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Mental Health Services for Children and Youth in the Child Welfare System: A Focus on Caregivers as Gatekeepers

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Abstract

Caregivers serve as gatekeepers for children while in the child welfare system, but few studies have focused on the caregiver and the factors that influence the use of mental health services for the children under their care. The purpose of this study was to examine the child's mental health need, the caregiver's level of stress, depression, and social support, and the utilization of mental health services by children using the three most common types of caregivers in the child welfare system (i.e., birth parent, relative caregiver, and foster parent). Data comes from the Patterns of Care (POC) study of five public sectors of care. The present study examined parents/caregivers and youth from the child welfare sector. Findings suggest that while birth parents were more likely to endorse more risk factors for themselves, and the children under their care had a higher level of mental health need, they were the least likely to utilize mental health services for the children under their care. Implications for the child welfare and mental health systems are discussed.

Keywords

Foster care; mental health; child welfare; caregivers

1. Introduction

Numerous studies have documented that children in the foster care system are in need of mental health intervention, but few receive needed services (Staudt, 2003; dosReis et al., 2001; Garland et al., 2000). While studies have focused on predictive variables of service use to include child and case characteristics and service funding issues (Raghavan et al., 2007; Burns et al., 2004; Leslie et al., 2004; James et al., 2004), one area that lacks attention and may help explain the underutilization of mental health services is the influence that the caregiver has on a child's utilization of services. Caregivers serve as gatekeepers for children while in the child welfare system, but few studies have focused on the factors that influence a caregiver's use of mental health services for the children under their care (Schneiderman & Villagrana, in press). The present study represents a step toward addressing this gap by examining the influence that caregivers have on the utilization of mental health services for children and youth in the child welfare system by focusing on the different types of caregivers and the factors that

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influence the receipt of mental health services by the children and youth under their care. Little is known as to the role that birth parents, relative caregivers, and foster parents play in the utilization of mental health services for children in the child welfare system. The intent of this study is to shed light on caregivers and the use of mental health services for their children, and therefore, have implications for improving service delivery and mental health outcomes for the large population of underserved children in the child welfare system.

1.1. Need for services

Due to traumatic experiences (e.g., neglect and/or abuse) that necessitated placement, the psychological effects of disruptive attachment, and the need to adjust to a foster care environment (Racusin et al., 2005), most children in the child welfare system exhibit mental health problems that require mental health intervention (Clausen et al., 1998; Halfon, Mendonca & Berkowitz, 1995). Studies have consistently documented the mental health needs of these children to include conduct and attention disorders, aggressive and self-destructive behaviors, depression, delinquency, autism, bipolar disorders, and impaired social relationships (see Kerker & Dore, 2006). In addition, due to the traumatic separation from their parents, children are often found to experience feelings of rejection, guilt, abandonment, and shame (Garland et al., 2000; Simms et al., 2000). It is not surprising, then, that the child welfare literature consistently documents that children in the foster care system are at a higher risk for psychopathology (Staudt, 2003; dosRios et al., 2001; Ezzell, Swenson, & Faldowski, 1999; Clausen et al., 1998; Garland et al., 1996), than children in the general population. The prevalence of mental health disorders with children in foster care are estimated as high as 80% (dosReis et al., 2001; Landsverk & Garland, 1999; Halfon, Mendonca & Berkowitz, 1995). Children in foster care are also 16 times more likely to have psychiatric diagnoses and 8 times more likely to be taking psychotropic medication than children in community samples (see Racusin et al., 2005).

1.2. Utilization of services

Comparatively less is known of the utilization of mental health services for children and youth in the foster care system. Rates of mental health service utilization by children in the foster care system vary by study and range from a low of 19% to a much higher rate of 94% (see Burns et al., 2004). However, in one of the only national studies of children in the child welfare system, Burns and colleagues (2004) investigated need for and use of mental health services among children investigated by child welfare agencies after a report of maltreatment of a cohort of 3,803 youth between the ages of 2 to 14 years. Researchers found that youth with mental health need as defined by the Child Behavior Check List (CBCL) were more likely to receive mental health services, but only 25% of such youth received any specialty mental health care during the previous 12 months of the study.

In an effort to better understand the utilization of mental health services by children in the foster care system, research studies have focused on predictive variables of mental health service use which generally include demographic and case characteristics (Burns et al., 2004; Leslie et al., 2004; James et al., 2004; McMillen et al., 2004; Newton et al., 2000; Garland et al., 2000; Zima et al., 2000; Ezzell, Swenson, & Faldowski, 1999; Garland et al., 1996; Garland & Besinger, 1997; Halfon, Berkowitz, & Klee, 1992). The child's demographic characteristics include older age, male gender, and Caucasian children more likely to receive services (Burns et al., 2004; Leslie et al., 2004; James et al., 2004; Zima et al., 2000; Garland et al., 2000; Garland & Besinger, 1997; Halfon, Berkowitz, & Klee, 1992) and children who experienced sexual abuse most notably referred for services (Burns et al., 2004), while children who experienced physical abuse are only referred when externalizing behaviors are displayed (Garland et al., 1996; Blumberg et al., 1996). Placement type is also significant with children

placed in kin care the least likely to receive mental health services (Leslie et al., 2004; McMillen et al., 2004; James et al., 2004; Garland et al., 2000; Leslie et al., 2000; Garland et al., 1996).

2. Caregivers as gatekeepers

Approximately 54% of children in the child welfare system are in non-relative placement (either foster home or group home) and 24% of children are in a foster family home with a relative (DHHS, 2007). No data exists as to the number of children in the child welfare system that are with a parent (i.e., returned or remained home). However, in examining the total number of children in the child welfare system nationwide California has a total of 16%, the state with the highest number of children in its child welfare system. Of these children, 24% are living with a parent (Needell, et al., 2006).

Given that children in the child welfare system are cared for and supervised by different types of caregivers, an area that may provide an explanation in the underutilization of mental health services for children and youth in the child welfare system is the influence that the caregiver has on a child's utilization of services. Children generally do not seek mental health services for themselves; it is the caregiver that serves as the gatekeeper for children while in the child welfare system (Schneiderman & Villagrana, in press). However, few studies have focused on the caregiver and the utilization of mental health services for the children and youth under their care. Of these studies, the majority have only focused on mental health service use by kin caregivers (Leslie et al., 2004; McMillen et al., 2004; Garland et al., 2000; Leslie et al., 2000; Garland et al., 1996). Research studies on kin caregivers have focused on the caregiver's social support, level of stress, mental health, and the child's psychological functioning as these factors influence whether children under their care receive services (Ezzell et al., 1999; Kolko et al., 1999; Zima et al., 2000; Geen, 2002; Shore, 2002; Brannan, Heflinger, & Foster, 2003; Timmer, Sedlar & Urquiza, 2004; Alegria et al., 2004). For example, caregivers displaying a higher level of stress are more likely to seek mental health services for the children under their care (Ezzell et al., 1999; Kolko et al., 1999; Timmer, Sedlar & Urquiza, 2004) and caregivers with a small or no support system are less likely to utilize services for the children under their care (Geen, 2002).

2.1. Service use by caregivers for the children under their care

As previously stated, most studies have focused on kin caregivers and have found that children in kin care are less likely to receive mental health services than children placed in non-kin care (Timmer, Sedlar, & Urquiza, 2004; McMillen et al., 2004; James et al., 2004; Leslie et al., 2000; Blumberg et al., 1996). In a study conducted by Leslie and colleagues (2000) of children in the foster care system in San Diego, CA, researchers found that 41.5% of children had at least one outpatient visit while in out of home care during an 18 month period. Children in non-kin care averaged twice as many visits during the 18 month period as children in kin care. One explanation for this may be partly due to kin caregivers experiencing unusual hardships. On average, kin caregivers are older than non-kin caregivers with up to 21% being over 60, have health or mental health problems, are experiencing financial hardship, and are single and less educated (Erhle and Geen, 2002). It is also important to note that some kin caregivers avoid any involvement with the child welfare system and are generally in a crisis situation when asking for help (Geen, 2003).

Although studies have consistently documented that non-kin caregivers are more likely to seek and receive mental health services for children under their care, it is unclear whether children in non-kin care in fact display more behavior problems and therefore their caregivers are more likely to seek services or whether kin foster care parents perceive the children under their care as having fewer problems. One possibility is that non-kin caregivers are less tolerant of their children's behavior and therefore more likely to report their children's behavior problems to

caseworkers and increase the likelihood of receiving services (Timmer, Sedlar, & Urquiza, 2004). In a study conducted by Timmer, Sedlar, and Urquiza (2000), researchers found that foster parents tended to rate children under their care with higher levels of externalizing behaviors and more frequent behavior problems than kin caregivers and thus were more likely to seek services. In another study that used two national datasets (i.e., National Survey of Child and Adolescent Well-being and Long Term Foster Care), researchers found that children placed in foster homes experienced higher levels of behavioral problems than children placed in kin care or those in birth family homes as reported by their caregivers. However, researchers found that from the perspective of teachers, children in kin care evidenced higher behavioral problems than children placed in nonkin foster homes (Rosenthal & Curiel, 2006).

To date, there is a dearth of studies that examined the role birth parents in the child welfare system play in the utilization of mental health services for their children. However, there is evidence to suggest that birth parents also play an important part in the utilization of mental health services for children in the child welfare system. In a national study conducted by Burns and colleagues (2004) of children and youth investigated for maltreatment, researchers found that children who remained at home versus those who were placed out of home were significantly less likely to have received mental health services. Although researchers did not specifically identify children placed with a birth parent, approximately 90% of the sample was living at home with their permanent primary caregiver. Becker, Jordan, and Larsen (2006) also found that children were more likely to attend mental health services before placement than after they were returned to their parents. These findings suggest that there are differences among caregivers and that type of caregiver is influential in the receipt of mental health services for children and youth in the child welfare system. Consistent with the research literature, the present study focused on the caregiver as a vital source in the identification and utilization of mental health services for the children under their care. The purpose of the present exploratory study was to examine 1) differences in the caregivers' characteristics of children who used mental health services and those that did not; and 2) differences by caregiver type (i.e., birth parent, relative caregiver, and foster parent) in the level of mental health need of the children under their care (i.e., externalizing, internalizing, and total competency behaviors as evidenced by the CBCL), the caregiver's level of support, depression, and stress and mental health service use by the children under the caregiver's care.

3. Methods

This study is a secondary data analysis of the Patterns of Youth Mental Health Care in Public Service Systems study (POC – Patterns of Care) of youths who were active in one or more public service sectors of care during the latter half of the 1996–1997 fiscal year in San Diego County.

3.1. Survey design and sample

The Patterns of Care study consisted of participants randomly selected from an enumeration of all youths active in one or more of five San Diego County public sectors of care (N = 12,662) during fiscal year 1996–1997. Of the 12,662, a total of 3,417 youth were randomly selected for recruitment. The sample was stratified by service sector affiliation, race/ethnicity, and level of restrictiveness of care. The final total sample consisted of 1,715 youth. The current study consists of only the child welfare data where records were identified as the youth being a dependent of the juvenile court because of protective issues. Of the total POC sample, 23% (N=430) of the children and youth were identified as having an active case in the child welfare sector. Established standardized measures were completed by the primary caregiver and children at baseline and two year follow-up on mental health service use, needs, and other

factors potentially associated with mental health service use (for further sampling information see Garland et al., 2001 and Hazen et al., 2004).

3.2. Measures

All variables used were from baseline data with the exception of mental health service use taken from report of service use at twelve months.

Need Factor—Youth's psychological symptomatology as reported by parent/caregiver was collected using the Child Behavior Checklist (Achenbach, 1991a). The Child Behavior Checklist (CBCL) is a parent/caregiver report questionnaire that provides age normed comparisons of behavior/emotional problems for children ages 2 to 18 with established reliability and validity for both English and Spanish speaking samples (Achenbach, 1991a, 1991b). The CBCL produces overall total problem behavior scores and broadband indices of internalizing behavior and externalizing behavior problems occurring during the previous six months. Total competency, internalizing behavior, and externalizing behavior were used to measure need for this study. Total competency contains sections addressing the area of social competence in order to determine which reported competencies discriminate between those children who are adapting successfully and those who are not. Total competency is based on the higher the score the better the child's competence overall. Internalizing problems combines the Social Withdrawal, Somatic Complaints, and Anxiety/Depression scales, while Externalizing combines the Delinquents Behavior and Aggressive Behavior scales. T scores on internalizing and externalizing problems less than 60 are considered in the normal range, 60–63 represent borderline scores, and scores greater than 63 are in the clinical range.

Caregiver Stress—The Caregiver Strain Questionnaire (Brannan et al., 1997) was used to measure caregiver strain. The Caregiver Strain Questionnaire is a 21 item continuous scale designed to measure the impact of caring for a child with emotional and behavioral problems in six areas: economic burden, impact on family relations, disruption of family activities, impact on psychological adjustment of family members, stigma, anger, and worry/guilt. Responses are rated on a five point Likert scale and measure each area during the past six months. Scores were the sum of all responses divided by the number of items, and had a potential range of 1–5 with the higher the score the greater the strain.

Caregiver Depression—The Center for Epidemiological Studies – Depression Scale (Radloff, 1977) was used to measure caregivers' level of depression. The questionnaire consists of 20 items that measure how often participants experienced symptoms of depression during the past week. The maximum score is 30; high scores on the CES-D indicate high levels of distress. A score ≥ 16 suggests a clinically significant level of psychological distress. Responses are rated on a four point Likert scale. The CES-D has established reliability and validity (Radloff & Teri, 1986).

Caregiver Social Support—The Social Provision Scale (Cutrona & Russell, 1987) is a 12 item continuous scale that measures global perceived social support. The questions ask respondents' perception of available social support in their lives in general and are not tied to a specific time period. Responses are rated on a five point Likert scale. Scores were the sum of all responses divided by the number of items, and had a potential range of 1–5 with higher scores indicating a greater social support.

Caregiver Demographics—Caregiver's demographic information included: Age, reflecting the caregiver's age at the time of baseline interview; ethnicity which included Caucasian, African American, Latino, and Asian/Other; marital status was dichotomized to include married and not married; income examined total family income as reported by parent/

caregiver on an incremental scale of annual income from $\leq \$1,000$ to $\geq \$200,000$. For this study income was divided as follows: 1) $\leq \$13,000$, 2) $\leq \$25,000$, 3) $\leq \$45,000$ and 4) $> \$45,000$ with each group being mutually exclusive; and education included no degree, high school, and college. Gender was not used as 94% of the sample was female.

Caregiver Type—Three caregiver types were identified for use in this study: 1) birth parent consisted of only parents who were biologically related to the youth ($n=167$), 2) relative caregiver ($n=110$) included all relatives (grandparents, uncles, siblings, and step-parent), and 3) foster parent ($n=153$) consisted of solely those identified as foster parents. Since mental health service use was examined at one year follow-up, the data were examined to determine if any placement changes were made in that year, particularly with foster parents. The majority (95%) of all caregivers were identified as being the same caregiver as at baseline. No data were excluded as preliminary analysis showed no significant differences with same caregiver at baseline and different caregiver at one year follow-up (table not shown).

Mental Health Service Use—Data for utilization of mental health services were measured by the National Institute of Mental Health (NIMH) Service Assessment of Children and Adolescents (SACA; Horowitz et al., 2001). This structured interview consists of both parent/caregiver and youth reports. The interview assesses utilization of mental health and substance abuse services by the youth. It obtains lifetime and past year use of school based, outpatient and inpatient mental health, and substance abuse services. Mental health service utilization in this study is defined as any use of specialty outpatient mental health or inpatient mental health services during the past year. Since past year use was examined, the SACA was examined at twelve month follow-up. The variable was dichotomous to include use of specialty outpatient/inpatient mental health service or no use of any specialty mental health service.

3.3. Analysis

Analyses were conducted using SPSS 17.0. Descriptive, univariate and bivariate statistics were used to describe the sample and evaluate differences between caregivers. T-tests and chi-square analyses were used to determine differences between the two groups of children who used mental health services and those that did not. Analyses of variance were used to determine differences among the three types of caregivers with the child's psychological symptomology, caregiver's level of stress, depression, and social support.

4. Results

Due to the focus of the study being on the caregiver, the data focuses on the caregivers with the exception of mental health service utilization which was taken from use of services by the child under the caregiver's custody. Table 1 presents descriptive data by caregiver type and on the total sample of 430 caregivers.

4.1. Differences in service use

T-tests were conducted to examine differences between mental health service use and no service use by caregivers for the children under their care with the caregiver's demographic characteristics, the child's mental health need, the caregiver's level of stress, depression and social support, and caregiver type. Children who did not use services had significantly lower scores on the CBCL than children who used mental health services. For the caregiver's level of stress, level of depression, and level of social support, t-tests were also used and only level of stress was statistically significant. Children who did not use mental health services had caregivers with a lower level of stress than children who used mental health services. Differences were also found with age of the caregiver and caregiver type between mental health service use and no service use. Results indicate that children who used mental health services

had older caregivers and that a greater number of children placed with foster parents used mental health services. Chi-square tests were run on the caregiver's demographic characteristics with the exception of age and all variables were not statistically significant (see Table 2).

4.2. Differences by caregiver type

In examining the child's mental health need and the caregiver's level of stress, depression and social support, differences were found among caregivers with regard to externalizing behaviors of the children under their care $F(2, 409) = 3.56, p = .029$, level of stress of the caregiver $F(2, 407) = 8.34, p = .001$, level of depression of the caregiver $F(2, 412) = 28.108, p = .001$, and level of social support of the caregiver $F(2, 414) = 20.83, p = .001$, with higher levels of externalizing behaviors indicating a higher level of mental health need for the child and higher levels of stress and depression indicating higher risk factors for the caregiver. A higher level of social support indicated a greater support system for the caregiver. The Tukey HSD (Honestly Significant Difference) test was conducted in order to determine which caregiver type was significantly different. The results of this test indicated that statistically significant differences in externalizing behaviors for the children under their care existed between birth parents and relative caregivers ($\bar{X}_{\text{difference}} = 4.03, p = .039$) with birth parents having children with a higher externalizing behavior score on the CBCL or a higher mental health need than relative caregivers. There were also statistically significant differences in the level of stress experienced between birth parents and relative caregivers ($\bar{X}_{\text{difference}} = .265, p = .004$) with birth parents having a higher level of stress. Differences were also found between birth parents and foster parents ($\bar{X}_{\text{difference}} = .277, p = .001$) with birth parents again having a higher level of stress than foster parents. Statistically significant differences were also found in the level of depression experienced between birth parents and relative caregivers ($\bar{X}_{\text{difference}} = 6.47, p = .001$) with birth parents having a higher level of depression. Birth parents and foster parents ($\bar{X}_{\text{difference}} = 8.41, p = .001$) also had statistically significant differences in their level of depression with birth parents having the highest level. Level of support was also statistically significant between birth parents and relative caregivers ($\bar{X}_{\text{difference}} = -.181, p = .013$) with relative caregivers having a stronger support system. There were also statistically significant differences between birth parents and foster parents ($\bar{X}_{\text{difference}} = -.384, p = .001$) in level of support with foster parents having a higher level of support. Relative caregivers and foster parents ($\bar{X}_{\text{difference}} = -.204, p = .006$) also had statistically significant differences in the level of support with foster parents having a stronger support system. For the outcome variable of mental health service use a chi-square test showed that there were statistically significant differences in mental health service use by caregivers for the children under their care among the different caregiver types with foster parents having the highest service use (60.6%) and birth parents (58.4%) having the lowest service use (see Table 3).

5. Discussion

Children and youth in the child welfare system are supervised by multiple individuals and systems that are responsible for the receipt of needed services. One important and crucial individual in a child's life while in care is their caregiver, as children generally do not seek services for themselves. Caregivers are the "gatekeepers" for children's well-being while in the child welfare system, but little is known as to the role that a child's caregiver plays in the utilization of mental health services for the children under their care. Results of this study suggest that caregivers are influential in the receipt of needed mental health services. In examining caregivers as a whole, results show differences between children who utilized mental health services and those that did not. Children who utilized mental health services had older caregivers than children who did not utilizing services. This finding departs from previous research studies that have documented that older caregivers are the least likely to utilize mental

health services for the children under their care (Ehrle & Geen, 2002; Zima et al., 2000). Several reasons may explain the departure from past findings. Previous research studies have generally only examined relative (kin) caregivers and utilization of mental health services with children in the child welfare system. This study is one of the first to incorporate the three most common types of caregivers in the child welfare system (birth parents, relative caregivers, and foster parents), and therefore, provides a broader perspective when examining caregivers. Findings suggest that examining the combined effect of the different types of caregivers in the child welfare system provides a unique perspective. In addition, results suggest that younger caregivers are less likely to utilize mental health services for the children under their care which closely resemble findings from community samples in which younger caregivers with children in mental health services are more likely to drop out of treatment (Kazdin, Holland, & Crowley, 1997).

In addition, findings are consistent with previous research studies in that utilization of mental health services has previously been associated with a child's psychological need. Research studies have consistently documented that children displaying externalizing behaviors are more likely to be deemed by caregivers in need of mental health services (Zima et al., 2000; Shore et al., 2002; Alegria et al., 2004; Timmer, Sedlar & Urquiza, 2004). Studies also indicate that the greater the impairment in social functioning and the greater the severity of the child's aggressive behavior the more likely that caregivers are to seek mental health services for their children (McKay, McCadam, & Gonzales, 1996; Farmers et al., 1999; Leslie et al., 2000; Brannan & Heflinger, 2005). Results of this study also show that a caregiver's level of stress is significant in determining whether mental health services are utilized for their children. Results from this study are consistent with previous research findings that indicate that the higher the level of stress of the caregiver the higher the likelihood of the utilization of mental health services for their children (Ezzell et al., 1999; Kolko et al., 1999; Timmer, Sedlar & Urquiza, 2004). One clear explanation for this can be attributed to stress playing a detrimental role in the lives of caregivers. For example, research studies have found that the more the stress in disruptive family and social relationships, with neighbors and the community, interrupted work and personal time, and restrictions on personal activities the more likely that the child is to use mental health services (Angold et al., 1998; Brannan & Heflinger, 2005).

Results of this study also suggest that there are significant differences between the different types of caregivers and that these differences may also influence the receipt of mental health services for the children under their care. In particular, birth parents are younger, less educated, single, and living in poverty. These are all factors that have been shown to influence receipt of services for children with relative caregivers (Ehrle & Geen, 2002; Zima et al., 2000), but have not previously been examined with birth parents. Findings suggest that birth parents fare worse than relative caregivers and foster parents with birth parents having the highest level of depression and stress, the lowest level of social support, and reported higher levels of externalizing behaviors for the children under their care. In addition, birth parents also have the lowest mental health service use for their children.

Birth parents in the child welfare system face challenges unique to this population of caregivers. While relative caregivers and foster parents are caring for a child on a "temporary" basis and are expected to abide with child welfare and court mandates for the children under their care, birth parents have mandates that they are expected to follow for themselves and the children under their care. This can exacerbate the level of stress and depression experienced by these caregivers. Often these may be the same reasons that brought them to the attention of the child welfare system in the first place. Similar to findings in the child welfare literature where relative caregivers sought services in times of crisis and avoided any involvement with the child welfare system (Geen, 2003), birth parents may also avoid any further contact with social workers and do not seek help for needed services for fear of losing their children. In addition, many families

involved in the child welfare system often have a low or no social support system, this can further impact birth parents as they are less knowledgeable of the workings of the child welfare and mental health systems, and therefore, are unable to access services.

Stigma may also be a significant factor as to the underutilization of mental health services by birth parents for their children. For example, in a study conducted by Richardson (2001) of children in a community sample, when parents were asked about their perceptions of mental health services for their children stigma was a concern with parents not wanting relatives to find out the child was receiving services. With families in the child welfare system, an additional concern may be that parents may not want friends and relatives to know the family's involvement with the child welfare system and do not seek needed services. Lack of service use has a detrimental outcome for both the parent and child, in that parent's depression and stress may contribute to a child's need for mental health services and a child's mental health need may contribute to a parent's depression and stress.

5.1. Implication

Results from this study have practice implications for both the child welfare and mental health systems. Social workers need to be educated as to the mental health issues that children may face after an incident of abuse. Children need to be assessed and closely monitored to determine whether there is a need for mental health services regardless of whether the child is exhibiting externalizing behaviors, as some children may not display any symptoms/behaviors and may be left untreated. In addition, caregivers in the child welfare system are overburdened, not only from the demands of the children under their care, but also from the various systems (e.g., child welfare, court, and school) they interact with. It is, therefore, the responsibility of the child welfare system to educate caregivers to understand their children's behavior early on so that their level of stress does not determine whether services are sought. Children should receive needed services regardless of the caregiver's psychological well-being.

These data also suggest considerable differences between birth parents, relative caregivers, and foster parents, particularly with birth parents. The child welfare and mental health systems need to target birth parents and provide educational trainings as to the importance of mental health treatment for their children as well as themselves. Findings from this study also provide evidence as to the importance of social workers closely monitoring cases where a child remains or is returned home as these children may be at a greater risk for re-abuse. Targeting birth parents may lead to a higher utilization of mental health services by children and in turn may help alleviate the risk factors that parents face.

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References

- Achenbach, TM. Manual for the child behavior checklist/4–18 and 1991 profile. Burlington, VT: University of Vermont, Department of Psychiatry; 1991a.
- Achenbach, TM. Manual for the youth self-report and 1991 profile. Burlington: University of Vermont, Department of Psychiatry; 1991b.

- Alegria M, Canino G, Lai S, Ramirez RR, Chavez L, Rusch D, Shrout PE. Understanding caregivers' help-seeking for Latino children's mental health care use. *Medical Care* 2004;42(5):447–455. [PubMed: 15083105]
- Angold A, Messer SC, Stangl D, Farmer EM, Costello EJ, Burns BJ. Perceived parental burden and service use for child and adolescent psychiatric disorders. *American Journal of Public Health* 1998;88(1):75–80. [PubMed: 9584037]
- Blumberg E, Landsverk J, Ellis-MacLeod E, Ganger W, Culver S. Use of the public mental health system by children in foster care: Client characteristics and service patterns. *Journal of Mental Health Administration* 1998;23(4):398–405.
- Becker M, Jordan N, Larsen R. Behavioral health service use and costs among children in foster care. *Child Welfare* 2006;85(3):633–647. [PubMed: 16999388]
- Brannan AM, Heflinger CA, Bickman L. The caregiver strain questionnaire: Measuring the impact on the family of living with a child with serious emotional disturbance. *Journal of Emotional and Behavioral Disorders* 1997;5:212–222.
- Brannan AM, Heflinger CA, Foster EM. The role of caregiver strain and other family variables in determining children's use of mental health services. *Journal of Emotional and Behavioral Disorders* 2003;11(2):77–91.
- Brannan AM, Heflinger CA. Child behavioral service use and caregiver strain: Comparison of managed care and fee for service medicaid systems. *Mental Health Services Research* 2005;7(4):197–211. [PubMed: 16320103]
- Burns BJ, Phillips S, Wagner R, Barth R, Kolkom D, Campbell Y, Landsverk J. Mental health needs and access to mental health services by youth involved with child welfare: A national survey. *Journal of the American Academy of Child and Adolescent Psychiatry* 2004;43:960–978. [PubMed: 15266190]
- Clausen JM, Landsverk J, Ganger W, Chadwick D, Litrownik A. Mental health problems of children in foster care. *Journal of Child and Family Studies* 1998;7(3):283.
- Cutrona, CE.; Russell, D. The provisions of social relationships and adaptations to stress. In: Jones, WH.; Perlman, D., editors. *Advances in Personal Relationships*. Vol. Vol.1. Greenwich, CT: JAI Press; 1987. p. 37–68.
- dosReis S, Zito JM, Safer DI, Soeken KL. Mental health services for youths in foster care and disabled youth. *American Journal of Public Health* 2001;91:1094–1099. [PubMed: 11441737]
- Ehrle J, Geen R. Children cared for by relatives: What services do they need? *The Urban Institute New Federalism National Survey of American's Families* 2002;B-47:1–7.
- Ezzell CE, Swenson CC, Faldowski RA. Child, family and case characteristics: Links with service utilization in physically abused children. *Journal of Child & Family Studies* 1999;8(3):271–284.
- Farmer EM, Stangl DK, Burns BJ, Costello EJ, Angold A. Use, persistence, and intensity: Patterns of care for children's mental health across one year. *Community Mental Health Journal* 1999;35(1):31–46. [PubMed: 10094508]
- Garland AF, Landsverk JL, Hough RL, Ellis-Macleod E. Type of maltreatment as a predictor of mental health service use for children in foster care. *Child Abuse & Neglect* 1996;20(8):675–688. [PubMed: 8866114]
- Garland AF, Hough RL, Landsverk JA, McCabe KM, Yeh M, Ganger WC. Racial and ethnic variations in mental health care utilization among children in foster care. *Children's Services: Social Policy, Research, & Practice* 2000;3(3):133–146.
- Garland AF, Hough RL, McCabe KM, Yeh M, Wood PA, Aarons GA. Prevalence of psychiatric disorders in youth across five sectors of care. *Journal of the American Academy of Child and Adolescent Psychiatry* 2001;40:409–418. [PubMed: 11314566]
- Geen, R. "Foster children placed with relatives often receive less government help". Washington, D.C: The Urban Institute; 2003.
- Halfon N, Berkowitz G, Klee L. Mental health service utilization by children in foster care in California. *Pediatrics* 1992;89:1238–1244. [PubMed: 1594382]
- Halfon N, Mendoca A, Berkowitz G. Health status of children in foster care: The experience of the center for the vulnerable child. *Archives of Pediatric and Adolescent Medicine* 1995;149:386–392.
- Hazen AL, Hough RL, Landsverk JA, Wood PA. Use of mental health services by youth in public sectors of care. *Mental Health Services Research* 2004;6:213–226. [PubMed: 15588032]

- Horowitz SM, Hoagwood K, Stiffman AR, Summerfeld T, Weisz JR, Costello EJ, et al. Reliability of the services assessment for children and adolescents. *Psychiatric Services* 2001;52:1088–1094. [PubMed: 11474056]
- James S, Landsverk J, Slymen D, Leslie L. Predictors of outpatient mental health service use – The role of foster care placement change. *Mental Health Services Research* 2004;6:127–141. [PubMed: 15473100]
- Kazdin AE, Holland L, Crowley M. Family experience of barriers to treatment and premature termination from child therapy. *Journal of Consulting and Clinical Psychology* 1997;65(3):453–463. [PubMed: 9170769]
- Kerker BD, Dore MM. Mental health needs and treatment of foster youth: Barriers and opportunities. *American Journal of Orthopsychiatry* 2006;76(1):138–147. [PubMed: 16569139]
- Kolko DJ, Seleyo J, Brown EJ. The treatment histories and services involvement of physically and sexually abusive families: Description, correspondence, and clinical correlates. *Child Abuse & Neglect* 1999;23(5):459–466. [PubMed: 10348382]
- Landsverk, J.; Garland, AF. Foster care and pathways to mental health services. In: Curtis, PA.; Dale, G., Jr; Lincoln, editors. *The foster care crisis: Translating research into policy and practice*. Child, youth, and family services. NE: University of Nebraska Press; 1999.
- Leslie LK, Landsverk J, Ezzet-Lofstrom R, Tschann JM, Slymen DJ, Garland AF. Children in foster care: Factors influencing outpatient mental health service use. *Child Abuse & Neglect* 2000;24(4):465–476. [PubMed: 10798837]
- Leslie L, Hurlburt M, Landsverk J, Barth R, Slymen D. Outpatient mental health services for children in foster care: A national perspective. *Child Abuse & Neglect* 2004;28:697–712.
- McKay MM, McCadam K, Gonzales JJ. Addressing the barriers to mental health services for inner city children and their caretakers. *Community Mental Health Journal* 1996;30(4):353–361. [PubMed: 8840078]
- McMillen JC, Scott LD, Zima BT, Ollie MT, Munson MR, Spitznagel E. Use of mental health services among older youths in foster care. *Psychiatric Services* 2004;55(7):811–817. [PubMed: 15232022]
- Needell, B.; Webster, D.; Armijo, M.; Lee, S.; Cuccaro-Alamin, S.; Shaw, T.; Dawson, W.; Piccus, W.; Magruder, J.; Exel, M.; Smith, J.; Dunn, A.; Frerer, K.; Putnam Hornstein, E.; Ataie, Y. *Child welfare services report for California*. 2006. Retrieved December 19, 2007, from University of California at Berkeley Center for Social Services Research website. URL: <http://cssr.berkeley.edu/CWSCMSreports/>
- Newton R, Litrownik A, Landsverk J. Children and youth in foster care: Disentangling the relationship between problem behavior and number of placements. *Child Abuse & Neglect* 2000;24(10):1363–1374. [PubMed: 11075702]
- Racusin R, Maerlender AC, Sengupta A, Isquirth PK, Straus MB. Psychosocial treatment of children in foster care: A review. *Community Mental Health Journal* 2005;41(2):199–221. [PubMed: 15974499]
- Radloff LS. The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement* 1977;1:385–401.
- Radloff LS, Teri L. Use of the center for epidemiological studies – Depression scale with older adults. *Clinical Gerontologist* 1986;5(1/2):119–136.
- Raghavan R, Inkelas M, Franke T, Halfon N. Administrative barriers to the adoption of high quality mental health services for children in foster care: A national study. *Administration Policy in Mental Health and Mental Health Services Research* 2007;34:191–201.
- Richardson LA. Seeking and obtaining mental health services: What do parents expect? *Archives of Psychiatric Nursing* 2001;15(5):223–231. [PubMed: 11584351]
- Rosenthal JA, Curiel HF. Modeling behavioral problems of children in the child welfare system: Caregiver, youth, and teacher perspective. *Children and Youth Service Review* 2006;28:1391–1408.
- Schneiderman JU, Villagrana M. Meeting children's mental and physical health needs in child welfare: The importance of caregivers. *Social Work in Healthcare*. (in press).
- Shore N, Sim KE, LeProhn NS, Keller TE. Foster parent and teacher assessment of youth in kinship and non-kinship foster care placements: Are behaviors perceived differently across settings? *Children and Youth Services Review* 2002;24(1/2):109–134.

- Simms MD, Dubowitz H, Szilagyi MA. Health care needs of children in the foster care system. *Pediatrics* 2000;106:909–918. [PubMed: 11044143]
- Staudt MM. Mental health services utilization by maltreated children: Research findings and recommendations. *Child Maltreatment* 2003;8(3):195–203. [PubMed: 12934636]
- Timmer SG, Sedlar G, Urquiza AJ. Challenging children in kin versus nonkin foster care: Perceived costs and benefits to caregivers. *Child Maltreatment* 2004;9(3):251–262. [PubMed: 15245678]
- U.S. Department of Health and Human Services. Washington, DC: Government Printing Office; 2007. Trends in Foster Care and Adoption FY 2000 – FY 2005. Retrieved December 26, 2007, from http://www.acf.hhs.gov/programs/cb/stats_research/index.htm
- Zima BT, Bussing R, Yang X, Belin TR. Help-seeking steps and service use for children in foster care. *The Journal of Behavioral Health Services & Research* 2000;27(3):271.

Table 1

Demographic Characteristics for Caregivers (N = 430)

Characteristics	Caregiver Type			Total Sample
	Birth Parent (n=167)	Relative Caregiver (n=110)	Foster Parent (n=153)	N (%) or Mean (SD)
Age	37.15 (7.85)	50.79 (13.04)	46.54(10.83)	43.93 (11.86)
Ethnicity				
Caucasian	74 (44.6)	36 (32.7)	63 (45)	173 (41.6)
African-American	23 (13.9)	37 (33.6)	42 (30)	102 (24.5)
Latino	44 (25.8)	29 (26.4)	25 (17.9)	97 (23.3)
Asian/Other	26 (15.7)	8 (7.3)	10 (7.1)	44 (10.6)
Education				
No Degree	52 (31.5)	34 (30.9)	18 (11.8)	104 (24.4)
High School	92 (55.8)	41 (37.3)	67 (44.1)	200 (46.8)
College	21 (12.7)	35 (31.8)	67 (44.1)	123 (28.8)
Marriage				
Yes	45 (26.9)	53 (48.2)	86 (56.2)	184 (57.2)
No	122 (73.1)	57 (51.8)	67 (43.8)	230 (42.8)
Income				
<\$13,000	83 (52.5)	15 (14.5)	6 (4.5)	104 (26.1)
<\$25,000	52 (32.9)	39 (37.5)	24 (17.6)	115 (28.9)
<\$45,000	15 (9.5)	25 (24.0)	41 (30.1)	81 (20.4)
>\$45,000	8 (5.1)	25 (24.0)	65 (47.8)	98 (24.6)

Note: Due to missing data the sample size varies in some cells.

Table 2Need¹ and Predisposing² Factors, and Caregiver Type by Mental Health Service Use³ (N=430)

Variables of Interest	Service Use (51%)	No Service Use (49%)	Test
Internalizing Behavior	55.29 (11.58)	51.75 (11.37)	$t(377) = -3.003^{**}$
Externalizing Behavior	59.81 (12.69)	53.72 (12.92)	$t(377) = -4.622^{**}$
Total Competency	38.95 (8.18)	41.57 (8.92)	$t(300) = 2.647^{**}$
Stress	1.96 (.69)	1.66 (.62)	$t(373) = -4.408^{**}$
Depression	11.01 (9.84)	10.00 (10.75)	$t(378) = .95$
Social Support	4.23 (.52)	4.22 (.54)	$t(380) = -.286$
Age	45.77 (11.80)	42.00 (11.08)	$t(381) = -3.219^{**}$
Caregiver Type			
Birth Parent	41.6	58.4	$\chi^2(2) = 10.46^{**}$
Relative Caregiver	51.5	48.5	
Foster Parent	60.6	39.4	
Education			
No Degree	47.9	52.1	$\chi^2(2) = 2.08$
High School	49.2	50.8	
College	56.8	43.2	
Income			
≤\$13,000	46.4	53.6	$\chi^2(3) = 1.796$
≤\$25,000	45.7	54.3	
≤\$45,000	49.3	50.7	
>\$45,000	54.5	45.5	
Marital Status			
Not Married	48.7	51.3	$\chi^2(1) = 1.190$
Married	54.3	45.7	
Ethnicity			
Caucasian	48.1	51.9	$\chi^2(3) = .992$
African American	53.8	46.2	
Latino	50.6	49.4	
Asian	49.9	50.1	

*
 $p \leq .05$ **
 $p \leq .001$

Note: Results are in means and standard deviations. Caregiver Type, Education, Income, Marital Status and Ethnicity are presented as percentages.

¹The need factor which includes total competency, internalizing and externalizing behaviors is the child's symptomatology as measured by the caregiver.²Predisposing factors which include stress, depression and social support pertain to the caregiver.³Mental health service use is by the children under the caregiver's care.

Table 3Need¹ and Predisposing² Factors and Mental Health Service Use³ by Caregiver Type (N=430)

Variables of Interest	Caregiver Type			Test
	Birth Parent (n=167)	Relative Caregiver (n=110)	Foster Parent (n=153)	
Total Competency	39.57 (7.85)	50.79 (13.04)	46.54(10.83)	$F(2, 327) = 1.06$
Internalizing Behavior	39.57 (8.23)	41.31 (8.91)	40.11 (9.00)	$F(2, 409) = .66$
Externalizing Behavior	57.83 (13.46)	53.81 (12.99)	57.67(13.07)	$F(2, 411) = 3.56^*$
Stress	1.98 (.75)	1.71 (.62)	1.70 (.56)	$F(2, 407) = 8.34^{**}$
Depression	15.57 (12.70)	9.10 (9.19)	7.16 (7.39)	$F(2, 412) = 28.108^{**}$
Social Support	4.04 (.58)	4.22 (.52)	4.42 (.42)	$F(2, 414) = 20.83^{**}$
Mental Health Service Use				
Yes	41.6	51.5	60.6	$\chi^2(2) = 10.46^*$
No	58.4	48.5	39.4	

*
 $p \leq .05$ **
 $p \leq .001$

Note: Results are in means and standard deviations. Mental health service use is presented as percentages.

¹ The need factor which includes total competency, internalizing and externalizing behaviors is the child's symptomatology as measured by the caregiver.² Predisposing factors which include stress, depression and social support pertain to the caregiver.³ Mental health service use is by the children under the caregiver's care