

EARLY CLINICAL DESCRIPTION OF A SOUTH AFRICAN NEURODEVELOPMENTAL BIRTH COHORT

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Background

Khula is an observational birth cohort study. It tracks 325 babies from birth, attempting to capture early predictors of emerging executive functions at 24 months of age and beyond.

Objective

To describe congenital and environmental factors potentially affecting development.

Methodology

Trained medical doctors took a history and examined 325 infants at one or two study visits in the first postnatal year. Relevant information (including birth history) was extracted from clinic records.

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Results

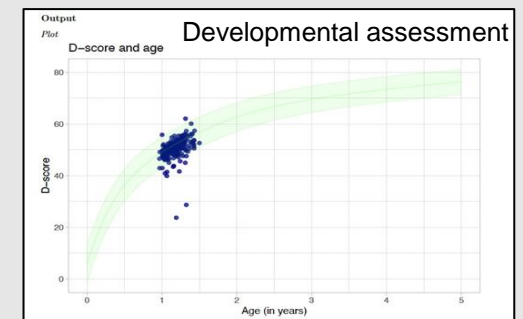
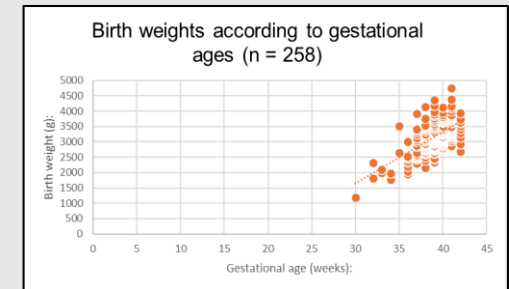
	Study infants n=325	HIV exposed n=109	Alcohol exposed n=35	Dually exposed n=17
Male (%)	165 (51)	54 (49)	18 (51)	8 (47)
Mean birth weight in grams (SD)	3181 (489.04)	3143 (499.84)	2982 (609.2)	2862 (579.8)
	n=321	n=107	n=35	n=17
Mean gestational age in weeks (SD)	39.1 (1.83)	39.1 (1.79)	38.3 (2.87)	38.0 (3.05)
	n=258	n=85	n=25	n=12
Small for gestational age (%)	30 (11.6)	9 (10.5)	5 (14.2)	2 (11.7)
	n=257	n=85	n=25	n=10
Preterm (%)	37 (14.4)	10 (11.8)	8 (32)	3 (17.6)
	n=257	n=85	n=25	n=10
HIV infected (%)	4 (1.2)	4 (3.6)	1 (2.8)	1 (5.8)
Foetal Alcohol Spectrum Disorder (%)	9 (2.8)	6 (5.5)	9 (25)	1 (5.8)
High risk (%)	2 (0.62)	1 (0.9)	1 (2.8)	0

Conclusion

Although the Khula Study follows a healthy birth cohort, the impact of HIV and alcohol exposure in this South African cohort is likely to affect neurodevelopmental outcomes.

Early identification enabled referral of high risk infants who ordinarily would only have been seen at primary care level.

Trained junior staff were able to identify these outliers on independent assessments, demonstrating the value of developmental assessment training.



Acknowledgements

Study participants

Funders:

