



A SERVICE OF THE
CHILDREN'S BUREAU

The Source

■ **Newsletter of
The National
Abandoned Infants
Assistance
Resource Center**

VOLUME 15, NO. 1
SPRING 2006



IN THIS ISSUE

- 2 Prevalence and Treatment of Methamphetamine Dependence: Implications for Women and Children
- 7 What do we know about the impact of methamphetamine on infants and young children?
An interview with Dr. Rizwan Shah
- 11 OxyContin® Abuse in Women: Implications For Pregnancy
- 15 OxyContin®: What Do We Know About Its Impact on Infants?
- 20 Moms Off Meth Support Group
- 22 Meth Science Not Stigma: Open Letter to the Media
- 23 Methamphetamine and HIV: What's the Connection for Women?
- 24 Good Bets
- 28 Conference Listings

NOTE FROM THE EDITOR

Over the past several years, treatment programs and child welfare agencies throughout the country have seen a shift in the drugs of choice of many pregnant and parenting women. Specifically, methamphetamine, once used primarily in rural areas of western states, has been gaining widespread popularity throughout the country. Also, an increase in pregnant women's abuse of prescription drugs, most notably OxyContin® and other opiates, presents unique challenges to providers in certain parts of the country—primarily Kentucky, Virginia, Ohio, West Virginia and the Northeast. In fact, some experts claim that more Americans are addicted to prescription painkillers than illicit drugs. Although marijuana and alcohol remain the most commonly abused drugs, the “newer” drugs require a fresh look at how we identify them in pregnant and parenting women and in newborns, how we treat them, and how we work with children and families affected by them. A growing body of literature is beginning to address some of these challenges. This issue of *The Source* attempts to further the discussion; synthesize some of the information about effective treatment strategies and the impact of these “contemporary” drugs on infants and children; and dispel some of the myths and misconceptions that have arisen about methamphetamines. Many thanks to the authors who are pioneers in this field, and who took time out of their busy schedules to share their expertise and knowledge with us. The Good Bets section of the newsletter on p. 24 includes additional sources of information on this and other related issues.

Amy Price, *Editor*

PREVALENCE AND TREATMENT OF METHAMPHETAMINE DEPENDENCE: IMPLICATIONS FOR WOMEN AND CHILDREN

What is one to conclude about the headlines concerning methamphetamine use and dependence? Is it spreading to “epidemic” proportions? To what extent are children of methamphetamine users at risk compared to users of other drugs? Is methamphetamine dependence treatable? The data and recent community experiences with methamphetamine addiction and treatment provide some answers.



Patterns of Use

Nationally, methamphetamine is used by fewer people than other illicit drugs. According to the 2004 National Survey on Drug Use and Health (NSDUH), of the approximately 19.5 million people who used illicit drugs in the prior month, only 583,000 (3%) of them reported past month use of methamphetamine. This compares with 14.6 million reporting marijuana use and 2.8 million reporting cocaine or crack use (SAMHSA, 2005a). This relatively lower number of people using methamphetamine has raised some questions about the recent media and legislative attention to methamphetamine use. The lower numbers, however, do not tell the complete story. Treatment admissions data paint the picture of a dramatically increasing trend in methamphetamine related problems, particularly in western and rural regions of the country. From 1993 to 2003, national treatment

admission rates for methamphetamine increased 300% to 56 persons per 100,000 (TEDS, 1993-2003).

DEMOGRAPHIC CHARACTERISTICS OF USERS

The demographic characteristics of people seeking treatment for methamphetamine abuse is significantly different from that of persons needing treatment for crack cocaine abuse. As a result, the communities now responding to the rapid growth in methamphetamine related problems may not have the experience and benefit of the treatment infrastructure that was created to respond to crack use. Methamphetamine use has been concentrated primarily in western states and rural communities; whereas crack cocaine use was, and still is, typically associated with urban areas. For instance, in five states, over 40% of all women admitted for drug treatment identified methamphetamine as their primary substance (Idaho 48%, Hawaii 46%, California 45%, Utah 44%, and Nevada 40%.) In comparison, methamphetamine/amphetamine treatment accounts for only 11% of female admissions nationally (TEDS analysis, 2005).

The racial demographics also differ dramatically: of those treated for methamphetamines in 2003, 75% were White, 16% were Hispanic, 3% were Black, and 3% were Asian/Pacific Islanders. In contrast, of those treated

for crack cocaine, the majority (49%) was Black, 39% were White, and 10% were Hispanic (SAMHSA, 2005b).

GENDER DIFFERENCES

Of all persons treated for methamphetamine in the United States in 2003, 45% were women. This is higher than the percentage of females associated with any other drug except tranquilizers. For instance, women represent only 25% of those treated for alcohol and marijuana, 34% for heroin, and 39% for cocaine (SAMHSA, 2005b). In addition, a disproportionate share of adolescent girls sought treatment for methamphetamine addiction—56% compared to 44% of boys (TEDS analysis, 2005).

Women and men often initiate and maintain drug use for different reasons. For instance, women more often first use drugs with a male partner, and continue to use in order to maintain connections with other users (Covington, 2002). In addition, a study by Dr. Richard Rawson of UCLA’s Integrated Substance Abuse Programs (ISAP) showed that women were more likely than men (37% vs. 25%) to report using methamphetamine to relieve depression (El Paso Intelligence Center, 2004). Methamphetamine’s appetite suppressing and energy enhancing properties also are especially appealing to women. In the UCLA study, 37% of women reported using methamphetamine to lose weight, compared to 9% of men.

Women who are dependent on methamphetamine usually have more severe problems than their male counterparts in many areas of their life. A study by Hser, Evan and Huang (2005) that examined treatment outcomes among methamphetamine-abusing patients confirmed this observation. The authors note that the women in the sample, most of whom were child-bearing age or had children, reported more psychiatric symptoms; were more likely to have been physically or sexually abused; and had greater incidence of serious employment, legal/criminal, parenting, and psychological problems than did men. This finding speaks to the need to provide methamphetamine dependent women with adequate services to meet their myriad needs.

In addition, interpersonal violence is characteristic of the majority of persons entering treatment for methamphetamine dependence, and this is especially true for women. In a study conducted by Cohen et al. (2003), over 85% of women and 69% of men in treatment for methamphetamine dependence reported experiencing violence. The most common source of violence for women was from a “partner” (80%), whereas the most common source for men were “strangers” (43%). The study also found that 57% of women and 16% of men in the study reported a history of sexual abuse and violence. An exhaustive literature review found that women with substance abuse disorders were nearly two times more likely than women in the general population to report childhood sexual abuse (SAMHSA, 2000).

A qualitative study by Brecht et al. (2004), noted some additional gender differences pertaining to meth use. This study found that female users were more likely to use meth on more days; smoke rather than snort or inject the drug; progress to regular use more quickly; live alone with their children;

and have worse medical, employment and psychiatric consequences than male users (Brecht et al., 2004 as reported in Rawson, 2005)

**WOMEN WHO ARE
DEPENDENT ON
METHAMPHETAMINE
USUALLY HAVE MORE
SEVERE PROBLEMS THAN
THEIR MALE
COUNTERPARTS IN MANY
AREAS OF THEIR LIFE.**

pregnant women

Data concerning pregnant women also is worrisome. Preliminary estimates from the recent Infant Development, Environment, and Lifestyle (IDEAL) Study indicate that 5.2% of women used methamphetamine at some point during their pregnancy (Arria et al., 2006). In the same study, 25% reported smoking, and 22.8% reported consuming alcohol during pregnancy. While the relative prevalence of methamphetamine using during pregnancy is much smaller, it is increasing. Between 1995 and 2003, admissions for methamphetamine dependence nearly doubled for pregnant women, while the number of pregnant women seeking treatment for both alcohol and cocaine problems decreased significantly (TEDS, 2005).



Risk to Children

Because of the higher rates of women seeking treatment for meth-related problems, and the aforementioned circumstances often related to their use, more children are likely to be affected. In fact, some children have been placed in alarmingly dangerous situations as a result of their parents’ methamphetamine use, particularly when they live or spend time where the drug is being manufactured. According to the El Paso Intelligence Center (EPIC), in approximately 10% of the 14,250 lab incidents recorded nationwide in 2003, children were present during the dangerous manufacturing of methamphetamine and placed at risk for exposure to toxic chemicals and the possible dangers of chemical contamination, fires and explosions (EPIC, 2004). Hazardous living conditions and filth are common in meth lab homes, and living conditions are unsuitable for anyone, especially young children.

While much attention has been focused on the risk to children living in homes where methamphetamine is being manufactured, most parents do not manufacture methamphetamine. However, children whose parents use methamphetamine are at risk even when their parents are not manufacturing the drug, and the risks are similar to those associated with other drugs of abuse. They include chronic neglect; physical and sexual abuse; living in chaotic, disruptive living situations; and exposure to violence that is so often associated with methamphetamine use, and may involve meth-using associates frequenting the home. Further, mothers who use methamphetamine during their pregnancies

Continued on page 4 . . .

Continued from page 3. . .

may increase the risk of poor birth outcomes and long term risks for their children (Shah, 2005; see article on p. 7 of this newsletter). However, as noted in the *Open Letter to the Media* on p. 22 of this newsletter, “research on the medical and developmental effects of prenatal methamphetamine exposure is still in its early stages,” and the results remain inconclusive.



Treatment for Methamphetamine

Recognizing the growing problem of methamphetamine abuse and dependence, in 1998, the Substance Abuse and Mental Health Administration (SAMHSA) and The Center for Substance Abuse Treatment (CSAT) published a Treatment Improvement Protocol (TIP) entitled *Treatment for Stimulant Use Disorders, TIP #33*. These best practice guidelines were researched, drafted, and reviewed by a panel of substance use disorder professionals chaired by Dr. Richard Rawson. The TIP provides vital information on the effects of stimulant abuse and dependence, discusses the relevance of these effects to treating stimulant users, describes treatment approaches that are appropriate and effective for treating these clients, and makes specific recommendations on the practical applications of these treatment strategies, which include: Cognitive Behavioral Therapy/Relapse Prevention; Contingency Management; Community Reinforcement Approach + Voucher; Motivational Interviewing; and the Matrix Model of Intensive Outpatient Treatment for Stimulant Users.

Of these strategies, the Matrix Model has been identified by both the

National Institute on Drug Abuse and SAMHSA as an evidence-based practice. Currently available therapist manuals, along with patient and family workbooks, make the program more easily transferable to community based organizations than other known treatment strategies for methamphetamine dependence.

OUTCOMES FOR METHAMPHETAMINE TREATMENT HAVE NOT DIFFERED FROM STUDIES OF TREATMENT FOR OTHER DRUGS OF ABUSE. WE KNOW THAT TREATMENT OUTCOMES HAVE MORE TO DO WITH THE QUANTITY AND QUALITY OF TREATMENT RECEIVED THAN THE TYPE OF DRUG ABUSED.

MATRIX MODEL

The Matrix Model, originally developed for cocaine users, is a directive, non-confrontational treatment approach that focuses on current issues and behavior change. This multi-component model was constructed using empirically supported interventions and treatment elements, and guided by a process of pilot-testing diverse strategies and incorporating those that enhanced treatment attendance and

decreased drug use as measured objectively by urinalysis. The resulting package of treatment elements was organized into a standardized treatment model.

Services are delivered in an intensive outpatient setting. Clients attend 16 weeks of cognitive behavior therapy groups (36 Sessions), family education groups (12 sessions), individual counseling (4 sessions), and social support groups (4 sessions), combined with weekly, random breath alcohol testing and urine testing for cocaine, methamphetamine, opiates, cannabis and benzodiazepines. Participation in 12-step meetings at least once a week is encouraged.

Several evaluations of the Matrix Model support its usefulness and efficacy with methamphetamine users, as well as other substances. For example, in one Southern California site, a group of 500 methamphetamine users and a group of 224 cocaine users were treated using the Matrix Model in the same office with the same staff during the same time period. The two groups had demographic and drug use differences but had virtually identical responses to the Matrix outpatient treatment. The methamphetamine users had higher ratings of depression, hallucinations, and several other symptoms, and required a longer time period for symptom remission. However, the data collected during treatment and at follow-up suggested comparable response to treatment using the Matrix Model for both cocaine and methamphetamine use (Rawson, Huber, Brethern, & Ling, 1998; Huber et al., 1997).

To further test the effectiveness of treatment for methamphetamine use disorders, SAMHSA/CSAT also issued a Request for Applications for a knowledge development program entitled “Replication of Effective Treatment for Methamphetamine Dependence and

Improvement of Cost-Effectiveness of Treatment.” The short title for the program is Methamphetamine Treatment Project (MTP). This cooperative agreement was the largest randomized clinical trial of treatment for methamphetamine dependence to date. UCLA ISAP served as the coordinating center for the program and, with the Matrix Institute on Addictions, implemented and evaluated the adaptation of the Matrix Model in community drug treatment programs in eight community out-patient settings in the western United States.

Seven sites that had been providing treatment for methamphetamine dependence for at least two years participated in the study, which compared their treatment as usual (TAU) to the Matrix Model.** Over an eighteen month period between 1999 and 2001, 978 clients seeking treatment for methamphetamine dependence were randomly assigned to receive either TAU or the manualized Matrix Model at the study locations.

To ensure fidelity to the Matrix Model, training for staff at the study sites consisted of an initial 40 hours of didactic and experiential training.

** The seven sites were: *The Journey Recovery Chemical Dependency Treatment Program, South Central Montana Regional Mental Health Center in Billings, Montana; New Leaf Treatment Center in Lafayette, California; The Matrix Institute, Orange County in Costa Mesa, California; East Bay Community Recovery Project in Hayward, California; The Women’s Addiction Treatment Center of Hawaii in Honolulu, Hawaii; The Family Recovery Center, Eye Counseling and Crisis Services in San Diego, California and; San Mateo County Alcohol and Drug Services in Belmont, California. San Mateo County collaborated with two providers and compared Matrix to the TAU at two locations. They were Pyramid Alternatives and Outpatient Drug and Alcohol Services for Asians.*

Clinical supervisors conducted additional training at each site with the help of the clinical director at the coordinating center. The Matrix Institute clinicians also monitored clinician performance via a weekly activity check list and reviewed a sample of tape recorded sessions to provide feedback and ensure that the Matrix Model was implemented as designed.

Results of the study, published in June 2004, indicated that in the overall sample and in the majority of sites, the clients assigned to the Matrix Model treatment attended more clinical sessions, stayed in treatment longer, and provided more methamphetamine free urine samples *during* the treatment period. The Matrix clients also had longer abstinence periods while in treatment than the clients assigned to TAU.

TABLE 1:

Follow-up Urinalysis Results*

	<u>Matrix Group</u>	<u>TAU Group</u>
Discharge:	66% MA-free	65% MA-free
6 mo:	69% MA-free	67% MA-free
12 mo:	59% MA-free	55% MA-free

*There was a follow-up response rate of over 80% in both groups at all points.

However, as illustrated by the comparative urinalysis test results in Table 1, the superiority of the Matrix Model approach did not continue into the discharge and 6 month post admission time periods as clients receiving TAU did equally as well. The good news from the study is that positive treatment outcomes were achieved using both Matrix and other good

quality treatment. The measures of drug use and functioning collected at treatment discharge and at 6 month post admission follow up indicated significant improvement by clients in all sites and all conditions when compared to baseline levels. This is not surprising given that the other treatment models most commonly used in the TAU group shared elements with the Matrix Model, including cognitive behavioral approaches, contingency management, and psychodynamic approaches.

It is important to note that outcomes for methamphetamine treatment have not differed from studies of treatment for other drugs of abuse. We know that treatment outcomes have more to do with the quantity and quality of treatment received than the type of drug abused. Treatment providers, clients, families, and communities can be reassured that persons with methamphetamine disorders can and do recover from addiction.

ADDRESSING TRAUMA

In 1999, recognizing the need to assess for and address issues of violence and victimization in treatment for methamphetamine dependence, SAMHSA funded a study to investigate promising models for treating women with these complex problems. The premise of the “Women with Co-Occurring Disorders and Violence Study (WCDVS)” was that substance abuse treatment with women who have histories of past traumatic events involves both “trauma-informed” and “trauma-specific” approaches. Trauma-informed systems and services take into account knowledge about trauma—its impact, interpersonal dynamics, and paths to

Continued on page 6 . . .

Continued from page 5 . . .

recovery—and incorporate this knowledge thoroughly in all aspects of service delivery. The primary goals of trauma-specific services are more focused to address *directly*, through the delivery of clinical treatment services, the impact of trauma on people's lives, and to facilitate trauma recovery and healing (Finkelstein et al., 2004). This study went a long way to advance models of treatment that integrate an understanding of trauma and substance abuse. Programs that view trauma as a defining experience are relevant for women dependent on methamphetamine given the high rates of violence and trauma experienced by them.



Conclusion

The escalation of methamphetamine use has taken many communities by storm. Fortunately, we are prepared with knowledge about effective treatment for methamphetamine dependent individuals, and methamphetamine dependent women in particular. Studies suggest that treatment models, like the Matrix Model and other evidence based practices, developed for cocaine and other substances, can be effective in treating methamphetamine users. Treatment outcomes for methamphetamine users appear to be similar to those for users of other drugs, and successful treatment and long term recovery for a parent may lead to life long benefits for both the child and the parent.

For more information about treatment for methamphetamine, and treatment for women with children, visit the SAMHSA website at www.ncsacw.samhsa.gov. Additional information and resources regarding methamphetamine also are available through the CSAT

Addiction Technology Transfer Centers (ATTC). The Pacific Southwest ATTC (www.psattc.org) offers two training modules: Methamphetamine 101—Etiology and Physiology of an Epidemic and Methamphetamine, and 102—Introduction to Evidence Based Treatments.

Sharon Amatetti, MPH,

Senior Public Health Analyst, and

Cheryl Gallagher, MA,

Public Health Advisor,

Substance Abuse and Mental Health

Services Administration,

Center for Substance Abuse Treatment; and

Nancy Young, PhD,

Project Director, National Center on

Substance Abuse and Child Welfare

REFERENCES

- Arria, A.M., Derauf, C., LaGasse, L.L., Grant, P., Shah, R., Smith, L., Haning, W., Huestis, M., Strauss, A., Della Grotta, S., Liu, J., & Lester, B. (2006). Methamphetamine and other substance use during pregnancy: Preliminary estimates from the Infant Development, Environment and Lifestyles (IDEAL) Study. *Maternal and Child Health Journal*.
- Brecht, M.L. (2004). *Women and Methamphetamine: Characteristics, Treatment Outcomes*. Presentation to the Center for Substance Abuse Treatment, State Systems Development Conference, August 13, 2004.
- Cohen, J., Dickow, A., Horner, K., Zweben, J., Balabis, J., Vandersloot, D., and Reiber, C. (2003). Abuse and Violence History of Men and Women in Treatment for Methamphetamine Dependence. *The American Journal on Addictions*, 12:377-385.
- Covington, S. (2002). Helping women recover: Creating gender-responsive treatment. In L. Straussner and S. Brown, eds., *Handbook of Women's Addictions Treatment*. San Francisco: Jossey-Bass.
- El Paso Intelligence Center (2004). Accessed online August, 2005, at <http://www.dea.gov/programs/epic.htm>.
- Finkelstein, N., VandeMark, N., Fallot, R., Brown, V., Cadiz, S. and Heckman, J. (2004). *Enhancing Substance Abuse Recovery Through Integrated Trauma Treatment*, National Trauma Consortium. Accessed online January 18, 2006 <http://www.nationaltraumaconsortium.org/documents/IntegratedTrauma.pdf>.
- Hser, Y.I., Evans, E., & Huang, Y.C., (2005). Treatment outcomes among women and men methamphetamine abusers in California. *Journal of Substance Abuse Treatment*, 28(1): 77-85.
- Huber, A., Ling, W., Shoptaw, S., Guiati, V., Brethern, P., Rawson, R. (1997). Integrating Treatments for Methamphetamine Abuse: A Psychosocial Perspective. *Journal of Addictive Diseases*, 16(4): 41-50.
- Rawson, R. (2005) *Clinical Phenomena in Methamphetamine Treatment: Treatment Response, Sexual Behavior, and Route of Administration*. Presentation to SAMHSA, August 2005.
- Rawson, R., Huber, A, Brethern, P., and Ling, W. (1998). *Treatment Response and Treatment Outcome of Methamphetamine and Cocaine Users*. Presented at American Society of Addiction Medicine. New Orleans, Louisiana.
- Shah, R. (2005). *Implications of Methamphetamine Abuse and Dependence for Child Welfare*, ACYF Children's Bureau, System of Care Grantees Teleconference, July 14, 2005. <http://www.ncsacw.samhsa.gov/files/508/MethCaliberTeleconference.htm>.
- Substance Abuse and Mental Health Services Administration. (2005a). *Results from the 2004 National Survey on Drug Use and Health: National Findings* (Office of Applied Studies, NSDUH Series H-28, DHHS Publication No. SMA 05-4062). Rockville, MD. Accessed online January 18, 2006 at <http://www.oas.samhsa.gov/NSDUH/2k4nsduh/2k4Results/2k4Results.pdf>.
- Substance Abuse and Mental Health Services Administration, Office of Applied Studies (2005b). *Treatment Episode Data Set (TEDS). Highlights - 2003. National Admissions to Substance Abuse Treatment Services*, DASIS Series: S-27, DHHS Publication No. (SMA) 05-4043, Rockville, MD.
- Substance Abuse and Mental Health Services Administration (2000). *Substance Abuse Treatment for Persons with Child Abuse and Neglect Issues, TIP 36*.
- Treatment Episode Data Set (TEDS) 1993-2003, Substance Abuse and Mental Health Services Administration, Office of Applied Studies.
- TEDS (2003). Online analysis using Treatment Episode Data Set (TEDS) 2003 public use file, available through the Substance Abuse and Mental Health Data Archive at <http://www.icpsr.umich.edu/SAMHDA/das.html>. Analysis conducted August 2005.

WHAT DO WE KNOW ABOUT THE IMPACT OF METHAMPHETAMINE ON INFANTS AND YOUNG CHILDREN? AN INTERVIEW WITH DR. RIZWAN SHAH

On April 3, 2006, Amy Price and Jeanne Pietrzak of the AIA Resource Center had the opportunity to interview Rizwan Shah, MD, Medical Director of the Child Abuse Program at Blank Children’s Hospital in Des Moines, IA. Following are the questions we asked along with her responses. To hear more from Dr. Shah, you can listen to a 90 minute presentation that she gave on February 21, 2006, as part of the AIA Resource Center’s 2006 Teleconference Series. To hear that entire presentation and view accompanying written materials, go to http://aia.berkeley.edu/training/teleconference/teleconference_series.html.

AIA: *You have conducted research on outcomes for infants who have been prenatally exposed to methamphetamine. Can you briefly describe your research?*

DR. SHAH: The Blank Children’s Hospital Clinic for Drug Exposed Babies started seeing drug affected babies in 1989. In 1993, we started seeing methamphetamine exposed babies. In 1998, I received a small grant from NIDA to look at the outcomes of this clinical population, primarily to see what these children look like. In addition, I am part of a four-site national study through Brown University. Dr. Barry Lester is the principal investigator of this study, which is in its fourth year. We are just starting to get preliminary data.

The data from our clinic are based upon 109 kids that we extrapolated from a population of more than 500 children that we have seen since 1993. Our oldest child in the study will turn 13 this year. Of the 109 children, 61 were meth exposed, 36 crack cocaine exposed, and 12 kids were exposed to both crack cocaine and methamphetamine.

I think it’s important to note that even though methamphetamine has been a major drug of abuse in most of the western and mid-western states for the last ten plus years, there are very few prevalence or clinical outcome studies on meth-exposed children. We have a few earlier studies by Dr. Suzanne Dixon from UCLA, looking at data on the babies born exposed to methamphetamine, and one study based in Sweden by Billing and Erikson who have followed children for about 10 plus years. Our studies provide us with an insight into what these children look like in the first few months of life and over a period of time.

AIA: *What are the most critical findings of the studies?*

DR. SHAH: First, we looked at characteristics of the moms. In our clinic population, about 40% of the mothers who are using methamphetamine do not get any prenatal care, compared to 22% of the moms using crack cocaine. This illustrates that when moms are



Dr. Rizwan Shah

using illegal drugs, including methamphetamine, they do not take care of themselves and they do not go for prenatal care. Many previous studies of crack cocaine and heroin users have clearly shown that if a pregnant woman who uses substances continues to go for prenatal care, the pregnancy and child outcomes will be better.

Also, because of the weight loss seen in meth using populations, and the perception that these individuals do not take good care of themselves, we were expecting to see a lot of women with nutritional problems. However, the actual numbers were lower than our expectations. Only about 16% of the meth using group had nutritional problems like anemia and poor weight gain during pregnancy. About 34% of the meth using

Continued on page 8 . . .

Continued from page 7 . . .

pregnant women had acute illnesses and were sick enough to see a physician.

Another important finding in this clinical outcome study is that 25% of the meth exposed babies were born premature, i.e., earlier than 36 weeks of gestation. This is similar to the groups we have for cocaine exposure. So, there obviously are complications during pregnancy related to poor prenatal care and pre-term birth that necessitate a close follow-up of the pregnancies complicated by methamphetamine use.

AIA: *What about the key findings for children?*

DR. SHAH: In our population, 19% of the children born to meth using moms were small for gestational age, and their head size was also small. This is also noted in the prospective, four-site Infant Development, Environment and Lifestyles (IDEAL) Study. It is important to remember that a baby exposed to methamphetamine may be born without any symptoms, and no two children exposed to methamphetamine may look alike. However, there are noticeable subtle neuro-behavioral symptoms in early infancy. The two areas that stood out among meth exposed babies in our clinic were feeding difficulties and sleep regulation problems.

Both meth exposed and cocaine exposed infants were prone to sleep problems. However, thirty-four percent of the newborns exposed to meth had feeding problems, compared to 9% of crack cocaine exposed babies. The feeding difficulties were related to coordination problems with sucking

and swallowing. Even the full-term meth exposed babies had a poor quality of suck, compared to the crack cocaine exposed babies.

Current research also identifies differences in meth exposed infants' cry patterns, which may indicate neurotoxic effects of meth exposure. Further, some meth exposed babies have shown symptoms of muscle tone problems. About 20% of them displayed poor, disorganized quality of movement, which was comparable to what we saw in the crack cocaine exposed group in our clinic.

AIA: *How do other outcomes for meth exposed children compare to outcomes for children exposed to cocaine?*

DR. SHAH: Overall, the developmental screening outcomes for meth exposed babies were comparable to crack cocaine exposed babies. Both groups, in the first 5 years of life, had an abnormality or delay in one of the four main domains—gross motor, fine motor, language, and social skills—at any given time. In the speech and language domain, meth exposed children did better than cocaine exposed children; 57% of the caregivers were concerned about behaviors in children who were meth exposed, compared to about 64% in the case of children that were crack cocaine exposed. Yet, a majority of those behavior concerns fell well within the normal range of the age appropriate behaviors.

Thus, it is important to note that the majority of the children exposed to either substance achieved their developmental milestones well within the normal range. Further, beyond six-to-eight months of age, meth exposed children were indistinguishable from the non-drug exposed children. So, without a history of substance exposure

at birth, these children are hard to detect beyond the infancy period. An important message, therefore, is for professionals and caregivers to carefully evaluate problems in drug exposed children, because a lot of the behaviors that they show in the preschool age are going to be well within the normal range.

AIA: *Have you been able to isolate the effects of methamphetamine from those caused by other substances (e.g., tobacco, alcohol)?*

DR. SHAH: The meth using population does not exclusively use methamphetamine during pregnancy. About 60% of the women in our clinic population who use methamphetamine also use marijuana and alcohol, and nicotine is used about 80% of the time. So, a baby exposed to meth is also likely to be exposed to alcohol, nicotine, and marijuana. And this is an important finding, because when we are seeing signs and symptoms in these children, how sure are we that these symptoms are related to methamphetamine rather than other drugs of exposure? We hope that our current prospective study, which has seen and documented these trends of substance use, is going to be able to comment on that.

AIA: *How does the timing and pattern of maternal methamphetamine use affect the fetus?*

DR. SHAH: In our clinical outcome study, we did not quantify the moms' methamphetamine use. However, we do know on a case-by-case basis, that if a mother uses methamphetamine throughout pregnancy, it has a greater impact on the pregnancy outcome.

Having said that, among twin gestations, though both twins were

exposed to the same amount of methamphetamine for the same period of time, the symptoms were different for each of the twins. Even the level of methamphetamine tested in the twins' meconium was different, indicating that, along with maternal factors, there are also fetal factors that determine how much of the drug is going to pass through the placenta and how the fetus's body is going to metabolize the drug. The history of exposure to all drugs, not just methamphetamine, also is relevant, because it will have an impact on infant outcome, especially on fetal growth.

AIA: *Has a positive home environment been found to mediate the effect of prenatal methamphetamine exposure on the child?*

DR. SHAH: By far, the most devastating effects in our clinical experience have been on children who are continuously in an environment complicated by ongoing substance abuse. The majority of these children experience neglect because of poor home environment conditions, poor quality of parenting, and lack of supervision. Many suffer from nutritional neglect. In the state of Iowa, 12% of child maltreatment reports are a direct result of mom's methamphetamine use. Whereas most of the physical abuse cases involve a father's methamphetamine use, the vast majority of the founded cases are due to neglect, primarily from maternal meth use. In our clinic population, 78% of the children will be placed in out-of-home care—with family members or foster care—by the time they are two years of age. This has created a strain on the foster care system and an increase in “children in need of assistance” proceedings in the Juvenile Court system.

Among children removed from homes due to parents' meth use, we see a large number of delays in social interaction and/or language skills. We believe this is related to poor parenting and is similar to earlier studies, in which other drugs of abuse (including alcohol) affect a parent's child rearing ability. For instance, a number of meth exposed children in our practice have been diagnosed with attention deficit disorder, depression, reactive attachment disorders, disobedient-defiant disorder, or obsessive-compulsive disorder. School absenteeism also is significant in this population. Basically, these children have lived in an environment without adult supervision or structure, and with a lack of boundaries. They have been functioning as independent adults and caregivers, at the cost of foregoing important developmental tasks of childhood. These difficulties persist even after children are placed in foster or adoptive homes. In spite of normal cognitive ability, environmental exposure to drugs, violence and abuse will effect the child's academic and social functioning.

The IDEAL prospective research is looking more closely at the home environment. Although the data are not yet compiled, we hope to learn more about its impact from this study.

AIA: *What are the principal medical effects on young children who have resided in homes where meth is being produced?*

DR. SHAH: Since Iowa enacted a pseudoephedrine control law in May 2005, we have seen a significant (80%) decrease in the number of methamphetamine labs. But, for the 10 years before that, the state of Iowa was in the top three in the nation for the number of meth labs discovered. However,

many parents who are manufacturing methamphetamine have increasingly gone out of the home to do so, rather than making it at home, so the number of children living in a home with an active meth lab has been small in our area.

In our clinic, other than a few case reports of children who accidentally got into methamphetamine, we haven't seen symptomatic children from residing in a home where meth is or was being produced. However, we have seen about 220 children from homes where parents were meth users. The medical effects of this passive exposure still need to be analyzed statistically, and The National Drug Endangered Children's medical group is collecting the information for consensus recommendations. But our clinic has not seen acute toxicity in children living in the home where parents are smoking meth.

As previously mentioned, the primary effect that we're seeing is neglect. These children depend upon their own resources to take care of themselves. We see five, six, seven, and eight-year-old children who have not only to take care of themselves and their younger siblings, but also act as primary caregiver for their parents who are not able to take care of themselves under the influence of drugs. Also, many children are exposed to inappropriate material in these homes. Almost universally, some exposure to pornography has been experienced by these children. So, sexual exploitation issues are more common than the traumatic sexual abuse of children.

AIA: *What kinds of interventions have you found effective in treating infants who were prenatally exposed to methamphetamine?*

Continued on page 10 . . .

Continued from page 9 . . .

DR. SHAH: The primary interventions that we are utilizing in our clinic are directed towards education of caregivers in understanding and managing subtle behavioral symptoms in meth exposed infants. These include calming interventions, such as infant massage to help calm the infant and enhance bonding, and caregiver education to: (1) understand infants' need for social interaction without over stimulation; (2) recognize signs of stress in infants and implement soothing interventions; (3) help the infant achieve sleep regulation by providing consistency in daily routines; and (4) address feeding difficulties, which may include special feeding practices and/or referral to an occupational therapist or feeding specialist. Additionally, a speech therapist is often needed to help with oral motor function difficulties. The most important intervention is to reassure the caregiver that the infant will achieve normal development and that symptoms noted in infancy do resolve without long lasting effects.

Sometimes parents who are still struggling with their own substance abuse can be very abrupt, and they are hyper themselves, so they do not read the children's cues very well. So, working with the parent to understand the nonverbal cues that the infant is giving is very important, along with providing consistency in the daily routine so that we have a schedule for feeding, bed time, nap time and daily infant massage.

For children who have muscle tone issues—most commonly increased muscle tone—significant enough that we are worried about the child achieving developmental milestones, we will refer them to early intervention services for effective range of movements, physical therapy, and occupational therapy. However, the number of infants requiring such interventions is small.

Starting at 12 months, we also have all parents include sign language for enhancing communication between the child and the parent. This works wonders for temper tantrums when the child is two and three years of age, particularly when they do not have adequate language to express their emotions. This intervention is not specific for drugs exposed infants; all children can benefit from early sign language implementation.

For older children, if there is a diagnosis of hyperactivity and/or other underlying mental health disorders, of course, I refer to the appropriate psychologist for neuropsychological evaluations and then to the psychiatrist for medical management of the disorder.

AIA: *To what degree do you believe that pediatricians and other medical professionals are getting information that is being published now regarding the prevention, identification and treatment of meth exposed infants and children?*

DR. SHAH: Adequate experience in issues related to substance abuse is not addressed in physicians' training. For issues related to meth abuse by pregnant women and its impact on child health, there are limited research data available to clinicians. Statistically sound, well controlled prospective research takes a long time to produce data, and we are always lagging behind the urgent need on the clinical side. Preliminary data from the IDEAL research group was presented at the Pediatric Research meeting in 2004, in multiple poster presentations. *Maternal and Child Health Journal* and *Pediatrics Journal* also have accepted articles for publication by Dr. Arria and Dr. Smith. We hope to see an interest in many more publications on this important subject.

AIA: *What do you believe are the most compelling research and policy questions that should be addressed regarding infants exposed to methamphetamine?*

DR. SHAH: Substance abuse is a complex health and social issue. In the public policy arena, a need to find a quick fix often undermines treatment and rehabilitative efforts. Funding for treatment programs for women falls short of the need for extended residential treatment programs for women and children. Lack of available treatment facilities, coupled with the eagerness to protect the child from harm, often results in placement of the child in out of home placement. Children with behavioral issues often experience multiple placements, leading to multiple co-morbidities for the vulnerable child.

Substance abuse in pregnant women has, at times, caused criminal proceedings against the mother. Such actions cause more harm than benefit to the woman and her child. On the research front, we obviously need prospective research on long term outcomes of both prenatal and environmental exposure to methamphetamine. We also must address medication needs for children with behavioral disorders, who have been prenatally exposed to meth. None of the drugs currently used for this purpose have ever been studied in this population.

In conclusion, I would like to add that we do not need to reinvent the wheel in providing for the needs of pregnant women and their children who are affected by methamphetamine use. As a group, meth exposed children are similar to children exposed to other drugs. Their problems are fixable and short lived. Overall, environmental factors contribute much more than prenatal drug exposure to the child's developmental outcomes.

OXYCONTIN® ABUSE IN WOMEN: IMPLICATIONS FOR PREGNANCY

Individuals can develop dependence on many substances ranging from licit drugs (e.g., alcohol and tobacco), to prescription drugs, to illicit drugs such as opiates. While opiate dependence traditionally has been equated with heroin addiction, it also includes abuse of prescription opiates. In particular, OxyContin®, a widely-prescribed opiate analgesic, has received intensive media attention in recent years. The purpose of this article is to: a) describe what we currently know about OxyContin® abuse; b) describe the epidemiology of OxyContin® use, abuse and dependence, with a particular focus on women; and c) discuss the unique challenges presented by OxyContin® use during pregnancy and the implications for treatment of this new form of opiate dependence.



What is OxyContin®?

OxyContin® is a high potency, controlled release pain reliever. The active ingredient in OxyContin® is oxycodone, a semi-synthetic morphine derivative that is also the active ingredient in a variety of prescription pain relief medications (e.g., Tylox®, Percocet®). Medically, OxyContin® is used to treat moderate to severe pain, chronic pain syndromes, and terminal cancers (Inciardi & Goode, 2003), and is marketed in a 12-hour time-release formula at doses ranging from 10 to 80 mg. Other pain medications (e.g., Percocet®, Percodan®) also contain oxycodone, but at much lower doses

(2.5 to 10 mgs) and in combination with other analgesics (e.g., acetaminophen) (www.justfacts.org).

When OxyContin® was first approved by the Food and Drug Administration in 1995, many saw it as a “miracle drug” and sales skyrocketed. By 2001, OxyContin® was the most frequently prescribed, brand name narcotic medication for treating moderate-to-severe pain. Subsequent experience has found that OxyContin® is a controlled substance with high abuse potential. This is because oxycodone has pharmacological properties similar to those of heroin, and individuals prone to addiction found ways to defeat the slow time-release mechanism in OxyContin® tablets. Those who misuse OxyContin® typically do so in one of three ways: (1) chewing the tablets; (2) crushing pills into a fine powder, which they snort; or (3) dissolving the tablets in water and then injecting the solution. All three methods lead to rapid, rather than slow, release of oxycodone, delivering the full 12 hour dose almost immediately after ingestion (GAO, 2003).

Why do people abuse OxyContin®? First, as a physically addictive drug, it has abuse potential in its own right. Second, those who alter how it is administered do so to achieve a euphoric high similar to that of heroin. Third, some people, particularly those who are already opiate dependent, use it to control withdrawal symptoms when heroin or other alternative drugs are unavailable.

OxyContin® is known by a number of street names including Oxy, OC, Kickers, Hillbilly Heroin, and

Blue. OxyContin® can be expensive when purchased illegally (\$20-\$40 per tablet). Like heroin and other opiate narcotics, OxyContin® can cause physical and mental impairment. Side effects may include respiratory depression, headaches, dizziness, seizures, low blood pressure and nausea (Risichitelli & Karbowicz, 2002). With overdose comes the risk of death, as OxyContin® can produce cardiac arrest or slowed breathing, especially if the individual ingested crushed tablets.



Epidemiology

In recent years, considerable attention has been paid to the non-medical use of OxyContin® and other oxycodone-containing analgesic medications (e.g., Miller and Greenfield, 2004). According to the National Survey on Drug Use and Health (NSDUH), lifetime prevalence of nonmedical use of oxycodone increased significantly from 11.8 million users (5%) in 2002 to 13.7 million users (5.8%) in 2003. During this same time period, the prevalence of lifetime heroin use remained relatively unchanged (1.6%).

To examine the epidemiology of non-medical opiate use, NSDUH compared Americans who had used only oxycodone to those who had used only heroin and those who had used both oxycodone and heroin in their lifetime. Oxycodone-only users were significantly younger than members of the other two groups. There were more

Continued on page 12 . . .

Continued from page 11 . . .

female oxycodone-only users (43.7%) than female heroin and oxycodone and female heroin-only users (31.1 % and 30.7%, respectively). Oxycodone only (91.3%) and heroin and oxycodone (90.6%) users were predominantly Caucasian, while heroin only users were more diverse (65.7% Caucasian, 26.8% African American, and 7.5% other race/ethnicity). Finally, lifetime heroin-only users were more likely than members of the other two groups to report a past year family income of less than \$20,000.

The NSDUH report also examined the extent to which lifetime users of these substances met diagnostic criteria for abuse or dependence in the past 12 months. Rates of drug dependence were highest among those who used both oxycodone and heroin (16.1%), followed by those who used oxycodone alone (7.2%) and finally heroin only (4.0%) in their lifetime.

The impact of prescription opiate use on opiate abuse and dependence is evident in the tracking of drug-related emergency room visits. Drug Abuse Warning Network (DAWN) data found that from 1995 (when OxyContin® was first introduced to the market) to 2002, oxycodone-related emergency department visits increased by 560% (SAMHSA, 2003). The implications can also be seen within the alcohol and drug abuse treatment community. SAMHSA's Drug and Alcohol Services Information System (DASIS) found that treatment admission rates for controlled narcotics more than doubled between 1992 and 2000. (SAMHSA, 2004). This rise in narcotic abuse has been attributed specifically to the development of powerful new painkillers, such as OxyContin® (CSAT, 2001).

OxyContin's slang name (e.g., "hillbilly heroin") speaks to the fact that abuse of the drug is not evenly

distributed across the country. Rather, it seems to be particularly acute in more rural areas of such states as Maine, West Virginia, Virginia, and Eastern Kentucky (Davis, et al, 2003; Hayes, 2004; Inciardi & Goode, 2003). The nature and extent of the problem can be illustrated by the following example where, in the first six months of 2001, one Eastern Kentucky drug treatment program reported over 40% of its admissions to be OxyContin®-related. Inciardi and Goode (2003) found that Kentucky had some of the highest rates of OxyContin® related crimes in the United States, and that the number of patients statewide who sought treatment for oxycodone addiction increased 163% between 1998 and 2000.

Women and Prescription Drug Use and Abuse

Several factors make abuse of prescription drugs a particular concern among women. While studies report similar rates of non-medical use of prescription drugs in men and women, women are more likely than men to abuse psychotherapeutic drugs (e.g., pain killers, tranquilizers, sedatives, stimulants) (Cafferata & Meyers, 1990; Simoni-Wastila, Ritter, and Strickler, 2004). In fact, a recent study by Simoni-Wastila and colleagues (2004) found that, even after controlling for a number of factors, women were at increased risk for non-medical tranquilizer and narcotic analgesic use. This may be due partially to the fact that women are more likely than men to be prescribed drugs with higher abuse potential, such as narcotics (e.g., oxycodone) and anti-anxiety medications (e.g., benzodiazepines). It has been estimated that women are 33% more likely than men

to be prescribed narcotic analgesics (Simoni-Wastila, Ritter, and Strickler, 2004). This information aligns with clinical experiences of many addiction medicine physicians who find pain medications are most commonly abused by women, with benzodiazepines a close second (Martha Wunsch, personal communication, 2006).

Women and Opiate Dependence

Women of childbearing age make up a large proportion of the opioid dependent population. Approximately five-to-ten thousand infants are born to opioid dependent women each year (NIDA, 1996). However, these numbers are likely gross underestimates, due to biases in both maternal reporting of drug use, and drug screening practices employed by health care professionals (Robins & Mills, 1993; Norton-Hawk, 1997). Further, perinatal opioid use may go undetected in many women who chose to forego treatment.

OxyContin® and Pregnancy

To date, no systematic studies of OxyContin® use during pregnancy have been reported in the research literature. Instead, practitioners must rely upon anecdotal impressions and case reports as well as what is known about opiate dependence in pregnancy.

Pregnancies of opioid-dependent women are often associated with a host of medical problems, including an elevated risk for obstetric complications such as toxemia, maternal syphilis, hepatitis, premature labor, intrauterine death, eclampsia, pre-eclampsia, gestational diabetes, and anemia (Hans,

1989, Finnegan 1991, Finnegan, 1982). Many of these medical problems appear to be an indirect effect of the lifestyle associated with illicit drug use, including poor nutrition, lack of medical/prenatal care, needle use, and domestic violence/victimization.

Few heroin dependent women receive adequate medical and prenatal care for a number of reasons, including lack of pregnancy recognition, limited access to services, no medical coverage, and preoccupation with drug use (Hans, 1989; Wilbourne, Wallerstedt, Dorato, & Curet 2001). Thus, these women often present for care either very late in pregnancy, or unregistered with the health care system at the time of delivery. This inadequate attention to prenatal health may ultimately result in obstetrical, delivery, and/or medical complications for both the mother and infant. While less is known about OxyContin®, anecdotal reports suggest similar factors may be operating for women who abuse this drug.



Treatment of opiate abuse/dependence

While no systematic studies have been conducted in relation to perinatal OxyContin® dependence, it is likely that pregnant and parenting women dependent upon OxyContin® would benefit from the same types of services as other opiate dependent women. This includes gender specific treatment programs that meet the special needs of women (e.g., childcare, mental health care, housing, transportation, medical and prenatal care, psychosocial and behavioral issues, socioeconomic concerns, legal and custody issues, and short-term and long-term planning for the care of the mother and her child(ren)) (Puentes, 2000). With the advent of managed care, however,

many such programs are no longer in operation, and fewer services currently are available for this high-risk population of women (Jansson et al., in press).

PHARMACOTHERAPY (OPIOID SUBSTITUTION)

Since it was first introduced in 1965, methadone has been the preferred treatment alternative for medical management of opioid dependence, and it is the only pharmacotherapy approved for use in treatment of perinatal opioid addiction in the United States. Methadone is a long-acting (approximately 20-30 hours) synthetic opiate agonist (Dole & Nyswander, 1965). When properly prescribed, methadone effectively prevents the symptoms of opiate withdrawal without producing intoxication (Kaltenbach and Finnegan, 1992). Advocates of methadone therapy have long touted the advantage of methadone over drug-free abstinence based treatment in its utility as a tool to allow treatment providers ongoing contact with individuals in recovery, as participants must come to clinics daily to receive their medication (Svikis et al., 1997). Additional benefits of properly managed methadone treatment include the elimination of drug cravings and signs of withdrawal, removing individuals from the dangers associated with illicit drug use (e.g., crime, violence, prostitution, etc.), and providing links to medical and social services within their community.

While not without controversy, many believe methadone maintenance is the treatment of choice for pregnant opiate dependent women as well. In studies conducted within the context of clinical care, infants born to opioid dependent women participating in

methadone treatment generally appear to fare better than heroin exposed infants, demonstrating superior birth outcomes (e.g., birth weight, head circumference, estimated gestational age (EGA) at delivery), and reduced mortality (Kaltenbach & Finnegan, 1987; Olofsson et al., 1983).

A cause for concern with regard to maternal methadone maintenance is the increased incidence and severity of neonatal withdrawal/abstinence syndrome (NAS) in methadone exposed infants. Results of a recent literature review indicate that between 60%-87% of methadone exposed infants require treatment for NAS, and up to 30% are admitted to the Neonatal Intensive Care Unit (Johnson, Jones, and Fischer, 2003). Further, methadone exposed infants often demonstrate higher rates of individual withdrawal symptoms, increased severity, and delayed onset, longer duration of symptoms, and longer need for treatment in comparison with other opioid exposed infants (Stimmel & Adamsons, 1976; Luty, Nikolaou, and Bearn, 2003; Johnson, Greenough, & Gerada, 2003). While methadone treatment has been provided to OxyContin® dependent non-pregnant individuals in a variety of settings (e.g., Times Argus, March 22, 2006), little is known about the relative risks and benefits of methadone treatment for perinatal OxyContin® dependence.

Buprenorphine, a partial opioid agonist, appears to be a promising alternative to methadone treatment for opioid dependence. While a relative newcomer in the United States, over 55,000 individuals have been treated with buprenorphine in France since 1996. Initial studies have indicated that buprenorphine effectively eliminates drug cravings, and allows individuals to experience little or no signs of withdrawal upon cessation of treatment

Continued on page 14 . . .

Continued from page 13 . . .

(Johnson, Jones & Fischer, 2003). However, buprenorphine has only recently received FDA approval for general treatment of opiate dependence, and has only recently been approved as an investigational drug to treat opiate dependence in pregnant women. For now, methadone continues to be the pharmacotherapy of choice in treating pregnant opioid dependent women.



Summary

OxyContin® is a high-potency, controlled-release pain reliever. Once touted as a “wonder drug” for chronic pain patients, OxyContin® is now viewed by many as a medication with high potential for abuse, particularly among individuals with a history of alcohol or other drug problems. This is of particular concern for women, who are much more likely than men to be prescribed narcotic analgesics. OxyContin® use among women of childbearing age adds the additional concern of pregnancy complications. While little is known about the maternal and fetal impact of OxyContin® use during pregnancy, there are certainly many adverse consequences associated with the use of other opiate analgesics during the perinatal period. Until more is known about OxyContin® use during pregnancy, physicians and other health care providers are encouraged to use caution when prescribing the medication to a pregnant woman.

Dace S Svikis, Ph.D.,

Lori Keyser-Marcus, Ph.D.,

Benita Panigrahi,

*Virginia Commonwealth University,
Richmond VA; and*

Martha J Wunsch, MD FAAP,

*Virginia College of Osteopathic Medicine,
Charlottesville VA*

REFERENCES

- Cafferata, G.L., & Meyers, S.M. (1990). Pathways to psychotropic drugs. Understanding the basis of gender differences. *Medical Care*, 28(4), 285-300.
- Center for Substance Abuse Treatment. (2001). OxyContin: Prescription drug abuse (DHHS Publication No. SMA 02-3636), Rockville, MD: CSAT.
- Davis, MP., Varga, J., Dickerson, D., Walsh, D., LeGrand, S.B., & Lagman, R. (2003). Normal-release and controlled-release oxycodone: pharmacokinetics, pharmacodynamics, and controversy. *Supportive Care in Cancer*, 11(2), 84-92.
- Dole, V. P. & Nyswander, M. (1965). Rehabilitation of patients on methadone programs. *Proceedings of the National Conference on Methadone Treatment*, 1, 1-7.
- Finnegan, L.P. (1982). Outcome of children born to women dependent upon narcotics. *Advances in Alcohol & Substance Abuse*, 1(3), 55-101.
- Finnegan, L.P. (1991). Treatment issues for opioid-dependent women during the perinatal period. *Journal of Psychoactive Drugs*, 23(2), 191-201.
- Government Accounting Office (GAO) (2003). *Report to Congressional Requesters: Prescription Drugs: OxyContin abuse and diversion and efforts to address the problem*, Washington, DC.
- Hans, S. (1989). Developmental consequences of prenatal exposure to methadone. *Annals of the New York Academy of Sciences*, 562, 195-207.
- Hays, LR. (2004). A profile of OxyContin addiction. *Journal of Addictive Diseases*, 23(4), 1-9.
- Inciardi, J.A. & Goode, J.L. (2003). OxyContin and prescription drug diversion. *Consumer Research*, July, 22-25.
- Jansson, L., Svikis, D., Jones, H., & Velez, M. (in press). Impact of managed care on treatment for drug dependent women and their children. *Substance Use and Misuse*.
- Johnson, K., Greenough, A., & Gerada, C. (2003). Maternal drug use and length of neonatal stay. *Addiction*, 98, 785-789.
- Johnson, R. E., Jones, H. E., & Fischer, G. (2003) Use of buprenorphine in pregnancy: patient management and effects on the neonate. *Drug and Alcohol Dependence*, 70, S87-S101.
- Kaltenbach, K., & Finnegan, L.P. (1987). Perinatal and developmental outcome of infants exposed to methadone in-utero. *Neurotoxicology and Teratology*, 9, 311-313.
- Kaltenbach, K. A., & Finnegan, L. (1992). Prenatal opiate exposure: Physical, neurobehavioral, and developmental effects. In M. W. Miller (Ed.), *Development of the Central Nervous System: Effects of Alcohol and Opiates* (pp 37-46). Iowa City, Iowa: John Wiley and Sons.
- Luty, J., Nikolaou, V., & Bearn, J., (2003). Is opiate detoxification unsafe in pregnancy. *Journal of Substance Abuse Treatment*, 24, 363-367.
- Miller, N.S. & Greenfield, A. (2004). Patient characteristics and risk factors for development of dependence on Hydrocodone and Oxycodone. *American Journal of Therapeutics*, 11, 26-32.
- Myers, B., Britt, G. C., Lodder, D. E., Kendall, K.A., Williams-Peterson, M.G. (1992). Effects of Cocaine Exposure on Infant Development: A Review. *Journal of Child and Family Studies*, 1(4), 393-415.
- National Institute on Drug Abuse (1996). *National Pregnancy and Health Survey*, (NIH Publication No. 96-3819). Rockville, MD: National Institutes of Health.
- Norton-Hawk, M. (1997). Frequency of prenatal drug abuse: Assessment, obstacles, and policy implications. *Journal of Drug Issues*, 27(3), 447-462.
- Olofsson, M., Buckley, W., Andersen, G.E., & Friis-Hansen, B. (1983). Investigation of 89 children born by drug-dependent mothers. *Acta Paediatrica Scandinavica*, 72, 403-406.
- Puentes, A.J. (2000). System responses to perinatal addiction. *Pregnancy and Exposure to Alcohol and Other Drugs* (DHHS Publication No. SMA 93-2040, pp. 7-45). Rockville, MD: US Department of Health and Human Services.
- Risichitelli, D.G., Karbowicz, S.H. (2002). Safety and efficacy of controlled-release oxycodone: a systematic literature review. *Pharmacotherapy* 22, 898-904.
- Robins, L.& Mills, J. L. (1993). Effects of in-utero exposure to street drugs. *American Journal of Public Health*, 82(12), 247-261.
- Simoni-Wastila, L., Ritter, G., & Strickler, G. (2004). Gender and other factors associated with the nonmedical use of abusable prescription drugs. *Substance Use and Misuse*, 39(1), 1-23.
- Stimmel, B., & Adamsons, K. (1976). Narcotic dependency in pregnancy: Methadone maintenance compared to use of street drugs. *JAMA*, 235(11), 1121-1124.
- Substance Abuse and Mental Health Services Administration (2004). *Results from the 2002 National Survey on Drug Use and Health: National Findings* (DHHS Publication No. SMA 03-3836), Rockville, MD: US Department of Health and Human Services.
- Substance Abuse and Mental Health Services Administration Drug Abuse Warning Network. (2003). *Emergency Department Data from the Drug Abuse Warning Network Final Estimates 1995-2002*. (DHHS Publication No. SMA 03-3780). Rockville, MD: US Department of Health and Human Services.
- Svikis, D. S., Lee, J. H., Haug, N. A., & Stitzer, M. L. (1997). Attendance incentives for outpatient treatment: Effects in methadone and non-methadone-maintained pregnant drug dependent women. *Drug & Alcohol Dependence*. Vol 48(1), 33-41.
- Wilbourne, P., Wallerstedt, C., Dorato, V., & Curet, L. B. (2001). Clinical management of methadone dependence during pregnancy. *Journal of Perinatology Neonatal Nursing*, 14(4), 26-45.

OXYCONTIN®: WHAT DO WE KNOW ABOUT ITS IMPACT ON INFANTS?

Nationally, non-medical use of OxyContin® and other prescription pain relievers has steadily increased over the last decade. Although the overall number of users remains very small compared to many illicit drugs, particularly among pregnant women, hospitals in certain parts of the country have seen an increase in the number of newborns experiencing withdrawal from prenatal exposure to it. This article provides information about the potential impact of prenatal exposure to OxyContin® on infants; and strategies for diagnosing, monitoring and treating infants who have been prenatally exposed.



Use of OxyContin® in pregnancy, labor, and lactation

Oxycodone has been labeled as a category B drug by the United States Federal Drug Administration and as category C by the Australian Drug Evaluation Committee's. Category B means that either (1) animal-reproduction studies have not demonstrated a fetal risk, but there are no controlled studies in pregnant women, or (2) animal-reproduction studies have shown adverse effects (other than a decrease in fertility) that was not confirmed in controlled studies in women in the first trimester, and there is no evidence of a risk in later trimesters. Category C includes drugs that, owing to their pharmacological effects, have caused or may be suspected of causing harmful

effects on the human fetus or neonate without causing malformations. These effects may be reversible (Micromedex, 2006).

Use of oxycodone during or prior to labor can result in longer duration of labor by decreasing the strength, duration and frequency of uterine contractions. Additionally, oxycodone crosses the placenta and, like other opiates, can cause adverse fetal effects that include physical dependence and withdrawal, growth retardation and respiratory depression in the newborn infant (Micromedex, 2006). Therefore, although no causal link has been established with its use and teratogenicity (i.e., developmental malformations) in animal experiments, it, like other opiates is still not recommended for use in pregnancy.

Additionally, the oxycodone metabolite, noroxycodone, has been detected in breast milk in low concentrations. Because of the possibility of sedation and respiratory depression in the nursing infant, caution should be exercised in administration of oxycodone to the mother. There have also been rare reports of excessive sleepiness, lethargy, and withdrawal symptoms in breast-feeding infants when maternal administration is discontinued (Micromedex, 2006).



Diagnosis

Most hospitals utilize maternal and neonatal urine specimens to detect

illicit substance abuse during pregnancy. However, neonatal urine specimen is indicative of only a short duration of intrauterine exposure and maternal drug use. Meconium, the initial stools passed by newborn infants, can detect exposure as long as 20 weeks prior and should, therefore, be used in addition to urine specimens (Beauman, 2005; Baldacci et al., 2004).

We have found that OxyContin® is not detected by routine tests (Rao & Desai, 2002), which can result in under diagnosis. Therefore, confirmatory tests like gas chromatography-mass spectroscopy (GC-MS) are routinely required to confirm the presence of oxycodone and its metabolites, noroxycodone and noroxymorphone (Le et al., 2005; Meatherall, 2005). Other confirmatory tests include high performance liquid chromatography (HPLC) and capillary electrophoresis (CE) (Cheremina et al., 2005; Baldacci et al., 2004). However, these latter tests are not routinely available and are also expensive.

Additional methods have been developed more recently for detection of oxycodone and its metabolites in urine, blood and meconium. The Oxycodone Direct Immunoassay Kit (Pomona, CA) can detect oxycodone but has 30-35% cross reactivity to oxymorphone, codeine and hydrocodone. A modification of this assay for use on meconium specimens (with additional pretreatment to decrease cross reactivity) has allowed the detection of oxycodone at concentrations of 100ng/g of

Continued on page 16 . . .

Continued from page 15 . . .

meconium (Le et al., 2005). Recently, another immunoassay (DRI® Oxycodone Assay) has been developed that detects oxycodone in urine with 97.7% sensitivity and 100% specificity at cutoff concentrations of 300ng/ml with no significant cross reactivity with other opiates (Abadie et al., 2005). Another sophisticated method called capillary electrophoresis-multiple stage ion-trap massspectrometry (CE-MS) and computer simulation has been developed to detect oxycodone and its metabolites and has even resulted in detection of a previously unidentified metabolite of oxycodone (Baldacci et al., 2004).



Clinical features in the prenatally exposed newborn infant

Very little data is available to evaluate the effect of OxyContin® on pregnancy or long-term infant development. With increasing polydrug abuse, as well as concomitant use of tobacco, alcohol, and psychoactive substances prescribed to pregnant women, it is becoming increasingly difficult to differentiate the effect of any single drug on the newborn infant. However, newborn infants who have intrauterine exposure to OxyContin® are likely to suffer from withdrawal symptoms.

First recognized more than 30 years ago, neonatal abstinence syndrome (NAS) is a clinical constellation of signs and symptoms in the newborn infant following intrauterine exposure to opiates. Up to 90% of infants exposed to opiates during pregnancy experience clinical signs of withdrawal (Johnson, Gerada & Greenough, 2003; Beauman, 2005; Sarkar & Donn,

2006). Importantly, the timing and severity of the withdrawal symptoms depends on the dosing and duration of opiate exposure in pregnancy. For example, withdrawal from methadone (an opiate used to treat mothers addicted to drugs like OxyContin®) occurs later than that from heroin and is usually more severe. However, while most women cut back on alcohol, tobacco and drug abuse when they find out they are pregnant, there is very little data on patterns of OxyContin® use during pregnancy (Ebrahim & Gfroerer, 2003).

Commonly seen clinical signs following withdrawal from opiates in the newborn infant include increased irritability or lethargy, poor feeding, diarrhea, vomiting, excoriating rashes and friction burns secondary to scratching, and fever. There may be poor feeding, sleep-wake abnormalities, dehydration, poor weight gain and seizures. Seizures are usually seen with severe and untreated withdrawal in neonates. Seizures also can be precipitated by the use of Naltrexone (naloxone) in infants who have been exposed to opiates during pregnancy.

Other signs of opiate withdrawal include irritability, yawning, sneezing, excessive high-pitched crying, increased tone, sensitivity to sound, excessive sweating, excessive sucking, poor feeding, increased tearing, diarrhea and tremulousness. Typically, neonatal withdrawal occurs within 2 weeks of birth. Acute symptoms generally last from days to weeks, but may persist for months.

In the preterm infant, symptoms are generally milder, with alternating periods of hyperactivity and lethargy. Tremors are seen less frequently, and sweating, which is common in normal term infants with NAS, is not seen in the preterm neonate. In addition, infants may be at increased risk of

neonatal mortality, sudden infant death syndrome (SIDS), and abnormal long term developmental outcomes (Osborn, Jeffery, & Cole, 2005a; Beauman, 2005).



Monitoring of withdrawal symptoms

Objective scoring systems have been developed to monitor infants suffering from withdrawal symptoms. These scoring systems provide an objective assessment of the infant's condition and are helpful in monitoring and directing therapy. The most commonly used is the Finnegan Scoring system that scores (from 0-2) signs and symptoms based on observation of the infant over a 2 to 4 hour time period (Finnegan et al., 1975). These symptoms include excessive crying, sleeping difficulties, tremors, skin breakdown, seizures, excessive sweating, poor feeding, vomiting, diarrhea, frequent sneezing or yawning, nasal congestion and fever. A score of 8 or more over an 8 hour period of observation is commonly used as an indicator for more frequent monitoring and intervention.

Other scoring systems include the Lipsitz tool or the Neonatal Drug Withdrawal Scoring System (Lipsitz, 1975) and the Neonatal Withdrawal Inventory (NWI) (Zahorodny, 1998). The Lipsitz tool scores for the following symptoms from 0-3: tremors, irritability, stools, muscle tone, skin breakdown, respiratory rate and reflexes. However, this tool is not as widely used as the Finnegan Scoring system. The NWI tool is similar and has an infant distress scale in addition.



Treatment

Treatment consists mainly of supportive care and close monitoring. Supportive care for these infants should consist of swaddling, minimal handling, placement in a quiet, low light environment, and close observation. Attention should be paid to weight loss by providing small volume, high calorie formula feedings. Many infants have difficulty coordinating sucking and swallowing and may require gavage feedings to provide adequate nutrition. Skin breakdown should be treated with barrier creams and clear transparent dressings. Knees, elbows, tip of the nose, and the area around the anal opening are the most likely areas subjected to breakdown. Prone sleeping should be avoided due to the increased risk of SIDS.

Pharmacologic treatment is usually indicated for more severe withdrawal. The American Academy of Pediatrics (AAP, 1998) recommends that for infants with confirmed drug exposure, the indications for drug therapy should be seizures, poor feeding, diarrhea and vomiting resulting in excessive weight loss and dehydration, inability to sleep and fever unrelated to infection. However, in practice, therapy is usually initiated when the Finnegan scores are over 8 and include symptoms not limited to those listed above.

There is no optimal drug treatment for withdrawal symptoms. Commonly used medications include sedatives (e.g., phenobarbital and benzodiazepines) or other opiates (e.g., morphine, tincture of opium, paregoric, or methadone). Table One on p. 18 compares the advantages and disadvantages of the commonly used medications in the treatment of NAS.

The optimal frequency of drug dosing for symptomatic NAS remains

**IN OUR EXPERIENCE,
WITHDRAWAL SYMPTOMS
WITH OXYCONTIN®
ARE SIMILAR TO THAT SEEN
IN OTHER INFANTS WITH
OPIATE WITHDRAWAL
WITH NO SPECIFIC
DISTINGUISHING
FEATURES.**

unclear. In general, the use of opiates or phenobarbitone to treat withdrawal symptoms, as compared to supportive care only, appears to reduce the time to regain birth weight and reduce the duration of supportive care, but may increase the duration of hospital stay (Osborn et al., 2005a; Osborn et al., 2005b). They also reduce the incidence of seizures compared to phenobarbitone (Osborn et al., 2005a). There is no significant difference in treatment failure between opiates and phenobarbitone when used alone, yet some studies have reported the combination of tincture of opium and phenobarbitone to be more efficacious (Beauman, 2005, Coyle et al., 2002). When compared to diazepam (benzodiazepines), opiates reduce the incidence of treatment failure (Osborn et al., 2005a). However, use of phenobarbitone and other sedatives may impair infants' sucking. There also is long term developmental concerns associated with prolonged use of phenobarbitone (Langenfeld, et al., 2005).

In a recent review of practices across the country, most Neonatal Intensive Care Units have been shown

to use the Finnegan scoring system for monitoring these infants. Tincture of opium or morphine sulfate solution is the most commonly used drugs for treatment of opiate or polydrug withdrawal. Methadone and Phenobarbitone were the second most common medications used for opiate or polydrug withdrawal, respectively (Sarkar & Donn, 2006).



Our experience

In our experience (unpublished data), withdrawal symptoms with OxyContin® are similar to that seen in other infants with opiate withdrawal with no specific distinguishing features. In the last 3 years at the Kentucky Children's Hospital in Lexington, KY, we have admitted over 70 infants in our NICU with withdrawal symptoms following drug abuse during pregnancy. Eleven (11) mothers admitted to using OxyContin® in addition to other drugs, most commonly other prescription opiates, and 5 of these mothers were enrolled in methadone treatment programs. None of the mothers used OxyContin® alone. One infant was born to a mother using both methamphetamine and OxyContin®. Despite our awareness of the false negative results of screening, only 3 of the 11 were confirmed to have OxyContin® metabolites in neonatal urine or meconium specimens.

In our observations, neonatal withdrawal symptoms from OxyContin® have occurred in the first 2-3 days and have lasted for as long as 30 days. We have used medications in only 4 of the 11 infants with history of OxyContin® exposure. Oral morphine sulfate, phenobarbitone and chloral hydrate were used in our infants for

Continued on page 18 . . .

Continued from page 17 . . .

TABLE 1

Commonly used drugs in the treatment of withdrawal symptoms in newborn infants

	ADVANTAGES	DISADVANTAGES
PHENOBARBITONE	Sedative Effective in controlling neurological symptoms	<ul style="list-style-type: none"> • No effect on diarrhea • Potential for affect on long term development • Can depress suck reflex and cause lethargy and sedation with higher levels
DIAZEPAM	Sedative	<ul style="list-style-type: none"> • Can result in respiratory depression if used with phenobarbitone • Not effective when used alone • Risk of seizures due to benzoic acid preservative • Increased risk of jaundice • Decreased tone, decreased feeding
METHADONE	Effective control of symptoms	<ul style="list-style-type: none"> • Increased hospital stay due to long half life • Risk of abuse if discharged home on it
TINCTURE OF OPIUM	Effective in controlling symptoms	<ul style="list-style-type: none"> • Concentrated solution, may result in overdose • Contains alcohol • No effect on diarrhea
ORAL MORPHINE SULPHATE	Effective in controlling symptoms	<ul style="list-style-type: none"> • Safer than tincture of opium or paregoric • Less dosing errors
PAREGORIC	Most effective Effective in controlling diarrhea	<ul style="list-style-type: none"> • Has benzoic acid- can result in elevated bilirubin levels and risk of kernicterus • Risk of hepatic damage and hypoglycemia due to 45% alcohol content
CHLORPROMAZINE	Effective in treating diarrhea and central nervous system symptoms	<ul style="list-style-type: none"> • Long half life • Increased risk of seizures and blood abnormalities
CHLORAL HYDRATE	Sedative Non specific action	<ul style="list-style-type: none"> • Gastrointestinal irritation

Adapted from Beauman et al., 2005; Johnson, et al., 2003; Osborn et al., 2005a, 2005b; and Langenfeld et al., 2005.

1-5 days. Only one infant was treated with phenobarbitone alone for 30 days while all others required more than one medication. We currently have no data on the long term affects of OxyContin® on these infants following discharge from the hospital.



The future

OxyContin® use has become increasingly widespread with abuse identified in more than 23 states (Rosenberg, 2004). Non-medical abusers of OxyContin® have been shown to have a severe pattern of abuse characterized by polydrug use, use of injections and needles, and high rates of dependence and abuse. In fact, 83% of non-medical OxyContin® users use other drugs or have abused other non-medical prescription drugs use prior to using OxyContin®, suggesting that these users are “graduating to” using OxyContin® (Sees et al., 2005). OxyContin is also the single most commonly abused opioid analgesic among street and recreational drug users (Cicero, Inciardi, & Munoz, 2005). Further, due to its high cost of nearly one dollar per mg or more, OxyContin® users are increasingly turning to theft and other means to pay for this addiction resulting in social and economic downfall (Arnold, 2005).

OxyContin® abuse and addiction has also been increasingly identified in adolescents and teenagers (Katz and Hays, 2004). More than 9.5% of high school children reported using OxyContin® in a survey in Virginia, and most of these students reported that “it was not at all difficult” to get OxyContin® (Holstege et al., 2002). In fact, a recent report on National Public Radio highlighted that, in 2005, 5.5% of 12th grade students nationwide reported using OxyContin®, an

increase of more than 40% in the last three years, and 5 times higher than that reported with methamphetamine (Arnold, 2005).

These data suggest that OxyContin® abuse will continue to be a significant health problem and one can anticipate seeing more OxyContin® exposed newborn infants. However, it is important to remember that specific testing is required to detect OxyContin® and its metabolites. Studies are currently ongoing to evaluate the long term effects on infants exposed to OxyContin® during pregnancy.

Rakesh Rao, MD,

Assistant Professor of Pediatrics, and

Nirmala S. Desai, MD,

Professor of Pediatrics,

Division of Neonatology, University of Kentucky, Lexington, KY

REFERENCES

- Abadie, J.M., Allison, K.H., Black, D.A., Garbin, J., Saxon, A.J. and Bankson, D.D. (2005). Can an Immunoassay Become a Standard Technique in Detecting Oxycodone and Its Metabolites? *J of Anal Toxicol* 29: 825-829.
- Arnold, C. (December 19, 2005). Teen Abuse of Painkiller OxyContin on the Rise. All Things Considered, National Public radio at www.npr.org.
- American Academy of Pediatrics (1998). Neonatal Drug Withdrawal: Committee on Drugs. *Pediatrics* 101:1079-1088. <http://www.pediatrics.org/cgi/content/full/101/6/1079>
- Baldacci, A., Caslavka, J., Wey, A.B., Thormann, W. (2004). Identification of new oxycodone metabolites in human urine by capillary electrophoresis-multiple-stage ion-trap mass spectrometry. *J Chromatogr A* 1051(1-2):273-82.
- Beauman, S.S. (2005). Identification and Management of Neonatal Abstinence Syndrome. *J Infus Nurs* 28:159-167.
- Cicero, T.J., Inciardi, J.A., Munoz, A. (2005). Trends in Abuse of OxyContin and other opioid analgesics in the United States: 2002-2004. *J Pain* 6(10):662-72.
- Cheremina, O., Bachmakov, I., Neubert, A., Brune, K., Fromm, M.F., Hinz, B. (2005). Simultaneous determination of oxycodone and its major metabolite, noroxycodone, in human plasma by high-performance liquid chromatography. *Bio Chromat* 26;19(10):777-782.
- Coyle, M.G., Ferguson, A., Lagasse, L., Oh, W., Lester, B. (2002). Diluted tincture of opium (DTO) and Phenobarbital versus DTO alone for Neonatal opiate withdrawal in term infants. *J Pediatrics* 140:561-564.
- Ebrahim, S.H. & Gfroerer, J. (2003). Pregnancy-Related Substance Use in the United States During 1996–1998. *Obstet Gynecol* 101:374–9.
- Finnegan, L.P., Kron, R.E., Connaughton, J.F., Emich, J.P. (1975). Neonatal abstinence syndrome: assessment and management. *Addict Dis Int J* 2(1):141-158.
- Holstege, C.P., Kell, S., Baer, A.B., Fatovitch, T. (2002). Prevalence of OxyContin Abuse in high school students. *J Toxicol: Clin Tox* 40(5):656.
- Johnson, K., Gerada, C. and Greenough, A. (2003). Treatment of neonatal abstinence syndrome. *Arch Dis Child Fetal Neonatal Ed* 88:F2–F5.
- Katz, D.A. and Hays, L.R. (2004). Adolescent OxyContin Abuse. *J Am Acad Child Adolesc Psychiatry* 43(2):231-4.
- Langenfeld, S., Birkenfeld, L., Herkenrath, P., Muller, C., Hellmich, M. and Theisohn, M. (2005). Therapy of the neonatal abstinence syndrome with tincture of opium or morphine drops. *Drug and Alcohol Dependence* 77:31–36.
- Le, N.L., Reiter, A., Tomlinson, K., Jones, J., Moore, C. (2005). The detection of oxycodone in meconium specimens. *J Anal Toxicol* 29(1):54-7.
- Lipsitz, P.J. (1975). A proposed narcotic withdrawal score for use with newborn infants. *Clinical Pediatrics*, 14: 592-594.
- Micromedex Health Care Systems, Volume 127, 2006.
- Meatherall, R. (2005). GC–MS Quantitation of Codeine, Morphine, 6-Acetylmorphine, Hydrocodone, Hydromorphone, Oxycodone, and Oxymorphone in Blood. *J Anal Toxicol* 29:301-308.
- Osborn, D.A., Jeffery, H.E., Cole, M. (2005a). Opiate treatment for opiate withdrawal in newborn infants. *The Cochrane Database of Systematic Reviews*, Issue 3. Art. No.: CD002059. DOI: 10.1002/14651858.CD002059.pub2.
- Osborn, D.A., Jeffery, H.E., Cole, M.J. (2005b). Sedatives for opiate withdrawal in newborn infants. *The Cochrane Database of Systematic Reviews*, Issue 3. Art. No.: CD002053. DOI: 10.1002/14651858.CD002053.pub2.
- Rao, R. and Desai, N.S. (2002). OxyContin and Neonatal Abstinence Syndrome. *J Perinatol* 22:324–325.
- Rosenberg, D. (2004). Kentucky’s pain. *Newsweek*, 144(12):44-5.
- Sarkar, S. and Donn, S.M. (2006). Management of neonatal abstinence syndrome in neonatal intensive care units: a national survey. *J Perinatol* 26:15-17.
- Sees, K.L., Di Marino, M.E., Ruediger, N.K., Sweeney, C.T., Shiffman, S. (2005). Non-medical use of OxyContin Tablets in the United States. *J Pain & Palliat Care Pharmacol* 19(2):13-23.
- Zahorodny, W., Rom, C., Whitney, W. et al. (1998). The neonatal withdrawal inventory: A simplified score of newborn withdrawal. *Dev Behav Pediatr*, 19: 89-93.

MOMS OFF METH SUPPORT GROUP

Moms Off Meth is a self-help group specifically designed to help mothers recover from their addiction to methamphetamines. Located in Ottumwa, Iowa, it is the first of at least 16 similar groups statewide. The group was started in 1999 by Ottumwa’s Crisis Center and Women’s Shelter to address the pervasive trauma and victimization issues among these women, particularly issues related to past and/or current sexual abuse.

For more information about the Moms Off Meth Group, contact the director, Cheryl Brown, at 641-683-1750.

Recognizing the importance of gender-specific recovery support for women, the Moms Off Meth support groups focus on the following 7 issues:

1. *Empowerment*
2. *Victimization—helping moms move from victim to survivor by:*
 - Providing information about domestic violence and sexual assault
 - Providing information about addiction and recovery
 - Providing information about effective coping skills
 - Helping women to form bonds with other women
3. *Helping women become accountable and responsible for their own actions by:*
 - Educating about the importance of accountability and responsibility for their actions
 - Educating about the importance of not taking on others’ responsibilities
 - Allowing women to claim the dignity and respect that they deserve
4. *Problem solving techniques*
5. *Ways to advocate for themselves and other women in the group by:*
 - Writing their own court reports to supplement the social worker’s report
 - Guiding them through the court process
 - Modeling behavior that is consistent with caring for themselves and other women
 - Using their experiences to help others; pooling their collective wisdom
6. *Ways to move past the guilt and shame that they feel over their life choices and the things that their children have witnessed*
7. *Education on how to survive in a sober world*

The group, which meets weekly, is co-facilitated by a staff person who is a domestic violence advocate and, when available, a volunteer who is an experienced member of the group. The lead facilitator receives at least 40 hours of domestic violence training, which includes group facilitation; 20 hours of sexual assault training; and a one-to-two day facilitator training. The role of the facilitator(s) is to maintain the focus of the group, which is driven by the participants with no specific curriculum.

The group is ongoing and open-ended. That is, women can start at any time and stay for as long as they want. Some mothers come to the group voluntarily and others are ordered by the courts to attend. As long as they are not disruptive, women are not required to be clean and sober to attend a meeting. However, through use of a “group conscience,” participants encourage women who show up high to seek treatment and come back when they are better able to participate.

Formal child care is not provided during the group, however, some of the chapters have volunteers that provide child care. In addition to the weekly group, Crisis Center staff also provides individual counseling, as well as court accompaniment for those involved in the child welfare system, and various other services.

Following is the story of one woman who is in recovery from poly-substance abuse, and currently co-facilitates the Moms Off Meth group in Ottumwa.

ONE WOMAN'S STORY

My name is Leigh Bakker. I am 37 years old and have 2 children, Leslie 15 and Tyler 4. I work for the Crisis Center and Women's Shelter in Ottumwa, Iowa. I have lived in Ottumwa for the majority of my life. I guess you could say that I grew up in a traditional, upper middle class family.

I began using alcohol at the age of 15—drinking on weekends. My use then progressed to drinking through the week, and I started smoking pot and cigarettes when I was about 16. I finished high school and went to our area community college the summer after graduation and then in the fall I attended UNI in Cedar Falls. I was there about 2 years when I decided that partying was much more fun, so I dropped out and moved back to Ottumwa. I got a job (actually 3 jobs) and went back to community college.

I began getting involved with cocaine when I was about 18 or 19 years old. I was a little scared of Meth because I had seen several friends using it, and they were going down hill at a high rate of speed. So I just stuck with the cocaine. My parents were very concerned about my behaviors and, since we have a history of substance abuse in our family on both sides, they called my uncle and a recovery friend of his to come down and get me on a planned intervention. They took me to Forest City Iowa to a treatment facility. This would be the 1st of several treatments I would go through in my life. When I left that treatment, I did stay clean for a while. But at 19 years of age, I wasn't convinced that I had an alcohol or drug problem. For God's sakes, I am only 19 years old! I was running to bars again, smoking pot, and doing lots of coke and now meth.

Meth was cheaper and a lot longer buzz for the money. I ended up getting pregnant at 20 years old. I was married and my husband was a severe alcoholic. Things progressively got worse during my pregnancy because he refused to quit using and drinking. I did the minute I found out I was pregnant because I was afraid that I would hurt my baby. She was born happy and healthy in July of 1990. I stayed clean for about a year after I had her. I was working, my husband was rarely around, and I was busy trying to raise a child on my own. We ended up getting a divorce and, shortly after that, I started using again. I ended up at the bars just so I would have adult companionship.

I went through periods of sobriety over the next 6-8 years and then got back into it all over again. I ended up losing my daughter to my parents, and then my ex-husband got custody of her. After that I went all out again drinking and using. I had always held jobs and supported myself. I had several good jobs and ended up screwing them up for one reason or another, which I now know was due to my using.

In 2000, I found out I was pregnant. I was using pretty heavily at the time and quit doing everything during my pregnancy but smoking pot. Pot is my drug of choice and, as far as I'm concerned, it is probably one of the harder drugs to quit. Also, I didn't really see that smoking pot would hurt my child.

My son tested positive for THC when he was born, and we were then involved with what DHS terms as a CINA (Child In Need Of Assistance). I had to complete another outpatient treatment and worked with DHS with their in-home providers that came to teach parenting skills and other child development tools. I had to submit to random UA's and, after about 18 months, the Juvenile Court closed my case. I was doing really well and almost had 3 years clean when I decided to go back out, which brings me to a little over a year ago. My significant other was still using, and I finally just gave up the fight with him and with myself and relied on the old saying, "If you can't beat them join them!" I got really caught up in the drug scene, and my whole life fell apart piece by piece.

DHS showed up at the place I was staying and said they had a child abuse report for my son. They would need to remove him from my care and place him in foster care until we could determine what we would be doing next. I ended up working it out with my mother that she would keep my son and I would go stay with her until his tests came back and we could proceed. Through a hair analysis, he tested positive for marijuana, amphetamines and methamphetamines. So he was again placed under a CINA. They also found out that my daughter was living with her father and asked that he bring her in for a test, which he did, but refused testing himself. He made no further contact with DHS and they called me one day to let me know that they were returning her to my custody. I was

encouraged to go to a place called The Bridge of Hope. It was a new treatment facility for women and their children. It was long term (4-6 months). I decided that my children were much more important to me than using drugs, so I voluntarily checked myself in to the Bridge. I cannot say that I loved every minute of the 5 months and 2 days that I was there, but I do love being clean and sober today.

As for making this time different... Well, I did have 3 years clean, and I know the program and how it works. I had the opportunity to receive those tools when I was 19 years old in my 1st treatment. I relied on those a great deal over the years, and that is what probably made quitting so easy when I did decide to do so. Also, as much as I really hated going into a long-term treatment facility, it was the best thing that could have happened. The 30 day centers barely give you time to get your body rid of the drugs and through the majority of after-effects (coming down). I had the opportunity to basically disappear from the drug world I was living in. People forgot about me, so I didn't have to worry about running into using friends or just having to distance myself from the lifestyle. I had already gotten into a routine, and I was completely substance free. I had a chance to take a good long look at how my life was and how it had changed, and I was reminded of how much better it was when I wasn't using. If I had not had the chance to do treatment at the Bridge, my children would not be with me today, I would not be living like I am, I would not have the job that I do and Love. I get the chance to give back what has so freely been given to me by all the persons I have met in the recovery program. It has truly saved my life and the lives of my children and family. I am very proud to be where I am today. I am comfortable living in my own skin these days, and I don't have the total chaos that came from the drug world I was living before. I also get to practice my program every day with the work that I do. It makes a big difference when you decide to LIVE THE PROGRAM!!!!!!

I have been through 5 treatment centers and have used drugs for over 22 years. I am a survivor of domestic violence and sexual assault. I enjoy my job now and none of it would be possible if I hadn't made the choice of LIFE instead of DRUGS!

— Leigh

METH SCIENCE NOT STIGMA: OPEN LETTER TO THE MEDIA

The following was excerpted from a letter that appeared on the *Join Together* website on July 25, 2005. The original letter, along with a complete list of the nearly 100 professionals who signed it, can be found on-line at <http://www.jointogether.org/news/yourturn/commentary/2005/meth-science-not-stigma-open.html>.

To Whom It May Concern:

As medical and psychological researchers, with many years of experience studying prenatal exposure to psychoactive substances, and as medical researchers, treatment providers and specialists with many years of experience studying addictions and addiction treatment, we are writing to request that policies addressing prenatal exposure to methamphetamines and media coverage of this issue be based on science, not presumption or prejudice.

The use of stigmatizing terms, such as “ice babies” and “meth babies,” lack scientific validity and should not be used. Experience with similar labels applied to children exposed parentally to cocaine demonstrates that such labels harm the children to which they are applied, lowering expectations for their academic and life achievements, discouraging investigation into other causes for physical and social problems the child might encounter, and leading to policies that ignore factors, including poverty, that may play a much more significant role in their lives. The suggestion that treatment will not work for people dependant upon methamphetamines, particularly mothers, also lacks any scientific basis.

Despite the lack of a medical or scientific basis for the use of such terms as “ice” and “meth” babies, these pejorative and stigmatizing labels are increasingly being used in the popular media, in a wide variety of contexts across the country. Even when articles themselves acknowledge that the effects of prenatal exposure to methamphetamine are still unknown, headlines across the country are using alarmist and unjustified labels such as “meth babies.”

Although research on the medical and developmental effects of prenatal methamphetamine exposure is still in its early stages, our experience with almost 20 years of research on the chemically related drug, cocaine, has not identified a recognizable condition, syndrome or disorder that should be termed “crack baby” nor found the degree of harm reported in the media and then used to justify numerous punitive legislative proposals.

The term “meth addicted baby” is no less defensible. Addiction is a technical term that refers to compulsive behavior that continues in spite of adverse consequences. By definition, babies cannot be “addicted” to methamphetamines or anything else. The news media continues to ignore this fact.

In utero physiologic dependence on opiates (not addiction), known as Neonatal Narcotic Abstinence Syndrome, is readily diagnosable and treatable, but no such symptoms have been found to occur following prenatal cocaine or methamphetamine exposure.

Similarly, claims that methamphetamine users are virtually untreatable with small recovery rates lack foundation in medical research. Analysis of dropout, retention in treatment and

re-incarceration rates and other measures of outcome, in several recent studies indicate that methamphetamine users respond in an equivalent manner as individuals admitted for other drug abuse problems. Research also suggests the need to improve and expand treatment offered to methamphetamine users.

Too often, media and policymakers rely on people who lack any scientific experience or expertise for their information about the effects of prenatal exposure to methamphetamine and about the efficacy of treatment. For example, a *New York Times* story about methamphetamine labs and children relies on a law enforcement official rather than a medical expert to describe the effects of methamphetamine exposure on children. A police captain is quoted stating: “Meth makes crack look like child’s play, both in terms of what it does to the body and how hard it is to get off.” (Fox Butterfield, Home Drug-Making Laboratories Expose Children to Toxic Fallout, Feb 23, 2004 A1)

We are deeply disappointed that American and international media as well as some policy makers continue to use stigmatizing terms and unfounded assumptions that not only lack any scientific basis but also endanger and disenfranchise the children to whom these labels and claims are applied. Similarly, we are concerned that policies based on false assumptions will result in punitive civil and child welfare interventions that are harmful to women, children and families rather than in the ongoing research and improvement and provision of treatment services that are so clearly needed.

METHAMPHETAMINE AND HIV: WHAT'S THE CONNECTION FOR WOMEN?

The increase in methamphetamine use among women over the last several years brings new challenges to the prevention and treatment of HIV. Although most of the literature on the relationship between methamphetamine and HIV is based on men who have sex with men (MSM), several studies have looked at the impact on women as well. In sum, the literature suggests that methamphetamine use increases the risk of HIV transmission and can cause complications in people with HIV.



Increased Risk for HIV

Methamphetamine (meth) lowers inhibitions, increases libido, and impairs judgment, often leading to an increase in risky sexual behaviors (Urbina & Jones, 2004; Semple, Patterson & Grant, 2004; NYC Department of Health & Mental Hygiene, 2004). Thus, its use is often associated with high-risk sexual behaviors and increased risk of HIV among gay men. However, several studies have found that women, like men, also experience increased sexual desire and sex drive, heightened sexual pleasure, and prolonged sexual activity associated with methamphetamine use (Klee, 1992; Rawson et al., 2002).

At least two studies have found that, compared to non-users, female meth users report significantly more sexual partners, are more likely to have sex with an intravenous drug user and trade sex for drugs, are significantly more likely to have anal sex, and are less likely to use a condom regardless of

the type of intercourse (Semple, Grant & Patterson, 2004; Molitor et al., 1998). Molitor and colleagues (1998) also found that methamphetamine users were more likely to have an STD.

In addition to increasing their chances for contracting HIV through risky sexual behavior, a relatively small proportion of female meth users inject the drug intravenously, potentially increasing their risk of using contaminated equipment. For example, in Semple et al.'s study (2004), 25% of the women reported injecting meth, and 13% indicated that injection was their primary method of consumption. Finally, meth users are at increased risk of contracting HIV because the drug itself "suppresses a part of your immune system that's important in fighting off HIV" (Press release, 2004).



Meth-related complications for people with HIV

HIV infected individuals who use methamphetamines may have trouble adhering to their anti-retroviral medication plan, which can speed up the progression of the disease and increase their chance of transmitting the virus during unsafe sex (Berger, 2004). Preliminary studies also suggest that meth suppresses one's immune system, allowing the virus to replicate more rapidly in the body (Heathology, 2006). Even if one is adhering to his or her medications, meth can accelerate replication of the virus in the brain. For example, animal studies suggest that meth use may result in a more

rapid and increased brain HIV viral load which may accelerate HIV-related dementia (Volkow, 2005; Urbina & Jones, 2004). Similarly, preliminary studies suggest that meth using, HIV-positive patients may experience greater neuronal damage and neuropsychological impairment, resulting in impaired motor functioning and verbal learning (Volkow, 2005; Urbina & Jones, 2004; Jernigan et al., 2005). Further, because depression is often associated with both HIV and meth separately, the compound effect may result in more complex psychological problems (Berger, 2004). Finally, meth use has been found to have serious acute cardiovascular effects and may interact with HIV medications to cause increased toxicity or death. Medical complications can include hypertension, hyperthermia, rhabdomyolysis (break down of skeletal muscle cells), and stroke (Urbina & Jones, 2004).



Conclusion

More research is needed to fully understand the many possible interactions between methamphetamine use and HIV, particularly among women. In the meantime, sufficient evidence exists to justify increased HIV education and prevention efforts among meth users, as well as increased education on the potential impact of meth use among HIV-infected individuals.

Amy Price, MPA,
*National AIA Resource Center,
University of California at Berkeley*

Continued on page 27 . . .



GOOD BETS



BOOKS, GUIDES, AND REPORTS

Behind the Eight Ball: Sex for Crack Cocaine Exchange and Poor Black Women

This book places crack addiction, crack-related prostitution and its consequences—STDs, HIV, and pregnancy—into the context of the larger social issues of inner-city poverty, race, gender, and class. In their own words, poor black women—nameless, faceless, and marginalized by poverty—share the details of their lives before and after crack cocaine invaded their communities, each recalling the circumstances of her introduction to the drug and her first experience using sex to support her addiction. Cost: \$49.95.

T. Telfair Sharpe (2005). Haworth Press, Inc., 10 Alice St., Binghamton, NY 13904-1580. Ph: 800-429-6784. Fax: 800-895-0582. www.haworthpress.com.

Drugs and Society: U.S. Public Policy

There are two main approaches to reforming drug policy, which reflect differing American values. One is the public health or harm reduction or cost/benefit approach, which implements the American value of pragmatism. It looks at the social science and bio-medical evidence regarding the effects of each drug, attempts to weigh the positive and negative consequences of various courses of action, and proposes policies with the best overall mix of outcomes. The other approach—libertarian or rights-based—implements the American value of individualism. It views the private behavior of adults as none of the government's business, and aims at maximizing individual freedom. *Drugs and Society* explains these differing views in detail, and offers the reader all the information needed to create an alternative drug policy. Cost: \$26.95.

J. Fish (2005). Rowman & Littlefield Publishers, Inc., 4501 Forbes Blvd., Suite 200, Lanham, MD 20706. Ph: 301-459-3366. Fax: 301-429-5748. www.rowmanlittlefield.com.

Drugs in Pregnancy and Lactation: A Reference Guide to Fetal and Neonatal Risk (7th Edition)

This reference provides practical information on more than 1,000 drugs that may be used by pregnant and lactating women. New to the 7th edition are 132 new drug entries, and highlighted recommendations in each drug entry that indicate the level of risk to the fetus and nursing infant. The recommendations help readers interpret animal and human pregnancy data to assess potential human risk when there are human data or the human data are limited or not available. FDA Risk Factor ratings for each drug are also included. Cost: \$99.00.

G. Briggs, R. Freeman, S. Yaffe (2005). Lippincott Williams & Wilkins, 530 Walnut St, Philadelphia, PA 19106-3621. Ph: 215-521-8300. Fax: 215-521-8902. http://www.lww.com.

Improving Outcomes and Preventing Relapse in Cognitive-Behavioral Therapy

Organized around specific psychological disorders, this book brings together leading scientist-practitioners to present strategies for maximizing the benefits of Cognitive-Behavioral Therapy (CBT). It describes effective ways of overcoming frequently encountered treatment obstacles, enhancing motivation and treatment compliance, complementing CBT with other approaches, and targeting the factors that contribute to relapse and recurrence. Cost: \$45.

M. Antony, D. Roth Ledley, & R. Heimberg (2005). Guilford Publications, Inc., 72 Spring St, New York, NY 10012. Ph: 800-365-7006. Fax: 212-966-6708. www.guilford.com.

Living with FASD (3rd Edition)

This resource for parents and professionals who care for individuals with Fetal Alcohol Spectrum Disorder includes the latest Institute for Medicine diagnostic criteria and terms, special considerations for infants, adolescents and adults, and an expanded resource list. Cost: \$24.95.

S. Graefe (2004). Groundwork Press, 2780 E Broadway, Ste 101, Vancouver, BC, Canada V5M 1Y8. Ph: 604-687-3114. Fax: 604-687-3364. www.groundworkpress.com.

Living with Prenatal Drug Exposure: A Guide for Parents

This guide for parents and professionals introduces caregivers to the challenges of caring for a child prenatally exposed to drugs. It offers practical techniques and strategies, debunks well-known myths, explores social issues, and includes a workbook section for parents and other caregivers. Cost: \$24.95.

L. Cowan & J. Lee (2003). Groundwork Press, 2780 E Broadway, Ste 101, Vancouver, BC, Canada V5M 1Y8. Ph: 604-687-3114. Fax: 604-687-3364. www.groundworkpress.com.

The Crack Baby Myth: Teens and Parents Write about the Crack Epidemic

During the late 1980's and early 1990's the crack epidemic raced across the country, sweeping tens of thousands of children into foster care. These stories, by teens who went into care and parents who lost children, document the pain caused by crack, and show the resilience of teens and some parents. Cost: \$8.00.

Youth Communications (2005). Youth Communications, 224 W. 29th Street, 2nd Floor, New York, NY 10001. Ph: 212-279-0708. Fax: 212-279-8856. www.youthcomm.org.

Matters of Substance: Drugs—and Why Everyone's a User

Attitudes about and control of drugs across the world are explored. Various uses and abuses of drugs are examined within the web of ideas we hold about personal freedom, the right to pleasure, the responsibilities of government, and the impact of globalization. The author argues for a consideration of all drugs—from caffeine to crack—as more than the sum of their chemical structure. He shows that the effect of a drug is just as dependent on the social setting, historical legacy, and psychology of an individual as it is on any inherent quality of the drug. Cost: \$24.95.

G. Edwards (2005). Dunne Books/Saint Martin's Press, 175 5th Avenue, New York, NY 10010. Fax: 212-674-6132.

Psychotherapy with Women

This clinical resource provides insights and interventions that have emerged out of decades of work in the psychology of women. Chapters from leading practitioners guide therapists and students to understand how gender, race, ethnicity, sexual orientation, class, immigration status, religion, and other factors shape the experiences and identities of diverse women, and offer guidance on how to intervene effectively in the multiple contexts of clients' lives. Cost: \$40.

M. Praver Mirkin, K. Suyemoto & B. Okun (2005). Guilford Publications, Inc., 72 Spring St, New York, NY 10012. Ph: 800-365-7006. Fax: 212-966-6708. www.guilford.com.

Treatment for Stimulant Use Disorders, TIP #33

This Treatment Improvement Protocol (TIP) was researched, drafted, and reviewed by a panel of substance use disorder professionals chaired by Dr. Richard Rawson. It describes basic knowledge about the nature and treatment of stimulant use disorders, and reviews what is currently known about treating the medical, psychiatric, and substance abuse/dependence problems associated with the use of two high profile stimulants: cocaine and methamphetamine. The TIP provides information on the effects of stimulant abuse, describes effective treatment approaches, and makes recommendations on the practical applications of these treatment strategies, which include: Cognitive Behavioral Therapy/Relapse Prevention; Contingency Management; Community Reinforcement Approach + Voucher; Motivational Interviewing; and the Matrix Model of Intensive Outpatient

Treatment for Stimulant Users. A copy can be ordered free of charge from SAMHSA's National Clearinghouse for Alcohol and Drug Information (NCADI) website at <http://store.health.org/catalog/ProductDetails.aspx?ProductID=15318>.

SAMHSA (1999). SAMHSA, 5600 Fishers Ln, Rockville, MD 20857. Ph: 800-729-6686. http://ncadi.samhsa.gov.

Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs, TIP #43

This Treatment Improvement Protocol (TIP) provides a detailed description of medication-assisted treatment for opioid addiction, including optional approaches such as comprehensive maintenance treatment, detoxification, and medically supervised withdrawal. A PDF can be downloaded at no cost from SAMHSA's National Clearinghouse for Alcohol and Drug Information (NCADI) website at <http://ncadi.samhsa.gov/media/Prevlinc/pdfs/bkd524.pdf>. Cost: Free.

SAMHSA (2005). SAMHSA, 5600 Fishers Ln, Rockville, MD 20857. Ph: 800-729-6686. http://ncadi.samhsa.gov.

Relapse Prevention: Maintenance Strategies in the Treatment of Addictive Behaviors

Leading scientist-practitioners offer an overview of relapse prevention across a range of behaviors. Chapters present the latest knowledge on the obstacles that arise in treating specific problem behaviors and the factors that may trigger relapse at different stages of recovery. Cost: \$45.

A. Marlatt & D. Donovan (2005). Guilford Publications, Inc., 72 Spring St, New York, NY 10012. Ph: 800-365-7006. Fax: 212-966-6708. www.guilford.com.

Social Policy for Children and Families: A Risk and Resilience Perspective

This book uses a unique framework to help readers understand effective public policy development. The authors argue that a public health framework rooted in ecological theory and based on principles of risk, protection, and resilience is essential for the successful design of social policy. This conceptual model is applied across the substantive areas of social policy, including child welfare, education, mental health, health, developmental disabilities, substance use, and juvenile justice. Cost: \$42.95.

J. Jensen & M. Fraser (2006). SAGE Publications, 2455 Teller Road, Thousand Oaks, CA 91320. Ph: 800-818-7243. Fax: 805-499-0871. www.sagepub.com.

Working with Traumatized Youth in Child Welfare

Integrating perspectives from the fields of child welfare and trauma, this work helps practitioners understand and address the special needs of maltreated children and their families. Current knowledge on attachment, trauma, and risk and resilience is clearly explained. Readers learn how to conduct assessments and implement effective helping strategies with youth in foster care and other settings. Includes case illustrations. Cost: \$36.00.

N. Boyd Webb (2005). Guilford Publications, Inc., 72 Spring St, New York, NY 10012. Ph: 800-365-7006. Fax: 212-966-6708. www.guilford.com.

Building a Home Within: Meeting the Emotional Needs of Children and Youth in Foster Care

This book presents a proven solution based on over 10 years of groundbreaking work by the Children's Psychotherapy Project (CPP): When young people in foster care work with the same therapist for as long as they need to, they'll make better progress toward developing strong, healthy relationships and hope for the future. Experts from the CPP give psychologists, social workers, counselors, and program administrators a complete, research-supported introduction to this successful "one child, one therapist, for as long as it takes" model as they share their triumphs and challenges. Cost: \$29.95.

T. Vaughn Heineman & D. Ehrensaft (2006). Brookes Publishing Co., P.O. Box 10624, Baltimore, MD 21285-0624. Ph: 800-638-3775. Fax: 410-337-8539. www.brookespublishing.com.

Attachment from Infancy to Adulthood: The Major Longitudinal Studies

This volume provides first-hand accounts of the most important longitudinal studies of attachment. Presented are a range of research programs that have broadened our understanding of attachment in and outside of the family context and its role in individual adaptation throughout life. Themes addressed include the complexities of designing studies that span years or even decades; challenges in

Continued on page 26 . . .

Continued from page 25 . . .

translating theoretical constructs into age-appropriate assessments; and how attachment interacts with other key variables that shape individual developmental trajectories. Cost: \$40.00.

Klaus Grossmann, Karin Grossmann & E. Waters (2005). Guilford Publications, Inc., 72 Spring St, New York, NY 10012. Ph: 800-365-7006. Fax: 212-966-6708. www.guilford.com.

Forming Alliances: Working Together to Achieve Mutual Goals

This guide describes a wide range of ways nonprofit organizations can work with others, with emphasis on finding the simplest alliance that will work to minimize time wasted on more complex partnerships. The book is filled with examples and worksheets that lay the groundwork for successful alliance building. Cost: \$29.95.

L. Hoskins & E. Angelica (2005). Fieldstone Alliance, 60 Plato Blvd E, Ste 150, St. Paul, MN 55107. Ph: 800-274-6024. Fax: 651-556-4517. www.fieldstonealliance.org.

Maximizing Program Services through Private Sector Partnerships and Relationships: A Guide for Faith-and Community-Based Service Providers

This publication provides practical guidance about seeking and engaging the support of corporate givers and foundation grant makers for substance abuse and mental illness services and programs. The book includes tips on marketing, diversifying funding streams, and writing grant proposals. It also highlights case studies of successful relationships and partnerships between social service organizations and funders. Cost: Free online.

SAMHSA (2005). SAMHSA, 5600 Fishers Ln, Rockville, MD 20857. Ph: 800-729-6686. http://www.samhsa.gov/FBCI/docs/PartnerHandbook_feb2006.pdf.

VIDEOS

I Am Concerned Training Film

This film is the newest component of the I Am Concerned: A Brief Intervention for the Primary Prenatal Care Setting pre-treatment manual. The film provides a step-by-step guide on how to use the manual as an educational and prevention tool. With both

in-depth discussion and intervention dramatizations, the film conveys information on the best ways to screen for drug use during pregnancy and how to help pregnant women who are using alcohol, tobacco, or illicit drugs. Available in both DVD and video. Cost: \$35.00.

National Training Institute (2005). National Training Institute, 180 N Michigan Ave, Ste 700, Chicago, IL 60601. Ph: 312-726-4011. Fax: 312-726-4021. http://www.childstudy.org/nti.cgi/vid-005.html.

The Listening Heart

This 37-minute documentary chronicles the day-to-day challenges of children, parents, and families who struggle with the consequences of Fetal Alcohol Syndrome (FAS). It tells the stories of four families, all of whom adopted a child with FAS. Each family's story focuses on a different aspect of FAS, ranging from behavioral difficulties to learning disabilities and social problems that affect the children's everyday functioning. The video offers hands-on methods, solutions, and techniques to dealing with the issues of FAS. Available in DVD and video. Cost: \$125.00.

NTI Productions (2005). National Training Institute, 180 N Michigan Ave, Ste 700, Chicago, IL 60601. Ph: 312-726-4011. Fax: 312-726-4021. http://www.childstudy.org/ntilproductions/thelisteningheartmovie.

The Power of Our Stories: Speaking Out for Addiction Recovery

This 44-minute video aims to empower people in recovery, their family members, friends, and allies to speak out for addiction recovery. The video demonstrates how people are using their stories to change attitudes and policies that stigmatize and discriminate against people seeking or in recovery from addiction to alcohol or drugs. The video is accompanied by a brochure and a worksheet with group and individual exercises. It can be viewed for free on the web, or can be purchased for \$15.95.

Faces & Voices of Recovery (2006). Faces & Voices of Recovery, 1010 Vermont Ave. #708, Washington, DC 20005. Ph: 202-737-0690. Fax: 202-737-0695. http://www.facesandvoicesofrecovery.org/support/merch_video_bk.php.

Reunited

Substance-abusing parents whose children have been removed by CPS speak openly about their experiences in this 25-minute

video. The parents, most of whom were using methamphetamines when their children entered the child welfare system, voice their desire to seek treatment and to be reunited with their children. They acknowledge the hard work that it takes to recover from substance abuse, and acknowledge the rewards of working with the child welfare system. The video, which was funded by the Oregon Department of Human Services under a Federal grant, also provides information about the Adoption and Safe Families Act (ASFA) and the time limits mandated by this Federal law. Cost: \$21.95 (includes shipping/handling).

E. Martin & J. Wurscher (2005). Oregon Department of Human Services, 2054 N Vancouver Ave, Portland, OR 97227. Ph: 503-231-8164. www.ASFVideo.org

ONLINE RESOURCES

Faces and Voices of Recovery Regional Discussion Groups

Faces & Voices of Recovery announces regional discussion groups for exchange of information about regional recovery advocacy, as well as opportunities for recovery advocacy at the national level. The discussion groups can be accessed at <http://www.facesandvoicesofrecovery.org/regions/map.php>. Discussions are archived at each region's section of the Faces & Voices web site.

Faces & Voices of Recovery, 1010 Vermont Ave #708, Washington, DC 20005. Ph: 202-737-0690. Fax: 202-737-0695. www.facesandvoicesofrecovery.org.

Methamphetamine and its Impact on Women, Children and Families

This comprehensive online resource includes national and state Drug Endangered Children (DEC) materials and protocols, federal/national reports, Substance Abuse and Mental Health Services Administration (SAMHSA) and National Institute on Drug Abuse (NIDA) publications, reports and other publications, methamphetamine conferences and trainings, videos from Washington State's Alcohol and Drug Clearinghouse, and more.

Children and Family Futures, Inc., 4940 Irvine Blvd, Ste 202, Irvine, CA 92620. Ph: 714-505-3525. Fax: 714-505-3626. http://www.cffutures.org/docs/MethamphetamineList.htm.

National Alliance for Drug Endangered Children

The growing problem of children endangered by their caregivers' manufacture, distribution, and abuse of drugs is the focus of this website maintained by the National Alliance for Drug Endangered Children. Designed for law enforcement, medical, social work, and legal professionals who have responsibility for addressing the safety and service needs of these children, the site provides extensive resources, including research papers, news articles, information on training and legislative action, and links to related organizations.

*National Alliance for Drug Endangered Children. Ph: 303-517-8278.
www.nationaldec.org/index.asp.*

Join Together

In addition to providing advocacy support, technical assistance, and a variety of other services, Join Together maintains a website with a wealth of information on virtually any issue related to tobacco, alcohol or other drugs. This includes current news, research, and funding opportunities.

Join Together. Ph: 617-437-1500. Email: info@jointogether.org. www.jointogether.org.

Meth Action Clearinghouse

The National Association of Counties has developed a clearinghouse of information on methamphetamines. This website has results of research and surveys; updates on federal, state and local legislation and advocacy; recent articles and news releases; and other resources.

National Association of Counties, 440 First Street, NW, Washington, DC 20001. Ph: 202-393-6226. http://www.naco.org/Template.cfm?Section=Meth_Action_Clearinghouse&Template=/TaggedPage/TaggedPageDisplay.cfm&TPLID=74&ContentID=17541.

MethResources.gov

Jointly sponsored by the White House Office of National Drug Control Policy, Department of Justice, and Department of Health & Human Services, this website includes the following information related to methamphetamines: publications and research, upcoming conferences, programs, funding, training and technical assistance, and policy and legislation. It also includes a state-by-state list of meth-related resources.

<http://www.methresources.gov/>

Integrated Substance Abuse Programs

The website of UCLA's ISAP has a wealth of information about treatment, research and training related to substance abuse issues. It has links to numerous organizations including the Matrix Institute, and an on-line community newsletter (ISAP News), which is published quarterly.

*ISAP, Neuropsychiatric Institute and Hospital, David Geffen School of Medicine at UCLA. Ph: 310-445-0874.
<http://www.uclaisap.org/>*

OTHER RESOURCES

National Hispanic Resource Help-Line

The National Hispanic Resource Help-Line provides support for Latinos throughout the nation who need information about educational, health and human service providers. The help-line provides early intervention and resource support for individuals and families in crisis, and helps to simplify the maze of social service programs. The service reinforces the individual's capacity for self-reliance and self-determination through education, referrals, affirmation, advocacy, collaborative planning and problem solving.

*Self Reliance Foundation/Acceso Hispano, 1126 16th Street, NW, Ste 350, Washington, DC 20036. Ph: 800-473-3003. Fax: 202-637-8801.
<http://www.selfreliancefoundation.org/>.*

Adoptive Families are Families for Keeps (2nd Edition) & Tara's Guide to Adoptive Families are Families for Keeps (CD)

This activity book is designed for social workers, parents, and other caregivers to use with young children who are making the transition from foster care to an adoptive family. Children follow Tara on her journey from foster care to adoption through a series of activities and a story. The companion CD-ROM, Tara's Guide to Adoptive Families are Families for Keeps, highlights ideas and concepts from the activity book. Cost: \$24.95 (book only), \$12.95 (CD for Windows), \$34.95 (book/CD set).

*L. Cowan (2004). Groundwork Press, 2780 E Broadway, Ste 101, Vancouver, BC, Canada V5M 1Y8. Ph: 604-687-3114. Fax: 604-687-3364.
www.groundworkpress.com.*

Continued from page 23 . . .

REFERENCES

- Berger, D.S. (July/August 2004). Crystal methamphetamine and HIV—A catastrophe. *The Body: The Complete HIV/AIDS Resource*. Retrieved on March 8, 2006 from http://www.thebody.com/tpan/julaug_04/crystal_meth.html.
- Healthology, Inc. (February 14, 2006). *Club Drugs and HIV: Possible New Strain Offers Wake-up Call*. (retrieved on March 8, 2006 from <http://abc-news.go.com/Health/Healthology/story?id=499819>).
- Jernigan, T.L., Garnst, A.C., Archibald, S.L., Fennem-Notestine, C. Rivera Mindt, M., Marcotte, T.L., Heaton, R.K., Ellis, R.J., Grant, I. (2005). Effects of methamphetamine dependence and HIV infection on cerebral morphology. *American Journal of Psychiatry*, 162:1461-1472.
- Klee, H. (1992). A new target for behavioral research—amphetamine misuse. *British Journal of Addiction*, 87: 439-446.
- Molitor, F., Truax, S.R., Ruiz, J.D., & Sun, R.K. (1998). Association of methamphetamine use during sex with risky sexual behaviors and HIV infection among non-injection drug users. *Western Journal of Medicine*, 168:93-97.
- New York City Department of Health & Mental Hygiene (April 2004). Health Bulletin: Methamphetamine and HIV. *Health & Mental Hygiene News*, 3(3).
- Press Release (March 2, 2004). Crystal methamphetamine use increases HIV Risk. *Clinical Infectious Diseases*. Infectious Diseases Society of America. Retrieved on February 27, 2006, from http://www.idsociety.org/Content/ContentGroups/News_Releases/Crystal_Methamphetamine_Use_Increases_HIV_Risk.htm.
- Rawson, R.A., Washton, A., Domier, CP, and Reiber, C. (2002). Drugs and sexual effects: Role of drug type and gender. *Journal of Substance Abuse Treatment*, 22:103-108.
- Semple, S.J., Grant, I., Patterson, T.L. (2004). Female methamphetamine users: Social characteristics and sexual risk behavior. *Women & Health*, 40(3): 35-50.
- Semple, S.J., Patterson, T.L., Grant, I. (2004). The context of sexual risk behavior among heterosexual methamphetamine users. *Addictive Behavior*, 29:807-810.
- Urbina, A. & Jones, K. (2004). Crystal methamphetamine, its analogues, and HIV infection: Medical and psychiatric aspects of a new epidemic. *Clinical Infectious Diseases*, 38:890-894.
- Volkow, N.D. (April 21, 2005). *Methamphetamine Abuse—Testimony before the Senate Subcommittee on Labor, Health and Human Services, Education, and Related Agencies—Committee on Appropriations*. National Institute on Drug Abuse, National Institutes of Health, Department of Health and Human Services. (retrieved on March 8, 2006 from <http://www.drugabuse.gov/Testimony/4-21-05Testimony.html>).



CONFERENCE LISTINGS



What it Takes: Promising Practice & Collaboration for Families with Substance Abuse and Child Welfare Issues

This conference will focus on promising, field tested, emerging methods and programs for strengthening families that are struggling with child maltreatment and substance abuse issues.

DATE: May 15-17, 2006

LOCATION: Phoenix/Mesa, Arizona

SPONSORING AGENCY: American Humane Association's Rocky Mountain Quality Improvement Center

CONTACT: <http://www.americanhumane.org>

10th Annual Birth to Three Institute

The theme of this year's institute is *Continuity from Pre-Birth to Five: Enhancing Connections for Babies, Families & Communities*. A variety of training opportunities will address the diverse needs and interests of early care and education professionals working with infants, toddlers and families in Early Head Start and child care programs.

DATE: May 16-19, 2006

LOCATION: Baltimore, MD

SPONSORING AGENCY: Early Head Start National Resource Center

CONTACT: Ph: (202) 638-1144. Website: <http://www.ehsnrc.org/Activities/BirthToThreeInstitute.htm>

13th Annual National Foster Care Conference

This conference will address a wide variety of problems facing foster care specialists, foster parents and various social service professionals who want to enhance their skills in order to create the best foster home environment.

DATE: May 17-19, 2006

LOCATION: Daytona Beach, FL

SPONSORING AGENCY: Daniel Memorial Institute

CONTACT: <http://www.danielkids.org/sites/web/content.cfm?id=275>

Public Health Social Work in the 21st Century

The goal of this one-day national conference is to bring together major stakeholders to dialogue and collaborate on enhancing the visibility, revitalization, and importance of public health social work, and build the basis for future collaboration.

DATE: May 19, 2006

LOCATION: Boston, MA

SPONSORING AGENCY: Boston University Schools of Social Work and Public Health

CONTACT: www.bu.edu/ssw/mswmp

Prevent Child Abuse America National Conference

The conference theme—*America's Families: We All Play a Supporting Role*—will be brought to life by nationally renowned keynote speakers as well as 90+ workshops on a range of topics that are integral to child abuse prevention, family support, non-profit management strategies, and other related areas.

DATE: May 21-24, 2006

LOCATION: San Diego, CA

SPONSORING AGENCY: Prevent Child Abuse America

CONTACT: Ph: (312) 334-6809. Email: rloden@preventchildabuse.org. Website: <http://www.preventchildabuse.org/events/conference/index.shtml>

First North American Conference on Spirituality and Social Work

This conference will bring together American and Canadian academics, practitioners, and students to discuss the important role spirituality plays in social work practice and education. The conference theme, *The Transforming Power of Spirituality: Breaking Barriers and Creating Common Ground*, reflects an effort to remove barriers and create common ground for the international exchange across borders.

DATE: May 25-27, 2006

LOCATION: Waterloo, Ontario

SPONSORING AGENCY: Canadian Society for Spirituality and Social Work and the Society for Spirituality and Social Work (USA)

CONTACT: Email: jcoates@stu.ca or ann.nichols@asu.edu. Website: <http://people.stu.ca/~jcoates/cnssw/index.html>

HIV/AIDS 2006: The Social Work Response

The theme of this year's conference is *HIV/AIDS at Year 25: Challenges and Opportunities for Social Work*. Over 600 AIDS-care social workers are expected, and over 120 conference sessions on AIDS social work practice will be offered.

DATE: May 25-28, 2006

LOCATION: Miami, FL

SPONSORING AGENCY: Boston College Graduate School of Social Work

CONTACT: Ph: (617) 522-4038. Email: lynchw@bc.edu. Website: http://socialwork.bc.edu/wp-content/pdf/flyer_hivaid06.pdf#search='HIV%20AIDS%202006%20The%20Social%20Work%20Response'

43rd Annual Conference of the Association of Family & Conciliation Courts

This conference, *Juggling Conflict, Crises and Clients in Family Court*, brings together leading judges, mediators, parenting coordinators, custody evaluators, researchers and others.

DATE: May 31-June 3, 2006
LOCATION: Tampa, FL
SPONSORING AGENCY: AFCC
CONTACT: Ph: (608) 664-3750.
 Email: afcc@afcc@afccnet.org.
 Website: <http://www.afccnet.org/>

The 2nd International, Interdisciplinary Conference on Clinical Supervision

This conference focuses on core issues in clinical supervision that cut across professional disciplines as well as issues specific to particular fields. It provides an opportunity for psychologists (school, counseling, clinical), social workers, nurses, marriage and family therapists, psychiatrists, substance abuse counselors, speech therapists, and other mental health professionals to meet and learn from each other about current issues, practice, and research findings related to clinical supervision of students and practitioners.

DATE: June 1-3, 2006
LOCATION: Buffalo, NY
SPONSORING AGENCY: University at Buffalo and other agencies
CONTACT: Erin Bailey, U.B. School of Social Work. Ph: 716-645-3381, x276.
 Email: eedb@buffalo.edu. Website: www.socialwork.buffalo.edu/csconference

2006 Conference on Family Group Decision Making

As reflected in the theme, *We Belong Together*, this annual conference will focus on the importance of finding connections and relationships with family and the community.

DATE: June 5-8, 2006
LOCATION: San Antonio, TX
SPONSORING AGENCY: National Center on Family Group Decision Making
CONTACT: http://www.americanhumane.org/site/PageServer?pagename=pc_fgdm

National Mental Health Association Annual Meeting

This meeting focuses on strategies to grow the power, reach and effectiveness of the mental health movement in the U.S., as reflected in the theme and mission, *Building the Movement*.

DATE: June 7-10, 2006
LOCATION: Washington, DC
SPONSORING AGENCY: National Mental Health Association
CONTACT: www.nmha.org/annualmeeting

2006 Social Work Policy Conference

The conference, *Shifting the Tides: Challenges for Policy Practice*, provides opportunities to share research and evaluation findings and discuss their implications for policy development and advocacy; to examine contemporary social welfare policies and their impacts on diverse populations; to meet informally with experts in policy formulation and education; and to honor students and faculty who have successfully influenced "state policy."

DATE: June 16-19, 2006
LOCATION: Washington, DC
SPONSORING AGENCY: Virginia Commonwealth University School of Social Work
CONTACT: <http://www.vcu.edu/slwweb/PolicyConf06.html>

Children's Bureau Annual Meeting of States & Tribes

The theme of this year's annual conference is *Many Paths, One Direction: Strategies for Achieving Lasting Reform in Child Welfare*. This event will bring together invited policy makers, State, local, and Tribal child welfare directors and administrators, judges and court improvement personnel, State Liaison Officers, Federal staff, representatives of national organizations, and other partners to explore the many paths that States and Tribes have taken as they have worked to strengthen their child welfare systems—honoring what is best in their systems, while creating innovative approaches to address new challenges.

DATE: June 19-22, 2006
LOCATION: Arlington, VA
SPONSORING AGENCY: Children's Bureau, U.S. Department of Health and Human Services
CONTACT: http://www.statetribemeeting.com/conf_schedule_main.htm

American Professional Society on the Abuse of Children Annual Colloquium

This conference is a major source of information and research necessary for interdisciplinary professionals in the field of child abuse and neglect.

DATE: June 21-24, 2006
LOCATION: Nashville, TN
SPONSORING AGENCY: APSAC
CONTACT: http://apsac.fmhi.usf.edu/services/services_colloqui.asp

Parenting Traumatized Children

This 1st annual, national conference will focus on parent-oriented information and practical tools for parents and therapists/adoption professionals to use when working with traumatized children.

DATE: June 22-24, 2006
LOCATION: Norcross, GA
SPONSORING AGENCY: Attachment Disorder Network
CONTACT: <http://www.radzebra.org/events.htm>

12th Annual Drug Court Training Conference

This is the largest conference in the nation focusing on substance abuse and criminality. This year's theme is *Successful Partnering for Recovery*.

DATE: June 21-24, 2006
LOCATION: Seattle, WA
SPONSORING AGENCY: National Association of Drug Court Professionals
CONTACT: <http://www.nadcp.org/annual.html>

International Family Violence and Child Victimization Research Conference

This conference offers a unique opportunity for researchers and scientist/practitioners from a broad array of disciplines to come together for the purpose of sharing, integrating and critiquing accumulated knowledge on family violence.

DATE: July -12, 2006
LOCATION: Portsmouth, NH
SPONSORING AGENCY: University of New Hampshire
CONTACT: <http://www.unh.edu/fr/conferences>

Continued on page 30 . . .

Continued from page 29 . . .

NTACCMH Training Institutes 2006

These institutes, *Developing local systems of care for children and adolescents with emotional disturbances and their families: Family-driven, youth-guided services to improve outcomes*, provide in-depth, practical information on how to develop, operate and sustain comprehensive, coordinated, community-based systems of care, and how to provide high quality, effective, clinical interventions and supports within them.

DATE: July 12-15, 2006

LOCATION: Orlando, FL

SPONSORING AGENCY: National Technical Assistance Center for Children's Mental Health

CONTACT: www.gucchd.georgetown.edu

20th Annual Conference on Treatment Foster Care

This conference is the only North American-based annual conference developed by and for treatment foster care professionals and foster parents. This year's title is *Treatment Foster Care: Withstanding the Test of Time*.

DATE: July 16-19, 2006

LOCATION: Pittsburgh, PA

SPONSORING AGENCY: Foster Family-Based Treatment Association

CONTACT: Ph: (800) 414-3382, x121 or 113. Email: ffa@ffa.org. Website: <http://ffa.org/conference/programinformation.html>.

NIMH Annual International Research Conference on the Role of Families in Preventing & Adapting to HIV/AIDS

This conference is designed to present research findings on family processes and HIV disease.

DATE: July 19-21, 2006

LOCATION: San Juan, Puerto Rico

SPONSORING AGENCY: National Institute of Mental Health

CONTACT: <http://www.nimh.nih.gov/scientificmeetings/hivaids2006.cfm>

9th National Child Welfare Data & Technology Conference

The theme of this year's conference is *Making IT Work: Improving Data and Practice in a Time of Change*.

DATE: July 19-21, 2006

LOCATION: Washington, DC

SPONSORING AGENCY: National Resource Center for Child Welfare Data and Technology

CONTACT: http://www.nrcwdt.org/nrc_conf/pres_2006_outline.html

North American Council on Adoptable Children 32nd Annual Conference

This conference is open to everyone interested in the welfare of children and families, including adoptive, foster, and birth parents, kinship care providers, child welfare professionals, and other child advocates. It includes sessions on recruiting permanent families, adoption support and preservation, permanency options, international adoption, parenting children with challenges, advocacy and policy.

DATE: July 26-29, 2006

LOCATION: Long Beach, CA

SPONSORING AGENCY: North American Council on Adoptable Children

CONTACT: <http://www.nacac.org/conference.html>

XVI International AIDS Conference

AIDS 2006 will be a landmark opportunity for science, government, community and leadership from around the world to advance our collective response to the epidemic. The theme, *Time to Deliver*, reflects the conference focus on the promises and progress made to scale-up treatment, care and prevention.

DATE: August 13-18, 2006

LOCATION: Toronto, Canada

SPONSORING AGENCY: International AIDS Society

CONTACT: International AIDS Society, Geneva, Switzerland. Ph: +41-(0)22-7 100 800. Email: info@iasociety.org. www.iasociety.org or <http://www.aids2006.org/>

11th International Conference on Violence, Abuse and Trauma

This multi-disciplinary conference is designed to bring people, agencies and communities together to make an impact on creating violence-free homes, communities and societies.

DATE: September 14-19, 2006

LOCATION: San Diego, CA

SPONSORING AGENCY: Institute on Violence, Abuse and Trauma; Children's Institute, Inc.; and Alliant International University

CONTACT: Jacqueline Manley, Conference Coordinator. Ph: (858) 623-2777, ext. 427. E-mail: fvconf@alliant.edu. Website: <http://www.ivatcenters.org/conference.htm>

7th National Structured Decision Making Conference

This annual conference, *Daily Practice for Performance Improvement*, will provide a forum for supervisors, managers, and administrators who use SDM™ to share their experiences, insights, innovations, successes, and lessons learned.

DATE: October 3-4, 2006

LOCATION: Portsmouth, NH

SPONSORING AGENCY: The Children's Research Center

CONTACT: Angela Noel. Ph: (608) 831-1180. Website: http://www.nccd-crc.org/crc/pdf/sdm_conf_2006brochure.pdf

29th National Children's Law Conference

Information about this annual conference will be available in June.

DATE: October 12-15, 2006

LOCATION: Louisville, KY

SPONSORING AGENCY: National Association of Counsel for Children

CONTACT: Ph: (888) 828-NACC. Email: advocate@nacchildlaw.org. Website: <http://www.nacchildlaw.org/training/conference.html>

Blending Addiction Science & Practice: Bridges to the Future

For more information about this conference, go to the website listed below and join the conference mailing list.

DATE: October 16-17, 2006

LOCATION: Seattle, WA

SPONSORING AGENCY: National Institute on Drug Abuse and Alcohol and Drug Abuse Institute at the University of Washington

CONTACT: <http://adai.washington.edu/Blending2006/>



RESOURCES AND PUBLICATIONS AVAILABLE FROM THE NATIONAL AIA RESOURCE CENTER

Title of Publication	Unit Price	No. of Copies	Total Price
■ AIA Fact Sheets			
— Women and children with HIV/AIDS (February 2006)	FREE*	_____	_____
— Women with co-occurring mental illness and substance abuse (May 2005)	FREE*	_____	_____
— Standby guardianship (December 2005)	FREE*	_____	_____
— Subsidized guardianship (December 2005)	FREE*	_____	_____
— Boarder babies, abandoned infants, and discarded infants (December 2005)	FREE*	_____	_____
— Kinship care (May 2004)	FREE*	_____	_____
— Family planning with substance-using women (April 2004)	FREE*	_____	_____
— Perinatal substance exposure (February 2004)	FREE*	_____	_____
— Recreational programs for HIV-affected children and families (September 2003)	FREE*	_____	_____
— Shared family care (December 2002)	FREE*	_____	_____
■ Literature review: Effects on prenatal substance exposure on infant and early childhood outcomes (2006)	5.00	_____	_____
■ Guide to Future Care and Custody Planning for Children, with Recommendations for State Legislation (2005)	15.00	_____	_____
■ From the Child's Perspective: A Qualitative Analysis of Kinship Care Placements (2005)	5.00	_____	_____
■ Discarded Infants and Neonatacide: A review of the literature (2004)	5.00	_____	_____
■ AIA Best Practices: Lessons Learned from a Decade of Service to Children and Families Affected by HIV and Substance Abuse (2003)	10.00	_____	_____
■ Shared Family Care: Restoring Families Through Community Partnerships (2003) in VHS or CD-ROM (please circle one)	FREE*	_____	_____
■ Annual Report on Shared Family Care: Progress and Lessons Learned (2002)	10.00	_____	_____
■ Expediting Permanency for Abandoned Infants: Guidelines for State Policies and Procedures (2002)	10.00	_____	_____
■ Partners' Influence on Women's Addiction and Recovery (2002)	10.00	_____	_____
■ Voluntary Relinquishment of Parental Rights: Considerations and Practices (1999)	10.00	_____	_____
■ Integrating Services & Permanent Housing for Families Affected by Alcohol and Other Drugs (1997)	10.00	_____	_____
■ Service Outcomes for Drug- and HIV-Affected Families (1997)	10.00	_____	_____
■ Family Planning & Child Welfare: Making The Connection (Video/Guide 1997)	10.00	_____	_____
■ Shared Family Care Program Guidelines (1996)	10.00	_____	_____

* One copy free. For price of multiple copies, please contact the Resource Center.

Total Amount Enclosed _____

Look on-line (<http://aia.berkeley.edu>) for these and other publications

Name _____

Affiliation _____

Address _____

City, State, Zip _____

Phone _____



**Mail this form with your check
(made payable to UC Regents) to:**

AIA Resource Center
University of California, Berkeley
1950 Addison Street, Suite 104, #7402
Berkeley, CA 94720-7402

The Source

EDITOR: Amy Price

DESIGN: Betsy Joyce

PRINTING: Autumn Press

CONTRIBUTING WRITERS:

Sharon Amatetti
Nirmala Desai
Cheryl Gallagher
Lori Keyser-Marcus
Benita Panigrahi
Jeanne Pietrzak
Amy Price
Rakesh Rao
Dace Svikis
Martha Wunsch
Nancy Young

The Source is published by the National AIA Resource Center through a grant from the U.S. DHHS/ACF Children's Bureau (#90-CB-0126). The contents of this publication do not necessarily reflect the views or policies of the Center or its funders, nor does mention of trade names, commercial products, or organizations imply endorsement. Readers are encouraged to copy and share articles and information from *The Source*, but please credit the AIA Resource Center. *The Source* is printed on recycled paper.

AIA RESOURCE CENTER

1950 Addison St., Ste. 104, #7402
Berkeley, CA 94720-7402
Tel: (510) 643-8390
Fax: (510) 643-7019
<http://aia.berkeley.edu>

PRINCIPAL INVESTIGATOR: Neil Gilbert, PhD

DIRECTOR: Jeanne Pietrzak, MSW

ASSOCIATE DIRECTOR: Amy Price, MPA

POLICY ANALYST: John Krall, MSW

RESEARCH ASSISTANT: Janise Miri Kim, BA

TRAINING COORDINATOR: Kate Spohr, MA

SUPPORT STAFF: Paulette Ianniello, BA

GRANT ADMINISTRATOR: Elisabeth Gordon, BS



1-24175-31031-44-AOAI4
UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CA 94720-7402

Address Service Requested

A SERVICE OF THE
CHILDREN'S BUREAU

Nonprofit Org.
U.S. Postage
PAID
Berkeley, CA
Permit No. 1