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Caregiver Substance Use and Trauma Exposure in Young Children

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ABSTRACT

This study examines the differential experiences of three groups of children: children living in homes with caregivers who had used methamphetamine, those living in homes with caregivers who used other drugs, and those in homes where there was no evidence of caregiver substance misuse. A random sample of 1127 children was selected from the public child welfare log of open cases in fiscal year 2005-2006. Results indicate that caregiver methamphetamine use was a robust correlate of trauma exposure, with interpersonal violence being the most prevalent form of trauma exposure. Practice and policy implications are presented for a wide range of professionals working with these children.

Implications for Practice

- Professionals should have the capacity to routinely utilize trauma-specific evaluation and screening tools, and implement evidence-informed trauma interventions with drug endangered children.

Recent articles about current methamphetamine production, trafficking, and misuse in the United States identify these activities as "epidemics," signaling the extraordinary level of concern across multiple systems, including law enforcement; public health and behavioral health; pediatric, addiction, and emergency medicine; social services; and nursing (Grant & Lebanon, 2007; Matteucci, Auten, Crowley, Combs, & Clark, 2007; Messina, Marinelli-Casey, West, & Rawson, 2007; Swanson et al., 2007). In fact, state and federal governments have made significant efforts to regulate chemical precursors of methamphetamine production (Cunningham & Liu, 2005) as well as to provide specialized, multidisciplinary programs to identify and assist "drug-endangered children" living in homes where methamphetamine is produced and used (U.S. Drug Enforcement Administration, 2008a, 2008b).

Despite stabilization in the rates of methamphetamine use in recent years, documented cases of methamphetamine dependence have increased from 10.6% of users in 2002 to 22.3% in 2004 (U.S. Department of Health and Human Services, 2005). There are scant epidemiological data documenting the number of children affected by parental methamphetamine use (Grant & Lebanon, 2007; Messina et al., 2007). However, the damaging effects of parental methamphetamine use are well-documented in three domains: (a) prenatal exposure during pregnancy (Heller, Bubula, Lew, Heller, & Won, 2001); (b) child maltreatment and injury concurrent with parental drug trafficking and addiction (Hohman, Oliver, & Wright, 2004; Messina et al.; U.S. Department of Health and Human Services, 2003); and (c) environmental contamination through exposure to methamphetamine production (Brown & Hohman, 2006; Horton, Berkowitz, & Kaye, 2003; Otero, Boles, Young, & Dennis, 2006).

The Office of National Drug Control Policy (2007) reported that children are present in at least 20% of homes where methamphetamine production occurs. These children are at risk for inhalation, absorption, and ingestion of toxic chemicals, illegal drugs, and contaminated foods, as well as increased exposure to fires and explosions. The health consequences of these exposures include nausea, chest pain, eye and tissue irritation, chemical burns, and even death (Swetlow, 2003). Almost half of all neonates prenatally exposed to methamphetamine exhibited symptoms of withdrawal, and babies whose mothers misused drugs during pregnancy tended to be born prematurely and underweight (Richardson, Goldschmidt, & Larkby, 2007; Stewart & Meeker, 1997; Zuckerman & Bresnahan, 1991). Additionally, parental methamphetamine misuse created greater risks of child neglect, multiple forms of physical abuse including shaken baby syndrome, and increased likelihood of child welfare involvement (Hanson et al., 2006; Kyle & Hansell, 2005). As a class of addictive and illegal behaviors, methamphetamine use should be seen as a marker for the presence of other risk factors, such as maternal psychopathology and domestic violence (Tronick & Beeghley, 1999). In sum, parental methamphetamine use exposes children to the same risks as adult producers and users, as well as to additional developmental, behavioral, victimization, and mortality risks that are unique to their youth, inexperience, and other associated vulnerabilities (Messina et al., 2007).

In addition to the health and environmental risks that are documented in the literature, children exposed to parental methamphetamine use may be subjected to significant insults to their emotional well-being that threaten their psychological, developmental, and moral development. This study focuses on child exposure to traumatic events that occur

with parental substance production and use, with special focus on methamphetamine. Trauma exposure is especially problematic when it affects young children who are isolated from external monitors (e.g. school and daycare personnel), do not have the verbal skills to report their distress, live with families who lack psychosocial resources (Ehrle, Green, & Clark, 2001), are exposed to chronic environmental stress (Jaffee et al., 2005), and are moving through critical stages of neurodevelopment (Carrion, Weems, & Reiss, 2007; De Bellis, 2002). The literature is replete with examples of the deleterious effects of trauma exposure on vulnerable children (Cicchetti & Toth, 2000; Finkelhor, Ormond, & Turner, 2005; Perry, Pollard, Blakely, Baker, & Vigilante, 1995). However, few extant studies empirically establish the prevalence of child trauma exposure or the psychosocial responses of children living with caregivers who produce, traffic, and use methamphetamine.

There is mounting evidence that maltreated children who are reared in homes where their caregivers are misusing substances face a more troubled existence, with multiple exposures to traumatic stressors beyond the neglect, physical abuse, and sexual abuse experiences that bring them to the attention of child welfare services (Carlson, Smith, Matto, & Eversman, 2008; Sprang, Staton-Tindall, & Clark, 2008; Office of National Drug Control Policy, 2007). Ethnographic studies (Haight et al., 2005) and case reports (Swetlow, 2003) document incidents of trauma exposure that include domestic violence and sexual assaults by disinhibited, impulsive, and sexually aggressive methamphetamine-using caregivers; witnessing violence against siblings; exposure to dangerous weapons (such as knives, guns, bombs, and explosives); increased exposure to stranger violence due to inadequate supervision; and the trauma of removal and decontamination if exposed to dangerous chemicals such as those used to manufacture methamphetamine (Office of National Drug Control Policy, 2007). Empirical data supplied by Iritani, Hallfors, and Bauer (2007) reveal that methamphetamine users were more likely to be poor and polydrug users who engaged in high risk, illegal behaviors, thereby increasing the risk of exposure to violence and criminal activity for all children in their care. Fals-Stewart, Kelley, Fincham, Golden, and Logsdon (2004) discovered that paternal drug misuse was associated with more negative disciplinary practices and less parental monitoring than fathers who misused alcohol only or who were nonsubstance using. Not only did this study establish a link between parental behavior and substance misuse, it underscored the importance of examining the differential effects of various substances on the experiences of the children.

The substance misuse literature has utilized empirical arguments to explain the relationship between a history of trauma and health and mental health outcomes (i.e., Messina & Grella, 2006), but has not typically used trauma frameworks to organize these variables and their diachronic interactions. The absence of trauma-informed conceptual frameworks to understand the experiences of these children is especially surprising in light of the mounting scientific evidence that the psychosocial sequelae of these types of exposures profoundly shape adult development and include problems such as the propensity for high-risk behaviors (Dennis & Stevens, 2003), substance misuse (Bailey & McCloskey, 2005; Brems, Johnson, Neal, & Freemon, 2004; Dube et al., 2003; Widom, Marmorstein, & White, 2006;), alcohol misuse (Clark, DeBellis, Lynch, Cornelius, & Martin 2003; Widom, White, Czaja, & Marmorstein, 2007) and depressive disorders (Widom, DuMont, & Czaja, 2007). Nonetheless, trauma-informed conceptual frameworks are currently absent in the emerging literature about methamphetamine-affected children, which has instead focused primarily on the neurodevelopmental and physiological consequences of methamphetamine poisoning. Furthermore, there is growing evidence that many professionals do not have the specialized conceptual frameworks or evidence-based protocols necessary to respond effectively to the pediatric dimensions of this epidemic (Bratcher, Clayton, & Greeley, 2007). Community mental health professionals who serve these children after removal from their homes require such tools to properly assess and treat their clients.

In an attempt to address these problems, this study examines differences in trauma exposure rates in young children who are involved in the child welfare system, and documents the differential experiences of children with varying degrees of parental substance use. To test the utility of a trauma framework to guide the assessment and treatment of drug-endangered children, this investigation will focus on the degree to which the experiences of drug-endangered children meet the standards for trauma exposure, and will document the specific experiences of children living in homes where methamphetamine is being used.

Methods

The data collected in this study represent a random sample of all open child protection records from fiscal year 2005-2006, drawn from a master list of cases provided by a public child welfare agency in the southern region of the United States. The master list of cases was arranged alphabetically by last name of the child. Following a random start, the authors selected every 3rd case until a sample equaling 20% of all open cases was obtained. Multiple cases on the same family were included only once because the entire child protection record was evaluated, yielding information on investigations and encounters as well as all siblings in a family unit. Four randomly selected cases were blocked from electronic access and subsequently replaced by the next case on the list. A more detailed description of the sampling procedure is included in Sprang et al. (2008). The data presented in this report represents the experiences of the 1127 children selected through this process.

Measurement

Electronic data records were examined including the investigative report(s), case summaries, continuous quality risk assessments, investigative findings, service recordings, and collateral interviews, to obtain data about the type, intensity, and frequency of trauma exposure for each of the children and substance use profiles of the caregiver(s). In this study, "caregiver" refers to the individual or individuals who reside(s) in the same home as the child, and who were listed by child protective services as the adult(s) responsible for daily care and custody of the children.

Caregiver substance use and misuse. A determination was made regarding the types of illicit substances that the identified caregiver(s) used and the types of legal substances that were misused (i.e., alcohol or prescription medication) based on criminal records, caregiver reports, worker observation, drug testing results, or court records. Illicit substance use variables included marijuana, cocaine, methamphetamine, crack, heroin/opiates, hallucinogens, and inhalants. Additionally, the misuse of legal substances such as alcohol and prescription drugs including pain relievers, tranquilizers, stimulants, psychotropics, and sedatives were examined. Substance use variables were coded as both dichotomous (any use of any of the substances indicated in the file = 1, no use = 0) and as composite measures of total number of substances used.

Child trauma exposure. Each rater made a determination as to whether the exposure met the *DSM-IV-TR*'s Post-traumatic Stress Disorder Criterion A1: "The person experienced, witnessed, or was confronted

with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of others" (American Psychiatric Association [APA], 2000, p. 467). Traumatic events were classified based on lifetime exposure to physical abuse (familial and nonfamilial); sexual abuse (familial and nonfamilial); intimate partner violence (IPV); attempted murder; aggravated assault; kidnapping; torture; disasters (natural and man-made); decontamination or removal; chemical abuse (exposure to life-threatening or physically harmful toxins); child endangerment events (contact with firearms, fires, or explosions); witnessing a violent or abusive act (sibling or nonsibling); violent death of a loved one; and motor vehicle accidents. PTSD Criterion A2 was assessed using the following DSM-IV definition: "The person's response involved intense fear, helplessness or horror…in children this may be expressed instead by disorganized behavior or agitated behavior" (APA, 2000, p. 467).

These criteria were applied consistently across all cases by trained coders who indicated whether or not the event had occurred, and whether the DSM-IV-defined responses were evident in the record. In cases where there was insufficient information in the case files to make these determinations, a follow-up interview was conducted with the caseworker to collect the data. In these interviews, workers were asked (a) if there was evidence of trauma exposure (as defined above) including referrals, substantiated investigations, criminal records, caregiver reports, or observations; or (b) if they had evidence through observation or reports from trained observers (e.g., mental health professionals) that the child had responded with fear, helplessness, horror, disorganized behavior, or agitation. If needed, we provided examples of each of these responses to assist the caseworker in making this determination.

Months in out-of-home care. This measurement was calculated based on the total number of months the child spent in out-of-home care for all removals that had occurred while in the care of the identified caregiver(s).

Analytic Approach

Secondary data from The Worker Information System (TWIST) database was entered into SPSS™ 15.0 for 1127 children. Substance use variables were used to create the independent variables for this analysis: (a) no-drug-use group: caregiver drug use was not apparent based on the coded records (not including alcohol; $n = 409$); (b) meth-use group: methamphetamine use by the caregiver was endorsed in the coded record ($n = 144$); and (c) other-drug-use group: methamphetamine use by the caregiver was not endorsed, but other drug use was present ($n = 574$). Caregiver drug use groups were used to examine differences in their children's exposure to traumatic events, response to traumatic events, impairment associated with those events, and Child Protective System (CPS) outcomes via a series of chi square analyses.

Results

Sample Description

Table 1 includes demographic data for each of the caregiver drug use groups. The average age of children in this analysis was 5.1 years old, slightly more than half were male (52.6%), the majority were White (71.3%), and more than half were from urban areas (58.6%). A higher percentage of children of methamphetamine-using caregivers were White (79.9%) compared to the other-drug-use group (69.3%) and the no-drug-use group (71.1%), $\chi^2(2, N = 1127) = 6.25$, $p < .05$. A higher percentage of children of methamphetamine-using caregivers were female (54.2%) compared to the other two groups (43.9% other drug use, 49.9% no drug use), $\chi^2(2, N = 1127) = 6.47$, $p < .05$.

Type of Trauma Exposure by Caregiver Drug Use Group

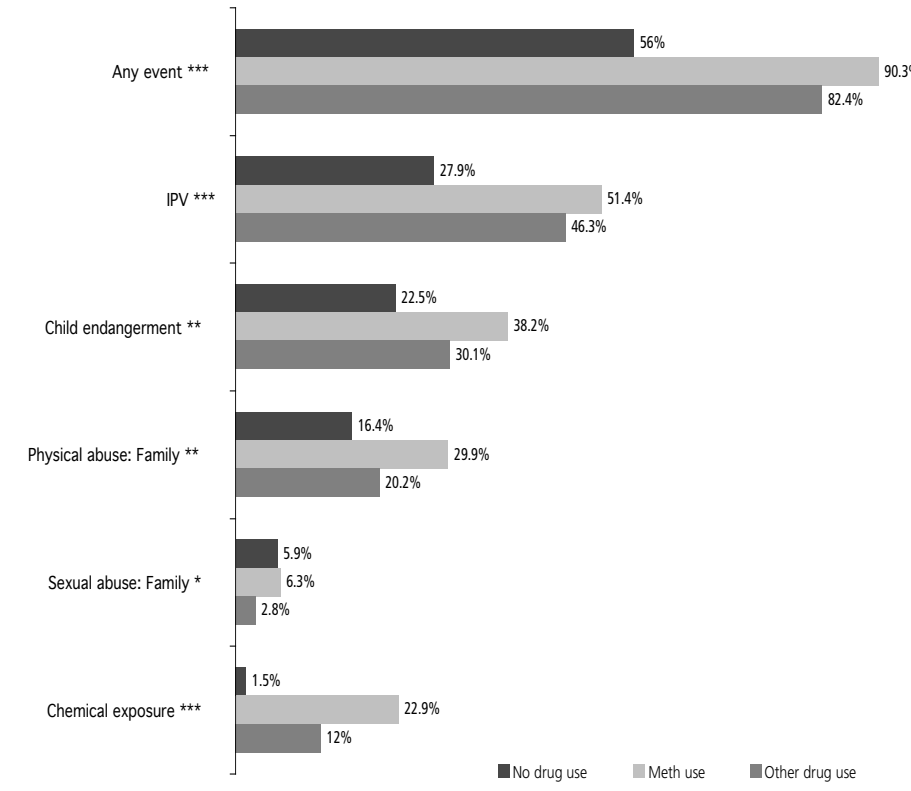
Figure 1 shows the types of traumatic events that children were exposed to by the caregiver drug use group. The majority of children of caregivers who used methamphetamine (90.3%) and 82.4% of children of caregivers who reported other types of substance use were exposed to a traumatic event. One of the most commonly reported traumatic events noted in case worker records was exposure to IPV by the caregivers. More than half (51.4%) of children in homes where methamphetamine was used by caregivers had been exposed to IPV compared to 46.3% of the other-drug-use group and 27.9% of the non-drug-use group, $\chi^2(2, N = 1127) = 42.33$, $p < .001$. In addition, a significantly higher percentage

Table 1. *Demographics of Caregiver Drug Use Groups*

Characteristics	No drug use $n = 409$	Meth use $n = 144$	Other drug use $n = 574$
Average age of child	5.2	5.2	5.1
% White*	71.1	79.9	69.3
% Male*	50.1	45.8	56.1

* $p < .05$.

Figure 1. *Exposure to traumatic events by drug user group.*



* $p < .05$; ** $p < .01$; *** $p < .001$.

of children in homes where methamphetamine was used had exposure to the traumatic events profiled in Figure 1, including child endangerment, $\chi^2(2, N = 1127) = 14.67, p < .01$); physical abuse by a family member, $\chi^2(2, N = 1127) = 12.09, p < .01$; sexual abuse by a family member, $\chi^2(2, N = 1127) = 6.89, p < .05$; and exposure to hazardous chemicals, $\chi^2(2, N = 1127) = 64.58, p < .001$.

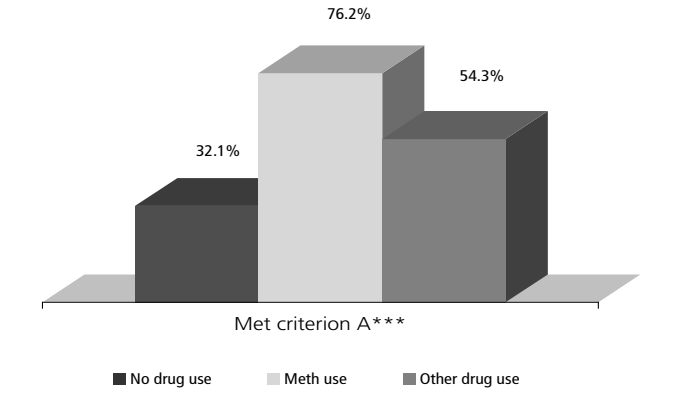
Percent Meeting DSM-IV PTSD Criterion A by Caregiver Drug Use Group

Exposure to a traumatic event was operationally defined using the event criterion from the *DSM-IV-TR* Criterion A for PTSD (see Methods section). Figure 2 shows that a significantly higher percentage of children of caregivers in the methamphetamine group met Criterion A1 and A2 compared to the other groups, $\chi^2(2, N = 923) = 82.23, p < .001$. In addition, a higher percentage of children of caregivers who used other drugs met Criterion A1 and A2 compared to the no-drug-use group.

Investigative Findings by Caregiver Drug Use Group

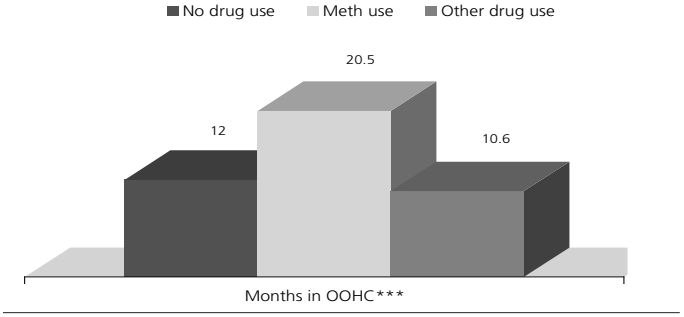
Child Protective Service records include an investigative finding for all open cases. For this sample, we examined the investigative findings of physical abuse, sexual abuse, neglect, and dependency by the caregiver drug use group. The majority of cases (83%) examined for this study involved neglect of one or more children. When examined by caregiver drug use group, a higher percentage of children in homes with methamphetamine users (88.9%) were substantiated neglect cases compared to the other-drug-use group (85.0%) and the no-drug-use group (78.0%), $\chi^2(2, N = 1127) = 12.43, p < .001$. In addition, a higher percentage of children in homes with methamphetamine users (5.6%) and the no-drug-use group (5.1%) were substantiated sexual abuse cases compared to the other-drug-use group (1.7%) $\chi^2(2, N = 1127) = 10.40, p < .01$.

Figure 2. *Percent meeting DSM-IV PTSD Criterion A by caregiver drug use group.*



*** $p < .001$.

Figure 3. *Number of months in out-of-home placement by caregiver drug use group.*



*** $p < .001$.

Months in Out-of-Home Care by Drug Use Group

Among the sample of children that were removed from the home ($n = 632$), we also examined records for the total time in the out-of-home placement. As shown in Figure 3, children of caregivers who reported methamphetamine use were in out-of-home placements a significantly greater number of months (17.80 months) compared to the no-drug-use group (3.89 months) and the other-drug-use group (6.91 months), $F(2, 1126) = 92.71, p < .001$.

Discussion

Four findings from this study investigating methamphetamine use and trauma exposure have important implications for child welfare and mental health services. First, when compared against children living with caregivers who did not misuse drugs, a significantly higher percentage of children of substance-misusing caregivers met Criteria A1 and A2 for *DSM-IV-TR* PTSD. This is a finding that has been robust across a number of risk studies comparing children living with substance-misusing and non-substance-misusing caregivers (Johnson & Leff, 1999). However, our study additionally found that a significantly higher percentage of children living with caregivers using methamphetamine met these PTSD criteria than those using other types of drugs. This finding is important because it highlights the idea that children living in "methamphetamine homes" (Bratcher et al., 2007) are more likely to experience trauma exposure than those children living with caregivers who are misusing other types of drugs. Indeed, this finding supports the public policy approach of assuming that such children are at high risk of trauma exposure—i.e., the efforts to identify such children from methamphetamine homes as "drug-endangered children" or "affected children" and the current policies in some jurisdictions that direct special funding and programming to these children (U.S. Drug Enforcement Agency, 2008a, 2008b). Additionally, this study lends support to those CPS agencies that choose to flag all children from methamphetamine homes as needing additional health and mental health attention until proven otherwise through careful evaluation (Otero et al., 2006).

Second, this study found that more than 50% of the children living in homes where methamphetamine was being used had been exposed to IPV—a significantly higher percentage than those in homes with other drug misuse (46.3%) and no drug misuse (27.9%). Children from methamphetamine homes were more likely to have been exposed to physical abuse, sexual abuse, child endangerment, and chemical exposure. This finding is important because it provides clues as to the complicated nature of children's trauma exposures. It is suggestive of an emerging picture that children removed from these homes have probably been exposed to more than one type of trauma, raising the possibility of differential and cumulated stress responses. This question warrants further attention as the experience of "complex trauma" has been identified as significantly impairing children in the diagnostic domains of attachment capacity, biomedical disorders, affect regulation problems, dissociation, behavioral control problems, cognitive impairment, and compromised self-concept (Cook et al., 2005; Complex Trauma Task Force, National Child Traumatic Stress Network, 2003).

Additionally, the fact that these children were more likely to be exposed to domestic violence is significant. IPV exposure has emerged as a particularly serious type of complex trauma exposure for young children because it insults the caregiver–child relationship during critical

periods of psychosocial development (Graham-Bermann & Edleson, 2001; Holden, Geffner, & Jouriles, 1998; Lieberman, Van Horn, & Ozer, 2005). Infants and toddlers exposed to caregiver mental health problems, substance misuse, and domestic violence have been found to demonstrate significant behavior problems as early as 3 years of age (Whitaker, Orzol, & Kahn, 2006). It should also be noted that previous research has consistently found high associations of domestic violence with child physical abuse and child mortality (English, Marshall, & Stewart, 2003). In sum, the combination of multiple traumas and exposure to domestic violence places these children in the highest risk categories assigned by child welfare, mental health, and law enforcement systems.

Third, CPS officially substantiated more children with methamphetamine-using parents as sexual abuse victims (5.6%) than those children in the two other groups. However, the highest number of children living in methamphetamine homes were ultimately classified as neglect cases (88.9%) despite the fact that those children experienced significantly high levels of psychological insult through trauma exposure. The statutory category of neglect is an important category of child maltreatment, but unfortunately often connotes a caregiver's inadequate management of a child's basic human needs as opposed to exposure to events such as physical abuse or sexual abuse, which strongly communicate that the child incurred tangible injuries (Smith & Fong, 2004). As McSherry (2007) has argued, societal appraisals of child neglect have resulted in "making a mole-hill out of a mountain" (p. 607). Fortunately, recent theoretical and empirical investigations have begun to illuminate that, generally speaking, child neglect is indeed a maltreatment category and can generate significant, deleterious, and lifespan consequences for children (DeBellis, 2005; Glaser, 2000) and as illustrated by these findings, includes a range of experiences.

Finally, we note that of the children in our sample who were removed from their homes across all categories, those removed from methamphetamine homes remained in state CPS custody for significantly longer periods of time than those removed from homes with other drug misuse or those with no drug misuse. While our data does not delineate the reasons for this difference, the evidence developed by other research investigations leads us to believe that the reasons are related to the severe biopsychosocial consequences of methamphetamine use on adult caregivers' functioning, the high level of prosecutorial action currently being directed against offenders, and the severity of the biopsychosocial injuries sustained by children removed from these homes. Like other serious addictions, *DSM-IV-TR* Methamphetamine Dependence (for those who meet this criteria) is a disorder associated with high relapse rates, and it demands specialized evidence-based treatment and recovery resources that may not be readily available to drug users with special needs who are living in rural areas or other jurisdictions with limited resources (Borders & Booth, 2007; Clayton, McBride, Roberts, & Hartsock, 2007; Falck et al., 2007; Gfroerer, Larson, & Colliver, 2007).

Unlike many neglect cases, where rehabilitation, parent training, and resource allocation can address the etiology of the substantiated problem, the child neglect cases associated with methamphetamine use often involve a constellation of highly complex legal trajectories, biomedical disorders, and psychosocial problems that usually cannot be addressed quickly (Iritani et al., 2007). Our findings indicate that this does not simply reflect the difference between substance misusing caregivers and nonmisusing caregivers. Methamphetamine-using caregivers in our sample are taking much longer to meet reunification criteria than even those caregivers misusing other drugs. We believe this is due to the global cognitive and other central nervous system impairments of adults either actively using methamphetamine or those who are in early stages of abstinence and treatment, as well as the absence of any integrative pharmacological and psychosocial treatment approach that has proven effective in addressing these multiple impairments (Homer et al., 2008; Rawson, Gonzales, & Brethen, 2002; Winslow, Voorhees, & Pehl, 2007). Additionally, child welfare cases involving caregiver methamphetamine use demand additional financial and professional resources to support the required "comprehensive integrated services strategy" (Otero et al., 2006, p. 14). This finding also has important ramifications for judicial and social service systems operating in jurisdictions with high rates of caregiver methamphetamine use when they attempt to meet the permanency guidelines stipulated in the American Safe Families Act (ASFA).

Limitations

Some researchers have recently warned against the scientific community becoming caught up in the "epidemic" or "plague" model of understanding methamphetamine use and trafficking by homogenizing study populations that might actually be more complex (Garrity et al., 2007). Such scientific caution is warranted, and there are a few caveats that we present regarding this study. First, the use of archival data limited our ability to capture contextual variables and processes not identified already in the CPS records, and as we have noted elsewhere (Sprang et al., 2008), the quality of these records probably are affected by the absence of systematic and routine assessment approaches. Additionally, our use of records might mean we have not identified areas of subjective distress that might be otherwise reported by children through interviewing, survey methods, or data collection using different protocols. Further, this approach did not allow us to identify and model potential mediating variables that would further explicate the complex trauma phenomena suggested by this study, as well as individual differences in vulnerability and resilience among the children in the sample.

The use of Criterion A as our standard for categorizing trauma exposure and response might also be problematic in light of the controversies involved in applying adult PTSD criteria delineated in the *DSM-IV-TR* to children, even though this is routinely done in scientific investigations and clinical settings. Nonetheless, this points to the current lack of tested measures for childhood trauma exposure, and opens up such efforts to the possibility of measurement error. Sibling groups were not excluded from the data set, introducing the possibility that all observations were not truly independent. However, according to findings from a study of 368 families from the National Survey of Children (Daniels, Dunn, Furstenburg, & Plomin, 1985), there can be a high degree of variability in the experiences of siblings within a family unit based on a constellation of factors including parental love, favoritism, sibling jealousy, and the qualities and behaviors of the primary caregiver in a child's life during critical developmental periods.

Finally, while we were unable to collect reliable socioeconomic status (SES) data from adults, it should be noted that the sampling frame from which we randomly selected cases was representative of the child welfare population, which is indisputably below the poverty line. Thus, our sample drew from poor families as opposed to children of misusers from middle or high SES populations. However, community epidemiological research points to methamphetamine misuse as typically a low SES phenomenon (Iritani et al., 2007) and a recent study of 710 rural methamphetamine misusers conducted in the same region as our investigation reported that less than one third of study participants held full-time employment 30 days before entering the study (Falck et al., 2007).

Implications for Practice

Child protective workers and social work clinicians need specialized skills to assess and treat drug-endangered children accurately and effectively, especially those children raised in homes where methamphetamine was used or manufactured. Trauma-informed training programs that are available through national resource centers such as the National Child Traumatic Stress Network may be useful tools for helping child welfare professionals and community-based providers acquire these skills. The picture that continues to emerge from scientific investigations, including this study, is that these children suffer from complex trauma disorders, which are often underidentified and difficult to treat. Meanwhile, their adult caregivers who use methamphetamine are themselves profoundly compromised by the biopsychosocial sequelae of their use, often confront serious criminal justice consequences, and face limited prospects as they seek effective treatment and recovery programs. This status suggests poor prognosis for efficient, predictable, and timely CPS reunification of children and caregivers.

At the same time, CPS and other professionals who use the trauma framework recommended here must recognize that child safety should be ensured through preventing traumatic re-exposures during visitation, and by managing child trauma problems effectively through referrals to providers who are qualified to provide evidence-based trauma treatment. Community-based social workers, program directors, and administrators are the professionals most likely to be providing behavioral health services for these CPS-referred children and their families (Leslie et al., 2007). The findings of this study clarify why child welfare and social work professionals should routinely utilize trauma-specific evaluation and screening tools, and implement evidence-informed interventions with drug endangered children. However, a number of national commissions have identified that the use of such evidence-informed approaches are the exception and not the rule (Knitzer & Cooper, 2006). In the rural state where this study was conducted, research recently demonstrated that mental health providers usually practiced as generalists, and were not using trauma-informed, evidence-based practices to treat children (Sprang, Craig, & Clark, 2008). However, on a hopeful note, the researchers also found that an increased utilization of evidence-based interventions was highly correlated with increased clinician training. This finding suggests that social work professionals will probably adopt demonstrably effective child assessment and treatment practices if training opportunities are provided and utilized. Furthermore, it is essential that intervention researchers develop, adapt, and test new approaches that address co-occurring child maltreatment and substance misuse (Donohue, Romero, & Hill, 2006). But it must also be emphasized that effective mental health treatment alone is insufficient, because highly vulnerable children and families require enhanced public health attention and community-level resource provision (Furumoto-Dawson, Gehlert, Sohmer, Olopade, & Sacks, 2007; Schroeder, 2005).

Finally, if the findings of high levels of traumatic exposure and the risk for future distress experienced by the drug-endangered children involved in this study are replicated in additional studies of this population, the urgent need for child welfare and mental health professionals to utilize child trauma frameworks will become even more evident. This realization will necessitate enhanced education, training, protocol development, and resource allocation cross systems of care.

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