



COGNITIVE ASSESSMENT TEAM

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AIM

- To investigate the effects of Pb on cognitive function of children from 4-10 years old.
- Establish whether there is greater impact on cognitive function for those with greater Pb exposure.

METHODOLOGY

- Prospective study
- Sample: Two groups for purposes of comparison
 - One in Exposed area and the other in non-exposed area(if possible)
 - Approximately 500 children (250 exposed and 250 non-exposed)
 - Children from Government schools
- Using a battery of tests-used for scientific and research purposes in Zambia and Sub-saharan Africa

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graph TD; A[School setting] --> B[Exposed Group (Experimental) 250]; A --> C[Non-exposed group (Control) 250];
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School setting

Exposed
Group
(Experimental)
250

Non-exposed group
(Control)
250



- Instruments for Data Collection

- Neuropsychological Assessment Tool (NEPSYII)
- Universal Non-verbal Intelligence Tool (UNIT)
- Kaufmans Assessment Battery for Children (KABCIII)
- Zambia Cognitive Assessment Tool (ZamCAT)

- Variables under study

- Executive function
- Language function
- Memory function
- Fine motor function
- Literacy and Numeracy

- Confounding variables: Age, gender, grade level, SES, Birth-weight



ANTICIPATED CHALLENGES

- Time-frame to collect all the data...testing time est. 45-60Minutes.