Alcohol and Drug Use in Young Adults with Prenatal Alcohol Exposure

The MSACD Project produced a recent report of alcohol and drug use in a community sample that includes young adults exposed to alcohol prenatally. Prior studies suggest that prenatal alcohol exposure is related to increased rates of adult substance abuse in clinical and nonclinical samples. The present report is a preliminary analysis of data on substance use in a community sample of exposed and non-exposed young adults. The sample includes 142 participants drawn from a predominantly African-American, low SES population. Participants in three groups were recruited prenatally: control, dysmorphic, and exposed/not dysmorphic. Participants in a special education contrast group were recruited during adolescence.

Participants completed self-report measures of substance use and provided blood and urine specimens. The gamma glutamyl transpepsidate test (GGTP), a measure of liver enzyme level associated with alcohol abuse, was completed for blood samples. The urine samples were analyzed for evidence of seven drugs.

For self-reports, there were no significant group differences for ever using tobacco, alcohol, marijuana, cocaine, or ecstasy. There were significant group differences for current use of marijuana. Participants in the dysmorphic group reported the highest percentage of use for tobacco and marijuana; participants in the special education contrast group reported similar, but slightly lower percentages of use. For alcohol, the special education contrast group reported the highest percentage of use. Significant effects also occurred for gender, with males reporting more across groups than females. No exposure group effects occurred in the analysis indicating high probability of having a substance
dependence disorder, but about 35% of participants from both the dysmorphic and special education contrast groups were in this category.

For the GGTP test, gender was again significant with males scoring higher than females across groups. The effect for exposure group was marginally significant with the exposed/nondysmorphic group having the highest mean. No group means were in the clinical range for this test. Laboratory results for urine samples could not be analyzed for five drugs due to low frequency of positive results. However, 38.7% of the sample as a whole tested positive for marijuana and 7% tested positive for cocaine. Exposure group was not significantly related to results for either drug.

These results suggest that prenatal alcohol exposure is not strongly related to young adult substance use. While a higher percentage of participants in the dysmorphic group reported using some substances than those in the control group, their use was similar to or lower than that of participants from the special education contrast group.

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