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 cotamine 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 withdrawl 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.