



Understanding the Similarities and Differences between Fetal Alcohol Spectrum Disorder and Mental Health Disorders

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1. Introduction

The profound effects of prenatal alcohol exposure were first described in France in 1968 (Lemoine et al. 1968) and in North America in 1973 (Jones et al. 1973; Jones and Smith 1973). The first identified children were born to alcoholic mothers who had consumed significant amounts of alcohol during the pregnancy. The children had clear patterns of physical anomalies (growth deficiency and characteristic facial features) and neurocognitive deficits. Jones and Smith (1973) called this disorder Fetal Alcohol Syndrome (FAS). Later research found that some individuals who had prenatal exposure to significant amounts of alcohol do not show all of the facial features and growth deficiency of full FAS, but they do have significant cognitive deficits, behavioural problems, and mental health concerns. This is due to differences in drinking patterns, the timing of exposure in the pregnancy, the quantity of alcohol consumed and other maternal factors such as genetics and nutrition. The full range of outcomes due to prenatal alcohol exposure is called Fetal Alcohol Spectrum Disorder (FASD). FASD includes three medical diagnoses: FAS, partial FAS and Alcohol Related Neurodevelopmental Disorder.

The prevalence of full FAS in the United States is estimated to be 2-7 per 1,000 and that of all the diagnoses under FASD to be 2-5 per 100 (May et al. 2009). However, the prevalence of people with FASD in the criminal justice system (CJS) appears to be disproportionately higher, with estimates of 10% to 23% of youth and adult in correctional facilities (Canadian Institute for Health Information 2008; Fast et al. 1999; MacPherson and Chudley 2007). The effects of significant prenatal exposure to alcohol are life-long and can increase susceptibility to criminal activity, victimization, and mental health problems for youth and adults. In the CJS there is an over-representation of people with FASD, individuals with mental health disorders, and those with both FASD and mental health disorders (Burd et al. 2010; Conry and Fast 2000; Fast et al. 1999; MacPherson and Chudley 2007). In one longitudinal study of adolescents and adults with FASD, 60% had had some contact with the legal system. Those that did appeared to have additional risk factors such as mental illness (Streissguth et al. 1996).

Many individuals, who are not necessarily known to have FASD, have mental health disorders which may contribute to their difficulties in the legal system and trouble with the law. Examples of these disorders are Attention Deficit Hyperactivity Disorder (ADHD), Anxiety Disorders, Bipolar Disorder, Conduct Disorder, Depression, Oppositional Defiant Disorder, Personality Disorders, Psychotic Disorders, and Substance Use Disorders. According to the Correctional Service Canada (CSC) (2010), in the past fifteen years there has been a considerable increase in the number of both male and female offenders with mental health problems presenting to the system and requiring mental health care.

This discussion paper examines the similarities and differences between individuals having a diagnosis of FASD and those having a diagnosis of a mental health disorder. First, the diagnostic process for FASD and for mental health disorders is described. In order to understand the implications of these diagnoses, the behaviours that result from FASD need to be understood. What is less well understood is the overlap between FASD and mental health disorders, that is, the high proportion of those with FASD who also have a mental health disorder and the unknown number of individuals with mental health disorders who may have an undiagnosed FASD. In

addition to the primary disability, the FASD or mental health disorder, the interaction with genetics and post-natal environmental factors confounds the diagnostic profile.

2.0 Diagnosing FASD and Mental Disorders

People can be diagnosed as having full FAS with a confirmed or unconfirmed history of prenatal alcohol exposure because of the three distinctive features (growth deficiency, facial anomalies, and central nervous system dysfunction) which do not co-occur in other disorders. Using the current Canadian Diagnostic Guidelines, people who have only some of the facial features and significant neurocognitive dysfunction are diagnosed as having partial FAS (pFAS), and those with no significant facial features but with significant neurocognitive dysfunction are diagnosed as having Alcohol Related Neurodevelopmental Disorder (ARND) (Chudley et al. 2005). For a diagnosis of pFAS or ARND there *must* be a confirmed history of prenatal alcohol exposure. Obtaining a history of prenatal alcohol exposure can be extremely challenging, especially for adults being evaluated for FASD. In the past, the term Fetal Alcohol Effects (FAE) was used to describe individuals with pFAS and ARND and appears in the earlier literature.

FASD is the umbrella term used to encompass the range of outcomes caused by prenatal exposure to alcohol; it is *not* a diagnosis. For convenience, the collective term FASD rather than the specific diagnoses is used in the remainder of this article to describe the effects of this disability.

Assessing for FASD requires both physical and cognitive evaluations. Therefore, it is recommended that it be made by a multidisciplinary team comprised of specialists such as pediatricians/physicians, psychiatrists, psychologists, speech-language pathologists, and occupational therapists, all of whom should be specifically trained in making FASD diagnoses. The physician/pediatrician looks mainly at the physical characteristics and the other members of the team primarily assess brain function and mental health disorders. It is critical to consider other syndromes which may resemble FASD, and consider post-natal factors which can compound the effects of prenatal alcohol exposure and affect brain function (e.g. substance abuse, traumatic brain injury, physical and emotional abuse, or an unstable environment). Individuals with a mental handicap or a traumatic brain injury may have symptoms which can be confused with those from prenatal alcohol exposure.

A diagnosis made at later ages is complicated due to physical features that may change as the child grows into an adult. In follow-up studies by Spohr and colleagues (Spohr et al. 1993; Spohr et al. 1994) only 10% of their original diagnosed group continued to have clearly recognizable features of FAS. People with ARND, who do not have the distinguishing physical features, can be overlooked and misdiagnosed. As individuals become older, it is often more difficult to obtain a reliable history of prenatal alcohol exposure. Because of these factors, making a diagnosis of an FASD is more difficult in adults. Along with these challenges, the capacity for making FASD diagnoses in Canada is limited due to the limited number of health professionals experienced in making assessments.

Evidence of brain damage is an essential criterion in making a diagnosis of any FASD. By definition, all individuals with FASD have significant deficits in multiple areas of brain function.

It is now known that people who do not meet the criteria for full FAS (i.e., partial FAS or ARND) can be more severely impaired in brain function than those with full FAS (Streissguth et al. 2004).

People with FASD can show a wide range of intellectual ability (IQ), from mentally handicapped to average or higher (Conry et al. 1997; Streissguth et al. 1996), although the mean IQ for groups studied is in the below average range. Deficits in intellectual ability alone do not explain the challenges of a person with FASD. Some individuals with FASD may present as more competent than they are because of their average IQ, but struggle in their day-to-day functioning because of their deficits in adaptive function, executive function, language, and memory. In order to make a diagnosis of an FASD, a neuropsychological assessment is done using standardized tests to assess these areas of brain function (Chudley et al. 2005).

The implications of the brain damage for day to day functioning have been described using the acronym “ALARM”: Adaptive Behaviour, Learning, Attention, Reasoning, and Memory (ALARM) (Conry and Fast 2000). People with FASD can show poor judgment, may be easily led by others, may not learn from previous mistakes, and can be impulsive. In the legal system, their problems with language and memory may jeopardize them receiving fair treatment. Individuals with FASD might recite the differences between right and wrong, but in the circumstances react impulsively with no regard for consequences. Their superficial talkativeness can lead others to overestimate their competence and level of understanding. Since people with FASD often have trouble learning from experience and planning for the future, they may not be deterred by traditional consequences in the CJS.

Perske (1994; 2010) studied why the responses and behaviour of individuals with intellectual disabilities may be misunderstood, and his findings can apply to people with FASD. Some of his relevant results include: desiring to please people in authority, watching for clues from the interrogator (guessing what the person wants to hear or simply agreeing without understanding what is being asked), having problems with language and memory, bluffing greater competence than one possesses, taking blame quickly without understanding the consequences, and having a too-pleasant façade (which may be interpreted as lack of remorse). If overwhelmed, the person may “shut down” and this could be seen as defiance. Most of these characteristics would not be typical of the person with only a mental health disorder.

How do we know that the brain deficits identified on the neuropsychological evaluations of people with suspected FASD actually represent brain damage? Brain imaging studies, which have shown structural abnormalities in various brain regions, correlate with these functional brain deficits (learning and behaviour) and may help explain why individuals with FASD develop behaviour difficulties (Astley et al. 2009; Riley et al., 2004). Some of the effects of alcohol on the brain might help explain the impairments in learning, memory, and social skills in people with FASD (Schonfeld et al. 2006).

In contrast to the diagnosis of FASD which is made by a multidisciplinary team, diagnoses of mental health disorders are made by psychiatrists or psychologists, who may or may not be part of a mental health team. The Diagnostic and Statistical Manual IV-TR (DSM-IV-TR) from the American Psychiatric Association (2000) or the International Statistical Classification of

Diseases and Related Health Problems, 10th revision (ICD-10) from the World Health Organization (2007), are the current standards used by psychiatrists in making mental health diagnoses. The DSM-IV-TR provides clinical definitions of mental health disorders based on clusters of symptoms or behaviours while the ICD-10 provides classifications of all medical conditions. The psychiatrist gathers information from the patient, family, and other professionals who have worked with the patient. The psychiatrist uses the guidelines and, informed by experience and clinical judgment, makes the mental health diagnoses.

The DSM-IV-TR is currently under revision. According to the American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders 5 (DSM-5) Task Force, no definition precisely specifies the concept of a mental/psychiatric disorder (American Psychiatric Association 2010). A proposed definition includes key features as follows: (1) a behavioural or psychological syndrome (2) that reflects an underlying psychobiological dysfunction (3) which results in significant distress or disability. The DSM classification of mental disorders reflects a consensus of current knowledge and does *not* imply that the condition meets legal criteria for mental disorder.

Currently, the diagnoses under FASD are not clearly evident in the DSM-IV-TR. FAS is listed with “other congenital malformations”. The defining characteristics or criteria for FASD are not described. Therefore, individuals with FASD may be given diagnoses based on subsets of their symptoms found in existing classifications such as “mental retardation”, “attention deficit/hyperactivity disorder” or “learning disorders” and which may not capture the complete profile. Similarly, the ICD-9 or 10 has only FAS in a category: “noxious influences affecting the fetus or newborn” or “congenital malformation syndromes due to known exogenous causes, not elsewhere classified.” The complexity of making a FASD-related diagnosis and the current classification systems familiar to psychiatrists make it unlikely that a FASD diagnosis will be considered or made as part of a forensic psychiatric assessment.

For both general psychiatric and forensic psychiatric assessments, it may be more difficult to obtain the information needed to make a mental health diagnosis when the patient/client is an adult, as that person’s consent is usually needed before contacting other sources of information. In addition, the collateral sources for information may be impossible to locate. Information may be unknown or reported inaccurately, and may be inaccurate in previous reports. If information is available only from the patient/client, and that person is someone with a disability such as FASD, this information could be unreliable (Conry and Fast 2000) and the diagnosis is inaccurate or incomplete. The psychiatrist may not make a diagnosis of FASD if not trained or experienced in that area, if a multi-disciplinary team for FASD is not available, or if information from previous assessments is missing. Nevertheless, even if FASD is *not* mentioned in a psychiatric report, there is still a possibility that FASD has not been considered or eliminated as a diagnosis.

Forensic evaluations typically do not include assessments of the full range of brain function, as the primary interest or referral question is the query of mental disorder. Psychiatrists have long been interested in the confounding effects of cognitive function on psychiatric disorders. Of particular interest has been the significant difference in IQ levels between those with schizophrenia and healthy controls. Those with schizophrenia demonstrate slightly lower IQs

initially compared to healthy controls, and decline with the onset of psychosis (Woodberry et al. 2008). While significantly lower than the controls, the mean IQ was in the average range. Lower IQ has also been associated with increased risk for severe depression, but not bipolar disorder (Zammit et al. 2004). IQ, therefore, is an important finding but not a discriminating feature separating those with FASD from those with a mental health disorder.

When a diagnosis of substance use disorder is made, the possibility of neuropsychological impairment after a long history of substance use needs to be recognized and assessed. Impairments in areas such as memory, attention, learning, and cognitive flexibility are well known. These deficits may or may not be irreversible but predicting the effects is complicated by a host of other factors. Cerebral atrophy has been seen on CT and MRI scans in over half of those with chronic alcohol problems. The use of other drugs can also lead to cognitive deficits (Toneatto 2004). In this regard, those with a long standing substance use disorder may present with similar deficits to those with FASD.

In animal studies, prenatal alcohol exposure was found to have adverse effects on neuroendocrine function, particularly the hypothalamic-pituitary-adrenal axis which plays a key role in response to stress, and that these adverse effects are life-long. The researchers postulated that individuals with FASD may be permanently hyperreactive to stress (Weinberg et al. 2008). Uban et al. (2011) characterized prenatal alcohol exposure as an adverse early life experience that programs neurobiological mechanisms and increases vulnerability to subsequent life stressors, which can then increase vulnerability to mental health disorders such as anxiety and depression.

Thus, there is a similarity between those with mental illnesses and those with FASD with regard to the presence of underlying neuro-psycho-biological dysfunction in both groups contributing to their disorders. There is now scientific research showing that major psychiatric illnesses are caused by the combined influences of genetic and environmental factors (Peay and Austin 2011). The difference is that those with FASD have brain damage from birth and a predisposition to mental health disorders due to genetics and the prenatal alcohol exposure.

3.0 Prevalence of Mental Health Disorders

There appears to be a high prevalence of people in the CJS who have been diagnosed with mental health disorders (Canadian Institute for Health Information 2008), but these studies do not discuss whether those with mental health disorders in the CJS have also been evaluated for or diagnosed with FASD. Therefore, it is not known to what extent the inflated rates of mental health disturbances in the CJS are also associated with individuals having an FASD. Mental health issues are now recognized as a major co-occurring factor in people with FASD, resulting in considerable disability (O'Connor and Paley 2009).

Estimates of rates of mental health disorders can vary greatly, depending on the population studied (e.g., among those in the general population, those in the CJS, or those with FASD) and the methodology used. Numerous studies have shown associations between people having mental health disorders and those having FASD, as well as links between individuals with

mental health disorders and those in the CJS. This prevents a simple comparison between those with FASD and those with mental health disorders.

In the study by Streissguth et al. (1996), it was found that up to 90% of people with FASD had been treated for a mental disorder. In a sub-group of 25 adult men and women from that study (Famy et al. 1998), using structured clinical interviews, 15 met criteria for current or past alcohol or drug dependence, 11 had experienced a major depressive episode, 10 reported psychotic symptoms, 5 were diagnosed with bipolar disorder, 5 received a diagnosis of anxiety disorder, and 10 were diagnosed with personality disorders. Of the 25, 18 had received some form of psychiatric treatment.

Table 1 shows the lifetime prevalence rates in Canada for the general population, for the general male federal incarcerated population, and for non-incarcerated adult males and females with FASD.

Table 1: LIVETIME PREVALENCE OF MENTAL HEALTH DISORDERS IN SPECIFIC POPULATIONS

Disorder	General adult population	Incarcerated adult males ³	Adult males with FASD ⁴	Adult females with FASD ⁴
Depression	8% ¹	29.8%	40%	50%
Psychosis	1% ¹	10.4%	47%	30%
Anxiety	12% ¹	55.6%	0	50%
Antisocial personality disorder	6-9% ¹	74.9%	21%	14%
Substance abuse	15.9% ²	52.9%	60%*	60%*
Alcohol abuse	46.6% ²	69.8%	60%*	60%*

²Canadian Community Health Survey: Mental Health and Well-being 2002 in Tjepkema 2004.

¹Public Health Agency of Canada 2002.

³Motiuk and Porporino 1992

⁴Famy et al. 1998

*Combined substance and alcohol abuse

In its most recent data, the CSC reports that 13% of male offenders and 29% of female offenders in federal custody were identified as showing mental health problems upon admission (Correctional Service of Canada 2009), although these data do not directly translate to the specific diagnoses of mental health disorders shown above. These numbers are lower than the diagnoses made in incarcerated adults in the previous study. When compared to the general population, adult incarcerated males and adults with FASD have significantly higher rates of mental health disorders. The FASD rates of specific disorders are based on small sample sizes.

Other studies have confirmed significant life-long challenges for people with FASD and mental health concerns. Children with prenatal alcohol exposure appear to show significantly more psychopathology, including symptoms of anxiety, disruptive behaviours, and mood disorders when compared to those without prenatal alcohol exposure (Walthall et al. 2008). People with FASD have significantly higher rates of oppositional defiant disorder, conduct disorder, and ADHD than the general population (Burd et al. 2003; Mattson et al. 2011).

In their study of youth in the CJS who had been referred to a forensic psychiatric facility for a psychiatric/psychological assessment, Conry et al. (1997) found that the most common psychiatric diagnoses, for both youth with FASD and controls (youth in the CJS also referred for

a psychiatric/psychological assessment and not diagnosed with FASD), were conduct disorder, ADHD, and substance use disorder. All youth with FASD had at least one psychiatric diagnosis, and many had multiple diagnoses. There were no significant differences in the rates of mental health disorders between youth with FASD and controls. A confirmed history of prenatal alcohol exposure was not obtained for the control group, and some may have had prenatal alcohol exposure.

A summary report on mental disorder, substance use, and criminal justice contact prepared for the British Columbia Ministry of Health Services (2005) indicated that “the forms of mental illness most prevalent among youth in the general population (e.g., “hyperkinetic syndrome”) were 4-5 times more prevalent among youth in the corrections system. Youth in corrections were significantly more likely to have been diagnosed with a substance use disorder in the past year (2.9-4.8 times [more prevalent]). Adults in the corrections system were more likely (1.2-1.9 times [more prevalent]) to have been diagnosed in the previous year with a mental illness than the general population. Rates of substance use were 11-13 times greater than the general population rates (p. 15).

Concurrent use of alcohol and drugs has been found to be associated with a significant number of crimes. Brochu et al. (2001) indicate that approximately 40% of crimes are associated with the use of and addiction to alcohol, illicit drugs, or both; half of jail inmates had consumed alcohol and/or drugs on the day of the offence. Reports have suggested that, when people with FASD are committing offences, they are likely to be influenced by others, and having a substance use disorder further compromises their judgment.

Fazel and Danesh (2002) did a systematic review of psychiatric assessments in general adult prison populations in western countries and found that prisoners were several times more likely to have psychosis and major depression, and about 10 times more likely to have antisocial personality disorder, than the general population. Fazel et al. (2008) later analyzed 25 surveys of mental health disorders among adolescents in juvenile detention and correctional facilities, and found that they were about 10 times more likely to suffer from psychosis than the general adolescent population. Girls were more often diagnosed with major depression than boys. The authors indicate that deliberate self-harm and repeat offending are common, and that some disorders such as substance misuse and conduct disorder could be risk factors for recidivism. The authors do not comment whether many of these individuals had diagnosed or undiagnosed FASD.

People with FASD frequently have multiple mental health issues, including ADHD, mood disorders (such as depression and bipolar disorder), anxiety disorders, and substance abuse, which could increase the risk for suicidal behaviour (Mattson et al. 2011). Streissguth et al. (1996) found that for adults with FASD, 43% reported suicide threats and 23% reported a history of suicide attempts, suggesting that individuals with FASD have an increase in lifetime suicide attempts relative to the general population.

Compared to the general population, there is a higher rate of mental health disorders among people in the CJS. For individuals in the CJS who also have FASD, this rate appears disproportionately higher.

4.0 Similarities and Differences between FASD and Mental Disorders

The literature reviewed above shows that there is an overlap between the group of individuals with FASD and the group of individuals with mental health disorders. There is a risk that the rights of either group will be jeopardized in aspects of the legal process if both factors are not considered.

For the person with FASD, it is important to consider the brain damage from prenatal alcohol exposure in addition to a likely mental health disorder in terms of their accountability, response to treatment, and response to legal corrections. The person with FASD may present as competent, but the ability to participate in the legal process is based on cognitive functioning and reasoning abilities that may not be present in someone with FASD. With current diagnostic tools, the effects on the brain of prenatal alcohol exposure cannot always be distinguished from the effects of a mental illness, and the individual needs to be considered as a whole. Individuals who are assessed for FASD should also be seen for possible mental health disorders.

For example, a person whose primary mental health disorder is ADHD has trouble paying attention, is impulsive, and may be hyperactive. A person with FASD can have similar symptoms. If either of these individuals has a substance use disorder, there is an increased risk of trouble with the law. It can be very difficult to determine whether the behaviours are because of the FASD, the ADHD, the substance use disorder, or the combination. However, the outcome for a person with FASD where the underlying problem is brain damage is likely to be more problematic than that of the person whose primary problem is ADHD. It may be possible to manage the symptoms of ADHD and reduce impulsive behaviours, but for the person with FASD who also has underlying deficits in reasoning, connecting cause and effect, and anticipating the consequences of their actions managing the ADHD alone is not sufficient to prevent conflict in the legal system.

A person with many types of mental illness and no FASD might be expected to understand the legal process and consequences. Someone who has a severe mental health disorder, such as a severe psychotic disorder, needs special consideration and probable life-long support. However, many mental health disorders can be managed with medication and supportive therapy.

There is no treatment for the primary disability of FASD, which is a permanent, life-long brain injury. However, people with FASD with or without a mental illness can be helped before, during, and after incarceration through environmental changes, behavioural support, and medication. The brain of an individual with FASD appears to be more sensitive and more vulnerable than that of the typical person, and may react to pharmacological treatment in different and unexpected ways. Thus, people with FASD may need closer supervision than others when being treated with medication. Psychotherapeutic treatment can be more challenging with people who have FASD because of their language and memory deficits and poor insight; as a result, standard therapeutic approaches are often less effective than they would be for a person with a normal brain (Conry and Fast 2010). The concern is that the lack of response to therapy by the person with FASD could be interpreted as manipulative and willful, when the underlying reason is actually the brain dysfunction.

For both individuals with FASD and those whose primary disability is a mental health disorder, a review of their past histories may reveal incidents involving accidents and assaults that further compromise their functioning. However, people who have experienced a traumatic brain injury once had a normally functioning brain and have residual function. Some areas of the brain may have been damaged by the traumatic event and some areas may have been spared; there is usually a possibility of recovery to a degree. On the other hand, individuals who have brain damage due to prenatal alcohol exposure never had a fully functioning brain and have fewer mental reserves to draw on.

Although beyond the scope of this review, it is important to mention the emergence, since 1998, of mental health courts (Canadian Institute for Health Information 2008). Their purpose is to direct people with a mental illness away from the CJS and to treatment. The programs take a variety of forms and criteria for participation, but the offender is required to adhere to an individualized program and certain requirements. It is not known how many individuals who have mental health issues and FASD may be in such programs. The person with FASD may be set up for failure and further jail time due to inability to comply with requirements.

The language and actions of people with FASD may be misinterpreted, especially if the possibility of an FASD is overlooked and the focus is only on the mental disorder(s). The possibility of FASD should be considered in those for whom the primary concern is mental health. Endicott (1991 p.4) noted that “inmates who have intellectual disabilities are at serious risk of harm due to their special susceptibility in the correctional system to abuse, exploitation, manipulation, misunderstanding of what is expected to them, and inability to benefit from most existing rehabilitative programs”. People with FASD have similar risks whether or not they have intellectual disabilities or mental health disorders.

Current programs in correctional institutions may not be effective for people with FASD with or without a mental illness, and could be detrimental to these individuals when they return to their communities. The prison environment is linked to stress-inducing factors, such as risk of violence, danger to personal safety, and separation from social support networks (Canadian Institute for Health Information 2008). Existing mental health disorders could also be exacerbated by this stress and the person’s poor coping ability. For inmates with FASD, because of their neurobiological vulnerability to stress, these effects can be compounded.

5.0 Summary and Conclusions

Studies of people with FASD indicate that they are at increased risk for maladaptive behaviours that may lead to criminal activity and victimization. These behaviours are often interpreted as willful, premeditated, and manipulative, but it is the underlying brain disabilities, including cognitive and mental health disorders, that contribute to their dysfunction. The effects of prenatal alcohol exposure on the brain are permanent, and this means that a person with an FASD will need life-long support and supervision to mitigate the secondary disabilities associated with prenatal alcohol exposure. Similar to offenders whose primary disability is a mental health disorder and without FASD, the mental illness will need to be addressed and treated. However, people with FASD who have mental health disorders may respond differently to treatment than individuals without FASD who also have mental health disorders. Their disabilities in areas such

as cognition, reasoning, and memory may reduce the effectiveness of standard psychotherapies. If the system only looks at the mental health disorders, treatments may be ineffective and planning for release will be inappropriate.

Involvement with the legal system may be the final common pathway for many individuals with FASD who also have mental health, social-emotional, and cognitive disabilities. Offenders with FASD should not return to their communities worse off than when they left, due to misunderstanding, victimization, and mismanagement of their disabilities, including mental health disorders. Determining the accountability of people with FASD, with or without a mental disorder, is a significant challenge for the legal system in developing promising practices to support and help these individuals and reduce recidivism.

Through its Institutional Mental Health Initiative, the CSC continues to focus on addressing the diverse mental health needs of offenders for the duration of their sentence and to ensure a successful transition back to the community. Concurrently, there also has been more education of correctional staff and mental health workers to better manage individuals with FASD in the CJS with the recognition that their disabilities go beyond mental health needs.

In the past decade, individuals are more likely to be diagnosed with FASD. There is greater understanding of the disabilities associated with FASD and the understanding that people without full FAS can be severely affected by the brain damage from prenatal alcohol exposure. There is also recognition that individuals with FASD can respond impulsively and erratically to expectations in court, correctional facilities, probation, and the community. Those with FASD have unique vulnerabilities that warrant special consideration in the CJS. Supporting people with FASD in managing their mental health disorders, cognitive disabilities, and social deficits may lead to better outcomes for the individuals with FASD and for society.

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