

TESTIMONY OF DEBORAH A. FRANK, M.D.
BEFORE THE UNITED STATES SENTENCING COMMISSION

FEBRUARY 25, 2002

Judge Murphy and members of the Commission, thank you for giving me the opportunity to speak with you today. I am a Professor of Pediatrics at Boston University School of Medicine, a pediatric clinician at Boston Medical Center, and a Principal Investigator of a National Institute on Drug Abuse research project (DA06532) which for the past 10 years has followed the developmental and behavioral outcomes of a cohort of inner city children with and without in utero cocaine/crack exposure. I say cocaine/crack as a single phrase advisedly, since there are no physiologic indicators that show to which form of the drug the newborn was exposed. The biologic thumbprints of exposure to these two substances in utero are identical.

My co-authors and I, as pediatricians and researchers in inner city Boston, are on the front lines witnessing the negative impact of addictive disorders on families, children, and the community. In response to this experience, in addition to our own research we have conducted a number of systematic reviews of the published medical/psychological data regarding the effects of prenatal cocaine/crack exposure, the most recent of which, focusing on long-term outcome after the newborn period, was published in March 2001 in the Journal of the American Medical Association, a reprint of which has been submitted to the Commission. In brief, we conclude that there are small but identifiable effects of prenatal cocaine/crack exposure on certain newborn outcomes, very similar to those associated with prenatal tobacco exposure. There is less consistent evidence of negative long-term effects up to the age of six years, which is the oldest age for which published information is available. There are no long-term studies, which identify any specific effects of "crack" compared to cocaine on children's development. Based on years of careful research, we conclude the "crack baby" is a grotesque media stereotype, not a scientific diagnosis. You may recall the initial predictions of catastrophic effects of prenatal cocaine or crack exposure on newborns — including inevitable prematurity, multiple birth defects, "agonizing withdrawal with catlike cry," early death and profound long term disabilities for the survivors. The actual data are quite different.

NEONATAL OUTCOMES

Prematurity, Smaller Size at Birth, Birth Defects

Risk of preterm delivery due to prenatal cocaine or crack exposure is significantly decreased if mothers receive prenatal care, even if they do not become fully abstinent from drug use. The majority of exposed infants are not born prematurely in any event, but prenatal care decreases the risk of prematurity to approximately that of other infants from the same impoverished backgrounds.

After taking into account other factors that often co-occur with cocaine exposure in pregnancy (such as poverty, tobacco and alcohol use, poor nutrition, and inadequate prenatal care) the most consistently observed effects of prenatal cocaine/crack exposure are small but statistically significant decreases in birth weight, length, or head circumference. These deficits are similar in magnitude to those seen after exposure to 1 pack of cigarettes a day during pregnancy. In

contrast to the effects of heavy prenatal alcohol exposure, there is no convincing evidence that prenatal cocaine/crack exposure is associated with any increased risk of birth defects. In other words, while there are detectable newborn effects of prenatal exposure to cocaine or crack, they are not different from and certainly not worse than the effects of far more common exposures to legal drugs.

Drug Withdrawal and Neonatal Behavior

Unlike prenatal exposure to heroin, methadone, barbiturates, or benzodiazepines (such as valium), prenatal cocaine exposure does not cause a recognizable withdrawal syndrome in the newborn. Nor does prenatal cocaine/ crack exposure require prolonged hospitalization for pharmacologic treatment. While some investigators have found that heavy prenatal cocaine/crack exposure is associated with subtle differences in newborn behavior on detailed research assessments, these effects are usually not clinically obvious. In other words, an experienced pediatrician can walk into any nursery and identify from across the room an infant withdrawing from opiates, but an infant exposed to cocaine or crack without opiate exposure will be clinically indistinguishable from the other infants.

Sudden Infant Death Syndrome (SIDS)

Unlike prenatal tobacco or opiate exposure, prenatal cocaine or crack exposure has not been shown to be an independent risk factor for Sudden Infant Death Syndrome, or for increased risk of death in the first two years of life.