

Fetal alcohol spectrum disorder linked to high prevalence of epilepsy, Queen's study

KINGSTON, ON – Children with Fetal Alcohol Spectrum Disorder (FASD) show a very high prevalence of developing epilepsy and having seizures, according to a national study by Queen's University researchers.

Six per cent of study participants had epilepsy and 12 percent had one or more seizures in their lifetimes. By comparison, less than one percent of the general population is expected to develop epilepsy. The study results also showed that individuals were more likely to have epilepsy, or a history of seizures, if exposure to alcohol had occurred in the first trimester or throughout the entire pregnancy.

“There are very few studies that have examined the relationship between seizures and epilepsy among individuals with FASD,” says study co-author James Reynolds, a pharmacology, toxicology and neuroscience researcher at Queen's University. “The consensus recommendation of scientists, clinicians, and public health officials around the world is very clear—a woman should abstain from drinking during pregnancy as part of an overall program of good prenatal health care that includes good nutrition, adequate exercise, and sufficient rest.”

Researchers examined the histories of 425 individuals between the ages of two and 49 years from two FASD clinics. They compared risk factors such as the level of exposure to alcohol or other drugs, type of birth, and trauma with the co-occurrence of epilepsy or a history of seizures in participants with confirmed FASD diagnoses. The report builds on a growing body of evidence that maternal drinking during pregnancy may put a child at greater risk for an even wider variety of neurologic and behavioral health problems than thought before.

The study results will appear in the June issue of *Alcoholism: Clinical & Experimental Research*. The research team included St. Michael's Hospital, University of Alberta, University of Toronto, and the Toronto Western Research Institute. The study was funded by the Canadian Institutes of Health Research.

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