Substance Abuse among Caregivers of Maltreated Children

Claire B. Gibbons\textsuperscript{a}, Richard P. Barth\textsuperscript{b}, & Sandra L. Martin\textsuperscript{a},

\textsuperscript{a}School of Public Health, University of North Carolina, Chapel Hill
\textsuperscript{b}School of Social Work, University of North Carolina, Chapel Hill

Corresponding Author:
Claire B. Gibbons, M.P.H.
Doctoral Candidate
Department of Maternal and Child Health
University of North Carolina at Chapel Hill
Rosenau Hall, CB #7445
Chapel Hill, NC 27599-7445
phone: (919) 484-3164
fax: (919) 966-0458
email: cgibbons@email.unc.edu

KEY WORDS: substance abuse, child maltreatment, child welfare

Preparation of this article was assisted by a grant from the Robert Wood Johnson Foundation Substance Abuse Policy Research Program (547927). Use of the National Survey of Child and Adolescent Well-Being (NSCAW) was facilitated under a contract from the Administration on Children, Youth, and Families, U.S. DHHS. The opinions contained herein are solely those of the author(s), and may not be those of RWJF or ACF/DHHS.

Child Abuse and Neglect, resubmission under review
Substance Abuse among Caregivers of Maltreated Children
Abstract

Objective: The purpose of this study was to measure the prevalence of substance abuse by in-home caregivers of maltreated children, and to compare the prevalence of self-reported substance abuse to child welfare worker-identified substance abuse.

Method: Data from the National Survey of Child and Adolescent Well-Being, a national probability sample of children investigated for child maltreatment were analyzed. Substance abuse was measured using the Composite International Diagnostic Interview Short Form (CIDI-SF) and questions from the child welfare worker interview. The sample consisted of 4073 families whose children lived at home.

Results: 9.6% of caregivers had a problem with alcohol or drugs according to the child welfare worker assessment, and only 3.9% of caregivers were alcohol or drug dependent according to the CIDI-SF. Overall, 11.1%, or 234,851, of caregivers whose children live at home with them have a substance abuse problem. Child welfare workers did not identify a substance abuse problem among 61% of caregivers who met DSM-IV criteria for alcohol or drug dependence.

Conclusion: These findings suggest that substance abuse rates may not be as high in the child welfare population as often believed. Still, child welfare workers need more training in identifying substance abuse problems among their clients and methods to identify substance abuse early in the service delivery process.
Introduction

Over the past two decades, caregiver substance abuse (i.e., abuse of substances by the child’s parent or guardian) has been considered to be at least responsible for much of the child maltreatment reported to child welfare services. There are many mechanisms that explain how caregiver substance abuse might contribute to child maltreatment. For instance, some researchers have observed that in-utero exposure to cocaine and other drugs can lead to congenital deficits in the child, which may make the child more difficult to care for and therefore more prone to child maltreatment (Black & Mayer, 1980; Magura & Laudet, 1996). Studies also have shown that parenting skills can suffer among substance-abusing parents. For example, some researchers have found that substance-abusing mothers are less responsive to their infants (Magura & Laudet, 1996). Caregivers who abuse substances also may prioritize their drug use more highly than caring for their children, which can lead to lack of attention to children’s needs for such things as food, clothing, hygiene and medical care (Black & Mayer, 1980; Magura & Laudet, 1996). Finally, some have found that violence is more likely in homes where stimulant drugs and alcohol are used (Famularo, Kinscherff & Fenton, 1992; Magura & Laudet, 1996).

Studies that have examined the prevalence of substance abuse among caregivers who have maltreated their children have found widely varying rates of caregiver substance abuse. Previous estimates have ranged from 19 percent (Pierce & Pierce, 1985) to 79 percent (Besinger, Garland, Litrownik & Landsverk, 1999). One widely quoted estimate of the prevalence of substance abuse among caregivers involved in child welfare is that “…40 to 80 percent…” of caregivers have a substance abuse problem (Young, Gardner, & Dennis, 1998).
Indeed, many previous studies have found a strong positive association between caregiver substance abuse and child maltreatment. For example, one large community based study (namely, the Epidemiological Catchment Area study) of 4,000 non-institutionalized parents found that 40% of respondents who reported that they had abused their child in the previous 12 months had an alcohol or drug disorder compared to 16% of respondents who did not report abusing their children in the previous 12 months (Kelleher, Chaffin, Hollenberg, & Fischer, 1994). Furthermore, 56% of respondents who had neglected their children had an alcohol or drug disorder compared to 17% who had not neglected their children. Pierce and Pierce analyzed 205 substantiated sexual abuse cases reported to a child abuse hotline in Missouri between 1976 and 1979 (1985). They found that 19% of the caregivers were described by the child abuse hotline workers as having a drinking problem. In addition, the Child Welfare League of America conducted a survey in 1992 of child welfare workers within public and non-profit child protective service agencies that were members of the league (Curtis & McCullough, 1993). They found that 37% of the children served by public agencies and 57% of children served by non-profit agencies were “…affected by problems associated with alcohol or other drugs.” Finally, in a study sponsored by the National Center on Child Abuse and Neglect, child welfare workers were asked to identify adults in their caseloads who had either suspected or known alcohol or illicit drug abuse problems (US DHHS, 1993). They found that in 29% of the cases a family member abused alcohol and in 18% of the cases at least one adult abused illicit drugs.

Studies have also shown that substance abuse plays an important role among families whose children are placed in foster care. For example, McNichol and Tash studied the effect of parental substance abuse on 268 children in family foster care in southern California (2001). They found that 8% of children were placed due to prenatal exposure
to illegal drugs and another 14% were placed due to parental substance abuse. In addition, Besinger and her colleagues found that 79% of the 639 children who entered out-of-home care in San Diego County between 1990 and 1991 had caregivers who abused substances (1999).

These studies have clearly established a positive relationship between caregiver substance abuse and child maltreatment among children in out-of-home care and among children in the general population. However, one important group of children has been omitted from previous research: children involved with the child welfare system who live at home. All of the previous studies focused on families with children living in foster care, on families with children who are at high risk of being placed in foster care, or on a mixture of families with children living at home and families with children living in foster care. It is vitally important to understand the prevalence of substance abuse among families involved in the child welfare system whose children live at home. It is particularly important to study these families because most children who become involved with child welfare services continue to live at home. Only about 19 percent of investigated reports of maltreatment result in children placed in foster care (US DHHS, 2003). Although children living with parents abusing illegal substances are probably more likely than other children to enter foster care, many of these children will remain at home (Beckwith, Howard, Espinosa, & Tyler, 1999; Suchman & Luthar, 2000).

Although children living at home after a report of child maltreatment remain at high risk for repeat reports of abuse or neglect (Fluke, Yuan, & Edwards, 1999), we were unable to identify any study that examined the prevalence of substance abuse among families who are involved with child welfare services and whose children live at home. In addition, despite considerable discussion in the older literature about child welfare
workers’ lack of training in the addictions (Curtis & McCullough, 1993), and a general discomfort among child welfare workers in working with caregivers who have substance abuse problems (Thompson, 1990; Tracy & Farkas, 1994), less has been done recently. Further, the authors located only two previous studies that examined how well child welfare workers identified caregiver substance abuse problems (English & Graham, 2000; Kagle, 1987). Although these studies provide some indication that child welfare workers are not identifying many cases of substance abuse in families in the child protective system, the study designs were somewhat limited. One of the investigations did not use a standardized questionnaire to identify substance abuse problems, and the sample size was very small (Kagle, 1987). The other study also had a relatively small sample size of 261 children in a single geographic location in the Northwest (English & Graham, 2000).

The present study seeks to expand the literature by examining the prevalence of caregiver substance abuse among children who live at home using data from the National Survey of Child and Adolescent Well-Being (NSCAW), a nationally representative sample of 5,504 families who have been investigated by Child Welfare Services (CWS) for child maltreatment. This analysis focuses on caregivers in the NSCAW sample whose children live at home with them (termed “in-home caregivers”). The in-home caregiver for the vast majority of children is their biological parent. The analysis includes both open cases (those that received some type of service beyond the CWS investigation) and closed cases (those that did not receive any services after the CWS investigation). The NSCAW sampling frame, the child welfare worker interview, and the caregiver interview were all used to determine whether the family or child received services. This study will also compare the prevalence of self-reported caregiver
substance abuse to the prevalence of child welfare worker identified substance abuse.

There are two research questions in this study:

1. Among families involved with the child welfare system, what proportion of the children's caregivers have substance problems based on:
   a. The assessment performed by the child welfare workers?
   b. The assessment of a standardized measure of substance dependence, namely, the alcohol and drug scales on the Composite International Diagnostic Interview (CIDI-SF)?
   c. The assessment of both the child welfare workers and the CIDI-SF?

2. How well do the child welfare workers’ assessments of substance dependence agree with the standardized measure of substance dependence (the CIDI-SF)?

**Methods**

**Subjects**

NSCAW participants consist of a nationally representative sample of 5,504 children from 36 states, ages 0 to 14 years, whose families were investigated by CWS for child maltreatment between October 1999 and December 2000. The NSCAW sample was selected using a two-stage stratified sampling design. Children were excluded from the study if a sibling had already agreed to participate in the study, if a child was the perpetrator of the maltreatment, if the child was more than 14 years old, and if the referral to CWS was screened out (i.e., the alleged maltreatment did not meet the criteria for child abuse or neglect as defined by the state, or too little information was reported to CWS to justify pursuit of the case). Families who were receiving child welfare services, infants, and sexually abused children were oversampled to generate accurate national estimates of the developmental status, service receipt and child welfare history of
children whose caregivers had been reported to CWS for allegedly maltreating their child.

This analysis focuses on 4,037 families from the NSCAW sample, specifically families in which the children remained in the homes of their caregivers (i.e., the children were not placed in foster or kin care). Children were fairly evenly distributed by age, with approximately 17% between 0 and 2 years old, 21% between 3 and 5 years old, 37% between 6 and 10 years old and 24% between 11 and 14 years old. The majority of children (47%) were White/non-Hispanic, with about one-quarter (27%) Black/non-Hispanic, one-fifth (19%) Hispanic, and 7% of some other race/ethnicity. Half of the children were male. The majority of the caregivers were less than 35 years old (64%), about one-quarter (28%) were between 35 and 44 years old, 7% were between 45 and 54 years old, and just under 2% were over 54 years old. Ninety percent of the caregivers were female.

Measures

Composite International Diagnostic Interview Short Form. The Composite International Diagnostic Interview Short Form (CIDI-SF) was used to measure alcohol dependence and drug dependence of the children’s caregivers. The CIDI-SF was developed for use in the National Health Interview Study as a brief measure of the most commonly occurring psychiatric disorders that are assessed by the original interview (Walters, Kessler, Nelson, & Mroczek, 2002). The CIDI-SF asks the caregiver about his/her substance use during the 12 months prior to the interview. As part of NSCAW’s baseline data collection, the CIDI-SF was administered to all caregivers whose children lived at home with them at the time the interview (it was therefore not administered to foster parents). To maximize the respondent’s privacy, the CIDI-SF was administered
using an Audio Computer Assisted Self-Interview (ACASI). This format likely increased
the caregiver’s willingness to report socially unacceptable behavior, because the
caregiver used a laptop computer with headphones to answer the substance abuse
questions. The questions were spoken to the caregiver through the headphones and the
caregiver answered the questions using the keyboard.

The CIDI-SF section that assesses alcohol problems first screens the respondents to
determine whether they have used alcohol in the past 12 months. The alcohol screen
asks “What is the largest number of drinks you had in any single day during the past 12
months?” If the respondent answers that s/he has had 4 or more drinks in a day, s/he
has a “positive screening result” and will continue on to complete the alcohol
assessment. Caregivers included in the “positive screen” category are only those who
screened positive but did not go on to meet the criteria for dependence. The alcohol
assessment is comprised of seven questions that correspond to the seven criteria for
alcohol dependence defined by the fourth version of the Diagnostic and Statistical
Manual of Mental Disorders (DSM-IV) (e.g., “During the past 12 months, was there a
time when you drank more alcohol than you intended to or drank longer than you
intended to?”). Each of the seven questions to which the respondent answered “yes” is
given a score of one, while “no” responses are scored zero. The scores for each of the
seven questions are summed to calculate a risk score that can range from zero through
seven. Scores of 3 or higher denote alcohol dependence (Walters, Kessler, Nelson &
Mroczek, 2002).

Similarly, the CIDI-SF drug assessment first screens the respondents to determine
whether they have used any illegal drugs during the previous 12 months (i.e., marijuana,
cocaine or crack, LSD or another hallucinogen, and heroin). The drug assessment also
screens respondents to determine whether they have used legal drugs without a doctor’s prescription, in larger amounts than prescribed, or for a longer period than prescribed (including sedatives, tranquilizers, stimulants, analgesics or other prescription painkillers, or ‘inhalants that you sniff or breathe’). Illegal drugs included in the screening question are: marijuana, cocaine or crack, LSD or another hallucinogen, and heroin. If the respondent reports use of any of these substances in the previous 12 months, s/he has a “positive screening result” and will continue on to complete the drug assessment. The seven questions about substance-related behavior following the drug screen are similar to the seven questions that follow the alcohol screen. The scoring procedure is also the same.

**Child Welfare Worker Assessment of Substance Abuse.** The baseline child welfare worker interview contained two questions about substance abuse by the children’s caregivers, specifically: “At the time of the investigation, was there active alcohol abuse by the caregiver?” and “At the time of the investigation, was there active drug abuse by the caregiver?” Child welfare workers’ responses to these two questions will be used to examine the child welfare workers’ assessment of caregiver substance abuse.

NSCAW received Institutional Review Board (IRB) approval from the Research Triangle Institute and the University of North Carolina at Chapel Hill. It also received clearance from the Office of Management and Budget. This study received additional IRB approval from the University of North Carolina at Chapel Hill.

**Analysis**

The prevalence and corresponding standard error of a substance abuse problem (either alcohol or drug) is calculated using the child welfare worker assessment of substance
abuse and the CIDI-SF. These prevalence estimates are stratified by case status (open vs. closed) and chi-square tests are conducted to determine whether the prevalence of substance abuse problems vary by case status. The prevalence of a substance abuse problem identified by the child welfare worker assessment of substance abuse only, identified by the CIDI-SF only, and the prevalence of substance abuse problems identified by both the child welfare worker assessment of substance abuse and the CIDI-SF are similarly calculated. Next, the Kappa statistic is used to determine the level of agreement between the child welfare worker assessment of substance abuse and the CIDI-SF (Hasin, McCloud, Li, & Endicott. 1996; Rosner, 1995). In addition, the proportion of caregivers who screen positive for substance abuse problems on the CIDI-SF, or who are self-identified as alcohol or drug dependent on the CIDI-SF, that are also identified by the child welfare worker is calculated. Chi-square tests are used to determine whether there are significant differences between open and closed cases. Finally, the proportion of alcohol problems and drug problems identified by child welfare workers are stratified by the score on the CIDI-SF alcohol or drug assessment. Chi-square tests are calculated to determine whether the CIDI-SF score is associated with child welfare worker identification of substance abuse problems.

Results

At the time of the child welfare services' investigation, the child welfare worker assessment reported that 5.8% of caregivers were actively abusing alcohol, 5.8% were actively abusing drugs, and 9.6% were actively abusing some type of substance (either alcohol or drugs) (Table 1). Child welfare workers were significantly more likely to identify alcohol problems, drug problems, and any substance problems among open cases than among closed cases. For example, child welfare workers reported caregiver alcohol problems for 12.6% of open cases, but only 3.3% of closed cases ($\chi^2=27.1$,
Similarly, child welfare workers reported drug problems for 12.1% of open cases but only 3.5% of closed cases ($\chi^2=24.6, p<.001$). Overall, child welfare workers reported substance problems for 19.8% of open cases and only 5.8% of closed cases ($\chi^2=37.6, p<.001$).

In contrast, the CIDI-SF classified 2.2% of caregivers as alcohol dependent, 2.8% as drug dependent, and 3.9% as being substance dependent (either alcohol or drug dependent) in the past 12 months. The likelihood of CIDI-SF self-reported alcohol or drug dependence did not differ significantly by case status. That is, when assessed with a chi-square test, there were no significant differences between the proportion of caregivers who self-reported alcohol dependence, drug dependence or substance dependence on the CIDI-SF by whether the child welfare case was open or closed. A higher proportion of caregivers had a positive screen for substances: 7.3% consumed four or more alcoholic drinks in a single day in the 12 months prior to the interview, 18.3% reported using drugs in the 12 months prior to the interview, and 23.9% had a positive screen for either alcohol or drugs. There were no significant differences between open and closed cases.

There was little overlap in the caregiver substance abuse categorization of the child welfare worker compared to the CIDI-SF. Less than one percent of caregivers were identified by both the child welfare worker assessment and the CIDI-SF as having an alcohol problem (0.6%) or having a drug problem (0.7%). Just over one percent of caregivers were identified by the child welfare worker and the CIDI-SF as having a substance problem (1.4%). Open cases were significantly more likely to be identified by both the child welfare worker assessment and the CIDI-SF as having a drug problem ($\chi^2=8.34, p<.01$) and as having a substance problem ($\chi^2=13.42, p<.001$).
Kappa statistics that measure the level of agreement between the child welfare workers’ and the CIDI-SF’s assessment of substance problems among the children’s caregivers are presented in Table 2. Although there is slightly more agreement between the child welfare workers’ assessment and the CIDI-SF for drug problems compared to alcohol problems, all of the Kappa’s are below .4, which indicates that there is a very low level agreement between the two types of assessments (Rosner, 1995).

When the child welfare workers’ assessments were examined in combination with the CIDI-SF findings, only 14.1% of the caregivers who screened positive on the CIDI-SF alcohol screen (i.e., they drank at least 4 drinks in one day in the past year) were identified by the child welfare worker assessment as having an alcohol abuse problem (Table 3). Open cases were significantly more likely to be identified by the child welfare worker compared to closed cases. For example, 25.2% of open cases, but only 10.6% of closed cases that were positive on the CIDI-SF alcohol screen were identified by the child welfare worker as having an alcohol abuse problem ($\chi^2=7.38$, $p<.01$). Only 29.4% of caregivers who were classified as alcohol dependent on the CIDI-SF were identified by the child welfare workers as having an alcohol abuse problem; furthermore, there was no significant difference by case status in the child welfare worker identification of alcohol abuse problems within this subgroup.

Table 3 also shows that only 13% of caregivers who were positive on the CIDI-SF drug screen (i.e., they used some type of illegal drug or inappropriately used prescription or other drugs) were also identified by the child welfare workers as having a drug problem, with open cases being significantly more likely to be identified by the child welfare workers than closed cases. For example, 23.1% of open cases, but only 8.1% of closed
cases that screened positive on the CIDI-SF drug screen were also identified by the child welfare worker as having a drug abuse problem ($\chi^2 = 9.98, p < .01$). Child welfare workers were generally able to identify more of the caregivers with a drug dependency: 27.4% of caregivers who were classified as drug dependent were also identified by the child welfare workers as having a drug problem. Fifty-two percent of drug dependent caregivers with open cases were also identified by the child welfare workers as having a drug abuse problem, but only 16.5% of drug dependent caregivers with closed cases were also identified by the child welfare workers as having a drug abuse problem.

Finally, only 17.9% of caregivers who screened positive for either alcohol or drugs on the CIDI-SF were identified by the child welfare workers as having a substance problem. Open cases were significantly more likely to be identified by the child welfare workers than closed cases. For example, 31.9% of open cases, but only 12.1% of closed cases were classified by both the CIDI-SF and the child welfare workers as having a substance problem ($\chi^2 = 9.02, p < .01$). More of the caregivers with alcohol or drug dependencies were identified by child welfare workers. Overall, 39% of caregivers with an alcohol or drug dependency were also identified by the child welfare worker as having a substance problem. Again, open cases were significantly more likely to be identified by the child welfare workers than closed cases. That is, 64% of open cases, but only 28.2% of closed cases were classified by both the CIDI-SF and the child welfare workers as having a substance problem.

To examine whether child welfare workers were more likely to identify a substance abuse problem among caregivers with higher CIDI-SF scores, the proportion of alcohol problems identified by the child welfare workers for each CIDI-SF score was calculated. In general, alcohol problems are more likely to be identified by the child welfare workers
for those caregivers with higher CIDI-SF scores (χ²=24.74, p<.01) (Table 4). For example, only 4.9% of caregivers with a CIDI-SF alcohol score of zero were identified by the child welfare workers as having an alcohol problem while 54.2% of caregivers with a CIDI-SF alcohol score of 7 were identified by the child welfare workers as having an alcohol problem.

Similarly, child welfare workers are more likely to identify a drug problem among caregivers with higher drug scores on the CIDI-SF (χ²=28.26, p<.001) (Table 4). For example, only 4.5% of caregivers with a CIDI-SF drug score of zero were identified by the child welfare workers as having a drug abuse problem while 16.9% of caregivers with a CIDI-SF drug score of 7 were also identified by the child welfare workers as having a drug problem.

Discussion

This is the first study to use a national probability sample to examine the prevalence of substance abuse among families involved in the child welfare system whose children live at home. It is also the first study using a national probability sample that compares caregivers’ self-reported substance abuse with the child welfare worker’s assessment of caregivers’ substance abuse. According to the child welfare worker assessment, 9.6% of caregivers had a substance abuse problem (alcohol or drugs) at the time of the child welfare investigation, but according to the caregivers on the CIDI-SF, 23.9% screened positive for alcohol or drug problems, and 3.9% were alcohol or drug dependent. Altogether, 11.1% of caregivers were found to have a substance abuse problem (either by self-report on the CIDI-SF or child welfare worker report). Although our estimates are lower than many previous estimates (US DHHS, 1999; Young, Gardner, & Dennis, 1998), we still find that substance abuse among caregivers who have been investigated
for maltreatment is a significant problem. Overall, we found that 11.1%, or 234,851 caregivers whose child (or children) live at home with them have a substance abuse problem. We therefore conclude that substance abuse among caregivers involved with child welfare is a very significant problem. For example, 3.9% of caregivers in our study reported being alcohol or drug dependent on the CIDI-SF. This is a rather small percentage, but it represents over 81,000 families whose children live at home with an alcohol or drug dependent primary caregiver and who were investigated for alleged maltreatment. Similarly, 9.6% of caregivers were reported by the child welfare worker to be actively abusing alcohol or drugs at the time of the child welfare investigation. This represents over 183,000 families.

Reasons for the lower prevalence estimates in the present study compared to earlier studies are likely due to differences in sampling. The present study was limited to families whose children lived at home. In contrast, many previous estimates that are much higher than ours came from studies conducted among children in foster care, or who were at very high risk of being placed in foster care (Besinger, Garland, Litrownik & Landsverk, 1999; Famularo, Kinscherff, & Fenton, 1992; Famularo, Stone, Barnum & Wharton, 1986; Murphy, et al., 1991). In addition, most earlier studies were limited by small sample sizes with exclusively urban settings. The present study provides estimates using a large, nationally representative sample of families who have been investigated for alleged child maltreatment.

Moreover, the findings of this study may differ from past studies due to differences in the definition of “substance abuse problem.” For example, Murphy and his colleagues (1991) considered substance abuse problems to exist only if they were noted in a written report by a psychiatrist or psychologist, or if the court ordered screening for substance abuse.
Other studies use the child welfare worker’s judgment of whether a caregiver has a substance abuse problem. In these studies substance abuse was “defined” by the child welfare worker or psychologist themselves (Curtis & McCullough, 1993; Pierce & Pierce, 1985; US DHHS, 1993; US DHHS, 1999). The present study used three definitions of substance abuse problems: the first by asking the child welfare worker whether the primary caregiver abused alcohol or drugs at the time of the investigation, the second by measuring the proportion of caregivers with a positive screen, and the third by measuring substance dependence according to a clinical definition (3 or more DSM-IV criteria). Finally, some previous studies limited their samples to substantiated cases only. The present study included both substantiated and unsubstantiated cases.

We also found that caregivers do not identify a substance abuse problem among the majority of caregivers who self-report that they are alcohol or drug dependent. Overall, only 39% of caregivers who self-report that they are alcohol or drug dependent are identified by the child welfare worker as having a substance abuse problem. Although we cannot expect child welfare workers to identify all caregivers with substance abuse problems (caregivers may be very adept at disguising their problem), we would expect that if any caregiver is identified, it would be those who are so involved with alcohol or drugs that they meet the DSM-IV criteria for substance dependence. This finding is particularly disappointing given all of the efforts made in the past decade or more to educate child welfare workers and substance abuse counselors about the overlap between the two systems (US DHHS, 1999; Young, Gardner, & Dennis, 1998).

Interpreters of these findings must recognize the methodological limitations of this investigation. One limitation of this study is the possible under-reporting of substance abuse problems by caregivers on the CIDI-SF and the child welfare worker assessment.
The CIDI-SF is based on caregiver self-report of substance use, which makes it particularly vulnerable to under-reporting of substance involvement. Research shows that respondents usually wish to present themselves in a socially desirable way and may therefore alter their responses to be more socially acceptable (Richter & Johnson, 2001). The likelihood that a caregiver may under-report substance involvement may be especially salient in the context of child welfare, where the caregiver may be afraid her children will be taken away if she reveals her substance abuse problem. This may occur despite assurances of confidentiality or confidential data collection methods, such as Audio Computer Assisted Self-Interview (A-CASI), which was used to administer the CIDI-SF.

The child welfare worker’s assessment of substance abuse may also be subject to under-identification of substance involvement. Many authors have noted that few child welfare workers have been trained to diagnose or treat substance abuse problems, or if they have, the training that they received was inadequate (Dore, Doris, & Wright, 1995; Gregoire, 1994; Semidei, Radel & Nolan, 2001; Tracy & Farkas, 1994). This can lead to under-identification of substance involvement which may, in turn, lead to underidentification of domestic violence (Barth, Kohl, Hazen, & Landsverk, in press) and other threats to child safety and well-being. The findings of this study suggest that under-identification of substance abuse is a significant problem.

**Implications**

In conclusion, we find that caregiver substance abuse among families reported to child welfare services for maltreatment remains a significant problem. In addition, child welfare workers did not identify a substance abuse problem among 61% of caregivers who meet DSM-IV criteria for alcohol or drug dependence. Child welfare workers need
access to short, concise assessment tools that are specifically designed to identify
caregiver substance abuse problems. In addition, they need access to better training in
identifying substance abuse problems. Addressing this problem is critical, as failure to
recognize and treat caregiver substance abuse problems may result in continued risk of
maltreatment to children. However, these lower estimates of substance abuse offer an
opportunity to focus substance abuse services to meet the needs of child welfare clients.
References


Table 1. The Prevalence of Alcohol Problems, Drug Problems, and Any Type of Substance Problems Among the Children’s Caregivers Based on Assessments by Child Welfare Workers and the CIDI-SF

<table>
<thead>
<tr>
<th></th>
<th>Alcohol Problem</th>
<th>Drug Problem</th>
<th>Any Type of Substance Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%(SE)</td>
<td>%(SE)</td>
<td>%(SE)</td>
</tr>
<tr>
<td>Child Welfare Worker Assessment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Cases</td>
<td>5.8 (0.6)</td>
<td>5.8 (0.7)</td>
<td>9.6 (0.9)</td>
</tr>
<tr>
<td>Open Cases</td>
<td>12.6 (1.6)</td>
<td>12.1 (1.3)</td>
<td>19.8 (1.6)</td>
</tr>
<tr>
<td>Closed Cases</td>
<td>3.3 (0.5)</td>
<td>3.5 (0.8)</td>
<td>5.8 (0.9)</td>
</tr>
<tr>
<td>CIDI-SF Assessment of Positive Screen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Cases</td>
<td>7.3 (0.8)</td>
<td>18.3 (1.2)</td>
<td>23.9 (1.3)</td>
</tr>
<tr>
<td>Open Cases</td>
<td>7.2 (1.1)</td>
<td>21.3 (1.9)</td>
<td>26.4 (2.1)</td>
</tr>
<tr>
<td>Closed Cases</td>
<td>7.4 (0.9)</td>
<td>17.1 (3.6)</td>
<td>23.0 (1.6)</td>
</tr>
<tr>
<td>CIDI-SF Assessment of Substance Dependence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Cases</td>
<td>2.2 (0.4)</td>
<td>2.8 (0.6)</td>
<td>3.9 (0.6)</td>
</tr>
<tr>
<td>Open Cases</td>
<td>2.1 (0.6)</td>
<td>3.3 (0.6)</td>
<td>4.5 (0.7)</td>
</tr>
<tr>
<td>Closed Cases</td>
<td>2.2 (0.5)</td>
<td>2.6 (0.7)</td>
<td>3.6 (0.7)</td>
</tr>
<tr>
<td>Both Child Welfare Worker and CIDI-SF (Substance Dependence) Assessment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Cases</td>
<td>0.6 (0.2)</td>
<td>0.7 (0.2)</td>
<td>1.4 (0.3)</td>
</tr>
<tr>
<td>Open Cases</td>
<td>1.0 (0.4)</td>
<td>1.5 (0.3)</td>
<td>2.6 (0.5)</td>
</tr>
<tr>
<td>Closed Cases</td>
<td>0.4 (0.2)</td>
<td>0.4 (0.2)</td>
<td>1.0 (0.3)</td>
</tr>
</tbody>
</table>
Table 2.

**Kappa Statistics Estimating the Agreement Between the Child Welfare Workers’ Assessments and the CIDI-SF Assessments of Substance Problems by the Children’s Caregivers**

<table>
<thead>
<tr>
<th></th>
<th>Alcohol Problem</th>
<th>Drug Problem</th>
<th>Any Type of Substance Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>K</td>
<td>K</td>
<td>K</td>
</tr>
<tr>
<td>All Cases</td>
<td>.11</td>
<td>.19</td>
<td>.20</td>
</tr>
<tr>
<td><strong>Open Cases</strong></td>
<td>.11</td>
<td>.20</td>
<td>.20</td>
</tr>
<tr>
<td><strong>Closed Cases</strong></td>
<td>.11</td>
<td>.16</td>
<td>.18</td>
</tr>
</tbody>
</table>
Table 3.
Proportion of Substance Abuse Problems Identified by the Child Welfare Workers,
Stratified by the CIDI-SF’s Screening and Substance Dependence Findings

<table>
<thead>
<tr>
<th>CIDI-SF</th>
<th>All Cases % (SE)</th>
<th>Open Cases % (SE)</th>
<th>Closed Cases % (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alcohol</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Screen</td>
<td>14.1 (3.0)</td>
<td>25.2 (4.8)</td>
<td>10.6 (3.7)</td>
</tr>
<tr>
<td>Dependent</td>
<td>29.4 (9.4)</td>
<td>46.7 (13.3)</td>
<td>22.2 (9.8)</td>
</tr>
<tr>
<td><strong>Drug</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Screen</td>
<td>13.0 (2.3)</td>
<td>23.1 (3.8)</td>
<td>8.1 (2.6)</td>
</tr>
<tr>
<td>Dependent</td>
<td>27.4 (5.6)</td>
<td>52.1 (10.1)</td>
<td>16.5 (5.8)</td>
</tr>
<tr>
<td><strong>Any Type of Substance Abuse Problem</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Screen</td>
<td>17.9 (2.1)</td>
<td>31.9 (4.1)</td>
<td>12.1 (2.4)</td>
</tr>
<tr>
<td>Dependent</td>
<td>39.0 (6.4)</td>
<td>64.0 (7.9)</td>
<td>28.2 (7.4)</td>
</tr>
</tbody>
</table>
Table 4.

Proportion of Alcohol and Drug Problems Identified by Child Welfare Workers, Stratified by the Score on the CIDI-SF Alcohol and Drug Assessments

<table>
<thead>
<tr>
<th>CIDI-SF Score</th>
<th>Alcohol** % (SE)</th>
<th>Drug*** % (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>4.9 (.6)</td>
<td>4.5 (.6)</td>
</tr>
<tr>
<td>1</td>
<td>14.0 (3.9)</td>
<td>9.6 (3.0)</td>
</tr>
<tr>
<td>2</td>
<td>17.4 (6.6)</td>
<td>63.3 (13.5)</td>
</tr>
<tr>
<td>3</td>
<td>28.9 (13.1)</td>
<td>32.7 (13.3)</td>
</tr>
<tr>
<td>4</td>
<td>57.4 (17.5)</td>
<td>17.2 (8.5)</td>
</tr>
<tr>
<td>5</td>
<td>3.9 (3.5)</td>
<td>26.0 (13.0)</td>
</tr>
<tr>
<td>6</td>
<td>22.5 (19.4)</td>
<td>42.1 (10.4)</td>
</tr>
<tr>
<td>7</td>
<td>54.2 (22.4)</td>
<td>16.9 (9.2)</td>
</tr>
</tbody>
</table>