THE TRIPLE B PREGNANCY COHORT STUDY: ALCOHOL USE DURING PREGNANCY AND DEVELOPMENTAL OUTCOMES IN INFANTS AT 12-MONTHS OF AGE

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Introduction and Aims: Heavy prenatal alcohol exposure (PAE) is linked with poor developmental outcomes for offspring. However, impacts of low-level alcohol exposure are less clear. Aims were to: (a) describe the patterns and prevalence of maternal alcohol use across pregnancy, as well as to describe alcohol use by partners; and, (b) examine the impacts on infant development, particularly at low-level exposure, where uncertainty about the potential harm to infants remains.

Methods: Data were from a prospective pregnancy cohort (N=1,324) with data on alcohol exposures at each trimester of pregnancy and infant development at 12-months.

Key Findings: The majority of women (58.2%) consumed alcohol during pregnancy. Prevalence of alcohol use decreased following pregnancy awareness, and occurred only infrequently above low-levels. Alcohol use was reported by the majority (83.2%) of partners and was associated with maternal alcohol consumption. Multivariate regression analyses controlling for potential confounding factors showed no evidence of harms associated with low-level PAE on infant cognitive, language, motor or socio-emotional development. Low-level exposure in trimester two was associated with slightly higher scores on language and cognitive domains, and slightly lower scores for socio-emotional development.

Discussions and Conclusion: Alcohol use during pregnancy is common, particularly in early trimester one, prior to pregnancy awareness. Alcohol use in pregnancy is also associated with alcohol use by partners. Findings showed no evidence of harm associated with low-level alcohol exposure, yet residual confounding may obscure any potentially small detrimental effects. The results may alleviate anxiety among women who have consumed alcohol in pregnancy at low-levels.