

Association Between Paternal Alcoholism and Adverse Outcomes Observed in Individuals with Prenatal Alcohol Exposure Receiving a Fetal Alcohol Spectrum Disorder Diagnostic Evaluation at the Washington State Fetal Alcohol Syndrome Diagnostic & Prevention Network Clinic (FASDPN)



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Background

- Recent studies showcase the negative effects of the birth father's alcohol use on fetal development:
 - Philip May and Colleagues: *“Does paternal alcohol consumption affect the severity of traits of fetal alcohol spectrum disorders?”* 2025
 - Michael Golding: *“Paternal Drinking and the Epigenetic Influences on FASD”* at the Seattle FASD Research Conference in 2025
- **Study Objective:**
 - To see if there is a correlation between paternal alcoholism and adverse fetal outcomes among patients with prenatal alcohol exposure (PAE) evaluated for FASD at the Fetal Alcohol Syndrome Diagnostic & Prevention Network (FASDPN).

Study Methods

- **Study Design:** Retrospective observational records review study
- **Study Population:** Patients with PAE who received a FASD diagnostic evaluation from the FASDPN (n = 524)
- **Data Collection:**
 - **Exposure:** Documented history of paternal alcoholism (yes/no) reported in the clinic's New Patient Information Form.
 - **Outcomes:**
 - **Primary:** Severity of the FASD Diagnostic classification from most to least severe: FAS, SE/AE, ND/AE
 - **Secondary:** Measures of adverse outcomes in growth, facial features and structural, neurological and functional brain abnormalities.

Preliminary Outcomes among 524 patients with PAE

Documented Paternal alcoholism: yes (n=322) no (n=202)

May et al 2025 observed significant correlations between paternal alcohol consumption and:

Significant correlations observed between paternal alcoholism and the child's:

- FSIQ PIQ **VIQ**: WISC
- Math: WISC
- Processing speed: WISC
- Adaptive Behavior: VABS
- Executive Function:
 - RCFT copy
 - DKEF Tower: total achievement
 - DKEF Trails: switching
 - DKEF Color Word: switching
- Memory: CVLT
- Mental health diagnoses
- Maternal alcohol use during pregnancy

No correlations were observed between paternal alcoholism and the child's:

- Pre or **postnatal height weight**
- **FAS facial features**
- **Microcephaly**
- Language
- Visual Motor Integration
- ADHD
- FASD diagnostic classification

Discussion

FASDPN Study and May et al Study

FASDPN Clinic

107 FAS

126 SE/AE

158 ND/AE

61 Not FASD/AE

68 Other/AE

16 Typical Development/no AE

48% White

52% male

Birth to 53 years old

WA State

Clinic population

Paternal alcoholism (yes/no)

May et al., 2025

439 FAS

317 PFAS

169 ARND

225 Typical Development/AE

462 Typical Development/no AE

100% South African

? % male

7 years old

Western Cape Province

Population based

Several measures of paternal alcohol use

Conclusion

- This presentation reflects preliminary results from the FASDPN clinical population.
- Final results will be available in June 2026