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**Factors associated with the health and cognition of 6 year old to 8 year old children in KwaZulu-Natal, South Africa**

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**Objective:** To investigate 6 year old to 8 year old children's health, nutritional status, and cognitive development in a predominantly rural area of KwaZulu-Natal, South Africa.

**Methods:** The Cohort study of 1383 children investigating the association of demographic variables (area of residence, sex, pre-school education, HIV status, height for age and hemoglobin level) and family variables (socio-economic status, maternal and paternal level of education), with children's cognitive performance. The latter was measured using the Grover-Counter Scale of Cognitive Development and subtests of the Kaufman Assessment Battery for Children, second edition (KABC-II). General linear models were used to determine the effect of these predictors.

**Results:** "Area of residence" and "height-for-age" were the statistically significant factors affecting cognitive test scores, regardless of attending pre-school. Paternal level of education was also significantly associated with the cognitive test scores of the children for all three cognitive test results, whereas HIV status, sex, and their socio-economic status were not.

**Conclusion:** Children with low cognitive scores tended to be stunted (low height-for-age scores), lacked pre-school education and were younger. Area of residence and their parent's educational level also influenced their cognition.

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