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Another perspective on 'The effect of different alcohol drinking patterns in early to mid pregnancy on the child's intelligence, attention, and executive function'

Sir,

It has been suggested in a series of papers published on 20 June 2012 in *BJOG*[1–5] that low and moderate weekly alcohol consumption in early pregnancy is not associated with adverse neuropsychological effects in children aged 5 years. The authors of the papers state that it remains the most conservative advice for women to abstain from alcohol during pregnancy; however, small amounts may not present a serious concern.

The researchers studied 870 preschool children whose mothers reported drinking during pregnancy and compared them with 758 preschool children whose mothers reported not drinking during pregnancy. They measured the children's IQ and attention levels at the age of 5 years. Children exposed prenatally to 1–8 drinks per week had the same IQ and attention levels as children with no exposure to alcohol.

We contend that the reason the children in this study did not appear to be harmed by the alcohol is because the children were too young to measure the full impact alcohol may have had on their brains. At 5 years of age, the brain is still developing. A 5-year-old's brain is not developed sufficiently to perform complex tasks, such as remembering and following multiple instructions, writing a report, communicating abstract ideas effectively or exercising good judgment. Over 30 years of research on fetal alcohol syndrome (FAS) confirms that alcohol has its greatest impact on complex brain functions.[6] This is why children exposed to and damaged by prenatal alcohol exposure do deceptively well in their preschool years. The full impact of their alcohol exposure will not be evident until their adolescent years.

Please consider the following statistics based on 2600 children who received a diagnostic evaluation for FAS in the Washington State FAS Diagnostic & Prevention Network clinics over the past 18 years.

- One of every seven children diagnosed with FAS (the most severe outcome caused by prenatal alcohol exposure) had a reported exposure of 1–8 drinks per week. (The Danish studies did not conduct FAS diagnostic evaluations on the children.)
- One-half of the children with FAS had developmental scores in the normal range as preschoolers. However, all had severe brain dysfunction confirmed by the age of 10 years. (The Danish studies only assessed preschoolers.)
- Only 10% of the children with FAS had attention problems by the age of 5 years; 60% had attention problems by the age of 10 years. (The Danish studies only assessed attention at the age of 5 years.)
- Only 30% of the children with FAS had an IQ below normal. However, 100% had severe dysfunction in other areas, such as language, memory and activity level. (The Danish studies did not assess these areas.)

Although the science may be complicated and studies sometimes yield conflicting messages, the public health message is simple: to have the *healthiest baby possible*, women should not drink alcohol when trying to conceive and during pregnancy. When a pregnant woman drinks, her child is at risk. If she drinks heavily, her child is at higher risk. ■

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