



Fetal alcohol spectrum disorder: the importance of assessment, diagnosis and support in the Australian justice context

Natasha Reid^a , Natalie Kippin^b, Hayley Passmore^{b,c}  and Amy Finlay-Jones^b 

^aChild Health Research Centre, Centre for Children's Health Research (CCHR), The University of Queensland, South Brisbane, QLD, Australia; ^bTelethon Kids Institute, Perth Children's Hospital, Perth, WA, Australia; ^cSchool of Paediatrics and Child Health, The University of Western Australia, Perth, WA, Australia

Fetal alcohol spectrum disorder (FASD) is a neurodevelopmental condition with life-long implications. Individuals with FASD can experience communication, cognitive, behavioural, social and emotional difficulties that impact their functional capacity. Due to these brain-based impairments, previous research suggests that individuals with FASD are over-represented in the justice system. The current article outlines how individuals with FASD may experience inequities within the justice system, why assessment, diagnosis and intervention is important, and the role of health and justice partnerships in promoting more equitable outcomes for justice-involved individuals with FASD. Increased resources and collaborations between health and justice professionals are required to enable the provision of neurodevelopmental assessments for all complex presentations, including FASD.

Keywords: assessment; diagnosis; fetal alcohol spectrum disorder; justice; neurodevelopmental impairments; support.

Introduction

Fetal alcohol spectrum disorder (FASD) is a neurodevelopmental condition, characterised by a wide range of impairments. This can include, but is not limited to, marked cognitive, communication, behavioural and executive functioning deficits, which also affect academic and daily living skills (Lange, Rovet, Rehm, & Popova, 2017). FASD is a life-long condition, which requires a range of individualised supports as each person experiences unique strengths and challenges (Harding, Flannigan, & McFarlane, 2019). Recent research demonstrates that the prevalence rates for FASD are much higher than previously suggested, with global FASD

prevalence among children and youth in the general population estimated to be 7.7 per 1000 (Lange, Probst, et al., 2017). There is persuasive evidence that individuals with neurocognitive impairments, including FASD, are disproportionately involved with the justice system (McSherry et al., 2017). For example, incarceration rates of young people with FASD in Canada were found to be 19 times greater than those for people without FASD (Popova, Lange, Bekmuradov, Mihic, & Rehm, 2011). A recent study in Western Australia (WA), reported that 36% of young people in WA's youth detention centre met diagnostic criteria for FASD. Of great concern, only two of the 36 children who met criteria

Correspondence: Natasha Reid, Child Health Research Centre, Centre for Children's Health Research (CCHR), The University of Queensland, Room 408, 62 Graham St, South Brisbane, QLD 4101, Australia. Email: n.reid1@uq.edu.au

for FASD had a previous diagnosis (Bower et al., 2018).

Notably, an Australian report documented that individuals with cognitive disabilities faced extreme disadvantage throughout the justice system, and this was even more pronounced for First Nations Australians (McSherry et al., 2017). Forms of disadvantage included inconsistent or inadequate support during legal processes, accessibility issues due to the complexity of language used, long delays in proceedings for accused persons with cognitive impairments, and misinterpretation of impairment-related behaviours as wilfully difficult or defiant (McSherry et al., 2017). Here we outline how individuals with FASD may experience inequities within the justice system, the importance of assessment, diagnosis and intervention, and the role of health and justice partnerships in promoting more equitable outcomes for justice-involved individuals with FASD.

Ways in which FASD impacts the legal process

The impairments common to FASD have the potential to influence all stages of an individual's journey through the justice system, as a complainant, witness and defendant (Fast & Conry, 2009). Legal processes are often lengthy, complex and highly verbal; they place heavy demands on neurocognitive functions, in particular, the ability to effectively communicate (Hand, Pickering, Kedge, & McCann, 2016). Information gained through a comprehensive neurodevelopmental assessment, such as that undertaken to assess for FASD, can be used to educate legal professionals about an individual's abilities (Fast & Conry, 2009). An informed response to that individual's immediate and future needs, both for justice-related contexts and beyond, can then be developed (Bower et al., 2018).

Investigative interviews

Interviews typically revolve around detailing an alleged incident or story, employing

narrative discourse. For individuals with neurocognitive impairments, narrative discourse can be particularly challenging (Rollins, 2014; Thorne & Coggins, 2016). Expression and comprehension of narrative discourse draws on sophisticated cognitive and linguistic functions, requiring both the speakers and listeners to integrate multiple pieces of information, such as who may have been involved, how the events played out, and the reasons and intent of actions taken by those involved (Snow, Powell, & Sanger, 2012). Among children and adults with FASD, both justice and non-justice involved, receptive and expressive language skills are two of the most commonly impaired skills (Popova et al., 2011), and in WA, 69% of sentenced youths with FASD had a language disorder (Bower et al., 2018; Kippin et al., 2018). Within the justice context, these communication problems are likely to affect their participation in investigative interviews and undermine capacity for self-advocacy. Furthermore, of justice-involved youth in WA with FASD, 28% did not have Standard Australian English as a first, or 'home' language, which highlights the potential for additional vulnerability when attempting to navigate and self-advocate in a Standard Australian English justice system (Kippin et al., 2018).

Of note, individuals with FASD have also been found to display theory of mind deficits, an aspect of social cognition, which refers to appreciating one's own and others' mental and emotional states (Lindinger et al., 2016). Those with FASD may therefore have difficulties interpreting others' intentions and events they have witnessed. Individuals with FASD can also be prone to confabulation, which is to make up stories unintentionally to fill in the gaps, probably due to memory impairments (Freckelton, 2016b) and a desire to please others (Thiel et al., 2011). The impairments associated with FASD also increase the risk of individuals' suggestibility, which may lead to agreeing with information put to them by others, including peers or police, even though

they may not fully understand or appreciate the consequences (Freckelton, 2016a). This can result in increased rates of victimisation of those with FASD (Thiel et al., 2011) and brings into question the voluntariness of interviews conducted by police, and also the accuracy of information being elicited (Freckelton, 2016a). Overall, the impairments associated with FASD can result in incorrect testimony, false confessions and potentially unjust convictions (Douglas, 2015). In legal proceedings that involve high-stakes outcomes for all parties, it is crucial that an individual's needs are identified and understood, so that adequate adjustments can be made, alleged incidents can be appropriately elicited and understood, and the process of justice enabled.

Fitness to plead and court proceedings

Fitness to plead laws are intended to avoid unfair trials and protect individuals who have been charged with an offence, but are unable to participate equitably in the legal process (Rogers, Blackwood, Farnham, Pickup, & Watts, 2008). However, findings of unfitness may potentially deny accused persons the right to a fair trial: for example, through preventing people the opportunity to defend allegations against themselves in court and potentially denying individuals the opportunity to be found not guilty. Furthermore, individuals may be subjected to state intervention or detention for a period of time that surpasses the length and/or seriousness of the potential sentence, if the finding of unfitness had not been made (McSherry et al., 2017). A relevant example was the case of Rosie Anne Fulton, a young Aboriginal woman who in 2012 was considered unfit to plead to minor criminal charges, due to cognitive impairments related to FASD. It was deemed that there was no suitable environment for her to reside, and as such she was detained in a Kalgoorlie prison for 21 months and was only released after a public media campaign (Freckelton, 2018).

Consequently, the Law Commission has concluded that unfitness to plead proceedings

that remove an accused person from trial should occur as a last resort and highlighted the importance of enabling a typical trial through the implementation of appropriate adjustments (McSherry et al., 2017; The Law Commission, 2016). One approach that has been implemented internationally that would be beneficial in cases with individuals with neurodevelopmental disorders, such as FASD, is the use of intermediaries, or communication assistants. Intermediaries are often speech pathologists who act impartially to help facilitate legal proceedings (Hepner, Woodward, & Stewart, 2015). In Australia, intermediary schemes have been inconsistently implemented across states and territories, and the Law Council of Australia (2018) have recommended that the service is expanded and available for legal proceedings with any person with complex communication needs, including witnesses and defendants.

Extending the concept of appropriate accommodations further, some have advocated that an alternative court approach is necessary for individuals with FASD, specifically a needs-based or solution-focused court approach (Blagg, Tulich, & Bush, 2017). Solution-focused or problem-solving courts are not a new notion in Australia, as they have been implemented in several ways previously. This has included the Drug Courts, the Special Circumstances Court (for homeless and mentally impaired offenders), the Koori or Murri Courts (Edgely, 2016) and the Neighbourhood Justice Centre in Victoria, which has been operating successfully for 12 years (Halsey & de Vel-Palumbo, 2018). Given that solution-focused courts aim to address the underlying causes of an offender's behaviour, this approach has the potential to provide a more effective and responsive approach for individuals with neurodevelopmental impairments, including those with FASD.

Sentencing considerations

The nature of neurodevelopmental impairments among those with FASD needs to be

understood, as they may result in an individual having a lower level of culpability and consequential understanding (Douglas, 2010). For example, when compared to those without FASD, individuals with FASD have been identified to lack a similar degree of empathy, which relates to a deficit with social cognition (Stevens, Dudek, Nash, Koren, & Rovet, 2015). Sentencing processes therefore need to consider possible mitigation of their criminal responsibility and moderation of the weight given to personal and general deterrence (Douglas, 2010). Such considerations are evident in a judgement of the Supreme Court of Western Australia (*LCM v The State of Western Australia* [2016] WASCA 164), in which an appellant's 10-year detention sentence was reduced by three years as a result of the appellant receiving a FASD diagnosis after their initial sentencing. In this case, former WA Chief Justice Wayne Martin ruled that FASD was a mitigating factor, as it diminished the appellant's moral culpability for the offence, their ability to act deliberately and their ability to understand and show remorse, and if the FASD diagnosis had been known at the time of the initial sentencing a different sentence would likely have been imposed (Freckelton, Martin, Mazza, & Beech, 2017).

In Canada, the deficits associated with FASD have been considered as a mitigating factor in numerous cases. For example, in a judgement made by the Manitoba Court of Appeal (*R v Friesen* [2016] MBCA 50), an appellant's manslaughter sentence was reduced from six years to four years as it was concluded that 'an offender's moral blameworthiness may be reduced if he suffers from an FASD related diagnosis and there is a connection between the condition and the offence for which he stands charged'. In providing the summary the judge also highlighted the importance of the court having confirmation regarding an FASD diagnosis and an understanding of the neurodevelopmental impairments experienced by individuals – 'The sentencing judge must have evidence of the

diagnosis and its impact on the accused to draw the nexus between that diagnosis and the accused conduct relating to the offences.'

Compliance

Individuals with FASD also often experience difficulties when required to comply to particular conditions, such as those stipulated by community-based orders and supervised release orders (Douglas, 2010). These conditions are often delivered in high-pressure situations such as during court proceedings, they are communicated using complex oral and written language, and they rely heavily on the individual being able to remember the specific details of the order for an extended period. For those with FASD, who commonly have impairments in memory, oral and written language, and adaptive function, breaching these orders is often inevitable (Douglas, 2010). If the individual's impairments and functional abilities are known, the conditions of the order can be tailored for their specific circumstances and their level of capacity and function (Fast & Conry, 2009). This often involves adapting expectations placed upon the individual, increasing the support and supervision available and making information, such as dates, times, rules and consequences, as simple and as clear as possible. An Australian resource, Blurred Borders (<https://blurredborders.legal-aid.wa.gov.au/about-blurred-borders>), which was created by Legal Aid WA, is one example of how complex legal information and concepts, such as bail, can be simplified to better meet an individual's needs. For those who receive a sentence of detention, compliance to detention centre procedures is critical, but can pose difficulties for those who may struggle to understand and follow instructions (Fast & Conry, 2009). Without adaptations to expectations placed upon individuals in detention, further escalation of negative behaviours and the consequential punishments within detention centre environments are likely. Training for all staff who engage with justice-involved populations about neurodevelopmental impairments

and accommodating management approaches is crucial to promote appropriate environments for individuals with FASD and other impairments (Passmore et al., 2018).

Supports and interventions

Programs and interventions that justice-involved people participate in aim to reduce recidivism and promote community safety. Interventions for justice-involved individuals have been classified into two broad groups based on their overarching philosophy: (a) behavioural control approaches, and (b) therapeutic approaches (Lipsey, 2009). Research has demonstrated that the use of behavioural control approaches are less effective than therapeutic approaches at reducing recidivism rates (Evans-Chase & Zhou, 2014; Lipsey, Howell, Kelly, Chapman, & Carver, 2010), and this is likely the case for individuals with FASD, who may struggle with notions of cause and effect. Intervention studies with the general population provide proof of concept that individuals with FASD can experience improvements (Reid et al., 2015). However, there has been limited research focused on interventions for adolescents and adults with FASD and specifically for justice-involved individuals with FASD.

When planning and delivering therapeutic approaches for justice-involved individuals with FASD, it is important to consider the specific cognitive, learning and daily living needs that can impact their ability to engage effectively in programs and interventions. For example, drug and alcohol addiction treatment programs are important for potentially reducing justice involvement of individuals with FASD, and recent research highlights the need for such programs to be tailored to the developmental needs of the participant (Currie, Hoy, Legge, Temple, & Tahir, 2016). Comprehensive, accurate and timely neurodevelopmental assessments are an important step to better understanding whether an individual may or may not require specific program adaptations

to be made. While traditionally, health and justice partnerships refer to legal services being provided in health care contexts (Health Justice Australia, 2018), the overrepresentation of people with neurodevelopmental disorders in the justice system highlights a need for embedding of medical and allied health services in justice contexts. Such services could be used to design and deliver individualised programs that support rehabilitation of the individual and prevent further impairments and comorbidity. Given individuals who are involved with the justice system have complex needs and are at risk of further justice involvement, health and justice partnerships are important to enable integrated and coordinated care for the health and developmental needs of individuals throughout all stages of their engagement with the justice system.

One example of a comprehensive approach to FASD in the justice system is the Manitoba Youth Justice Program, which has been in place since 2006. The Manitoba Program has five main aims: (a) to ensure youth receive diagnostic services; (b) to provide recommendations to the judiciary; (c) to build capacity within the family and community while enhancing support services; and (d) to implement meaningful multidisciplinary and reintegration plans post-custody (Longstaffe et al., 2017). Supports and services are carefully informed by the young person's health, neurocognitive and social profile. For example, an understanding of the sensory needs of an individual can help guide case workers or lawyers as to the type of living arrangement most suited to not exacerbating sensory regulation difficulties (Longstaffe et al., 2017). Some individuals with FASD have problems with regular sleep patterns, so a sentencing order that includes mandatory work or education conditions can integrate the time of day and night that an individual is best able to function (Longstaffe et al., 2017).

Individuals with complex communication needs, such as those with FASD, often

struggle with language related to social problem solving, emotions and theory of mind. Therefore, rehabilitation programs, such as those that target behaviour and social cognition, can potentially be enhanced through learnings from health disciplines that have not traditionally been part of the justice workforce, such as speech pathology (Noel & Westby, 2014). Similarly, individuals with developmental disabilities such as FASD often have longstanding learning and education needs; they require a multidisciplinary health and justice response that is collaborative and ongoing regardless of whether they are in a justice or community setting (Hamilton et al., 2019). In addition, education plans developed for individuals with FASD should be relevant to their specific needs. For example, it should consider whether supports for visual motor integration or fine motor skill difficulties are needed in the classroom or learning environment (Safe et al., 2018). Evaluation of supports and services against outcomes of, for instance, reducing recidivism and improving school engagement can also be better enabled through health and justice partnerships (Coldiron, Hensley, Parigoris, & Bruns, 2019).

Lack of assessments and supports in the Australian health system

To date, there has been limited responsiveness in the Australian justice system regarding the needs of individuals with FASD. However, a continuing limiting factor for the justice system is the inadequate availability of timely assessments and supports. For instance, in Queensland there is a substantial lack of publicly provided FASD-related services for individuals over the age of 11 years. Young people or adults who are involved with the justice system and may have FASD are therefore unable to access the assessments and services they need. There is presently a lack of awareness and understanding from health professionals about FASD, and this may act to perpetuate misinformation about the value of assessment.

The recommended assessment framework detailed in the Australian Guide to the Diagnosis of FASD (Bower & Elliott, 2016) should be considered as a benchmark for the assessment of all individuals with complex neurodevelopmental presentations (Shelton, Reid, Till, Butel, & Moritz, 2018). This process provides a comprehensive understanding of an individual's strengths and weaknesses across 10 neurodevelopmental domains (i.e. brain structure/neurology; motor skills; cognition; language; academic achievement; memory; attention; executive function, impulse control and hyperactivity; affect regulation; and adaptive behaviour, social skills and social communication). Therefore, increased resources and collaboration between health and justice professionals could enable the provision of neurodevelopmental assessments for all complex presentations, including FASD.

A commonly voiced concern by health professionals is that asking about alcohol use in pregnancy or assessing for FASD is stigmatizing and only places blame on mothers for a child's difficulties (Payne et al., 2005). It is true that FASD and alcohol use during pregnancy are currently stigmatized issues, such that women who consume alcohol are likely to be negatively judged and labelled as irresponsible, regardless of their circumstances (Bell et al., 2016). This can result in unwillingness to initiate conversations regarding alcohol, among both pregnant women and health professionals (Choate & Badry, 2019; Eggertson, 2013). However, failure to discuss alcohol use during pregnancy and FASD perpetuates stigma and prevents change. It is important to consider that alcohol use is ubiquitous in Australian society, and thus it is not surprising that individuals of reproductive age consume alcohol. Furthermore, due to our high rates of unplanned pregnancies (Taft et al., 2018), the majority of exposures occur before a woman is aware she is pregnant. Professionals have an opportunity to change the status quo, through providing accurate information to women, their partners and support networks regarding

the potential risks associated with alcohol use in a client-centred way (Reid, Gamble, Creedy, & Finlay-Jones, 2018). It is only through speaking compassionately and openly that these issues will be de-stigmatized.

Importantly, research documents the benefits that an accurate neurodevelopmental assessment and FASD diagnosis can confer (e.g. Chamberlain, Reid, Warner, Shelton, & Dawe, 2017; Salmon, 2008). A seminal study by Streissguth et al. (2004) found that obtaining an early diagnosis (i.e. before 6 years) and receiving developmental disability support were two of the most important protective factors for individuals with FASD. The importance of all diagnoses for individuals involved with the justice system was highlighted in research conducted by Baldry, Briggs, Goldson, and Russell (2018), who interviewed 124 justice professionals across Australia, England and Wales. Diagnosis was seen as vital to enable the youth justice system to respond appropriately, including to facilitate diversion rather than criminalising young people due to their impairments.

Without a timely comprehensive assessment, which may lead to a diagnosis, individuals are denied appropriate supports, particularly through their difficulties with daily functioning not being recognised as impairments, but rather being misinterpreted as wilful misbehaviour. Further, provision of information and education to individuals and families about a diagnosis, potential life-long impacts, and possible education, training and employment opportunities needs greater attention (Currie et al., 2016), and health and justice partnership can pave the way for a more holistic response. As eloquently stated by Choate and Badry (2019), 'diagnosis managed from a strengths and opportunities perspective can open doors of hope and possibility' (p. 45). To advance access to timely neurodevelopmental assessments and appropriate supports for justice-involved individuals, effective health and justice partnerships are urgently required.

Conclusions

Given the over-representation of individuals with FASD in the justice system, alternative approaches are critically needed. We have detailed how individuals with FASD can experience inequalities at all stages of the justice system and why neurodevelopmental assessment, diagnosis and intervention are imperative. Furthermore, there is an urgent need for health and justice partnerships to enable increased access to timely assessments, appropriate supports and interventions that can ultimately lead to improved outcomes for individuals with FASD.

Ethical standards

Declaration of conflicts of interest

Natasha Reid has declared no conflicts of interest

Natalie Kippin has declared no conflicts of interest

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Ethical approval

This article does not contain any studies with human participants or animals performed by any of the authors.

ORCID

Natasha Reid  <http://orcid.org/0000-0001-9813-5613>

Hayley Passmore  <http://orcid.org/0000-0002-5031-2593>

Amy Finlay-Jones  <http://orcid.org/0000-0002-1336-4001>

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