What are the Effects of Drug Use on the Infant and Child?

- Medical problems for pregnant women
- Increased fetal mortality
- Increased neonatal complications
- Premature delivery
- Lower birthweight
- Increased respiratory problems
- Neonatal Withdrawal Syndrome (from opiates)

Update on the Effects of Cocaine in Pregnancy

In the 1980's prenatal cocaine exposure was believed to cause severe and permanent damage to the developing fetus. Newspaper headlines talked about the "bio-underclass" that would be created by mothers using cocaine during pregnancy and many women were arrested in Georgia and in other states for "prenatal child abuse." Then the pendulum swung, as it so often does. It became evident that the real effects of cocaine were not nearly as severe as what had been reported at first, and many people turned their attention to other issues. However, the National Institute on Drug Abuse supported a number of studies, including one by this laboratory, that have investigated the long-term outcome in children whose mothers used cocaine and other drugs in pregnancy. We have reported in previous newsletters on the outcomes for infants and toddlers. Those children prenatally exposed to cocaine did not have any physical problems and did not show less growth than other children. They also had similar ability levels; however, they did have more problems with the regulation of behavior and arousal when they were 24 months old. Other projects around the country have reported similar findings.

In the last few months, studies have been completed on older children, from four to 10 years of age. These studies, from different parts of the country, have been able to look at school achievement, intelligence, motor skills, visual-motor skills, and attention. They also have kept a close eye on the ways in which the child-rearing environment affects these same outcomes. Such children are at much greater risk for poverty, neglect, abuse, and environmental conditions that do not support positive development when raised by substance abusing women.

Several of these studies were presented by their authors at the recent Society for Research on Child Development biennial meeting in Tampa, Florida. Overall, the take-home message was this: cocaine exposure prenatally does have a measurable effect on long-term development, but the caregiving environment is a much bigger influence. The environmental factors that were examined included socioeconomic status (poverty), mother's education, mother's mental health status and drug use. The child's growth also influenced outcomes. Children who showed normal growth did not appear to be negatively affected.
- Increased incidence of Sudden Infant Death Syndrome (SIDS): the rate of breathing problems and SIDS is higher among babies of substance-abusing women than the general population

- Increased risk of postnatal environmental problems (e.g., neglect)

- Information received from MSACD Fact Sheet

by their exposure while those who had small head circumferences did less well than their peers.

When there was a cocaine effect after other factors were controlled, effects were noted on ability, visual/motor skills, attention and memory. As had been noticed in younger children, behavior was often affected, with the cocaine-exposed children being more impulsive and having poorer attention. Some also showed more depressive symptoms. All these results suggest that cocaine exposure in pregnancy, while not as damaging as initially reported, is still a risk factor for negative childhood outcomes. Children of substance abusers should be identified early in life and provided with the medical, social and educational services that they need to reach their highest potential.

The studies that were reported at the meeting were done in Pittsburgh at the University of Pennsylvania, in Gainesville at the University of Florida, in Miami at Jackson Memorial Hospital and as part of a four-site collaborative study called the Maternal Life Styles Study, conducted in New Haven, Detroit, Memphis, and Miami.

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