

Fetal alcohol spectrum disorder term paper example

[Health & Medicine](#), [Alcoholism](#)



There are a variety of birth defects that are influenced by the actions of the parent while the child is in utero. From the harmful effects of drugs and alcohol, to the physiological changes that occur within the mother's body as a response to stress and dietary deficiencies, the influence of such prenatal events can prove to be lifelong for the child. One such disorder associated with the prenatal environment is known as Fetal Alcohol Syndrome (FAS), which falls under the category of Fetal Alcohol Spectrum Disorder. The spectrum of disorders under the FASD umbrella also includes Partial FAS, Alcohol-Related Birth Defects (ARBD), and Alcohol-Related Neurodevelopmental Disorder (ARND). Each alcohol-related disorder under the FASD category has unique characteristics, but they can each contribute to lifelong challenges for the child.

What is FAS?

When a mother consumes alcohol, a teratogen, during pregnancy, the fetus is at an increased risk of developing FAS. While the effects of FAS vary from child to child, some of the common problems that may be present include physical deformities, mental retardation, difficulties with vision, learning disorders, and behavioral challenges that can impair the individual for the duration of their life. The harmful effects of FAS can occur as early as during the first few weeks of pregnancy, even before the woman knows she may be pregnant. Since the fetus is unable to process alcohol as efficiently as an adult, the alcohol is more concentrated and leads to a reduction in nutrition and oxygen to the fetus' vital organs, hindering healthy development (Sokol, Delaney-Black, & Nordstrom, 2003). According to research, FAS within the

developed world occurs in 0.97 per 1,000 births, with some American Indian reservations reporting an average of 8 per 1,000 births (May et al., 2007).

Etiology of FAS

FAS occurs when a mother ingests alcohol during pregnancy, with any amount of alcohol consumed potentially harming the development of the fetus. However, research suggests that as the amount of alcohol consumed may increase the likelihood of the fetus developing FAS, with binge drinking showing to be more harmful when compared to ingesting small amounts over the duration of the pregnancy (NIH, 2012). Alcohol passes from the mother to the fetus through the placenta and umbilical cord, and it has the potential to trigger a variety of problems within the developing fetus. Alcohol can constrict the blood vessels within the placenta, thus hindering the delivery of vital nutrients and oxygen and the toxic byproducts that occur during the metabolism of alcohol can become concentrated in the brain of the fetus, leading to neurological and developmental defects (SAMHSA, 2007).

While FAS and FASD do not have any genetic heritability factors and cannot be passed on from an individual who has FASD to the fetus (Sanford School of Medicine, n. d.), rates of FAS have been shown to be higher among individuals within low socioeconomic and minority groups (Sokol, Delaney-Black, & Nordstrom, 2003). Some common risk factors within among individuals who are considered to be in lower socioeconomic status (SES) include social transience and unemployment/marginal employment (May & Gossage, 2001). Research by Sokol, Delaney-Black, and Nordstrom (2003)

revealed that African American children are five times more likely to experience FAS symptoms when compared to Caucasian children, and American Indian/Alaskan Native children are 16 times more likely to develop FAS symptoms when compared to Caucasian children. Such a marked difference between minority and majority groups suggests that there may be a cultural influence regarding drinking while pregnant. Research into alcohol use among various populations revealed that alcoholism occurs at a much higher rate within the Native American community compared to Caucasians (SAMHSA, 2007). In addition to the higher rates of alcoholism within the Native American population, poverty and a lack of access to health care are also cited as contributing factors to the increased prevalence of FASD among the Native American population (SAMHSA, 2007).

Prognosis and Treatment for FASD

Currently, there is no cure for FASD, but there are several treatment options that have shown to be effective in addressing the challenges faced by individuals with FASD. Treatment options consist of five categories: medical care, medication, behavioral and educational therapy, parent training, and alternative approaches (CDC, 2006). While no medication has been identified as a specific FASD treatment, some of the medications used to treat the symptoms of FASD include stimulants, antidepressants, neuroleptics, and anti-anxiety drugs (CDC, 2006). Stimulants can be useful in treating symptoms such as hyperactivity, problems paying attention, and poor impulse control. Antidepressants have been shown to be useful in lessening sad moods, school disruptions, and anti-social behaviors. Neuroleptics are

used to treat aggression and other behavioral problems, while anti-anxiety medications are used to lessen the symptoms of anxiety (CDC, 2006). Among the behavior and educational therapies that have been shown to be beneficial include friendship training, specialized math tutoring, executive function training, parent-child interaction therapy, and parenting and behavior management training (CDC, 2006). Friendship training teaches children how to interact in a socially acceptable way with other children. Executive functioning training teaches both behavioral awareness and self-control, focusing on cause and effect relationships and problem solving. Children are not the only ones who can benefit from behavior and educational therapies, as an improvement in the parent-child relationship and decrease in parent distress has been linked to a decrease in the severity of behavior problems exhibited by the child (CDC, 2006).

Prevention

The only way to prevent FASD is to abstain from drinking while pregnant. Warnings have been issued regarding the dangers of consuming alcohol while pregnant, dating back to 1981 when the nation's leading spokesman on matters of public health (the Surgeon General) stated that alcohol should not be consumed by pregnant women due to the fact that there is no known safe level of alcohol ingestion during pregnancy (Sokol, Delaney-Black, & Nordstrom, 2003). A few years later, in 1989, alcohol warning labels were introduced; yet even with the additional warnings, data shows that there was no significant change in the incidence of FASD (Sokol, Delaney-Black, & Nordstrom, 2003). Since research has suggested that there may be a link

between socioeconomic status and the incidence of FAS, it has been recommended that “ universal prevention might be facilitated by social and economic opportunities for the entire population and reducing the prevalence of alcohol abuse” (Stratton, Howe, & Battaglia, 1996).

Additionally, research into the risk factors that contribute to higher incidence of FAS revealed that “ alcohol consumed prior to knowledge of pregnancy, level of distress, and low SES” contribute to an increase in the likelihood of a woman giving birth to a child with FAS (Lewis, Shipman, & May, 2011).

Through creating programs that can address the primary risk factors of FASD (low SES, poor nutrition, and stress), the levels of FASD would likely decrease (Lewis, Shipman, & May, 2011). Another way to reduce the incidence of FASD occurs during prenatal appointments between the mother and the medical professionals. A recent report suggests that women should be screened for alcohol on an annual basis and during the first trimester of pregnancy (ACOG, 2011). Skilled ob-gyns should talk to their patients about alcohol use, use screening tests to identify at-risk drinking patterns, utilize referrals of alcohol-dependent women for professional treatment, and use a chart of standard drink measurements to inform pregnant women about the dangers associated with consuming alcohol while pregnant (ACOG, 2011).

Conclusion

While FASD is 100% preventable, it still occurs among the current generation, despite the previous educational outreach actions. However, with more research into why women drink while they are pregnant, more effective prevention programs can be developed that address not only

alcohol use, but also the factors (low SES, high stress levels) that have been shown to contribute to an increased likelihood of giving birth to a child with FASD. Likewise, access to affordable, quality health care services before, during, and after pregnancy can help to assist women in making healthy choices that not only affect the woman's health, but that of their children. For children who are born with FASD, there are a variety of treatment options that can address the physical and emotional challenges that may be present. However, interventions are not helpful solely for the child with FASD, as the mother, caretakers, and extended family can benefit from learning effective techniques for working with the challenges associated with FASD. Seeking outside assistance and education can aid in the emotional health of the entire family. Additionally, parents and teachers of children with FASD can benefit from continued education in the most effective ways to help children to succeed and thrive in life.

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