

Fetal Alcohol Spectrum Disorders in a Southeastern County of the United States: Child Characteristics and Maternal Risk Traits

Objective: To detail the characteristic traits of children with fetal alcohol spectrum disorders (FASDs) and maternal risk factors in a southeastern U.S. County.

Methods: Independent samples were drawn from 2 different cohorts of first-grade students. All consented children (49.8%) were measured for height, weight, and head circumference, and those \leq 25th centile entered the study along with a random sample drawn from all enrolled students. Study children were examined for physical growth, dysmorphology, and neurobehavior, and their mothers were interviewed.

Results: Total dysmorphology scores discriminated well the physical traits of children across the FASD continuum: fetal alcohol syndrome (FAS) = 15.8, partial FAS (PFAS) = 10.8, alcohol-related neurobehavioral disorder (ARND) = 5.2, and typically developing controls = 4.4. Additionally, a neurobehavioral battery distinguished children with each FASD diagnosis from controls. Behavioral problems qualified more children for FASD diagnoses than cognitive traits. Significant proximal maternal risk variables were as follows: reports of pre-pregnancy drinking, drinking in any trimester, and comorbid use of other drugs in lifetime and during pregnancy, especially alcohol and marijuana (14.9% among mothers of children with FASD vs. 0.4% for controls). Distal maternal risks included reports of other health problems (e.g., depression), living unmarried with a partner during pregnancy, and a lower level of spirituality. Controlling for other drug use during pregnancy, having a child diagnosed with a FASD was 17.5 times greater for women who reported usual consumption of 3 drinks per drinking day prior to pregnancy than for nondrinking mothers ($p < 0.001$, 95% CI = 5.1 to 59.9). There was no significant difference in the prevalence of FASD by race, Hispanic ethnicity, or socioeconomic status. The prevalence of FASD was not lower than 17.3 per 1,000, and weighted estimated prevalence was 49.0 per 1,000 or 4.9%.

Conclusion: This site had the second lowest rate in the CoFASP study, yet children with FASD are prevalent.

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