first-grade children with FASD. (P.A. May et al., *Prevalence of Fetal Alcohol Spectrum Disorders in 4 US Communities*, 319 JAMA 474 (2018).) Importantly, these research sites were not comprised of high-risk communities. In some communities, rates of FASD may be much higher. Rates of FASD are increased 10- to 40-fold in foster care, juvenile and adult corrections, special education, and indigenous populations. In foster care, the prevalence of FASD was 25 percent (one in four children). In special education programs, the prevalence was 82.0 per 1,000 (1 in every 12 students). Among psychiatric populations, the rate was 82.0 per 1,000 (1 in every 12 patients). (S. Popova et al., *Prevalence of Fetal Alcohol Spectrum Disorder Among Special Subpopulations: A Systematic Review and Meta-analysis*, 114 Addiction 1150 (2019).)

FASD is also very prevalent in adult corrections systems and ranges from 17 percent to 30 percent. Rates are even more frequent among populations where substance use disorders and mental health disorders are prevalent. Missing data often make diagnosis difficult in correctional settings. (K. Flannigan et al., *Fetal Alcohol Spectrum Disorder and the Criminal Justice System: A Systematic Literature Review*, 57 Int'l J. L. & Psychiatry 42 (2018).) In a systematic review of prevalence rates in correctional settings, prevalence rates ranged from 10.9 percent to 22.3 percent. (N. Hughes et al., *A Systematic Review of the Prevalence of Foetal Alcohol Syndrome Disorders Among Young People in the Criminal Justice System*, 3 Cogent Psychol. 1214213 (2016).) In a study

completed in a secure forensic hospital, 8 percent of patients met criteria for a diagnosis of FASD. (J.D. Stinson & S.B. Robbins, *Characteristics of People with Intellectual Disabilities in a Secure US Forensic Hospital*, 7 J. Mental Health Res. in Intell. Disabilities 337 (2014).)

FASD is a very costly condition. The annual cost of care for children exceeds $23,000, and for adults the cost exceeds $24,000. This study found that compared to other common conditions, the estimated costs for children with FASD exceed those for autism ($23,000 versus $17,000, a 26 percent increase), and the costs for adults with FASD exceed those for diabetes in adults ($24,000 versus $21,000, a 13.5 percent increase). (J.R. Greenmyer et al., *A Multicountry Updated Assessment of the Economic Impact of Fetal Alcohol Spectrum Disorder: Costs for Children and Adults*, 12 J. Addict. Med. 466 (2018).)

Determining If FASD Is a Concern

Among the risk factors and behavioral indicators there are many red flags for attorneys that should be considered when representing a client who may have been born prenatally exposed to alcohol in utero:

1. The client has a younger sibling who has been diagnosed with FASD. (E.L. Abel, *Fetal Alcohol Syndrome in Families*, 10 Neurotoxicology & Teratology 1 (1988).)
2. Was your client adopted? Has your client been removed from the home by a child protective services agency (high risk of abuse, exposure to trauma, neglect and out-of-home placement including multiple foster care placements)?
3. The client has had special education placement, often at an early age, and repeated difficulties in school with or without an IEP.
4. There are several early behavioral indicators of FASD, including sleep disorders (J.E. Jan et al., *Sleep Health Issues for Children with FASD: Clinical Considerations*, 2010 Int'l J. Pediatrics 7 (2010); C.L. McGee & E.P. Riley, *Social and Behavioral Functioning in Individuals with Prenatal Alcohol Exposure*, 6 Int' J. Disability & Hum. Dev. 369 (2007)), anxiety disorders, temper tantrums, tremors, seizure disorders, jitteriness or fidgeting (M.J. O'Connor & B. Paley, *Psychiatric Conditions Associated with Prenatal Alcohol Exposure*, 15 Dev. Disabil. Res. Rev. 225 (2009)), and feelings of detachment from others.
5. Other issues include birth defects, including heart murmurs (patent ductus arteriosus); failure to thrive; feeding difficulties; orthopedic problems; and developmental delay in many areas.
6. Most children who have FASD also have attention deficits including ADHD. Many children with FASD have poor math skills and arithmetic calculation (dyscalculia)—that often is associated with very poor social skills. (C.D. Coles et al., Math *Performance and Behavior problems in children Affected by Prenatal Alcohol Exposure: Intervention and Follow-Up*, 30 J. Dev. & Behav. Pediatrics 7 (Feb. 2009).) Other issues include language and speech deficits and other neuropsychological deficits, including sporadic memory problems, cause-effect reasoning impairment, poor planning, impulse control, and deficient organizational skills. (H.C. Olson et al., *Neuropsychological Deficits in Adolescents with Fetal Alcohol Syndrome: Clinical Findings*, 22 Alcoholism: Clinical & Experimental Res. 1998 (Dec. 1998).) In addition, they may have problems of poor motor coordination and signs of poor executive functioning, including inability to track visual information. (S.N. Mattson et al., *Neuropsychological Comparison of Alcohol-Exposed Children with or Without Physical Features of Fetal Alcohol Syndrome*, 12 Neuropsychology 146 (1998).)
7. Clients with FASD also have great difficulty handling complexities of peer interaction (A.P. Streissguth et al., *Risk Factors for Adverse Life Outcomes in Fetal Alcohol Syndrome and Fetal Alcohol Effects*, 25 J. Dev. & Behav. Pediatrics 228 (2004)), interpreting social clues (C.H. Olson, *The Effects of Prenatal Alcohol Exposure on Child Development*, 6 Infants & Young Children 10 (1994)), and conforming to social norms. Inept social behavior is, in fact, a hallmark of FASD including gullibility and suggestibility.
8. Clients may have mental health issues including co-occurring psychiatric disorders, self-injury, and self-loathing and suicide attempts. Because of their history of failure and rejection, individuals with FASD have an elevated risk of depression and suicide. (J.E. Huggins et al., *Suicide Attempts Among Adults with Fetal Alcohol Spectrum Disorders: Clinical Considerations*, 11 Mental Health Aspects of Dev. Disabil. 33 (2008).)
9. There may be ethnic and cultural issues: In the United States, Native Americans and Alaskan Eskimo-Inuit peoples have the highest rate of FASD among various ethnic groups, followed by African Americans. (L.E. Tennkku et al., *Racial Disparities in Pregnancy-Related Drinking Reduction*, 13 Maternal Child Health J. 604 (2009).)

If FASD is a potential concern, then screening is appropriate. Assessment of exposure can be complex and expert assistance may be helpful. (Brown et al., *Prenatal Alcohol Exposure, supra*, at 144.)

Diagnosis of FASD

The optimal strategy for diagnosis of FASD is still be-

ing refined. It is often suggested that multidisciplinary teams are optimal for the diagnosis of FASD. However, the professional workforce required to staff a nationwide multidisciplinary clinic system is woefully inadequate. In a study of awareness of FASD among Canadian judges and prosecutors, 75 percent reported having contact with someone with FASD, but only 40 percent of judges and 26 percent of prosecutors felt prepared to deal with a person with FASD. Only 8 percent were aware of a referral location for a diagnostic assessment. (L.V. Cox, D. Clairmont & S. Cox, *Knowledge and Attitudes of Criminal Justice Professionals in Relation to Fetal Alcohol Spectrum Disorder*, 15 Can. J. Clin. Pharmacol. e306 (2008).)

A 2007 study found that 42 percent of psychologists underestimated the prevalence of FASD, over 70 percent reported a lack of training in FASD, 11 percent felt that a diagnosis of FASD would not be useful, and 82 percent reported being unprepared to manage people with FASD. (D. Wedding et al., *Psychologists' Knowledge and Attitudes About Fetal Alcohol Syndrome, Fetal Alcohol Spectrum Disorders, and Alcohol Use During Pregnancy*, 38 Prof. Psychol: Res. & Prac. 208 (2007).) In a recent study, 62 percent of pediatricians felt prepared to identify and 50 percent felt prepared to diagnose FASD. However, only 34 percent felt prepared to manage and coordinate the treatment of children with fetal alcohol spectrum disorders. Only 13 percent reported that they routinely counsel adolescent patients about the risks of drinking and pregnancy. (S. Gahagan et al., *Pediatricians' Knowledge, Training, and Experience in the Care of Children with Fetal Alcohol Syndrome*, 118 Pediatrics e657 (2006).)

Current diagnostic capacity in the United States is unable to diagnose even 1 percent of affected people. (L. Burd, *Screening for FASD in Corrections Systems, in Legal Issues of FASD* 47 (I. Binnie, M. Trussler & E. Jonsson eds., 2015).) A relevant example of diagnostic capacity limitations has been demonstrated in a survey of adult corrections systems in the United States. In a population of 3.08 million, only one person was reported to have a diagnosis of fetal alcohol syndrome. (L. Burd et al., *Fetal Alcohol Syndrome in the United States Corrections System*, 9 Addiction Biology 169 (2004).) If the prevalence rate in this setting was 1 percent, then 30,079 people with FASD were undiagnosed (or, presented another way, 99.996 percent of affected people were undiagnosed). In the Canadian corrections system, in a population of 148,979, only 13 were reported to have fetal alcohol syndrome. (L. Burd et al., *Fetal Alcohol Syndrome in the Canadian Corrections System*, 1:e14 J. FAS Int'l 1 (2003).) This is in contrast to recent prevalence estimates for FASD that reported a rate of 112.8 per 1,000, or one in eight people in corrections. (Popova et al., *Prevalence of Fetal Alcohol Spectrum Disorder Among Special Subpopulations, supra.*)

Previous diagnostic criteria have emphasized growth impairment, abnormal facial features, and central nervous system impairments. Several of these features change with time. Follow-up studies found that only 10 percent of the original diagnosed patients continued to have recognizable facial dysmorphology. (H.L. Spohr, J. Willms & H.C. Steinhausen, *Prenatal Alcohol Exposure and Long-Term Developmental Consequences*, 341 Lancet 907 (1993).)

More recent diagnostic schema now emphasize the most common manifestations of FASD, which are neurocognitive impairments and mental disorders. (S. Johnson et al., *Comparison of Alcohol-Related Neurodevelopmental Disorder and Neurodevelopmental Disorder Associated with Prenatal Alcohol Exposure Diagnostic Criteria*, 39 J. Dev. & Behav. Pediatrics 163 (Feb./Mar. 2018).)

The expression of FASD often becomes more complex across the lifespan. Inadequate assessments often do not identify the link between prenatal exposure and brain damage, which is often manifest as impairments in cognitive or intellectual functioning, deficits in communication, and impairments in memory, attention, executive functioning, academic skills, and, importantly, adaptive behavior or daily living skills. (L.R. Doyle et al., *Relation Between Adaptive Function and IQ Among Youth with Histories of Heavy Prenatal Alcohol Exposure*, 111 Birth Defects Res. 812 (2019).) Many of these comorbid conditions occurring later in development have been described as secondary disabilities. (A.P. Streissguth et al., *Understanding the Occurrence of Secondary Disabilities in Clients with Fetal Alcohol Syndrome (FAS) and Fetal Alcohol Effects (FAE).* Final Report to the Centers for Disease Control and Prevention (CDC) (Univ. of Wash. Sch. of Med., 1996).) In a legal context, it is important to emphasize deficits or weaknesses as opposed to isolated evidence of average performance that may be dependent on specific settings, programmatic supports, or accommodations.

Implications of Failure to Diagnose FASD

Using a prevalence rate of five percent for the age group birth through 18 years, the number of children with FASD in the United States would be 3.5 million. A recent publication described the current situation as "most people with FASD will live and die without ever having received a diagnosis of FASD." (A.E. Chudley, *Diagnosis of Fetal Alcohol Spectrum Disorder: Current Practices and Future Considerations*, 96 Biochem. Cell Biology 231 (2018).)

Because most people with FASD are undiagnosed, they will never have the opportunity to benefit from diagnosis-informed representation or diagnosis-informed treatment. In large part this is due to a lack

of understanding of the magnitude of the risk and underappreciation of the severity of the risk for future problems in people with FASD. The risk for adverse outcomes tends to increase across the developmental periods of childhood, adolescence, and early adult life. Living without a proper diagnosis deprives the person of adequate services and effective treatment to prevent recidivism and reduce risk of further involvement with the court system.

Treatment plans for this population would be much more appropriate if they were based on the correct diagnosis and applied within the context of the age and development-dependent risk for people with FASD. Lack of long-term anticipatory planning with an emphasis on risk reduction increases the complexity of care across the lifespan. Common examples are not anticipating the risk of school failure, substance abuse, and the need for ongoing assistance as vulnerable adults. FASD is not a benign childhood inconvenience that most people will simply outgrow, but typically is a life-altering disorder that changes over the life of affected individuals.

Many families enter the child welfare system due to consequences of substance use. FASD should be a routine consideration in these cases. Importantly, the diagnosis of FASD in a child suggests increased risk for FASD in the siblings if the mother continues to drink during subsequent pregnancies. The recurrence rate for FASD may be as high as 75 percent. (E.L. Abel, *Fetal Alcohol Abuse Syndrome* (1998).) This indicates the need to consider FASD for all siblings in the family, especially younger sibs. Early identification of FASD could lead to early entry to treatment for the mother, which if successful could prevent exposure and FASD in younger siblings.

In foster care proceedings, parents with FASD may need modification of mandated services to obtain maximum benefit from these services. These changes may include longer times to complete services due to related impairments, more community support, and access to more specialized treatment programs. (L. Burd & L. Hudson, *Improving Outcomes for Families Affected by Prenatal Alcohol Exposure*, Quality Improvement Ctr. for Res.-Based Infant-Toddler Ct. Teams (2019).)

Adverse Childhood Experiences (ACEs)

Almost three-quarters of youth and adults with FASD have experienced physical trauma, emotional abuse, and sexual abuse. Fetal alcohol exposure may also be a marker for increased risk of exposure to postnatal environmental adversity over the life span. (J. ConrSy, D.K. Fast & C.A. Loock, *Youth in the Criminal Justice System: Identifying FAS and Other Developmental Disabilities*. Final Report to the Ministry of the Attorney General (Vancouver, BC, 1997).) These events are often referred to as adverse childhood experiences (ACEs). The ACEs include emotional and physical neglect, such as having a parent with problem substance use in the household, having an incarcerated household member, having a parent who has a chronic mental illness, witnessing domestic violence between the mother and her partner, and having one or no parent in their lives. The risk of ACEs among people with FASD is increased sevenfold when compared to people without FASD. (C. Kambeitz et al., *Association of Adverse Childhood Experiences and Neurodevelopmental Disorders in Children with Fetal Alcohol Spectrum Disorders (FASD) and Non-FASD Controls*, BMC Pediatrics (forthcoming).)

Legal Implications of FASD

If trial counsel has discovered any evidence that the birth mother may have consumed any alcohol during pregnancy, counsel must investigate the maternal alcohol history by going back three generations. Often counsel must obtain the maternal alcohol history of the birth mother by interview or through review of foster care records, collateral interviews of family members, and treatment and arrest records. (Brown et al., *Prenatal Alcohol Exposure, supra*, at 144.) Failure to investigate FASD as a mitigating factor could result in ineffective assistance of counsel for not exploring how FASD may relate to the client's moral culpability. (*Williams v. Sterling*, 914 F.3d 302 (4th Cir. 2019); *Rompilla v. Beard*, 545 U.S. 374, 391–93 (2015); *but see Brown v. Thaler*, 684 F.3d 482, 499 (5th Cir. 2012), and Anne S. Douds, Holly R. Stevens & William E. Sumner, *Sword or Shield? A Systematic Review of the Roles FASD Evidence Plays in Judicial Proceedings*, 24 Crim. Just. Pol'y Rev. 492 (2013), available at https://bit.ly/33LUNll.) Counsel may also be rendering ineffective assistance of counsel for failing to hire, appoint, or retain qualified experts who are trained in diagnosing FASD and who can testify forensically about problems with executive functioning and impulse control problems. (N.N. Brown et al. *A Proposed Model Standard for Forensic Assessment of Fetal Alcohol Spectrum Disorders*, 38 J. Psychiatry & L. 383 (2010).)

FASD may be an important consideration for exclusion from the death penalty, interrogation, confessions, diversion programs, competency to stand trial, assessment of culpability, and mitigating factors. This is well illustrated by a study finding that 45 percent of juveniles had given at least one false confession, and two-thirds of them were charged based on that confession. (G.R. Hodas & L. Becker, *FASD: The Invisible Disorder Filling Beds in Juvenile Facilities & Prisons* (Apr. 4, 2018) (2018 Criminal Just. Advisory Bd. Conf., State College, PA); K. McLachlan et al., *Assessing FASD in Young Children: Exploring Clinical Complexities and Diagnostic Challenges*, 22 J. Popululation Therapeutics & Clin. Pharmacol. e108 (2015).)

Research has demonstrated that 14 percent of children aged 6–11, 61 percent of adolescents aged 12–20, and 58 percent of adults with FASD had experienced legal problems. For people over 12 years of age, 35 percent had been incarcerated. (Streissguth et al., *Understanding the Occurrence of Secondary Disabilities in Clients*, *supra*.) In a study of youth in a corrections system, 23 percent met criteria for an FASD. (D.K. Fast, J. Conry & C.A. Loock, *Identifying Fetal Alcohol Syndrome Among Youth in the Criminal Justice System*, 20 J. Dev. & Behav. Pediatr. 370 (1999).) As people with FASD enter adolescence, the risk for substance abuse and involvement with the corrections system increases dramatically and may impact as many as 58 percent of this population. A juvenile with FASD is 19 times more likely to be incarcerated in juvenile corrections. (S. Popova et al., *Fetal Alcohol Spectrum Disorder Prevalence Estimates in Correctional Systems: A Systematic Literature Review*, 102 Can. J. Pub. Health 336 (2011).)

People with FASD receive their first formal charge earlier, manifest more extensive neuropsychiatric impairments, and overestimate their understanding of proceedings related to arrest, interrogation, and understanding of court procedure. (Flannigan et al., *Fetal Alcohol Spectrum Disorder and the Criminal Justice System*, *supra* at 42.) They are also less able to adequately communicate with their counsel than people without FASD. People with FASD are also much more suggestable than comparison populations. (N.N. Brown, G. Gudjonsson & P. Connor, *Suggestibility and Fetal Alcohol Spectrum Disorders: I'll Tell You Anything You Want to Hear*, 39 J. Psychiatry & L. 39 (2011).) They demonstrate a social incompetence that often manifests as gullibility. (S. Greenspan & G. Woods, *Social Incompetence of FASD Offenders: Risk-Awareness as a Factor in Criminal Culpability, in Law and Ethics in FASD and the Law* 127 (E. Jonsson & S. Clarren eds., 2018).) In the context of a legal proceeding, a diagnosis of FASD can be considered to encompass both the etiology and the outcome (or, as stated elsewhere, the cause and the effect). (*See Williams v. Stirling*, 914 F. 3d 302, 318 (4th Cir. 2019) (linking brain damage, neurodevelopmental and neurobehavioral evidence caused by FASD, and petitioner's capacity to appreciate the criminal conduct). *See also Trevino v. Davis*, 138 S. Ct. 1793, 1800 (2018) (the US Supreme Court held that "evidence of FASD would have helped the jury better understand the circumstances leading to the capital murder charges").)

Memory impairments can become more pronounced in adults who, in addition to FASD, may have their own extensive histories of alcohol and drug misuse. The most serious of memory deficits can arise from confabulation, where individuals confuse events that really happened with events that they heard about, saw on TV, or may have discussed repeatedly during interrogation. Repeated questioning can lead to confusion and confabulation, and false confessions. (D.K. Fast & J. Conry, *Fetal Alcohol Spectrum Disorders and the Criminal Justice System*, 15 Dev. Disabil. Res. Rev. 250 (2009).)

FASD and Mental Health Issues

People with FASD are also at high risk for mental health disorders, which need to be considered in the diagnostic assessment. Research demonstrates that individuals with FASD are overrepresented in psychiatric populations. In a longitudinal follow-up study, 94 percent of people with FASD reported mental health problems. The research team later noted that alcohol or drug dependence, depression, psychotic disorders, and avoidant, antisocial, and dependent personality disorders were common diagnoses in adults with FASD. In their study of youth in a forensic psychiatric assessment unit, the most common psychiatric diagnoses were conduct disorder, attention deficit hyperactivity disorder, and substance use disorder. (Conry, Fast & Loock, *Youth in the Criminal Justice System*, *supra*.)

A recent structured and systematic review of the published literature on comorbid mental disorders in children and adolescents with FASD found that the rates of these disorders in FASD are alarmingly high. Several were unexpected, psychosis was increased by 24-fold in people with FASD, and intellectual disability was increased by 22 times. (D. Weyrauch et al., *Comorbid Mental Disorders in Fetal Alcohol Spectrum Disorders: A Systematic Review*, 38 J. Dev. & Behav. Pediatrics 283 (May 2017).) This suggests that FASD may be the most common identifiable cause of both childhood- and adolescent-onset psychosis and intellectual disability.

FASD as a Mitigating Factor

Most people with FASD are a vulnerable population and require ongoing intervention to reduce exploitation and the consequences of this exploitation. They are susceptible to exploitation by family and peers, which is often not recognized as a mitigating factor by police and prosecutors. Gullibility is also an important consideration and may be especially important in evaluating confessions. The history of many people with FASD is often one of exploitation before, during, and after entry into the corrections systems.

FASD Is a Developmental Disability

Research over the last 40 years has documented major cognitive, behavioral, adaptive, and neurodevelopmental and neurobehavioral

impairments among individuals with FASD. FASD increases the risk for intellectual disability by 23 times. However, the most typical presentation of FASD is not intellectual disability. Overemphasizing the importance of IQ alone as a criterion for either intellectual disability or developmental disability is often misleading. Prenatal exposure to alcohol, leading to a diagnosis of FASD, is considered to be the leading cause of developmental disabilities with known etiology. (W.J. Edwards & S. Greenspan, *Adaptive Behavior and Fetal Alcohol Spectrum Disorders*, 38 J. Psychiatry & L. 419 (2010).) Children prenatally exposed to alcohol also show deficits in adaptive behavior manifested as deficits in communication, daily living skills, and socialization. Having an IQ below 75 and impairments in adaptive behavior are the current criteria used to diagnose intellectual disability. The diagnostic similarities between FASD and intellectual disability include brain impairments as well as adaptive deficits and support needs, which are identical to those found in a person with an intellectual disability. (S. Greenspan et al., *FASD and the Concept of "Intellectual Disability Equivalence," in Fetal Alcohol Spectrum Disorders in Adults: Ethical and Legal Perspectives—An Overview on FASD for Professionals* 241 (M. Nelson & M. Trussler eds., 2016).) In some cases, documentation of the impairments will be sufficient to allow presentation of impairments and confirmation of disability, even if FASD cannot be confirmed.

Some states, including Minnesota (Minn. Stat. § 252.27 (2009)) and Alaska (Alaska Stat. § 47.20.290 (2012)), have included fetal alcohol syndrome and the broader diagnostic construct of FASD into the definition of what constitutes a developmental disability. Many disability organizations throughout the United States will not provide supported services for people with FASD, arguing that their adaptive behavior deficits are solely related to psychiatric issues. People with FASD also frequently have higher IQs but much lower adaptive behavioral skills. For example, in California, a developmental disability "shall not include other handicapping conditions that are solely a learning disability or psychiatric in nature. (Cal. Code Regs. tit. 17, § 54000(c)(1)(2).)

People with FASD should not be excluded from services due to confusion about the role of mental disorders in their impairments; they are born with impairments. The age of onset is at birth. The neurocognitive impairments of FASD precede the expression of mental disorders. The secondary disabilities, including mental health issues, are primarily sequela from the cognitive deficits and brain impairments.

In *Samantha C. v. State Department of Developmental Services*, 185 Cal. App. 4th 1462 (2010), the California Court of Appeal concluded that the plaintiff, who was eligible for special education, was also eligible for regional center services as an individual requiring treatment similar to an individual with an intellectual disability. The school district had diagnosed Samantha with a learning disability at a time when the claimant was functioning within the average range of cognitive ability. "Her full-scale IQ was 99, which was the 47th percentile." (*Id.* at 1473.) The court found that her deficits were not "solely" due to a learning disability because of her adaptive functioning scores in the range of mild intellectual disability. (*Id.* at 1492–93.) The court attributed the deficits in adaptive and cognitive functioning to injuries sustained at birth. (*Id.* at 1493.) The court distinguished between academic supports provided in an educational setting and those services available to individuals who require treatment similar to an individual with an intellectual disability through the regional center. "The statute does not require similarity in the educational or teaching methods. . . . Because educational and teaching methods may differ even among those with Intellectual Disability, the fifth category does not require similar educational or teaching methods, but rather similar types of treatment, such as independent living skills training." (*Id.* at 1494.)

The court held that a disorder is "solely" psychiatric if "there is impaired intellectual or social functioning which originated as a result of the psychiatric disorder or treatment given for such a disorder." (Cal. Code Regs. tit. 17, § 54000(c)(1).) *Samantha C.* helps to distinguish "solely" psychiatric disorders from developmental disabilities that may co-occur with psychiatric disorders. The court found that the claimant's condition was not solely psychiatric because her birth injuries contributed to her adaptive deficits. The claimant's behavior problems identified before age three also helped to demonstrate that her social adaptive deficits were not caused solely by a psychiatric disorder. The court in *Samantha C.* held that "a need for psychological or mental health services does not disqualify a person from fifth category eligibility if the person is otherwise eligible." (*Samantha C.*, 185 Cal. App. 4th at 1494.) Individuals with FASD show an array of deficits in social and adaptive functioning that persist throughout the lifespan. Because children born with FASD are born with a developmental disability, it is important to have early identification, early diagnosis, and ongoing diagnosis-informed intervention across the lifespan. Development of a diagnosis-informed treatment plan may require the expertise of an FASD expert in this area.

Once diagnosed, the client should be referred for services from a state or federal disability agency. Many disability organizations do not recognize FASD as one of the eligibility categories for disability services, especially if the IQ is higher than 70. Attorneys

representing the client with FASD should argue that the client was born with a developmental disability and has permanent brain damage that often results in the client having very low adaptive behavior skills. The focus for FASD should be on the individual's adaptive deficits rather than the adaptive strengths. (Edwards & Greenspan, *Adaptive Behavior and Fetal Alcohol Spectrum Disorders, supra.*) Without appropriate services, many people with FASD are at increased risk to end up in the criminal justice system, in state hospitals, and among the unemployed. The attorney representing the client with FASD should also assist in the application for appropriate services and related benefits.

Discussion

Recent prevalence estimates suggest that FASD may affect five percent of the general population. Prevalence rates of FASD in foster care, special education, and juvenile and adult corrections are greatly increased. Huge challenges confront corrections systems in developing an appropriate response to this problem. Large-scale changes in access to improved screening and a massive need for diagnostic services are urgently needed.

As a result of the central nervous system deficits, people with FASD are often manipulated, coerced, or led into actions with adverse consequences for them. In a corrections system, these can result in an increase in danger to them and an increased risk for sexual exploitation in a custodial setting. Ideally, increased awareness of these deficits would be sufficient for staff to provide additional protection or special placement, which might include restricted access to the general prison population. Violations of regulations are common. These may be the result of impulsivity and impaired comprehension of written materials or verbal instructions and are often magnified by association with exploitative inmates. Giving directions more slowly, simply, and concretely and using multiple repetitions of instructions may be useful. These behaviors are often repeated with no apparent gain or motivation. As inmates move into the community, impairments in time estimation and planning can cause great difficulty in getting to important meetings on time and keeping scheduled probation appointments, leading to breaches of probation conditions. As noted above, many of these problems could be prevented or minimized by providing at least basic in-service training for corrections, parole, and probation staff.

Many thousands of people in these systems require more comprehensive services. The potential benefits could include reduced prison time, decreased rates of recidivism, and improved outcomes for people reentering society. The development of these interventions must address the lifespan problems of people with FASD. In addition, it is important to focus on development of strategies to prevent the use of juvenile corrections systems and prisons as large-scale service systems for so many people with this preventable problem. ■

Beyond the Mob

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reaching conduct that Congress may not have intended it to reach").) But the policy question, as reflected in the Justice Manual, remains whether DOJ should rein in RICO prosecutions outside the traditional organized crime context. The Justice Manual implores prosecutors to restrict RICO charges to effectuate the congressional purpose of the law, which was to combat organized crime. Prosecutorial discretion is of paramount importance in ensuring the statute is used for appropriate purposes. Using RICO to prosecute street gangs and terrorist groups seems to fall well within Congress's intent, as those groups are similar to the mob: organized, violent, and engaged in various illegal activities, from drug dealing to murder.

But what DOJ once used exclusively as a tool to bring down sprawling criminal enterprises engaged in heinous acts of violence and intimidation is now being employed to prosecute less severe crimes involving nonviolent offenders. The Varsity Blues defendants are a far cry from mob bosses and murdering hitmen (or even street gangs and corrupt politicians), and using RICO—including its threat of severe penalties—is a bit like using a sledgehammer to pound a nail.

But DOJ did not go directly from using RICO only to prosecute mobsters smuggling vast quantities of heroin and cocaine in cases such as "The Pizza Connection" in the 1980s to deploying it against less severe conduct as in the Varsity Blues case. From the mob to street gangs to public corruption and terrorist organizations—and now to white-collar prosecutions—the evolution of DOJ's use of RICO has been long and slow. The trend, however, is unmistakable: So long as prosecutors have a broad and flexible tool like RICO, they will find new ways to use it. ■