IMPACT OF METHAMPHETAMINE ABUSE ON CHILDREN AND FAMILIES

Rizwan Z. Shah, M.D., FAAP
Blank Hospital for Children
Des Moines, IA

SCOPE OF PROBLEM:

- Since 1992 western and mid-western United States has seen a disproportionate increase in the use of Methamphetamine among rural, agricultural states. The percentage of current methamphetamine users who met the criteria for substance abuse dependence doubled between 2002 (27.5%) and 2004 (59.3%).

- Admission to the publicly funded treatment system for primary methamphetamine use disorder represent 7% of all treatment admissions.

- There has been a 373% increase in treatment admission for stimulant disorder.

- Between 1993 and 2003, while overall treatment admissions increased by 14% (1.618 million to 1.842 million), admissions for stimulant disorders increased from 28,900 to nearly 137,000.

WOMEN AND METHAMPHETAMINE ABUSE:

- According to TEDS (Treatment Episode Data System) in 2004, states like Hawaii registered 45% of substance abuse treatment admissions for women using Methamphetamine.

- Among pregnant women, admissions for methamphetamines and marijuana use doubled over a 10 year period, from 7% in 1994 to 22% in 2004. (TEDS).

- Methamphetamine admissions among 12-14 year old females constituted 66.4% of admissions in 2004.

- The Infant Development, Environment and Lifestyle (IDEAL) study of Methamphetamine effects on children (principal investigator, Dr Barry Lester, Brown University Center for Children at Risk), with sites in Los Angeles, Honolulu, Des Moines, Tulsa and Auckland (NZ), screened approximately 27,000 newborn infants for MA exposure. From this pool was derived a sample of in-utero methamphetamine exposed children as well as a non-exposed control group.

Preliminary results from IDEAL provide the following information:

- Pregnant methamphetamine users and non-users did not differ in age, race, education or type of insurance.

- Overall 5.2% of pregnant women used methamphetamine, 1.3% used barbiturates, 0.7 % used cocaine, 6.0% used marijuana, 22.8% used alcohol and 25% of the sample smoked cigarettes.

- Pregnant women who abuse Methamphetamine seek prenatal care at a lower rate than non-users and have fewer prenatal visits. (Arria et al 2004) IDEAL data.

CLINICAL OUTCOME DATA ON PRENATAL METH EXPOSED INFANTS:

Blank Hospital for Children in Des Moines, Iowa has followed meth exposed infants and children since 1993. Clinical data from a sample of 109 children evaluated in drug exposed infants provided information on 61 meth exposed, 36 cocaine exposed and 14 children exposed to both meth and cocaine before birth.

In this group, 25% of meth exposed infants were born premature. 10% of meth exposed .infants where small in size with relatively small head size and meth exposed infants showed more evidence of feeding difficulties. 37.4% vs. 9.8% in meth exposed vs. cocaine exposed infants. Sleep disturbance was similar in these groups. Developmental follow-up of drug exposed children indicate that 41% of meth exposed children ages 0-5 will exhibit delay in one area of developmental domain. (Shah, R.Z., 2006)

Clinical outcome data also suggests that early intervention services have positive outcome in meth exposed children and many symptoms noted in early infancy will resolve with timely interventions. At school age, as a group, meth exposed children are performing at comparable levels with their peers. Incidence of Attention Deficit Disorder and other behavioral problems seem to worsen with a history of prenatal meth exposure, but the influence of environmental risk factors play a significant role in both the severity and prevalence of ADHD and other behavior problems noted in children exposed to meth.

CHILD WELFARE AND METH EXPOSED CHILDREN:

There is little national data on the total number children in out-of-home placement due to parental substance abuse. Estimates of the extent of problem stated in the DHH report to congress in 1999 indicates that between 1/3 to 2/3 of children in the child welfare system are affected by parental substance abuse disorder. In a recent survey by the National Center on Child Abuse Prevention Research, 85 percent of states reported substance abuse was one of the two major problems exhibited by families in which maltreatment was suspected. (National Center on Child Abuse Prevention Research, 2001).

An estimated 8.3 million children in the United States are living with a parent who uses alcohol or other drugs. Each year there are 1.8 million child abuse investigations due to report of child abuse/neglect and of these reports 500,000 are substantiated for abuse/neglect. Each year some 200,000 children are placed in out of home care.

How substance abuse of parent effects child welfare depends upon states and local policies and procedures in determining the extent of harm to children and how best to intervene on children's behalf. Knowledge and skill of field workers in children's services will often determine the path of intervention. Equally important in this equation is the availability of appropriate health care, substance abuse treatment services and social support for the affected families.

Parents entering publicly funded treatment programs, had a child under age 18 in 59% of the cases, had a child removed by CPC in 22% of the cases, and lost parental rights following the removal in 10% of the cases. (CSAT TOPPS-II Project)

Substance abuse of a parent impacts child's well being in multiple ways. A woman with substance abuse history is at risk for losing primary custody of her child in 22-29% of cases. Women using methamphetamine report high rates of violence (85%women vs. 69% men) and in 80% of women victims of violence, it is a partner who perpetrates such violence on women. (J. Cohen, 2003). This raises important safety concerns for young children living in a household with methamphetamine using mother.

Children of meth abusing parents not only suffer from neglect and parental supervision, but have added danger of harm from exposure to toxic fumes if parents are involved in manufacturing of methamphetamine. Additional risk in the environment of meth manufacturing is from accidental ingestion of left over powder of meth accessible to young children. Many case reports in medical literature describe signs and symptoms of such exposure/ ingestion.

National DEC (Drug Endangered Children) Initiative is aimed at addressing the needs of children living in an environment contaminated by methamphetamine as well as children prenatally exposed to meth. Many states have organized local multi-disciplinary teams to deal with assessment needs of drug endangered children.

State laws dealing with control of pesudoephedrine sales have resulted in 80-85 % drop in clandestine meth labs in many states. While this is good news for the drug control office, treatment facilities continue to see increasing numbers of new meth using clients. Some states are reporting increase in cocaine use (California) and other states (Nebraska and Iowa) are beginning to see more use of crystal meth of increased potency.

PRELIMINARY DATA FROM DEC CLINIC IN DES MOINES, IOWA

From September 2004 to August 2005, Regional Child Protection Center's DEC program evaluated 19 children from active meth labs homes and 220 children from homes where parents were using illegal drugs. Of the 19 children exposed to meth labs, only one child showed life threatening blood disorder. For the 19 children from active meth lab a total of 44 service referrals were made.

Medical Referral-----	24/19. Of these 12 were dental issues.
Developmental	3/19
Mental Health	17/19. Fifteen referrals for counseling

15/19 children were placed with relative on removal.

Outcome of children removed due to parental substance use:

Report Period: September 2004-August 2005	
Total number of children:	220
Age 0-5	137

112 children did not need service referrals.

Service Referrals of 98 Children:

Medical	61	
Developmental	36	
Mental Health	55	
Total Referral	152	(Multiple referrals per child.)

Placement of 220 Children:

Relative Placement	143
Foster home	48
Non using parent	8
Non family guardian	5
Shelter, crisis	9
Using parent	1
Unknown	7

SUMMARY

- Methamphetamine use continues at an alarming rate despite control of pseudoephedrine sales.

- In communities with high prevalence of Methamphetamine use, 5.2% of newborns are born positive for meth.

- Children exposed to Methamphetamine show subtle but documented neuro-toxicity effects in infancy.

- A much larger numbers of children are exposed to effects of parent's meth use than those exposed to meth labs.

- Children living in homes with parents addicted to meth have multiple intervention needs, which require coordinated planning by healthcare, mental health and social service professionals.

- Relatives, especially grandparents, are assuming primary care of a large number of children from substance using homes.

- There is an urgent need to allocate public/private funding to help grandparents/family caregivers to continue to meet the challenge of caring for the children removed from substance abusing parents.

- Methamphetamine abusers can achieve long-term abstinence with the help of drug treatment programs. "Because methamphetamine abusers respond to treatment, getting them into therapy is a top priority. For women, there is the added urgency to help them avoid exposing the children they may bear to the consequences of prenatal drug exposure." (Hser, Y.I., 2005)