CHILDREN AND FAMILY RESEARCH CENTER

Parental Substance Abuse and Child Maltreatment Literature Review

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Executive Summary

Understanding the relationship between parental substance abuse and child maltreatment is vital in providing better assessments of families at risk and creating better intervention and prevention strategies. This literature review will review the issues of child maltreatment in the context of parental substance abuse, including the definition, prevalence, and incidence of substance abuse; studies investigating child maltreatment in the context of parental substance abuse; and studies investigating child maltreatment in multiple contexts including parental substance abuse. This paper will also discuss possible implications and future directions of research.

What are the Definitions, Prevalence, and Incidence of Substance Abuse as They Relate to Child Maltreatment?

Definitions.

- The meaning of child maltreatment varies by state and by professional groups.
- Substance abuse definitions have been applied inconsistently among studies.

Prevalence and incidence.

- More recent findings of various studies show that from 50% to 78% of parents involved in the child welfare system were substance abusers (Besinger, Garland, Litrownik, & Landsverk, 1999; Famularo, Kinscherff, & Fenton, 1992; Murphy, Jellinek, Quinn, Smith, Poistrast, & Foshko, 1991; U.S. General Accounting Office, 1994, 1998).
- Albert, Klein, Noble, Zahand, & Hotby (2000) found that of children who died due to abuse or neglect, 25% had a mother who was a drug addict.

Child Maltreatment in the Context of Parental Substance Abuse

What types of substance abuse are related to child maltreatment?

- Much higher permanent removal percentages (90%) were found among parents who abused hard drugs than among parents who solely used alcohol (60%) (Murphy et al., 1991).
- Of parents who significantly maltreat their children, alcohol abuse was specifically
 associated with physical abuse, and cocaine was associated with sexual abuse
 (Famularo et al., 1992).
- Nearly 60% of drug-exposed infants were the subject of subsequent substantiated reports of abuse or neglect as contrasted with just over 8% of control children (Kelley, 1992).

What is the likelihood of child maltreatment by a substance abusing parent?

- Adults with substance abuse problems are more than twice as likely as their counterparts to abuse or neglect their children (Chaffin, Kelleher, Hooengerg, & Fischer, 1996).
- Substance abuse appeared as a relatively important risk factor for re-referral among 59% of 12,329 cases gathered in CPS investigations (English & Marshall, 1999).

Child Maltreatment in Multiple Contexts Including Parental Substance Abuse

How does the economic environment relate to substance abuse and child maltreatment?

Child maltreatment rates are far higher in communities marked by poor housing,
 poverty, lack of societal support, and violence (Carta, Atwater, Greenwood,

- McConnell, McEvoy, & Williams, 2001; Ernst, 2001; Garbarino & Kostelny, 1992; Kotch and Thomas, 1986; Rishters & Martinex, 1993).
- Children who were exposed in-utero to heroin and remained at home were found to
 function significantly lower than those who were adopted at a very young age,
 indicating the negative effect of severe environmental deprivation (Ornoy,
 Michailevskaya, Lukashov, Bar-Hamburger, & Harel, 1996).

How does substance abuse affect family functioning?

• Studies have found that the overall level of functioning within the family of substance abusing parents leads to child maltreatment. Findings include dysfunctional internal and external boundaries (Flanzer, 1990; Goglia, Jurkovic, Burt, & Burge-Callaway, 1992; Mucowski & Hayden, 1992; Petersen-Kelley, 1985; Preli, Protinsky, & Cross, 1990; Sheridan & Green, 1993; Sheridan, 1995).

What are the Implications for Future Research?

Studies have shown that the role of parental substance abuse in child maltreatment is difficult to disentangle from other factors associated with child maltreatment. Therefore, longitudinal, intergenerational, community-based studies examining the interaction of many variables are needed (Magura & Laudet, 1996).

Introduction

Substance abuse is a pervasive, devastating problem in contemporary society that affects all sectors of the population. Subsequently, substance abuse is one of the most serious issues facing children and families. According to the 1992 Pregnancy and Health Survey conducted by the National Institute on Drug Abuse (1994), 221,000 of the 4 million women who delivered that year used an illicit drug during pregnancy (Jaudes & Ekwo, 1997). Other studies indicate that 11% of children in the United State—some 8.3 million—live with at least one parent who abuses alcohol or other drugs (Rivinus, Levey, Matzko, & Seifer, 1992). Many studies and reports have also recognized that substance abuse is a critical factor among the families involved with the child welfare system (Blau & Whewell, 1994; Curtis & McCullough, 1993; Dore, Doris, & Wright, 1995). Some studies identified parental substance abuse as a key predictor of reoccurring child abuse and neglect (McNichol & Tash, 2001).

Understanding the relationship between parental substance abuse and child maltreatment is important because it is not only necessary in providing better assessments of families at risk, but is also helpful in creating better intervention and prevention strategies. This paper will review the issues of child maltreatment in the context of parental substance abuse, including the definition, prevalence, and incidence of substance abuse; studies investigating child maltreatment in the context of parental substance abuse; and studies investigating child maltreatment in multiple contexts including parental substance abuse. This paper will also discuss possible implications and future directions of research.

Search Strategy

To locate studies for this review, the following sources were used: the PsyInfo, Social Work Abstract, Child Abuse, Child Welfare and Adoption, and Medline database from 1990 to

2001, using such keywords as, "risk factors of child maltreatment," "parental substance abuse," "child maltreatment," and "substance abuse." The search for empirical studies was limited to the years 1990 through 2001. Prior to the 1990s, much research was dedicated to drawing a general consensus about what child maltreatment is and how important this issue is.

To be included in this review initially, studies must have: (a) been published in a major journal of psychology, medical information, sociology, and/or social work; (b) been an empirical evaluation of the association between risk factors including parental substance abuse and child maltreatment; (c) employed either a representative community sample or a clinical sample with an appropriate comparison group; and (d) indicated the effective sizes of study. However, two criteria - (b) and (d) - had to be changed because there was: (a) a lack of empirical studies focusing on the relationship between parental substance abuse and child maltreatment, (b) inefficient statistical information to for meaningful analysis, and (c) methodological variation among the studies. Therefore, this review included studies without effect size and comparison groups.

This review has limitations due to the constraints of the literature on this topic in several important ways. First, while there are some studies including fathers and other primary caretakers included in this review, studies on risk factors tend to emphasize mothers as perpetrators of or chiefly responsible for child maltreatment. Second, all studies included are based on clinical samples identified through welfare systems or agencies that deal with issues of child maltreatment. As such, generalization to mothers who are never brought to the attention of welfare systems is limited. Third, definitions of child maltreatment vary among the studies because the lack of homogeneity in what constitutes child maltreatment differs by states. Also, the approaches for measuring parental substance abuse vary across the studies. Finally, some of

the studies used small sample sizes, contributing to failure to detect effects due to insufficient power.

Results

This literature review is organized into three sections: (a) the definition, prevalence, and incidence of child maltreatment by parents who are substance abusers; (b) child maltreatment in the context of parental substance abuse; and (c) child maltreatment in multiple contexts including parental substance abuse. All of the studies in the review section are empirical, although there are some polemical articles included in the discussion section.

Definitions, Prevalence, and Incidence

Definitions. The Child Abuse and Neglect Prevention and Treatment Act of 1974 (Pecora, Whittaker, & Maluccio, 1992) broadly defined child abuse and neglect (child maltreatment and child abuse and neglect are used interchangeably) as "the physical or mental injury, sexual abuse, negligent treatment, or maltreatment of a child under the age of eighteen by a person who is responsible for the child's welfare under circumstances which indicate that the child's health or welfare is harmed or threatened thereby." While nearly all states adhere to the basic definitions of child maltreatment provided in the Child Abuse and Neglect Prevention and Treatment Act of 1974, individual state definitions reflect their own state law and service emphases. Furthermore, law enforcement, education, medical, mental health, and other allied professionals may hold different views and apply slightly different definitions, not only within but also, between states. The influence of history and culture makes it more difficult to reach consensus on the definition of child maltreatment. Behaviors considered abusive in some eras or cultural setting often become legitimate and acceptable ones in other times and places (Pecora et al., 1992). Different ethnic groups pose different standards to raise their children. For example,

in some Asian cultures, to never to discipline a child by hitting or spanking is tantamount to neglect (Rohner, Kean, & Cournoyer, 1991). The forms of child maltreatment, however, have been consistently grouped into approximately five major categories: physical abuse, sexual abuse, physical neglect, educational neglect, and psychological (emotional) maltreatment (Pecora et al., 1992).

Definitions of substance abuse have also been applied inconsistently among the studies. In many reports in my review, the criteria for substance abuse are unclear. The differences in the retentiveness of the substance abuse criteria could account for discrepancies in prevalence rates. Substance abuse includes the abuse of legal drugs (e.g., alcohol, prescription drugs, over-the-counter drugs) as well as the use of illegal drugs (e.g., cocaine, heroin, marijuana, and methamphetamines). Because legal drugs, alcohol in particular, is just as detrimental to parental functioning, they are called "illicit" drugs (Hernandez, 1992).

Prevalence and incidence. Studies from the 1990's to today show prevalence rates of substance abuse among parents in substantiated child maltreatment cases range from findings of 50% or more (Besinger, Garland, Litrownik, & Landsverk, 1999; Famularo, Kinscherff, & Fenton, 1992; Murphy, Jellinek, Quinn, Smith, Poistrast, & Foshko, 1991). For example, Murphy et al. (1991) required that substance abuse be noted in reports from a psychiatrist or psychologist or in a court-ordered screening for inclusion in their study, which likely resulted in an underestimate of the degree of substance abuse among caregivers. As Famularo et al. (1992) demonstrated, substance-abusing parents are less likely to comply with court orders than are non-abusers. Also, many substance abusers may fail to follow through with orders for substance abuse screenings or evaluations with psychiatrists and psychologists. Therefore, restricting evidence of substance abuse to cases in which professionals have documented the abuse is likely

to result in a high rate of false negatives (Besinger et al., 1999). Besinger and his colleagues (1999) operationally defined substance abuse to include any known history of substance abuse and, therefore, found relatively higher (75%) rates of substance abusing parents in their study. This follows an earlier study by the U.S. General Accounting Office (GAO) (1994) that revealed that in random samples of case files in California, New York, and Pennsylvania, fully 78% of foster children reviewed had at least one parent who was abusing drugs or alcohol in 1991. Another study by the GAO (1998) found that about two-thirds of foster children in both California and Illinois in 1997 had at least one parent who abused drugs or alcohol, and most had been doing so for at least 5 years.

A number of reports are available indicating prevalence and incidence of child maltreatment by parents with substance abuse (Dore et al., 1995). For example, in the recent past, some states and localities have gathered information about parents of children referred for maltreatment. For example, in San Diego County, California, they keep detailed records of perceived parental substance problems associated with a referral. Some research shows that about 13% of all reports in that county fell under drug-related categories (Albert, Klein, Noble, Zahand, & Hotby, 2000). Of the drug-related referrals, about one-half are associated with general neglect (Barth, Courtney, Durr-Berrick, & Albert, 1994). Studies in other areas show that of a group of children who died due to abuse or neglect, 25% had a mother who was a drug addict (Albert et al., 2000). In over half of the cases, the mother was in methadone treatment. More recently, research has shown that both out-of-home placement and death were more likely among children who were exposed to illicit drugs prior to birth and were maltreated than for those who were only exposed to drugs (Jaudes & Ekwo, 1997).

Discussion. Parental substance abuse contributes to at least 50% of all child welfare service cases and has become the "dominant" characteristic in child welfare caseloads. Clearly, inconsistency of definitions of child maltreatment and parental substance abuse makes it difficult to design valid studies in this area. More must be done to develop better definitions and, at the same time, be sensitive to various cultural differences within our society. Only after this is done can the true dimensions of the interaction between parental substance abuse and child maltreatment be recognized.

Child Maltreatment in the Context of Parental Substance

Type of substance abuse. Many studies found significant relationships between parental substance abuse and child maltreatment; however, few studies have directly explored this relationship (Leonard & Jacob, 1988; Milner & Chilamkurti, 1991). Both Murphy and his colleagues (1991) and Famularo and his colleagues (1992) investigated the type of substance abuse and type of maltreatment of parents engaged in court actions due to child maltreatment. Murphy et al. (1991) differentiated between the type of substance abuse and child maltreatment and found that drug-abusing parents were more likely to reject court-ordered services and more likely to have their children removed than were alcohol-abusing parents. Much higher permanent removal percentages (90%) were found among parents who abused hard drugs than among parents who solely used alcohol (60%). In one comparison of substance abusing and nonsubstance abusing parents involved in Massachusetts' court system, they found that parents with documented substance abuse histories were more likely than other parents: (a) to be repeat offenders with regard to child abuse and neglect; (b) to fail to follow through with court-ordered services; and (c) to eventually lose care and custody of their children. Famularo et al. (1992) used logistic analysis to determine the relationship between the type of parental substance abuse

and the type of maltreatment. They found that in a sample of parents who significantly maltreat their children, alcohol abuse was specifically associated with physical abuse and cocaine was associated with sexual abuse.

Both Kelley (1992) and Wolock and Magura (1996) performed longitudinal studies to investigate the relationship between parental substance abuse and child maltreatment. In Kelley's case-control study, mothers of infants born with positive toxin screens for maternal cocaine use were matched with control mothers on age, race, and socioeconomic status. Nearly 60% of the drug-exposed infants were the subject of subsequent substantiated reports of abuse or neglect as contrasted with just over 8% of control children. At 11 months of age, all of the control children were still living with their biological mothers in contrast to just over half of the drug-exposed children. Forty-two percent of the latter had been placed by child protective services in foster care. Wolock and Magura (1996) followed a cohort of 239 families comprising both substance abusing and non-substance abusing parents for an average of 2 years. They found that parental substance abuse directly increased the likelihood of re-reports for maltreatment to the CPS agency. These two studies lend support in validating the association between parental substance abuse and child maltreatment by describing changes over time.

Likelihood of abuse. Chaffin, Kelleher, Hooengerg, and Fischer (1996) used a probability sample of 18,000 adults in five communities across the U.S. to determine the impact of substance abuse on child maltreatment. Their findings suggest that, all else constant, adults with substance abuse problems are more than twice as likely as their counterparts to abuse or neglect their children.

Two studies included both mothers and fathers. First, Ammerman, Kolco, Kirisci, Blackson, and Dawes (1999) examined both fathers and mothers concurrently in parents with

and without substance abuse disorder (SUD) histories. They focused on identifying the relationship between parental history of substance use disorder (SUD) and abuse potential. Subjects consisted of the biological mothers and fathers of 290 boys aged 10 to 12 years living in intact families. Fathers were divided into two groups based on the presence (N=152) or absence (N=138) of lifetime diagnoses of abuse or dependence for substance. Mothers were also divided into two groups based on presence (N=53) or absence (N=106) of lifetime occurrence of substance abuse or dependence. Results indicated significantly higher Abuse Scale scores in fathers and mothers with SUD histories in contrast to their counterparts without SUD histories. Separate regression models revealed that, for both fathers and mother, positive and negative affectivity predicted Abuse Scale scores. Another study that investigated both mothers and fathers (Whipple & Webster-Stratton, 1991), found that CPA mothers compared to non-CPA mothers were more likely to report having a drug history. However, the two groups did not differ on alcohol history. Conversely, CPA fathers compared to non-CPA fathers were more likely to report having an alcohol history, but the two groups did not differ on drug history.

In their study profiling violence toward children, Wolfner & Gelles (1993) conducted a telephone survey of a national sample of 3,232 households having at least one child under 18 years old living at home. In questioning respondents on their alcohol and drug use, they found that there were no significant differences for either punishment or abusive violence based on alcohol drinking rates (abstainers, drink 1-3 times/month, or drink at least weekly). However, drug users (those who reported using illegal drugs at least once during the referent year) reported 20% more minor violence and 46% more severe violence that abstainers.

English and Marshall (1999) reported that substance abuse appeared as a relatively important risk factor for re-referral among 59% of 12,329 cases gathered in CPS investigations.

When Curtis and McCullough (1993) asked Child Protection Agency (CPA) workers if the number of children affected by alcohol and other drugs or parents using these substances was higher in the past 12 months as compared with the previous 12 months, 94 (47%) of 200 public and voluntary agency respondents answered yes. When asked about increases in the past five years, 176 out of 200 (88%) answered yes. Problems related to substance abuse increase the number of children and their families who require child welfare interventions and services. However, two studies highlighted that parental substance abuse is the risk factor least likely to be assessed by CPS workers due to the difficulty of screening and the lack of training.

Discussion. Findings from studies on a possible link between parental substance abuse and child maltreatment vary but clearly demonstrate their strong relationship. Obviously, parental substance abuse is a major problem for child maltreatment. Any conclusive statements about causality between parental substance abuse and child maltreatment, however, are not possible because of the correlational nature of the study designs. Half of the studies relied on secondary data and were affected by self-report bias. The majority of studies did not test for the effects of drug-related problems in the general population on child maltreatment reports. Poverty and neglect were pervasive among studies. Many of the parents in the samples were poor, isolated, emotionally disturbed, and also had a history of being abuse and/or neglected as children. These factors might be the actual cause of child maltreatment, with substance abuse as a co-occurring effect caused by the same underlying factors. However, although substance abuse may be only one of many problems in these families, it is one that is clearly identified. Child Maltreatment In Multiple Contexts Including Parental Substance Abuse

Economic environment. While many studies found strong bivariate associations between substance abuse and child maltreatment, others found that substance abuse was just one of a

number of serious problems parents had. Many research outcomes highlighted the relationship between parental substance abuse and child maltreatment but failed to control for the parent's personal and social problems (Famularo et al., 1992). Famularo et al. (1992) also recognized their inability to determine whether perpetrators were intoxicated at the time the maltreatment occurred and to discern the true impact of substance abuse by controlling for a number of social and emotional problems among perpetrators.

In this regard, some researchers contend that the social problem of substance abuse in the political, economic, and demographic context of child maltreatment also needs to be considered. Several studies have shown that a child's community environment affects child well being. Garbarino and Kostelny (1992) tested differences that exist in poor neighborhoods that contribute to child maltreatment. Their study found that child maltreatment rates were far higher in the neighborhoods that were marked by poor housing, poverty, and violence. For those families who live, work, and go to school in communities that are characterized by a general lack of societal support, exposure to violence, and neglect, child maltreatment is an increasingly frequent occurrence (Rishters & Martinex, 1993). Kotch and Thomas (1986) focused on family and social factors associated with child abuse and neglect reports. They found that the rate of substantiation is highly related to a parent's socioeconomic status (SES). Within low SES,

Ernst (2001) found that child maltreatment rates were statistically significant for the factors related to economic disadvantage, and substance abuse is highly related to poverty. Carta, Atwater, Greenwood, McConnell, McEvoy, and Williams (2001), in their longitudinal investigation of prenatal substance exposure in an overlapping cohort design, investigated the effects of prenatal substance exposure, as well as multiple environmental risks, on children's

trajectories over 54 months of life. Three age cohorts, each followed for 2 years, overlapped at two assessment points to permit a test of developmental continuity across cohorts. A cumulative environmental risk index was created. The total enrolled sample was composed of 146 children with prenatal substance exposure and 143 children without exposure. Both prenatal substance exposure and environmental risk were found to have significant effects on development.

Similarly, Ornoy, Michailevskaya, Lukashov, Bar-Hamburger, and Harel (1996) found severe environmental deprivation was key in the outcomes of children exposed in-utero to heroin. Children aged .5-6 years old born to heroin-dependent mothers had lower birth weights and lower head circumferences and had a high incidence of hyperactivity, inattention, and behavioral problems. When these children were divided by those raised at home and those adopted at a very young age, the adopted children were found to function similarly to the controls, while those not adopted functioned significantly lower.

Family functioning. Flanzer (1990) highlighted that one of the factors related to child maltreatment and parental substance abuse may be the overall level of functioning within the family itself. Substance abuse research has revealed a variety of problems in the dynamics of families where there is parental substance abuse. Study findings include dysfunctional internal and external boundaries (Goglia, Jurkovic, Burt, & Burge-Callaway, 1992); poor communication skills, low expressiveness, and high family conflict (Petersen-Kelley, 1985); chaotic or rigid interaction patterns (Preli, Protinsky, & Cross, 1990); role distortion (Mucowski & Hayden, 1992); and generally low levels of family competence and adverse family environment (Sheridan & Green, 1993). For example, Sheridan (1995) examined the relationships among substance abuse, family functioning, and abuse/neglect in 81 samples of incarcerated substance abusers.

between substance abuse, family dynamics, and abuse/neglect (Flanzer, 1990). Although parental substance abuse was found to be directly related to child maltreatment, results suggest it may also be indirectly associated through its relationship with family-of-origin competence.

Discussion. Studies support the complex nature of child maltreatment in multiple contexts, including parental substance abuse. Family dynamics and socioeconomic factors interact with parental substance abuse to increase the possibility of child maltreatment both within and outside of the family system. However, those studies represent small, nonprobability samples that are not generalizable to other populations. Each model focused on only one variable, either psychosocial or socioeconomic factors; thus, the model provides only a partial explanation of complex dynamics that must be explored further with larger, more diverse samples, additional variables, and multivariate statistical techniques.

Discussion

From reviewing the published literature on parental substance abuse and child maltreatment, the link between child maltreatment and parental substance abuse is shown to have been identified long ago. The nature and extent of this relationship has yet to be clearly delineated. The strength of association varied considerably depending on the samples examined and the methods employed to identify maltreated children and diagnose parental substance abuse. There are also three major limitations of the studies reviewed: methodological problems, over-representation and under-representation, and cultural issues.

Methodological Problems

Inconsistent definitions of substance use or abuse, absence of good databases, and a host of methodological problems were revealed in the studies reviewed. Clearly, the lack of consensus over the relationship between parental substance abuse and child maltreatment exists

among different professionals and researchers. Second, reliable data on a national basis have not been available because of inadequate state data collection and differences in definitions used. Good data is the crucial component to properly analyze the relationship between parental substance abuse and child maltreatment. Lack of validated assessment tools for screening parental substance abuse is another problem in this field of research. As discussed earlier, studies in this review use different instruments while only few studies have validity concerns. Some studies pointed out that many structured assessment procedures do not adequately address risks to children associated with parental substance abuse, and caseworkers are insufficiently trained at screening parents (Dore et al., 1995). Substance abuse is also usually linked to an array of individual and social factors. In this regard, teasing out the individual or social contributions of these various factors is also a difficult process. Developing valid and culturally sensitive assessment definitions, data, and tools are essential in future research.

Over-representation and Under-representation

Of the studies in this review, over 75% of all samples recruited were of only one ethnic group. Only two studies included community-based samples, and most of the studies have looked exclusively at parents who were involved in the child welfare system. In particular, an elevated prevalence of substance abuse among specific ethnic groups may be due to the over-representation in the samples of studies of families from the lowest socioeconomic classes. They are likely to have more attention from the child welfare system than are other ethnic groups. These families may have an increased prevalence of many forms of psychological and social problems, but these problems may be due to poverty and not related to the maltreatment of their children. One study revealed that even though substance abuse and child maltreatment occurs regardless of socioeconomic status, only the majority of those who are lower socioeconomic

status end up into the court and in CPA files (Dore et al., 1995). Researchers must take into account the over-representation of the poor and members of minority groups among child abusing parents.

Cultural Issues

In spite of growing awareness, the realities of child maltreatment by parents with substance abuse among minority groups are often out of view. This has made for exclusion of minority families' experiences in theory development, service delivery, and research. In this review, no studies include ethnically representative samples. In fact, relatively few studies looked at child maltreatment and parental substance abuse in the context of specific ethnic or minority groups (Hong & Hong, 1991). There is an increasing need for ethnically sensitive assessment and research, including representative sample sizes, from various ethnic groups (Schumacher, Smith-Slep, & Heyman, 2001).

Future studies

Methodologically advanced research is necessary to examine the true relationship between substance abuse and child maltreatment. The studies reviewed in this paper indicate that the role of parental substance abuse in child maltreatment is difficult to disentangle from other factors associated with child maltreatment. Without appropriate intervention, the cycle may very well continue. Longitudinal, intergenerational, community-based studies examining the interaction of many variables are desperately needed (Magura & Laudet, 1996). Future studies will improve the current knowledge base by using a standardized measure to assess substance abuse among caregivers. Evaluating substance abuse with a higher degree of specificity would also clarify how substance abuse is related to child maltreatment.

References

- Albert, V., Klein, D., Noble, A., Zahand, E. & Holtby, S. (2000). Identifying substance abusing delivering women: Consequences for child maltreatment reports. *Child Abuse and Neglect*, 24, 173-183.
- Ammerman, R., Kolco, D. J., Kirisci, L., Blackson, T. C. & Dawes, M. A. (1999). Child abuse potential in parent with histories of substance use disorder. *Child Abuse and Neglect*, *23*, 1225-1238.
- Barth, R., Courtney, M., Duerr-Berrick, J. & Albert, V. (1994). From child abuse to permanency planning: Pathways and outcomes of the child welfare system. New York: Aldine de Gruyter Press.
- Besinger, B. A., Garland, A. F., Litrownik, A. J. & Landsverk, J. A. (1999). Caregiver substance abuse among maltreated children placed in out-of-home care. *Child Welfare*, 78, 221-239.
- Blau, G. M., Whewell, M. C., Gullotta, T. P. & Bloom, M. (1994). The prevention and treatment of child abuse in households of substance abuser: A research demonstration progress report. *Child Welfare*, *73(1)*, 83-97.
- Carta, J. J., Atwater, J. B., Greenwood, C. R., McConnell, S. R., McEvoy, M. A. & Williams, R. (2001). Effects of cumulative prenatal substance exposure and environmental risks on children's developmental trajectories. *Journal of Clinical Child Psychology*, 30, 327-337.
- Chaffin, M., Kelleher, K. & Hollenberg, J. (1996). Onset of physical abuse and neglect:

 Psychiatric, substance abuse, and social risk factors from prospective community data.

 Child Abuse and Neglect, 20, 191-203.

- Curtis, P. & McCullough, C. (1993). The impact of alcohol and other drugs on the child welfare system. *Child Welfare*, 72, 533-542.
- Dore, M. M., Doris, J. M. & Wright, P. (1995). Identifying substance abuse in maltreating families: A child welfare challenge. *Child Abuse & Neglect*, 19, 531-543.
- English, D. J. & Marshall, D. B. (1999). Characteristics of repeated referral to child protective services in Washington state. *Child Maltreatment*, *4*, 297-307.
- Ernst, J. S. (2001). Community-level factors and child maltreatment in a suburban county. *Social Work Research*, *25*, 133-143.
- Falmalaro, R., Kinscherff, R. & Fenton, T. (1992). Parental substance abuse and the nature of child maltreatment. *Child Abuse & Neglect*, *16*, 475-483.
- Flanzer, J. P. (1990). Alcohol and family violence: Then to now—who owns the problem. *Alcoholism Treatment Quarterly*, *3*, 61-79.
- Garbarino, J. & Kostelny, K. (1992). Child maltreatment as a community problem. *Child Abuse* and *Neglect*, *16*, 455-464.
- Goglia, L. R., Jurkovic, G. L., Burt, A. M. & Burge-Callaway, K. J. (1992). Generational boundary distortions by adult children of alcoholics: Child-as-parent and child-as mate. *American Journal of Family Therapy*, 20(4), 291-299.
- Hernandez, J. T. (1992). Substance abuse among sexually abused adolescents and their families.

 **Journal of Adolescent Health, 13, 658-662.
- Hong, G. K. & Hong, L. K. (1991). Comparative perspectives on child abuse and neglect: Chinese versus Hispanics and Whites. *Child Welfare*, *70*, 463-475.

- Jaudes, P. K. & Ekwo, E. E. (1997). Outcomes for infants exposed in utero to illicit drugs. *Child Welfare*, *76*, 521-531.
- Kelley, S. (1992). Parenting stress and child maltreatment in drug-exposed children. *Child Abuse* & *Neglect*, *16*, 317-328.
- Kotch, J. B. & Thomas, L. P. (1986). Family and social factors associated with substantiation of child abuse and neglect reports. *Journal of Family Violence*, *1*, 167-179.
- Leonard, K. E. & Jacob, T. (1988). Alcohol, alcoholism, and family violence. In V. B. Van Hasselt, R. L. Morrison, A. S. Bellack & M. Hersen (Eds.), *Handbook of family violence* (pp. 383-406). New York: Plenum Press.
- Magura, S. & Laudet, A. B. (1996). Parental substance abuse and child maltreatment: Review and implications for intervention. *Children and Youth Services Review, 18*, 193-220.
- Milner, J. S. & Chilamkurti, C. (1991). Physical child abuse perpetrator characteristics: A review of the literature. *Journal of Interpersonal Violence*, *6*, 345-366.
- McNichol, T. & Tash, C. (2001). Parental substance abuse and the development of children in family foster care. *Child Welfare*, 80, 239-255.
- Mucowski, R. J. & Hayden, R. (1992). Adult children of alcoholics: Verification of role typology. *Alcoholism Treatment Quarterly*, *9*, 127-140.
- Murphy, J. M., Jellinek, M., Quinn, D., Smith, G., Poitrast, F. G. & Goshko, M. (1991).

 Substance abuse and serious child maltreatment: Prevalence, risk, and outcome in a court sample. *Child Abuse and Neglect*, *15*, 197-211.
- Ornoy, A., Michailevskaya, A. O., Lukashov, I., Bar-Hamburger, R. & Harel, S. (1996). The developmental outcome of children born to heroin-dependent mothers, raised at home or adopted. *Child Abuse and Neglect*, 20(5), 385-396.

- Pecora, P. J., Whittaker, J. K. & Maluccio, A. N. (1992). *The child welfare challenge: Policy, practice, and research.* New York: Walter de Gruyter.
- Petersen-Kelley, A. (1985) Family environment and Alateens: A note on alcohol abuse potential. *Journal of Community Psychology*, 13, 75-76.
- Preli, R., Protinsky, H. & Cross, L. (1990). Alcoholism and family structure. *Family Therapy*, *17*(1), 1-8.
- Rishters, J. E. & Martinex, P. (1993). The NIMH community violence project I: Children as victims of and witnesses to violence. *Psychiatry*, *56*, 7-21.
- Rivinus, T. M., Levoy, D., Matzko, M. & Seifer, R. S. (1992). Hospitalized children of substance abusing parents and physically and sexually abused children: A comparison. *Journal of American Academy of Child and Adolescent Psychiatry*, 31, 1019-1923.
- Rohner, R. P., Kean, K. J. & Cournoyer, D. E. (1991). Effects of corporal punishment, perceived caretaker warmth, and cultural beliefs on the psychological adjustment of children in St. Kitts, West Indies. *Journal of Marriage and the Family, 53*, 681-693.
- Sam, M. (1992). Through black eyes: A handbook of family violence in aboriginal and Torres

 Strait islander communities. Fitzroy: Secretariat of National Aboriginal and Islander

 Child Care.
- Schumacher, J. A., Smith-Slep, A. M. & Heyman, R. E. (2001). Risk factors for child neglect.

 *Aggression and Violence Behavior, 6, 231-254.
- Sheridan, M. (1995). A proposed intergenerational model of substance abuse, family functioning, and abuse/neglect. *Child Abuse and Neglect*, *19*, 519-530.

- Sheridan, M. J. & Green, R. G. (1993). Family dynamics and individual characteristics of adult children of alcoholics: An empirical analysis. *Journal of Social Service Research*, 17, 73-97.
- Tyler, R., Howard, J., Espinosa, M. & Doakes, S. S. (1997). Placement with substance abusing mothers vs. placement with other relatives: Infant outcomes. *Child Abuse & Neglect*, *21*, 337-349.
- U. S. General Accounting Office. (1998). Foster care: Agencies face challenges securing stable homes for children of substance abusers (GAO 13: HEHS-98-182). Washington DC: U. S. Government Printing Office.
- U. S. General Accounting Office. (1994). Foster care: Parental drug abuse has alarming impact on young children. Report to the Chairman, Subcommittee on Human Resources, Committee on Ways and Means, House of Representatives (GAO 13: HEHS-94-89).
 Washington, DC: U. S. Government Printing Office.
- Whipple, E. E. & Webster-Stratton, C. (1991). The role of parental stress in physically abusive families. *Child Abuse and Neglect*, *15*, 279-291.
- Wolfner, G. & Gelles, R. J. (1993). A profile of violence toward children: A national study. *Child Abuse and Neglect, 17*, 197-212.
- Wolock, I. & Magura, S. (1996). Parental substance abuse as a predictor of child maltreatment re-reports. *Child Abuse and Neglect*, *20*, 1183-1193.