Fetal Alcohol Syndrome
Fetal Alcohol Effects
Alcohol-Related Birth Defects

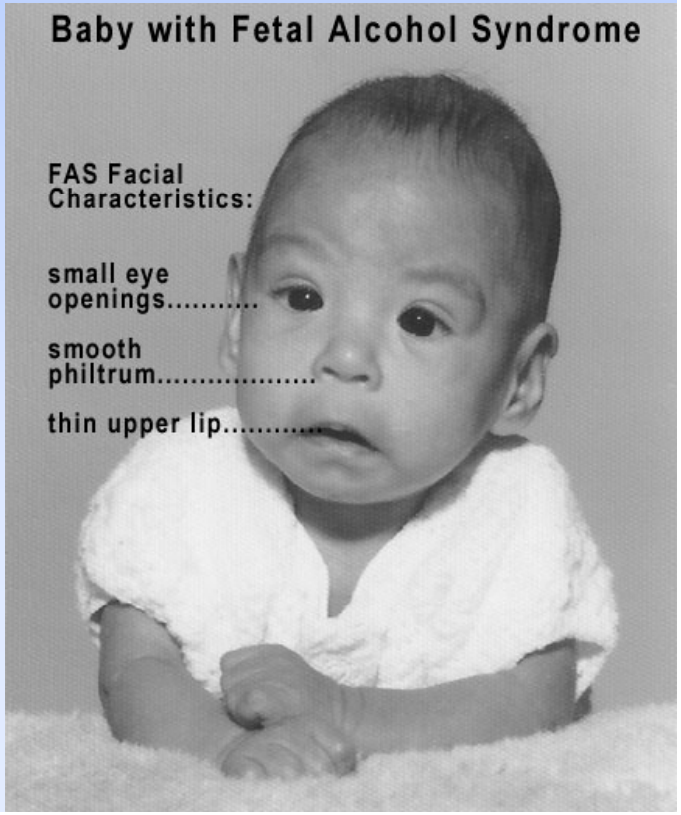
Articles:

Alcohol Alert

Alcohol, Health and Research World

Diagnosis (1973)

- Prenatal and Postnatal growth retardation
- Neurological Abnormalities
  - developmental delays
  - behavioral dysfunction
  - intellectual impairment
  - skull or brain malformations
- Characteristic Facial Features
  - Skin folds at eye corner
  - Small head circumference
  - Small eye opening
  - Thin upper lip
  - Indistinct philtrum



Children with FAS

Epidemiology

- Problems diagnosing infants and under reporting
- General population estimates range from 0.33 to 1.9 FAS per 1000 births. Three times this for FASD (fetal alcohol spectrum disorders)
- Much higher in particular groups
  - 10/1000 in some native American communities
  - 120/1000 in some Canadian Indians

Risk Factors

- Only seen in mothers that drink!
- Increased risk with age and parity
- Genetic factors suggested in twins
- While from ‘85-’88 there was decline in mothers that drank (32% - 20%), there was no decline in
  - less well educated, smokers, unmarried, <25 age
- >=2 drinks/day considered at substantial risk (in 1988 -- 1.7 of 52M women aged 18-44 drank at this level)
- >=3 drinks/day prior to recognition imparts significant risk
- >=1.6 drinks/day lead to neurobehavioral symptoms
- >=18 drinks/day give 30-33% chance of a child with FAS
- Binge more harmful than steady drink at particular times

Development of Syndrome

- Physical characteristics become less prominent with maturity (eye & lip abnormality remains)
- Cognitive Impairment endures with age
  - reduced IQ(avg68), hyperactive, distractible, impulsive, short attention spans (very similar to ADD)
  - Reading, spelling, and particularly arithmetic were common skill difficulties

Effects of Alcohol on fetus (animal and human studies)

- .085 BAC reduces fetal movement
- alters generation, proliferation, and migrations of cerebral cortical neurons in rat
- neuronal cell death
- inhibits nerve growth factor
- neurotransmitter functions altered
- Neuroendocrine impairment
- Immune impairment (sympathetic nerv system regulation)

Mechanisms of Action

- Acetaldehyde toxicity (and EtOH)
- Placental dysfunction and nutrition def.
- fetal hypoxia?
- elevated prostaglandins

Venturelli Chapters 27,28

- Fetal Rights vs Pregnant Woman's Rights
  - Interventionists (pp303-313)
  - Advocates for Reproductive Freedom
- Can Prosecution of Maternal Substance Abusers be an Effective Prevention Strategy? (315-320)

Fetal Rights vs Pregnant Woman's Rights

Interventionist Positions

During pregnancy, two human beings are involved: the woman and the unborn child. The rights and interests of *both* of them must be taken into account.

Self-determination should be limited when it has a harmful impact on someone else.

The large and ever increasing number of drug babies requires the intervention of the state to protect them.

A majority of states' wrongful death statutes hold fetuses that died in the uterus to be "persons."

Reproductive Rights Positions

Roe supports the position that the human unborn are not "persons" who enjoy the protection of the federal Constitution.

Negative public health consequences may occur if state intervention deters pregnant women from seeking prenatal medical care.

Lack of prenatal medical care and of drug treatment programs for certain segments of the population (poor, minorities) poses a real problem.

Punitive policies are a short-term solution with political appeal but they do not address the underlying problem, and they overlook genuine solutions such as education, treatment, and prenatal care.