SUBSTANCE EXPOSED INFANTS

PRESENTED BY

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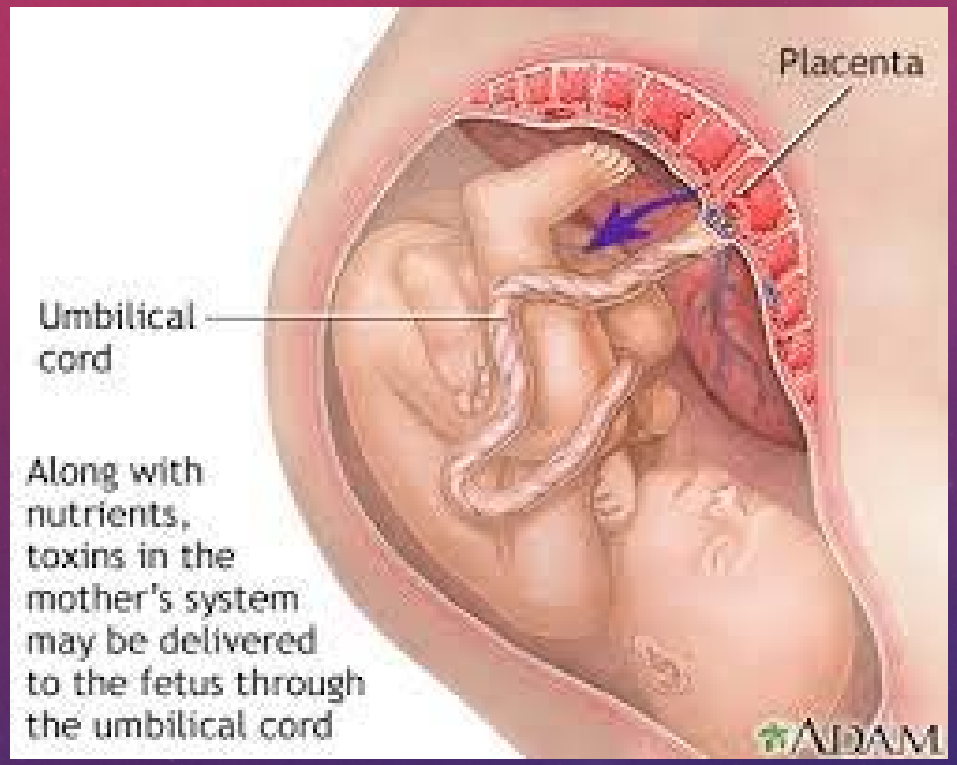
SUBSTANCE-EXPOSED INFANTS

Refers to infants exposed to alcohol and or other substances ingested by the mother in utero, whether or not this exposure is detected.

SUBSTANCE-EXPOSED INFANTS



Prenatal exposure to alcohol, tobacco and illicit drugs has the potential to cause physical, emotional and developmental problems for infants.

FRAMING THE ISSUE

- 400,000 - 440,000 infants (10% -11% of all births) are affected by prenatal alcohol or illicit drug exposure
- The harm caused to the child can be significant and long-lasting
- Prenatal substance exposure's effects on the developing brain affect cognitive abilities
  - Global deficits (developmental delays, intellectual disability)
  - Borderline cognitive abilities
  - Pockets of intellectual deficits
  - Widely varying abilities

ALCOHOL EXPOSURE

- Fetal Alcohol Syndrome (FAS), the leading – and only preventable – cause of birth defects and developmental disabilities. Adverse effects of FAS may include:
  - Reduced growth
  - Behavioral or cognitive disabilities
  - Central nervous system abnormalities
  - Heart, bone, kidney or eye defects
  - Hearing loss
  - Dysmorphic features

ALCOHOL EXPOSURE CONT.

Withdrawal from alcohol during the first 12 hours after birth, which may include:

- Tremors
- Poor feeding patterns, including weak sucking or exaggerated mouthing
- Poor sleeping
- Excessive crying

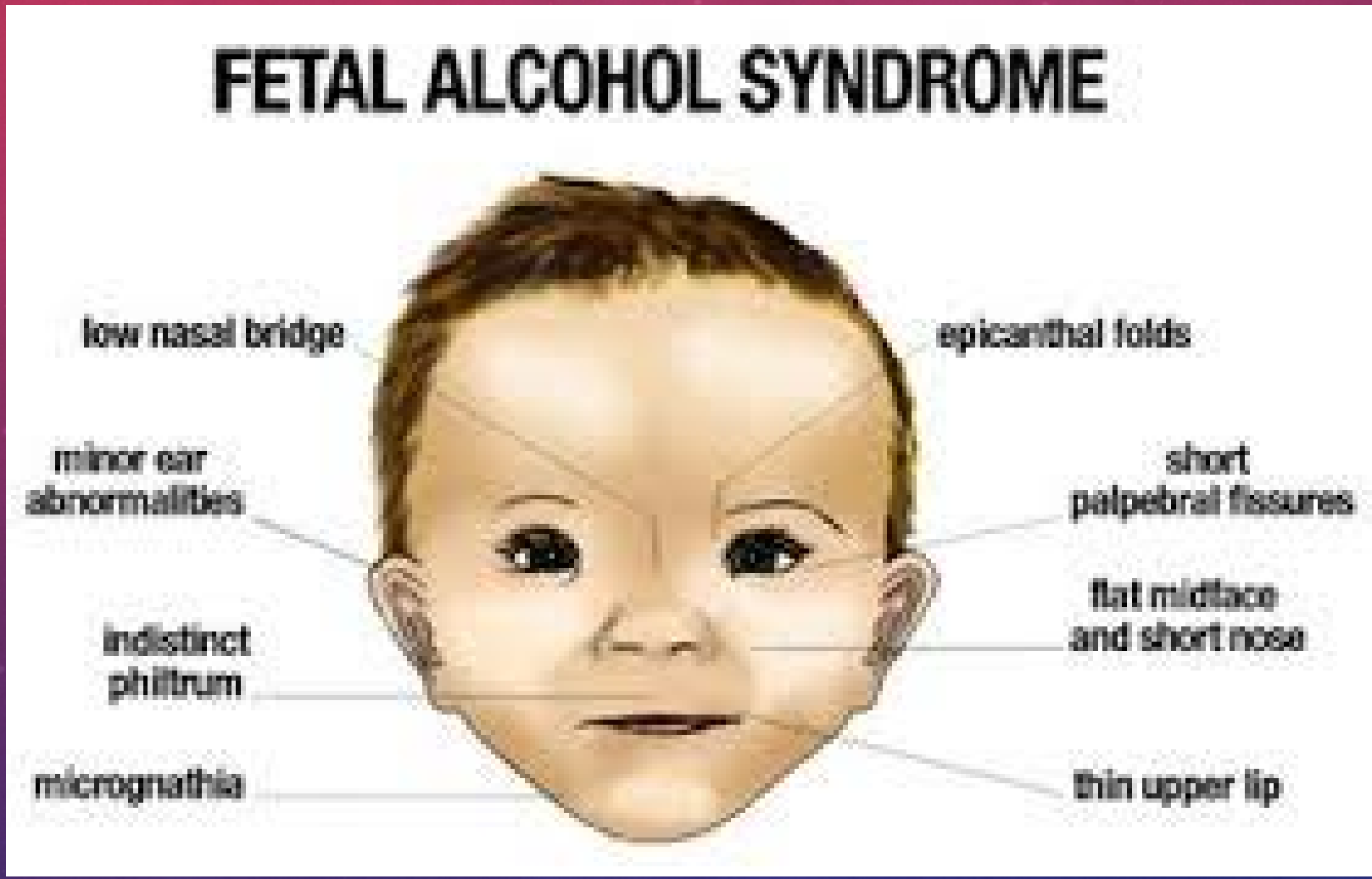
FETAL ALCOHOL SPECTRUM DISORDERS (FASD)

- Umbrella term for the range of effects that can occur with prenatal alcohol exposure
- Diagnostic terms include:
  - Fetal alcohol syndrome
  - Partial fetal alcohol syndrome
  - Alcohol Related Neurodevelopmental Disorder

FETAL ALCOHOL SYNDROME

- Growth delays either at birth or after birth
- Characteristic facial dysmorphology
- Central Nervous System Dysfunction
  - Microcephaly (small head size)
  - Intellectual disability
  - Structural changes to the brain
  - Deficits in 3 areas as determined by neuropsychological testing
  - Characteristic facial dysmorphology

FETAL ALCOHOL SYNDROME



HOW MUCH ALCOHOL CAN A PREGNANT WOMEN DRINK WITHOUT HARMING HER UNBORN BABY?

A. One drink a day

B. One drink a month

C. A few drinks with friends on a weekend in the 6th month

D. None

ANSWER:

D. None

MARIJUANA EXPOSURE

This is the most commonly used illicit drug during pregnancy. Overall use by expecting mothers in the U.S. population is between 4.8 % & 5.4 %.

Limited inconclusive studies have been done in this population, but some findings suggest an infant exposed to marijuana is at greater risk for:

Withdrawal from marijuana, which may include:

- Tremors
- High-pitched crying
- Abnormal sleep patterns
- Prolonged startle reflex

COCAINE EXPOSURE

An infant exposed to Cocaine is at greater risk for multiple deformities, which may include:

- Genitourinary tract, cranial or heart defects
- Bowel atresia
- Upper limb defects
- Prune belly syndrome
- Ambiguous genitalia
- Low birth weight, head circumference & length
- Meconium Aspiration Syndrome
- Persistent pulmonary hypertension
- Strokes, intracranial hemorrhage & infarcts due to precipitous delivery
- Sudden Infant Death Syndrome (SIDS)

WITHDRAWAL FROM COCAINE, WHICH MAY CAUSE:

- Central Nervous System (CNS) irritability including restlessness, irritability, tremors & increased tone
- Sleepiness and sluggishness, which may follow CNS irritability
- Behavioral symptoms, which may include trouble responding to human faces or voices, alternating periods of sleep and agitation, overstimulation, difficulty being consoled, exaggerated startle response, or rapid state changes (for example, when the infant goes from a quiet alert state to crying or crying excessively to sleep)
- Neuromotor problems such as high or low muscle tone, abnormal movements or abnormal suck-swallow patterns

AMPHETAMINE EXPOSURE

1.5% of Americans use amphetamines. Multiple drug use is high in those who use amphetamines.

An infant exposed to amphetamines is at greater risk for:

- Decreased birth weight, head circumference & length
- Significant complications related to blood loss from placental abruption
- Possible CNS or heart abnormalities

WITHDRAWAL FROM AMPHETAMINES MAY CAUSE:

- Abnormal sleep patterns, poor feeding, tremors, abnormal weight gain
- Agitation, vomiting & profuse sweating
- Frantic fist sucking, high-pitched crying, loose stools, fevers, yawning & increased reflexes.

OPIOID EXPOSED INFANTS ARE AT GREATER RISK FOR:

- Excessive crying/Irritability
- Abnormal coordination between sucking and swallowing
- Low Apgar scores
- Decreased or low birth weight, head circumference & length
- Congenital infections
- Premature birth and lower birth weight
- Blotchy skin coloring (mottling)
- Diarrhea
- Fever
- Hyperactive reflexes
- Increased muscle tone
- Irritability
- Poor feeding
- Rapid breathing
- Seizures
- Sleep problems
- Slow weight gain
- Stuffy nose, sneezing
- Sweating
- Trembling (tremors)
- Vomiting

TOBACCO EXPOSED INFANTS

- Infants who are exposed to secondhand smoke after birth are also at greater risk for SIDS.
- Chemicals in secondhand smoke appear to affect the brain in ways that interfere with its regulation of infants' breathing
- Infants who die from SIDS have higher concentrations of nicotine in their lungs and higher levels of cotinine (a biological marker for secondhand smoke exposure) than infants who die from other causes.

SOCIETAL IMPACTS OF PRENATAL SUBSTANCE EXPOSURE

- Prenatal substance exposure is associated with significant societal financial costs.
- Neonatal hospital costs for children exposed to Cocaine in-utero are estimated to be $5,200 more than the hospital costs for non-exposed infants.
- Children that need additional time in the hospital, beyond the point of medical need, but necessary while securing foster care placement, increases the cost by an additional $3,500.

TREATMENT DURING PREGNANCY

- Women with high-risk, drug-exposed pregnancies are shown to adapt to pregnancy and motherhood less easily.
- These women require specialized services to create nurturing and caring environments for both themselves and their child.
- Pregnancy-specific treatment programs have been developed to guide the practice of treating substance using mothers and/or mothers-to-be by addressing:
  - Health and nutrition
  - Providing support with the pregnancy

BARRIERS TO TREATMENT

- Low self-esteem
- Fearfulness of the stigma associated with prenatal drug use
- Family and work obligations
- Lack of access to health insurance
- Substance using or violent partners

CONCLUSION

- Drug use during pregnancy presents continuing costs at the personal, familial and societal level.
- In-utero drug exposure harms children
- Intervention effectiveness to assist pregnant substance users
- Postpartum, mother and child needs established through the following:
  - Solid program evaluation
  - Research
  - Continued governmental support and commitment.

QUESTIONS

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