

ALCOHOL AND THE FOETUS

Dr Elizabeth Tindle, FAPS
e.tindle@qut.com

Foetal alcohol syndrome (FAS)

- **What is it? How is it caused?**
- **How common is it? Characteristics**
- **Diagnostic procedures**
- **Case Study - management of FAS children and adolescents**

What is FAS?

- **Growth retardation (height, weight & head circumference)**
- **Central nervous system dysfunction**
- **Cranio-facial anomalies**
- **Major cause of mental disability**
- **Largest class of 100% preventable, birth defects**

How is it caused?

- **Alcohol is a teratogen**
- **It crosses the placenta within 10-15 minutes of consuming a drink. Umbilicus goes white & flaccid (soft)**
- **One unit of alcohol remains in the mother's system for approx. 1 hour (in baby's longer)**
- **results in reduction of brain cells and migration to wrong place.**

How common is FAS?

- Sweden - 1 in 600 live births
- France - 1 in 1000 : Seattle - 1 in 700
- New York State - 1-5 per 1000 live births
- Russia 15 per 1000 live births
- USA, Indian Reservation - 1 in 97
- Highest reported - 1 in 8 (Canadian Indian village)

How common is Partial FAS (or FAE)?

- Australian prevalence unknown
- Study now in progress in Australia WA
- USA - 1 in 300 to 350 live births (only those identified, referred and diagnosed)
- 89% diagnosed after the age of 6 years
- Sibling FAS is 170 per 1000 live births where a diagnosis.

Some Characteristics - Physical

- **Small, thin (until teenage in females)**
- **small head, narrow eye slits, flat mid face, low nasal ridge, no philtrum, thin upper lip, small chin, drooping eyelids, squint, myopia, rotated ears, hearing disorders, cleft palate, dental malformations, joint anomalies, extra digits, genital abnormalities, heart defects**

Psychosocial characteristics 0-5 years

- **Exaggerated startle response**
- **sleep disturbances, poor sleep /wake cycle**
- **failure to thrive, hungry, (mother exhausted/stressed)**
- **poor sucking response, problems bonding, piercing cry.**
- **Developmental delays: crawling, walking, talking, toilet training**
- **Distractibility /hyperactivity**
- **Restlessness, irritability, tantrums, disobedience**
- **Inability to adapt to changes and environment**

Psychosocial characteristics 6-11

- Delay in physical and cognitive development
- Temper tantrums, lying, stealing
- Hyperactivity/distractibility
- Memory deficits Impulsivity
- Inappropriate sexual behaviour
- Easily influenced. Consequences of behaviour unknown. Social rules!!! Uninhibited; will befriend anyone.
- Fact and fantasy confused. Animal treatment??
- Abstract ideas lacking (time , money)

Psychosocial characteristics age 12-17

- Increasing social difficulties & isolation
- Low motivation
- Egocentric, little understanding of others
- Lying stealing, faulty logic
- Impulsive, aggressive, unpredictable & violent behaviour
- Vandalism: criminal activity
- Pregnancy / fathering a child
- Unstable home situation; needing care
- Low self esteem, mental health issues, depression
- Suicidal, substance abuse

Psychosocial characteristics Age 18 to adult

- **Unpredictable and impulsive behaviour**
- **Aggressive /violent behaviour**
- **Depression /suicidal ideation & attempts**
- **Poor comprehension of social factors**
- **withdrawal and isolation**
- **social /sexual / financial exploitation**
- **Need financial support, protection & health care**
- **Legal issues, in trouble with law**

Diagnostic procedures

- **Apply Maternal alcohol use history questionnaire**
- **Checklist of cognitive signs: behavioural information from family members.**
- **Psychoeducational assessment data**
- **Diagnostic examination with paediatrician**
- **Folder: Medical and educational records & photographs**

Case definition: Australian study

- Any child under 15 years seen in previous month with newly diagnosed
- Foetal alcohol syndrome - Alcohol exposure confirmed
- Suspected foetal alcohol syndrome - alcohol exposure not confirmed
- Partial foetal alcohol syndrome - alcohol exposure confirmed

Managing FAS children

- Reduce stimuli; clear behavioural guidelines
- Unconditional love, quality time invested.
- No corporal punishment; increase positives
- Clear concrete and visual boundaries
- Role play appropriate behaviours: practice
- Own space and seating
- Outlets for physical release: Active learning
- Clear routines: daily repetition: hugs
- Prepared transitions: stability and **calmness**

SAFETY FOR ALL (age appropriate)

- **Keep sharp tools or cutlery out of reach or locked away.**
- **Keep matches or cigarette lighters out of reach.**
- **Lock medicine cupboards.**
- **Be aware of glass containers.**
- **Make home as "childproof" as possible**
- **Ensure adequate supervision.**
- **Remove ladders or kitchen steps.**

RECOMMENDATIONS

- **Facilitate an early diagnosis**
- **Encourage stable, long-lasting placements in nurturant homes**
- **Improve the circumstances of children in alcohol/drug abusing homes**
- **Intervene to prevent violence against them**
- **Promote communities and families with FAS to work together.**
- **Develop, evaluate & implement methods to detect people with FAS who need help.**

Maternal Alcohol use screens

- **The T-ace Questionnaire**
 - **T** How many drinks does it take to make you feel “high” ? (tolerance)
 - **A** have people annoyed you by criticising your drinking?
 - **C** Have you ever felt you ought to cut down on your drinking
 - **E** Have you ever had a drink first thing in the morning to stedy your nerves?

The CAGE Questionnaire

- **Have you ever felt the need to Cut down on your drinking?**
- **Have you ever felt Annoyed by criticism of your drinking**
- **Have you ever felt Guilty about your drinking**
- **Have you ever taken a morning “Eye opener” drink?**

TWEAK TEST

- **T Tolerance** : How many drinks can you hold?
- **W** Have friends or relatives Worried or complained about your drinking?
- **E** Eye- opener Do you sometimes take a drink when you get up?
- **K(C)** Do you sometimes feel the need to cut down on your drinking?

The end

- **Thankyou for your time and attention**
- **Best wishes for a happy relationship with your child and much mutual satisfaction and learning.**
- **Questions?**