

IMPACT OF PARENTS' SUBSTANCE ABUSE ON CHILDREN

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Substance Abuse Impact On Children.

- 11 % (8.3 million) children live with at least one parent who is either alcoholic or use illicit drugs.
- 3.8 million live with alcoholic parent.
- 2.1 million live with parent on illicit drugs.
- 2.4 million live with parent who uses multiple drugs.

Substance Abuse and Children.cont,

- Substance abuse in parent results in three fold increase in risk of child abuse.
- Substance abuse is a contributing factor in 40 % of the 1.2 million cases per year of child abuse.
- Of the families involved in child welfare system, substance abuse factors in 40-80 % of cases.

Trends in Drugs of Abuse

- National Meth Lab Seizures were up 85% between 2007-2012 due to “smurfing “ and”shake /bake labs.
- 5.2 million users abuse prescription opioids.
- Increase in opioid use has resulted in 3-5 fold increase in Newborns with NAS nationally.
- Rate of NAS doubled in Tenn Care from 2009-2012 reaching 10.7 per 1000 births.

Pattern of Addiction in Women.

- Women using drugs before pregnancy will continue using during pregnancy.
- Poly Drug use is more common than single Drug use.
- First and Third trimester are high risk times for Drug use.
- Prescribed SSRI Drugs will cause NAS in new born infant.
- Drug of choice is related to relationships of women.

COMMON DRUGS OF Abuse.

- Tobacco.
- Alcohol.
- THC.
- COCAINE.
- HEROIN.
- METHAMPHETAMINE.
- Prescription Drugs.

Tobacco Exposure

- Levels of cotinine in fetus are as high as mother.
- Tobacco exposure results in growth restriction in fetus.
- Infants exposed to tobacco have smaller lung capacity ,increasing respiratory infections and increased incident of asthma.

Exposure to Alcohol/FASD

- FAS with its associated permanent brain dysfunction/Retardation.
- ARND...alcohol related neurodevelopmental disorder.
- ARBD...alcohol related Birth defects.
- Classic FAS with out exposure history.

THC Exposure.

- Exposure to THC will result in growth restrictions.(small babies)
- Jittriness and tremors may be seen in newborns.
- Increased risk of ADHD at school age.

Perinatal Exposure to COCAINE.MLS study.

- Mothers using cocaine have more medical complications , received less prenatal care and had more risk of STD.(Bauer et al.Am J Ob Gyn. 2002)
- Mothers are more likely to use another drug while on cocaine.(Lester et al.,Pediatrics 2001.)

Perinatal Cocaine Exposure.Cont.

- Cocaine exposed infants were 1.2 weeks younger , weighed 536 gms less , measured 2.6 cm shorter and had head circumference 1.5 cm smaller.(Bauer et al.,Arch Ped Adol Med 2005.)
- Cocaine exposed infants have more CNS signs,most less than 5 % , except jitteriness,tremors and irritability.(Bada et al.,2002.)

Perinatal Cocaine .cont.

- At one month; lower arousal, poor quality of movement and self regulation, higher excitability, increased tone, poorer reflexes on NNNS. (lester et al. Pediatr, 2002.)
- Motor development from 1-18 months showed initial poor performance with later recovery. (Loncar et al., Neurotox and teratology, 2005)

Perinatal Cocaine.cont.

- Poorer feeding interaction , insecure attachment at 18 months were also noted.
- At age 7 yrs,exposed children are more impulsive,have less sustained attention,are more reactive to negative but common situations and have more symptoms of ADHD and Depression.

Perinatal Cocaine.cont,

- At age 9 yrs,exposed group is less skilled in important components of reading and speaking.
- At age 7-9 yrs,exposed group is more oppositional , have more symptoms of conduct disorder and at age 9 yrs , report more delinquency and acts of vandalism.
- The severity of all symptoms is proportionate to severity of exposure.

Perinatal cocaine.cont.

- Cocaine effects on IQ increase with age. A difference of 4.4 IQ points at age 7 yrs was projected to increase to 7.8 points by 15 yrs age.
- Mean effect=1.45 IQ points with covariates: site.,gender.,birthweight.,SES.,maternal IQ.,prenatal opiates.,alcohol.,THC and tobacco.

Prenatal Opiate Exposure.

- Maternal health issues similar to cocaine users.
- Opiate exposure impacts fetal growth.
- Neonatal Abstinence Syndrome in Opioid exposed neonate.
- Long term impact on cognitive development of methadone exposed infants.

Prescription Drugs Exposure

- Signs of narcotic withdrawal in baby.
- Some babies may be small size.
- No info regarding long term effects on child development.

NAS in Opioid Exposed Infant.

- 55-90 % exposed infants will exhibit NAS.
- Methadone dose relationship to severity is inconsistent.
- Dose related severity of NAS with short acting opioids, tobacco and SSRI use in Methadone using women.
- Onset within 48-72 hours after birth.
- Subacute signs last upto 12 months.

Neonatal Abstinence Syndrome.,NAS.

- Tremors and Irritability.
- High pitched crying.
- Disturbed sleep/awake transition.
- Uncoordinated suck and swallow.
- Vomiting and loose stools.
- Fever,sweating and nasal stuffiness.
- Increased heart rate.

Management of NAS

- Assess severity by using Finnegan scoring.
- Supportive care for mild symptoms.
- Medication for severe symptoms with close follow up.
- Breast feeding recommended for most drugs exposed infants.

Perinatal Meth Exposure

- Newborns are 3.5 times more likely to be small for age.
- One out of five newborns will be born preterm.
- Less arousal, poor quality of movement and cry, poor suck and swallow function noted in first four months of life.
- Sensory integration dysfunction and disorganised play noted at one year of life.

Symptoms of Meth Exposed Infants and Children (I)

NB to 4 weeks: (Dopamine Depletion Syndrome)

- Lethargic-Excessive Sleep Period
- Poor Suck and Swallow Coordination
- Sleep apnea
- Poor habituation

Symptoms of Meth Expose Infants and Children (II)

Four Weeks to Four Month Age:

- Symptoms of CNS immaturity - Effects on motor development
- Sensory Integration Problems - Tactile, defensive, texture issues
- Neurobehavioral Symptoms - Interaction Social development

Symptoms of Meth Exposed Infants and Children (III)

Six Months to Eighteen Months:

- The Honeymoon Phase
- Symptom Free Period

Prenatal Exposure to Meth.

- Late effects of Meth exposure may include increased incidence of ADHD.
- School age child may experience academic difficulties in later years of elementary school.
- Research based findings regarding behavioral and mental health issues are not yet published.

CO-morbidities in Substance abusing women.

- 53-76 % have mental health diagnoses.
- Prevalence of domestic violence.
- Unresolved childhood trauma/abuse.
- Poverty, homelessness, unlawful activities.
- Developmental disabilities including FASD.

Conclusion

- A collaborative response from Child protection , drugs treatment program , mental health services , medical providers , education/early intervention , juvenile court team and family support services is needed to accomplish successful outcome in children and families affected by substance abuse.