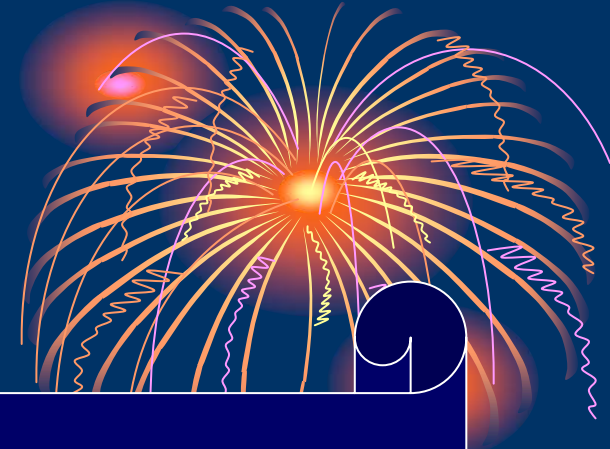




CIFASD Meeting

**Vancouver 24 - 25
June 2004**



Progress Report:
**Multi-method Intervention
Study in Children in South Africa
who are Alcohol Exposed**

Colleen Adnams



Rationale



- **I.O.M 1996:**
“Evaluation of effectiveness of educational interventions on children with FAS, ARND, and ARBD”
- **No systematic study evaluating the effectiveness of intervention methods for children with FASD has yet been published.**
- **The study of effectiveness of behavioral and pharmacological interventions is envisioned as a primary goal of this consortium.**

Background



- Designing effective treatment requires specification of core and peripheral deficits.
- Lack of access to large groups of well-diagnosed children with FAS / FASD has prevented design of outcome studies that employ rigorous scientific methodology.
- Minimal exchange of ideas among educators, clinicians and basic scientists with regard to development of effective intervention programs.



- **Based on available data of strengths and weaknesses and our own pilot intervention studies, broad goal is to examine effectiveness of cognitive and behavioural interventions in a well defined cohort.**
- **Study will benefit from the neuropsych. study, but also contribute to data on the cognitive profile of children with FASD.**
- **Interventions aimed at certain deficits may effect improvements in other deficits, thus helping to identify primary (core) and secondary deficits.**

Long Term Aim



- **Collaboration with neuro-behavioral, neuroimaging, and basic science units**
- **Identification of neurobiological mechanisms underlying behavioral change in children with FASD**
- **Develop effective evidence based learning and behavioural intervention methods.**

Specific Aims



- **To determine the degree to which 3 interventions improve academic skills and behavior in alcohol-exposed children.**
 - 1. Cognitive Control Therapy**
 - 2. Linguistic and literacy training**
 - 3. Family interventions**
- **To assess the effects of three mediating variables (self-efficacy, attention, meta-cognitive skills) and three moderating variables (child's IQ, life stress, maternal education) on therapeutic outcomes.**

Research Team



- **PA May, PW Kodituwakku, W Kalberg, University of New Mexico**
- **CM Adnams School of Child and Adolescent Health, UCT**
- **P Engelbrecht, M Perold, Department of Educational Psychology and Specialised Education, University of Stellenbosch**
- **P Sorour, Division of Communication Sciences and Disorders, UCT**
- **R Adams, Western Cape Department of Education**

Recruited professional resources




- **Psychometrist – Sean September**
- **Co-ordinator – Bernice Castle**
- **On both Neuropsych / Intervention projects**

Principles

- **Partnership with research community**
- **Sustainability**
- **Capacity Development**



Methodology

- **80 Grade 2/3 participants at 10 schools from Wellington 3 Epidemiology study (extensive demographic data)**
 - **65 FAS/PFAS; 15 'deferred' on initial diagnosis; confirmed exposure to alcohol**
 - **Randomised to 3 intervention, 1 control group.**
 - **Baseline assessment; 18 mths intervention; mid, post intervention assessment.**
 - **Analysis focus on clinically, statistically significant improvements and scale of change.**
- 

Progress



- ☺ ✓ **IRB: UNM, UCT**
- ☺ ✓ **Dept Education (PGWC)**
- ☺ **Contract in process (UNM & UCT)**
- ☺ ✓ **Negotiations and planning with schools**
- ☺ ✓ **Secured research site**

Implementation: Timeline



- **2003 – March 2004: planning, development of core and specific test batteries SA + US co-researchers**
- **March /May 2004 – recruitment and training psychometrist. Translation of tests, questionnaires**
- **May, June 2004 - participant recruitment (>70) via field worker visits to parents → 100%.**
- **June, July 2004 – commencement of baseline testing (CCT – 70, core – 19). Recruitment of co-ordinator**
- **July 2004 – employment of co-ordinator; randomisation of participants to intervention groups; preparation for interventions;**
- **August 2004 - reports to schools**
- **commence interventions (- June 2006); workshops**

Core Intervention battery



1. Reading test:

- a. Single word: UCT Graded (video/audiotape)
- b. Reading passages: Paarl Passages (video/audiotape)

2. Spelling Test:

UCT Single Word Spelling

3. Mathematics:

- a. S-SAIS Number Problems
- b. Ballard

4. Language tests:

- a. FROG expressive narrative (video/audiotape)
- b. TROG receptive grammar

5. Cognitive Control Battery

Teacher Questionnaires:

- a. Open questions and checklist
- b. Self Efficacy Questionnaire
- c. Pelham and Pelham Impairment Index

Intervention Core Battery cont:



Parent Questionnaires:

- a. Mental Pain**
- b. Alcoholism Screening - RAPS-4**
- c. Achenbach**

Classroom observation:

Qualitative observations and checklist

Snellen's Visual Acuity Screening

Auditory Screening: Otoacoustic Emissions (OAE) and Tympanogram

The different intervention groups will be administered further specific tests. All children will also be administered the Neuropsychological Battery.

Neuropsychological Battery to be done prior to/at onset of Intervention Phase:

Risks

- **Budget and ZA rand vs USD (\pm 20%)**





Acknowledgements

