



Neuro-Developmental Disabilities Screening and Assessment in Uganda

Investigators

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- **Lisa A. Croen, PhD, Kaiser DOR, CA**

Goals

- **Conduct feasibility / planning study**
- **Screen for ASD and other NDDs in rural and urban Uganda using 23 Question screener**
- **Evaluate screening results compared to clinical assessments**

Methods

- Convened Ugandan Technical Advisory Group (TAG)
- Prepared communities
- Conducted household screening in one rural and one urban area
- Conducted Medical Officer exams of children who screened positive and sample of negatives
- Referrals to medical specialists
- Final clinical diagnosis of ASD and other NDDs

NDDs screened

- Autism Spectrum Disorders (ASD)
- Cerebral Palsy (CP)
- Epilepsy
- Cognitive Impairment (CI)
- Speech and Language Impairment (SLD)
- Hearing Impairment
- Vision Impairment

Results

- Screened 1,169 children 2-9 years of age
- N=320 children (27%) screened positive
- N=379 children evaluated by MOE
- N=141 children evaluated by ≥ 1 medical specialist
- N=68 children received ≥ 1 specialist diagnosis, 8 with ASD

Sensitivity of 23Q and TQ

(Under most optimistic assumptions)

- ≥ 1 positive items on 23Q, any NDD
0.68-0.80 (moderate CI +/-)
- ≥ 1 positive items on original TQ, any NDD
0.60-0.70 (moderate CI +/-)

Prevalence of NDDs

- 7 NDDs 7.7 -- 10.3/100
- 6 NDDs 7.8 – 10.4

ASD data

Sensitivity of ASD screening items: ≥ 1 positive
ASD items, received ASD DX = 0.57

Prevalence of ASD:

0.68/100 (identified all children with ASD)

1.2/100 children (estimate based on children we
identified)

Publication –in press

Adaptation of the “ten questions” to screen for autism and other neuro-developmental disorders in Uganda.

Autism: International Journal of Research and Practice





Next steps (1)

- **Finalize a training program to increase capacity for identification and management of children with NDDs.**
- **Convene a stakeholders' meeting to disseminate study findings.**

Next steps (2)

- Anticipate Ro1 submittal in early 2013 with Lisa Croen and Angelina Kakooza as CO-PIs.
- Incorporate what we learned from this project with qualitative ethnographic component.

Thanks!

