

Fetal Alcohol Spectrum Disorder (FASD): A Call on Educators to Become Informed

By Jerrod Brown, Diane Harr, and Don Helmstetter

Abstract

Resulting from prenatal alcohol exposure, fetal alcohol spectrum disorder (FASD) is characterized by a range of cognitive, social, and adaptive impairments. Although the effects of FASD vary in range and severity, students with FASD often offer unique challenges and dilemmas to teachers and parents alike. These difficulties may include unusual learning and behavior patterns, requiring specialized assessment and individualized educational planning with a collaborative focus. Educators could benefit from advanced training in early intervention strategies for accommodating instruction to support students with FASD. Despite the fact that students with FASD usually do not outgrow the disorder, early diagnosis along with intensive and appropriate intervention can make an enormous difference in the child's life.

Keywords: Fetal alcohol spectrum disorder, education, special education, learning disabilities

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Fetal Alcohol Spectrum Disorder (FASD)

Fetal Alcohol Spectrum Disorder (FASD) is a life-long disorder caused by prenatal alcohol exposure. The umbrella term of FASD includes Fetal Alcohol Syndrome (FAS), partial Fetal Alcohol Syndrome (pFAS), Alcohol-Related Neurodevelopmental Disorder (ARND), and Neurobehavioral Disorder associated with Prenatal Alcohol Exposure (ND-PAE) (American Psychiatric Association, 2013; Chasnoff, Wells, Telford, Schmidt, & Messer, 2010; Chudley et al., 2005). FASD can include a wide range of cognitive (e.g., intelligence, executive control, short- and long-term memory, and attention), social (e.g., suggestibility, communication skills, and gullibility), and adaptive impairments (e.g., decision making and problem-solving abilities) (Brown, Gudjonsson, & Connor, 2011; Kodituwakku, 2009; McGee & Riley, 2007; O'Connor & Paley, 2009; Rasmussen, 2005).

No universal set of FASD criteria fits all cases because the appearance and severity of these symptoms varies as a function of the time and dose of prenatal alcohol exposure. In addition to these symptoms, students with FASD often experience an array of comorbid behavioral (e.g., ADHD and conduct disorder), mood (i.e., major depression and bipolar disorder), anxiety, and substance use disorders (Brown, Connor, & Adler, 2012; Han et al., 2015; Petrenko, Tahir, Mahoney, & Chin, 2014; Stevens, Nash, Koren, & Rovet, 2013). This complex interplay of comorbid psychiatric symptoms makes screening and assessment difficult, which can increase the likelihood of missed diagnosis or misdiagnosis and contribute to negative long-term academic outcomes. To help combat these issues, the Diagnostic and Statistical Manual-5th Edition (APA, 2013) recently introduced Neurodevelopmental Disorder Associated with Prenatal Alcohol Exposure (ND-PAE) as a disorder for future study.

Because FASD impacts between 2 and 5% of the United States population, educators are likely to encounter this disorder in most classrooms (May et al., 2014). Students with FASD can exhibit a wide range of deficits in ability and adaptive and executive functioning, all of which contribute to a host of academic challenges (Swart, Hall, McKee, & Ford, 2014). Many of these students will require the supports and services of special education programming. Modified forms of special educational services that address the unique features of this disorder may warrant consideration. In light of the pervasive difficulties inherent in this population, it is critical for educators to identify educational interventions incorporating a continuum of supportive collaboration and evidence-based practices (Duquette, Stodel, Fullarton, & Hagglund, 2006; Olson, Oti, Gelo, & Beck, 2009; Streissguth, 1997). Empowering educators and school administrators to recognize and refer students to appropriate resources significantly increases the likelihood of positive outcomes for all students with FASD. Early intervention provides students with the best chance for long-term success (Clarren, Olson, Clarren, & Astley, 2000; Edmonds & Crichton, 2008).

Implications for Education Professionals

The presence of FASD may not be immediately clear during initial encounters with a student. As a result, school-aged children with fetal alcohol-related problems are often not identified accurately due to several reasons. First, students with FASD are often referred for services centered on learning difficulties, behavioral problems, or attentional issues rather than FASD. To help limit the consequences of misidentification, education professionals should not rely exclusively on intelligence measures in their assessment batteries because intelligence tests may not accurately detect the adaptive functioning deficits of FASD. Second, the manner by which educators interview students and their families can be important. For example, FASD-related deficits may be masked by an over-reliance on simple yes/no



responses to questions. Third, educational professionals must keep in mind the impact of FASD symptoms on assessment strategies. One example is how memory-related impairments (i.e., memory loss, suggestibility, and confabulation) can result in misinformation that negatively influences the assessment process. Finally, the assessment of FASD often necessitates nuanced differential diagnosis, which may be beyond the skill sets of some professionals and require consultation with an FASD expert. The consequences of not accounting for these diagnostic complications is the missed and misdiagnosis of FASD, which can result in the use of inappropriate specialized services and instructional strategies, decreasing the likelihood of positive outcomes for students.

To maximize the possibility of educational success, instructional plans should be individualized in a developmentally appropriate manner that considers the symptoms and difficulties of FASD. Students with FASD may benefit from the utilization of functional approaches that emphasize the development of life-skills, self-advocacy, social skills, and behavioral regulation. School counseling services may be particularly helpful because the symptoms of FASD often predispose clients to higher rates of victimization and trauma than the general population. Given the range of expertise that such educational programming necessitates, professionals need to collaborate and partner with a network of medical, mental health, and social services professionals.

Training Recommendations for Educators

The primary goal of any FASD-related training is to be sure that all professionals who work in schools are familiar with FASD. Not only should such trainings include an overview of up-to-the-minute empirical research, educators should receive training in three key areas. First, the training should dispel the myths and misconceptions of FASD by providing an overview of the risk factors, red flag indicators, and symptoms of the disorder. Second, the training should discuss the best available screening and assessment practices by emphasizing the skills and strategies that can maximize the accurate identification of students with FASD. Third, the training should highlight educational interventions and best practice approaches with established effectiveness for students with FASD. Together, greater familiarity with FASD across these key areas has the potential to lead to increased recognition, accurate diagnosis, and improved educational outcomes for these students.

Suggestions for Further Research

There is a strong need for advanced and sophisticated research on FASD in several areas. First, research is needed to identify how the recently developed ND-PAE criteria can aid in the identification of FASD, particularly in school settings. This should include the development of tools that can be used by professionals working in education settings such as school psychologists, counselors, and social workers. Second, once better tools for identifying FASD have been developed, these instruments should be employed in research exploring the specific deficits and symptoms associated with FASD from kindergarten through high school. Third, these assessment tools also have the potential to improve the accuracy of FASD prevalence rates in school settings. Fourth, survey research should investigate the perceptions of students with FASD on their educational experiences. Fifth, other survey work should explore the experiences of education professionals (e.g., teachers, administrators, and nurses) in working with students who have FASD and assess their training needs in the area of FASD. Together, this work



can improve how students with FASD are treated in school and help maximize their short- and long-term potential.

Conclusion

The prevalence of FASD almost ensures that school professionals will come into contact with students who have FASD due to the disorder's educational and behavioral impacts, which may necessitate removal from the classroom setting. As such, education professionals need more training on screening and assessment, pre-referral interventions, and educational programming for students with FASD. The importance of this need is emphasized by the developmental and cognitive impairments that often accompany the disorder. Although school district professionals acknowledge the educational developmental impairments of children with FASD, very few are aware of the legal and policy issues surrounding FASD, the clinical background of FASD, or the curriculum regarding FASD prevention, identification, and care. These areas are critical to address in educational institutions, as knowledge about the disorder and due process initiatives can assist in early intervention with individuals who have FASD. School district administration can provide critical and timely advocacy for valuable training, assistance, and prevention surrounding such students and their families and the community.

Biographies

Jerrod Brown, Ph.D., is an Assistant Professor and Program Director for the Master of Arts degree in Human Services with an emphasis in Forensic Behavioral Health for Concordia University, St. Paul, Minnesota. Jerrod has also been employed with Pathways Counseling Center in St. Paul, Minnesota for the past fifteen years. Pathways provides programs and services benefiting individuals impacted by mental illness and addictions. Jerrod is also the founder and CEO of the American Institute for the Advancement of Forensic Studies (AIAFS), and the Editor-in-Chief of Forensic Scholars Today (FST) and the Journal of Special Populations (JSP). Jerrod has completed four separate master's degree programs and holds graduate certificates in Autism Spectrum Disorder (ASD), Other Health Disabilities (OHD), and Traumatic-Brain Injuries (TBI).

Diane Harr, Ph.D., is the Coordinator of Graduate Special Education Programs at Concordia University, St. Paul. Previously, Diane taught and coordinated special education programs at the K-12 grade levels. Her public-school experience included assessment, identification, and implementation of instructional strategies geared to meet the needs of all students including those with Autism Spectrum Disorders, Emotional Behavioral Disorders, Specific Learning Disabilities, and other neurological and functional impairments.

Dr. Don Helmstetter has been an educator and administrator in Minnesota for over 40 years. He is a former President of the Minnesota Association of School Administrators (MASA). He was also named the 2007 Minnesota Superintendent of the Year (by MASA). He currently directs the Education Doctorate programs at Concordia University, St. Paul, Minnesota, where he has served for over seven years. His academic area is school leadership; specifically, the ethics of school leadership.



References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.).* Arlington, VA: American Psychiatric Publishing.
- Brown, N. N., Connor, P. D., & Adler, R. S. (2012). Conduct-disordered adolescents with Fetal Alcohol Spectrum Disorder intervention in secure treatment settings. *Criminal Justice and Behavior*, 39(6), 770-793.
- Brown, N., Gudjonsson, G., & Connor, P. (2011). Suggestibility and Fetal Alcohol Spectrum Disorders: I'll Tell You Anything You Want to Hear. *The Journal of Psychiatry & Law, 1*, 39-73.
- Chasnoff, I. J., Wells, A. M., Telford, E., Schmidt, C., & Messer, G. (2010). Neurodevelopmental functioning in children with FAS, pFAS, and ARND. *J Dev Behav Pediatr* 31, 192-201.
- Chudley, A. E., Conry, J., Cook, J., & et al. (2005). Fetal alcohol spectrum disorder: Canadian guidelines for diagnosis. *Can Med Assoc J, 172,* S1-S21.
- Clarren, S., Olson, H. C., Clarren, S. G., & Astley, S. (2000). A child with fetal alcohol syndrome. In M. Guralnick (Ed.). Interdisciplinary clinical assessment of young children with developmental disabilities (pp. 307-326). Baltimore, MD: Paul H. Brooks.
- Duquette, C., Stodel, E., Fullarton, S., & Hagglund, K. (2006). Persistence in high school: Experiences of adolescents and young adults with fetal alcohol spectrum disorder. *Journal of Intellectual & Developmental Disability, 31*, 219-231.
- Edmonds, K., & Crichton, S. (2008). Finding ways to teach students with FASD, a research study. *Journal* of Special Education, 23, 54-73.
- Han, J. Y., Kwon, H. J., Ha, M., Paik, K. C., Lim, M. H., Lee, S. G., ... & Kim, E. J. (2015). The effects of prenatal exposure to alcohol and environmental tobacco smoke on risk for ADHD: A large population-based study. *Psychiatry Research*, 225(1), 164-168.
- Kodituwakku, P. W. (2009). Neurocognitive profile in children with Fetal Alcohol Spectrum Disorders. *Dev Disabil Res Rev, 15*, 218-224.

May, P. A., Baete, A., Russo, J., Elliott, A. J., Blankenship, J., Kalberg, W. O., ... & Adam, M. P. (2014). Prevalence and characteristics of fetal alcohol spectrum disorders. *Pediatrics*, *134*(5), 855-866.

- McGee, C. L., & Riley, E. P. (2007). Social and behavioral functioning in individuals with prenatal alcohol exposure. *Int J Disabil Human Dev, 6*, 369-382.
- O'Connor, M. J., & Paley, B. (2009). Psychiatric conditions associated with prenatal alcohol exposure. *Dev Disabil Res Rev, 15*, 225-234.
- Olson, H. C., Oti, R., Gelo, J., & Beck, S. (2009). Family matters: Fetal alcohol spectrum disorders and the family. *Developmental Disabilities Research Reviews*, *15*, 235-249.



- Petrenko, C. L., Tahir, N., Mahoney, E. C., & Chin, N. P. (2014). Prevention of secondary conditions in fetal alcohol spectrum disorders: Identification of systems-level barriers. *Maternal and Child Health Journal, 18*(6), 1496-1505.
- Rasmussen, C. (2005). Executive functioning and working memory in fetal alcohol spectrum disorder. *Alcohol Clin Exp Res, 29*, 1359-1367.
- Stevens, S. A., Nash, K., Koren, G., & Rovet, J. (2013). Autism characteristics in children with fetal alcohol spectrum disorders. *Child Neuropsychology*, *19*(6), 579-587.
- Streissguth, A. P. (1997). *Fetal alcohol syndrome: A guide for families and communities.* Toronto, ON, Canada: Paul. H. Brookes.
- Swart, S., Hall, W. A., McKee, W. T., & Ford, L. (2014). Caregivers' Management of Schooling for Their Children With Fetal Alcohol Spectrum Disorder. *Qualitative Health Research, 24*(11), 1540-1552.

