Light Drinking vs. Abstinence in Pregnancy: Cognitive and Behavioural Impact in Children, the Millennium Cohort

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Corrao et al. *Addiction*, 2000
Policy recommendations

UK Pregnant women or women trying to conceive should avoid drinking alcohol. If they do choose to drink, to minimise the risk to the baby, they should not drink more than 1 to 2 units of alcohol once or twice a week and should not get drunk.
Prevalence of high total difficulties at age 5 by mother’s drinking during pregnancy

![Graph showing prevalence of high total difficulties by mother's drinking during pregnancy. The x-axis represents drinking during pregnancy (Never, Not in pregnancy, Light, Moderate, Heavy/Binge), and the y-axis represents prevalence (%). The graph compares boys (red line) and girls (blue line).]
Verbal test scores by mother’s drinking during pregnancy

- **Never**
- **Not in pregnancy**
- **Light**
- **Moderate**
- **Heavy/Binge**

**Boys**

**Girls**
Australia O'Leary (2009) - RASCALS
CBCL total behavioural problems

- 5 Years
- 8 Years

UK Alati (2008) - ALSPAC
Intelligence Quotient (WISC-III) at 8 years
Millennium Cohort Study (MCS)

• Sample drawn from all live births in 4 countries of the UK during 2000-2002
• Clustered at the electoral ward level with oversampling
• 18,552 households
• Home interviews

Sweep 1 – 9 months
Sweep 2 – 3 years
Sweep 3 – 5 years
Sweep 4 – 7 years
Data

- 10,534 singleton birth children
- Alcohol consumption during pregnancy
  - Not in pregnancy
  - Light, not more than 1–2 units per week
- Socio–emotional behaviour (SDQ) at 7 years of age, parent and teacher report
- Cognitive tests – reading, maths & spatial skills at 7 years of age
Parent report SDQ for boys and girls.
Teacher report SDQ for boys and girls
Spatial skills for boys and girls

![Bar chart showing spatial skills for boys and girls with different adjustments (Unadjusted, OLS, PSM).]
Interpretation

• Prior to statistical adjustment children born to light drinkers appeared to have more favourable developmental profiles.

• Simulation of experimental conditions supports the suggestion that low levels of alcohol consumption during pregnancy are not linked to socioemotional or cognitive problems.