



THE RELATIONSHIP BETWEEN COMMON PATTERNS
OF PRENATAL ALCOHOL EXPOSURE AND
NEURODEVELOPMENT IN TWO-YEAR OLD CHILDREN

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Background: Around 60% of women drink some alcohol
while pregnant. There is conflicting evidence on the effect on

the fetus of common patterns of prenatal alcohol exposure (PAE) e.g. low level or sporadic drinking. Guidelines recommend abstinence as the safest option, creating problems for those advising women who drink at these levels before pregnancy recognition or beyond. The Asking QUestions about Alcohol (AQUA) study aimed to accurately measure PAE and account for important cofactors, to reduce uncertainty about child outcomes.

Method: Detailed data on PAE were prospectively collected in a pre-birth cohort of over 1500 mother/child dyads. There was also extensive data collection of predictors of child development at one and two-year's post-partum. A sub-group of children was followed up at two years of age with a neurodevelopmental assessment (Bayley III). Two-step multivariable regression analyses of an effect of PAE accounted for independent risk factors that related to 1) pregnancy, including sociodemographic, psychologic and lifestyle variables such as diet and supplement use, and 2) the postnatal care-giving environment, including breastfeeding and maternal psychological wellbeing.

Results: Adjustment for independent risk factors ameliorated any putative associations between PAE and cognitive, language and motor development in 554 two year-old children spread evenly across six PAE groups.

Conclusions: Assessing neurodevelopmental outcomes associated with PAE is strongly influenced by other modifiable and non-modifiable risk factors. Although we found no adverse neurodevelopmental outcomes at two years of age, follow-up will be necessary in these children when complex higher-level cognitive, language and motor skills are required.

recommended in breastfeeding. Following the notifications, between 2013 and 2015, 101 calls were received with 64% (n = 65) categorised as caution recommended, 34% (n = 34) categorised as considered safe to use, and 2% (n = 2) categorised as no longer recommended in breastfeeding. In 2016 alone, 12 codeine related calls were received and all recommended that codeine be avoided.

Conclusion: The data indicated a clear trend over time of pharmacists providing callers with evidence-based, up-to-date information in-line with regulations and safety updates.