



Published in final edited form as:

*Soc Work Ment Health*. 2011 January ; 9(1): 56–70. doi:10.1080/15332985.2010.494528.

## Caregiver Depression and Youth Disruptive Behavior Difficulties

**Geetha Gopalan, LCSW, PhD,**

Department of Psychiatry, Mount Sinai School of Medicine

**Kara Dean-Assael, LMSW,**

Department of Psychiatry, Mount Sinai School of Medicine

**Kathryn Klingenstein,**

Graduate School of Social Service, Fordham University

**Anil Chacko, Ph.D,** and

Department of Psychology, Queens College, City University of New York

**Mary M. McKay, LCSW, PhD**

Department of Psychiatry, Mount Sinai School of Medicine

### Abstract

This study examines the rates of depressive symptoms and service use among caregivers whose children receive treatment for disruptive behavior disorders. Descriptive analyses examined preliminary baseline data from the Family Groups for Urban Youth with Disruptive Behaviors study for 212 caregivers to determine rates of caregiver depressive symptoms and lifetime mental health service use. Findings indicate that caregivers manifest substantially higher rates of depressive symptoms compared to national norms. Of those caregivers with clinically significant depressive symptoms, less than half reported ever receiving mental health services. Findings suggest that greater attention should be paid to identifying and treating caregiver depression among children receiving treatment for disruptive behavior disorders.

### Keywords

Caregiver depression; disruptive behavior disorders; child mental health treatment

---

Parents who bring their children to mental health clinics frequently manifest high rates of mental health difficulties themselves (Ferro, Verdelli, Pierre, & Weissman, 2000; Rishel, Greeno, Marcus, & Anderson, 2006; Swartz et al., 2005). However, many of these parents do not receive their own psychiatric treatment (Ferro et al., 2000; Swartz et al., 2005), which can result in negative treatment outcomes for their children (Brent et al., 1998; Rishel et al., 2006). Parental depression, in particular, can have deleterious consequences in terms of child disruptive behavior difficulties (Aikens, Coleman, & Barbarin, 2007; Cummings, Keller, & Davies, 2005; Marchand, Hock, & Widaman, 2002). However, little research has examined rates of mental health service use among low-income, urban depressed caregivers whose children receive treatment for disruptive behavior disorders, specifically Oppositional Defiant Disorder (a recurrent pattern of hostile, disobedient, and defiant behavior beginning in childhood or adolescence; American Psychiatric Association, 2000) and Conduct

---

Correspondence concerning this article should be addressed to Geetha Gopalan, Department of Psychiatry, Mount Sinai School of Medicine, 1 Gustave L. Levy Place, Box 1230, New York, NY 10029. geetha.gopalan@exchange.mssm.edu.

Portions of this paper have been previously presented as poster at the Society for Social Work Research 14<sup>th</sup> Annual Conference "Social Work Research: A World of Possibilities" held January 13<sup>th</sup> – 17<sup>th</sup>, 2010.

Disorder (extreme externalizing behaviors, such as fighting, stealing, and property destruction; American Psychiatric Association, 2000). Consequently, the principal aim of this study is to examine the rates of caregiver depressive symptoms and lifetime mental health service use among parents bringing their children to community-based mental health clinics for treatment of Oppositional Defiant Disorder (ODD) or Conduct Disorder (CD).

### **Caregiver depression and mental health service use**

In recent years, studies demonstrate that a substantial number of parents seeking mental health treatment for their children also experience clinically significant levels of depressive symptoms (Rishel et al., 2006). For instance, among parents whose children met diagnostic criteria for Attention-Deficit Hyperactivity Disorder (ADHD) and received care through the public service sector, 41% manifested clinical levels of depression (Leslie, Aarons, Haine, & Hough, 2007). Rishel et al. (2006) found that 64% of mothers whose children received psychiatric treatment also met criteria for one or more current psychiatric diagnosis. Among these caregivers, 34% met criteria for Major Depressive Disorder. Ferro et al. (2000) also found that nearly one-third (31%) of mothers whose children met diagnostic criteria for unipolar depression screened positive for current major depression, while 22% expressed suicidal ideation or intent. Among a sample of mothers who brought their children to a rural community pediatric mental health clinic, Swartz et al. (2005) found that 35% of mothers met criteria for a depressive disorder. In combination, these findings are striking, given that only 1–7% of adults nationwide suffer from depressive disorders (Kessler, Chiu, Demler, & Walters, 2005). Moreover, up to 2/3rds of caregivers with mental health difficulties whose children receive psychiatric treatment frequently do not receive mental health treatment themselves (Ferro et al., 2000; Swartz et al., 2005).

### **Caregiver depression and child disruptive behavior disorders**

However, little research has examined the rates of mental health service use among depressed caregivers whose children receive treatment in community-based outpatient clinics for disruptive behavior disorders, such as ODD and CD. These disorders are the most common reasons for referral to child mental health care in community clinics (Frick, 1998; Kazdin, 1995; 2008). Studies indicate a substantial association between caregiver depression and childhood disruptive behavior problems (Civic & Holt, 2000; Gross, Shaw, Burwell, & Nagin, 2009), where caregivers experiencing higher levels of depression consistently report elevated rates of behavior problems in their children (e.g., Spieker, Larson, Lewis, Keller, & Gilchrist, 1999), including attention problems, hyperactivity, defiance, aggression, and delinquency (Chronis et al., 2007). As many as half of mothers bringing their children to treatment for behavior problems may manifest clinically significant depressive symptoms themselves (Alpern & Lyons-Ruth, 1993; Hutchings, Appleton, Smith, Lane, & Nash, 2002). Compared to the general population, rates of caregiver depression and child disruptive behavior difficulties are higher in low-income, inner-city communities (McKay, Harrison, Gonzales, Kim, & Quintana, 2002; Miranda et al., 2003; Siefert, Bowman, Heflin, Danziger & Williams, 2000; Tolan & Henry, 1996). Such environments render both parents and children more vulnerable to developing mental health problems as a result of multiple socio-environmental hardships, including poverty, community violence, unemployment, as well as insufficient housing, health, and mental health resources (Attar, Guerra, & Tolan, 1994; Belle, 1990; Gustafson, Larsson, Nelson, & Gustafsson, 2009; Ingoldsby & Shaw, 2002; Leventhal & Brooks-Gunn, 2000; Siefert, Finlayson, Williams, Delva, & Ismail, 2007).

Untreated, parental depression can lead to increased child disruptive behavior difficulties (Aikens et al., 2007; Cummings et al., 2005; Marchand et al., 2002). Caregiver depression

can result in poor parent-child attachment, which increases the likelihood of school-age children exhibiting behavior problems (Moss, Rousseau, Parent, St-Laurent, & Saintonge, 1998). Furthermore, depressed parents often have difficulty fulfilling parenting roles and responsibilities (Downey & Coyne, 1990; Goodman & Gotlib, 1999), manifest inconsistent or ineffective discipline and control, emotional unavailability, and insensitivity towards children (Cummings & Davies, 1994; Field, 1998; Susman, Trickett, Iannotti, Hollenbeck, & Zahn-Waxler, 1985), and demonstrate an increased likelihood of utilizing corporal punishment (Chung, McCollum, Elo, Lee, & Culhane, 2004). Unfortunately, such poor child management skills, discipline practices, family communication and interactional patterns are consistently implicated in the development and maintenance of disruptive behavior problems (Keiley, 2002; Loeber & Stouthamer-Loeber, 1987; Tolan & Henry, 1996). As a result, children who are already exhibiting disruptive behaviors are less likely to improve if their caregivers' depression hinders the development of ameliorative parenting practices and family processes.

It is not surprising, then, that parents' untreated mental health problems have been associated with diminished child mental health treatment success (Brent et al., 1998; Ferro et al., 2000; Leslie et al., 2007; Rishel et al., 2006; Swartz et al., 2005), as well as reduced compliance with children's psychiatric medication regimen (Leslie et al., 2007). Significant parental stressors are also known to hinder families' ability to seek and retain mental health treatment for their children (Thompson et al., 2007). When there are substantial family problems, including parental mental health difficulties, parents are less likely to have the resources or motivation to seek help, or to comply with their children's treatment needs (Harrison, McKay, & Bannon, 2004; Leslie et al., 2007).

Given the pervasiveness of caregiver depression and child disruptive behavior disorders in inner-city, low-income communities, as well as the impact that caregiver mental illness can have on child mental health and treatment outcomes, it behooves providers and policy makers to understand the prevalence of caregiver depression among parents whose children receive psychiatric treatment for disruptive behavior disorders, as well as the rates of service use among depressed caregivers. While previous studies have documented the prevalence of caregiver depressive symptoms and service use among children receiving psychiatric treatment for a variety of disorders (i.e., Ferro et al., 2000; Rishel et al., 2006; Swartz et al., 2005), there is little information identifying mental health service use rates for depressed caregivers within a sample of low-income, inner-city minority families bringing their children to community mental health clinics for treatment of ODD and CD. Consequently, the current study examines (1) rates of caregiver depressive symptoms among those parents bringing their children to treatment for disruptive behavior disorders, and (2) percentages of caregivers with clinically significant levels of depressive symptoms who report ever receiving mental health treatment. Based on the extant literature, we expect that caregivers whose children receive treatment for ODD and CD will manifest disproportionately high rates of depressive symptoms compared to national norms. Additionally, it is further hypothesized that the majority of caregivers with high levels of depressive symptoms will have never received mental health treatment. Data were collected in the context of a prospective intervention study examining the effectiveness of a Multiple Family Group service delivery model to reduce childhood disruptive behavior disorders ("Family Groups for Urban Youth with Disruptive Behaviors"). The current study begins to fill in a notable gap in research regarding mental health service use for depressed parents whose children currently receive psychiatric treatment for ODD and CD.

## Methods

### Sample

The current study utilized baseline data from the Family Groups for Urban Youth with Disruptive Behaviors study, currently in its 4<sup>th</sup> year of 5-year NIMH funding (5R01 MH072649). This parent study evaluates the effectiveness of a Multiple Family Group service delivery model to reduce childhood disruptive behavior disorders. Institutional Review Board approval for the parent study was obtained through the Mount Sinai School of Medicine. Children, aged 7–11 who met diagnostic criteria for ODD or CD and their adult caregivers were recruited from 12 urban child mental health clinics in the New York City metropolitan area. Potentially eligible youth and their families (based on an intake diagnosis of ODD and CD made by clinical service providers) were informed of the parent study by their providers first. If the family expressed interest in learning more, parents were contacted by a member of the research staff. After describing the parent study to the participants, research staff obtained written informed consent and administered the Parent/Teacher Disruptive Behavior Disorders Rating Scale (Pelham, Evans, Gnagy, & Greenslade, 1992; Pelham, Gnagy, Greenslade, & Milich, 1992) to determine if youth met symptom criteria for ODD or CD. Participants included both English and Spanish speakers. Participants were excluded from the study if children or caregivers manifested significant cognitive impairment which would interfere with understanding of program content or the informed consent process, or emergency psychiatric needs requiring services beyond those provided within an outpatient setting (e.g., hospitalization, specialized placement outside the home). Participants were also excluded if children resided in foster care or their legal guardian could not provide formal consent. Adult caregivers and youth of eligible families immediately completed baseline interviews consisting of structured assessment instruments. Based on the inclusion and exclusion criteria for the parent study, 237 caregivers and their children screened in as eligible for inclusion during the period beginning November 2, 2006 through December 1st, 2009. Of these, 212 (89%) adult caregivers completed valid baseline assessments regarding caregiver depressive symptoms and mental health service use.

### Measures

**Center for Epidemiological Studies-Depression Scale (CES-D)**—The CES-D is a 20-item non-diagnostic, self-report measure of depressive symptoms that is widely used in community-based epidemiological studies (Perez Foster, 2007). The Center for Epidemiologic Studies developed this measure (Radloff, 1977). Respondents are asked to rate, on a 0 to 3 scale (ranging from “Rarely/None of the Time to Most/All of the Time), how often in the past week they felt or behaved a certain way, such as “I was depressed,” or “I did not feel like eating; my appetite was poor”. Total possible scores range from 0 to 60, with higher scores indicating greater depressive symptoms. The items cover both depressed mood and physiological manifestations of depression, such as loss of appetite and sleep disturbance. A score of 16 or higher has been used extensively as the cut-off point indicating clinical levels of depressive symptoms (Knoch, Givens, & Sheridan, 2007). The internal consistency of the CES-D was reported to be .85 for the general population (Radloff, 1977), and in this study, the Cronbach’s alpha was .89. Caregivers with a score of 16 or higher met with research staff to discuss their clinical levels of depressive symptoms and were provided resources to accommodate and/or initiate caregivers’ reception of mental health services.

**Caregiver mental health service use**—Caregivers responded whether they had ever received mental health services for themselves (e.g., outpatient individual therapy, medication management, substance abuse treatment, inpatient hospitalization, day treatment, residential treatment, case management, psychological/psychiatric evaluation). Caregivers responded “Yes” or “No” to this question.

## Analyses

Analyses utilized SPSS Version 17 statistical software (SPSS for Windows 17.0., 2008). Descriptive statistics determined overall CES-D means for the sample, as well as the percentage of caregivers reporting clinically significant depressive symptoms (scoring  $\geq 16$  on CES-D). Percentage of caregivers ever receiving mental health services for themselves were computed for all caregivers, organized by clinically significant depressive symptom status.

## Results

Table 1 presents demographic information for this sample. Overall, the majority of caregivers for the current study identified as either Black/African American ( $n = 64$ , 30.5%) or Hispanic/Latino ( $n = 118$ , 56.2%). Most primary caregivers ( $n = 171$ , 81.8%) were mothers, with a mean age of 35.8 ( $SD=8.3$ ) years old. Only 1/3rd of caregivers reported being married or cohabiting. The majority of caregivers (70.3%) reported an annual income of less than \$20,000. Overall, a greater percentage of caregivers manifesting clinically significant levels of depressive symptoms reported having incomes lower than \$9,999 and less than an 8<sup>th</sup> grade education, compared to caregivers in the normal range on the CES-D.

The mean baseline CES-D score for this sample was 18.8 ( $SD = 11.2$ ), which is significantly higher than the reported national norm of 8.7 among U.S. adults (Sayetta & Johnson, 1980). Moreover, as indicated in Table 1, 56.6% ( $n = 120$  out of the  $n = 212$ ) of caregivers reported manifesting clinically significant levels of depressive symptoms at baseline, scoring 16 or higher on the CES-D. Finally, Table 2 indicates that, among those caregivers manifesting clinically significant levels of depressive symptoms, only 49.1% ( $n = 59$  out of  $n = 120$ ) reported ever receiving any type of mental health service.

## Discussion

Findings are consistent with prior research indicating caregivers who bring their children to psychiatric treatment manifest substantially higher levels of mental health difficulties than adults in the general population. Indeed, over half (56.6%) of all caregivers in the current sample manifested clinically significant levels of depressive symptoms. In comparison, studies indicate only 17 – 21% of the general population scored above 16 on the CES-D (McCue Horwitz, Briggs-Gowan, Storfer-Isser, & Carter, 2007; Radloff, 1977). At the same time, results from the current study suggest that slightly over half of caregivers (50.8%;  $n = 61$  out of  $n = 120$ ) with clinically significant levels of depressive symptoms have never received mental health services themselves. These findings are concerning, given the deleterious effect that untreated caregiver depression can have on child mental health and treatment outcomes.

## Limitations

Findings from this study should be interpreted in light of certain limitations. Wording of questions used to assess mental health service use asked if caregivers have “ever” used mental health services. As a result, the current study was unable to distinguish between caregivers’ current service use and history of service use prior to engaging their children into treatment. Given that prior studies (e.g., Ferro et al., 2000; Swartz et al., 2005) find that up to 2/3rds of depressed caregivers do not currently receive mental health treatment, we expect that rates of mental health service use from the current study would decrease if focusing on current service use.

As this was not an epidemiological study, we cannot conclude that rates of caregiver depressive symptoms detected in this sample are representative on a national basis.

Moreover, findings from the current study are limited to those families with children between the ages of 7–11 years old, as was specified by the intake criteria for the parent study (i.e., Family Groups for Urban Youth with Disruptive Behaviors study). Consequently, findings are not necessarily generalizable to families with older or younger children. This is not to say, however, that caregiver depression is applicable for school-age children exhibiting behavior problems alone. Certainly, aside from managing behavioral difficulties among teens, a substantial number of parents may experience lowered self-esteem, diminished life satisfaction, increased anxiety and depression, and more frequent ruminations about middle age during the transition through adolescence (Steinberg & Steinberg, 1994). Furthermore, caregivers of younger children with behavioral difficulties are also likely to experience mental health problems themselves (Gross, Shaw, Moilanen, & Dishion, & Wilson, 2008).

## Implications

Most importantly, findings from the current study underscore the need for ensuring that depressed caregivers receive appropriate treatment, especially given evidence indicating that caregivers' psychological well-being affects their children's treatment outcomes (Brent et al., 1998; Rishel et al., 2006; Weissman et al., 2006). Consequently, targeting caregiver depression may be an important element not only in the treatment of child disruptive behavioral problems, but also in the maintenance of treatment results.

A few options exist currently to address caregiver mental illness among parents whose children have psychiatric difficulties. An 8-session version of Interpersonal Psychotherapy developed for depressed mothers whose children received treatment for depression (IPT-MOMS; Swartz et al., 2007; 2008; Verdeli et al., 2004) focuses on the specific challenges associated with managing children with mental health difficulties and negotiating the child mental health service system (Swartz et al., 2007). A recent randomized trial indicated that mothers receiving IPT-MOMS manifested significantly lower depressive symptoms and higher levels of functioning compared to mothers in the control group. Moreover, children whose mothers received IPT-MOMS demonstrated significantly lower levels of depression than mothers receiving treatment as usual (Swartz et al., 2008).

However several trials of IPT-MOMS have reported difficulties engaging depressed mothers (Swartz et al., 2007; Verdeli et al., 2004). The literature points towards specific barriers endemic to individuals residing in low-income urban areas, such as high treatment costs, lack of insurance, limited time and competing priorities, loss of pay from missing work, inconvenient or inaccessible clinic locations, limited clinic hours, transportation problems, and child care difficulties (Armstrong, Ishiki, Heiman, Mundt & Womack, 1984; Maynard, Ehreth, Cox., Peterson & McGann, 1997). For those caregivers with significant economic difficulties, seeking treatment may be seen as an additional financial burden (Hall, 2001). Mothers may also fear that receiving mental health treatment could result in the removal of their child from the home (Anderson et al., 2006). Stigma about mental illness (e.g., concern about what friends and family think, embarrassment around discussing depression, belief that mental health treatment is ineffective) can also prevent depressed, economically disadvantaged women from seeking treatment (Scholle, Haskett, Hanusa, Pincus & Kupfer, 2003). Finally, mental health clinicians may be insensitive or ignorant to cultural factors, which subsequently affect treatment engagement and retention for minorities in general (Miranda, Azocar, Organista, Muñoz & Lieberman, 1996).

Given difficulties with engaging caregivers into their own mental health treatment, innovative services could co-locate child and adult treatment within the same setting. To date, a few studies have examined the effects of concurrent treatment for child disruptive behavior and caregiver depression. In one study, Chronis, Gamble, Roberts, and Pelham

(2006) offered the cognitive behavioral intervention entitled “Coping with Depression Course” (CWDC; Lewisohn, Antonuccio, Steinmetz, & Teri as cited in Chronis et al., 2006) to mothers whose families had participated in a prior 8-week behavioral treatment program for children with ADHD. The authors found that the subsequent CWDC intervention led to improvements in both maternal depression and mother-reported child behavior. Additionally, involvement in the CWDC intervention helped to maintain the positive effects of the initial ADHD treatment program. Sanders and McFarland (2000) have also developed a Cognitive Behavioral Family Intervention (CBFI), which has been effective in reducing both maternal depression and child disruptive behavior.

Conversely, it has been suggested that child mental health interventions which focus on parent training may be effective in reducing caregiver depression. Specifically, it is argued that as parenting skills increase, youth behavioral difficulties decrease, which in turn, results in decreases in caregiver depression (Barth, 2009). For example, DeGarmo, Patterson, and Forgatch (2004) evaluated the effects of Parent Management Training for recently separated mothers and their sons. DeGarmo et al. found that increases in effective parenting predicted reductions in child behavior problems, while reductions in maternal depression were mediated by reductions on youth behavioral difficulties. Furthermore, lifting of depression contributed to improved parenting and child conduct over the next 18 months. Such evidence suggests that it may be more cost-effective to offer parent training alone as part of child mental health interventions to treat disruptive behavior disorders. Only if there are no improvements in parent functioning should additional interventions be added to target caregiver depression (Barth, 2009).

In sum, findings from the current study indicate the importance of conjointly addressing children’s behavioral difficulties and depressive symptoms among their caregivers. As the current study and previous research demonstrate, caregivers of children receiving mental health treatment often do not receive services themselves, which can have harmful consequences for child mental health outcomes and treatment progress. As a result, future research would examine the most cost-effective and efficient ways of developing integrated treatment and service structures which would address both child and caregiver needs. This may entail co-locating caregiver treatment within child mental health treatment programs as an effective way of ensuring that caregivers with mental health issues engage in needed services. At the same time, the findings by DeGarmo et al. (2004) suggest that future research should determine if the relationships between improved parenting skills, reduced youth behavior problems, and subsequent reductions in caregiver depression also hold across other evidence-based, parent-mediated treatments for childhood disruptive behavior disorders.

## Acknowledgments

This study was supported by the National Institute of Mental Health (5R01 MH072649). The content is solely the responsibility of the author and does not necessarily represent the official views of the National Institute of Mental Health or the National Institutes of Health.

## References

- Aikens NL, Coleman CP, Barbarin OA. Ethnic differences in the effects of parental depression on preschool children’s socioeconomic functioning. *Social Development* 2007;17:137–160.
- Alpern L, Lyons-Ruth K. Pre-school children at social risk: Chronicity and timing of maternal depressive symptoms and child behavior problems at school and at home. *Development and Psychopathology* 1993;5:371–387.
- American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 4. Washington, DC: Author; 2000. text rev

- Anderson CM, Robins CS, Greeno CG, Cahalane H, Copeland VC, Andrews RM. Why lower income mothers do not engage with the formal mental health care system: Perceived barriers to care. *Qualitative Health Research* 2006;16:926–943. [PubMed: 16894224]
- Armstrong HE, Ishiki D, Heiman J, Mundt J, Womack W. Service utilization by black and white clientele in an urban community mental health center: Revised assessment of an old problem. *Community Mental Health Journal* 1984;20(4):269–281. [PubMed: 6518740]
- Attar BK, Guerra NG, Tolan PH. Neighborhood disadvantage, stressful life events, and adjustment in urban elementary-school children. *Journal of Clinical Child Psychology* 1994;23(4):391–400.
- Barth RP. Preventing child abuse and neglect with parent training: Evidence and opportunities. *The Future of Children* 2009;19:95–118. [PubMed: 19719024]
- Belle D. Poverty and women's mental health. *American Psychologist* 1990;45:385–389.
- Brent DA, Kolko DJ, Birmaher B, Baugher M, Bridge J, Roth C, Holder D. Predictors of treatment efficacy in a clinical trial of three psychosocial treatments for adolescent depression. *Journal of the American Academy of Child & Adolescent Psychiatry* 1998;37:906–914. [PubMed: 9735610]
- Chronis AM, Gamble SA, Roberts JE, Pelham WE. Cognitive-behavioral depression treatment for mothers of children with Attention-Deficit/Hyperactivity Disorder. *Behavior Therapy* 2006;37:143–158. [PubMed: 16942968]
- Chronis AM, Lahey BB, Pelham WE Jr, Williams SH, Baumann BL, Kipp H, Jones HA, Rathouz PJ. Maternal depression and early positive parenting predict future conduct problems in young children with Attention-Deficit/Hyperactivity Disorder. *Developmental Psychology* 2007;43:70–82. [PubMed: 17201509]
- Chung EK, McCollum KF, Elo IT, Lee HJ, Culhane JF. Maternal depressive symptoms and infant health practices among low-income women. *Pediatrics* 2004;113(6):523–529.
- Civic D, Holt VL. Maternal depressive symptoms and child behavior problems in a nationally representative normal birthweight sample. *Maternal and Child Health Journal* 2000;4:215–221. [PubMed: 11272341]
- Cummings ME, Davies PT. Maternal depression and child development. *Journal of Child Psychology* 1994;35:73–112.
- Cummings EM, Keller PS, Davies PT. Towards a family process model of maternal and paternal depressive symptoms: exploring multiple relations with child and family functioning. *Journal of Child Psychology and Psychiatry* 2005;46:479–489. [PubMed: 15845128]
- DeGarmo DS, Patterson GR, Forgatch MS. How do outcomes in a specified parent training intervention maintain or wane over time? *Prevention Science* 2004;5:73–89. [PubMed: 15134313]
- Downey D, Coyne JC. Children of depressed parents: An integrative review. *Psychological Bulletin* 1990;108:50–76. [PubMed: 2200073]
- Ferro T, Verdeli H, Pierre F, Weissman MM. Screening for depression in mothers bringing their offspring for evaluation or treatment of depression. *American Journal of Psychiatry* 2000;157:375–379. [PubMed: 10698812]
- Field T. Emotional care of the at-risk infant: Early interventions for infants of depressed mothers. *Pediatrics* 1998;102:1305–1310. [PubMed: 9794974]
- Frick, PJ. *Conduct disorders and severe antisocial behavior*. New York: Plenum Press; 1998.
- Goodman SH, Gotlib IH. Risk for psychopathology in the children of depressed parents: A developmental approach to the understanding of mechanisms. *Psychological Review* 1999;106:458–490. [PubMed: 10467895]
- Gross HE, Shaw DS, Burwell RA, Nagin DS. Transactional processes in child disruptive behavior and maternal depression: A longitudinal study from early childhood to adolescence. *Development and Psychopathology* 2009;21:139–156. [PubMed: 19144227]
- Gross HE, Shaw DS, Moilanen KL, Dishion TJ, Wilson MN. Reciprocal models of child behavior and depressive symptoms in mothers and fathers in a sample of children at risk for early conduct problems. *Journal of Family Psychology* 2008;22:742–751. [PubMed: 18855510]
- Gustafson PE, Larsson I, Nelson N, Gustafsson PA. Sociocultural disadvantage, traumatic life events, and psychiatric symptoms in preadolescent children. *American Journal of Orthopsychiatry* 2009;79:387–397. [PubMed: 19839676]



- Hall GCN. Psychotherapy research with ethnic minorities: Empirical, ethical, and conceptual issues. *Journal of Consulting and Clinical Psychology* 2001;69:502–510. [PubMed: 11495179]
- Harrison ME, McKay MM, Bannon WM Jr. Inner-city child mental health service use: The real question is why youth and families do not use services. *Community Mental Health Journal* 2004;40:119–131. [PubMed: 15206637]
- Hutchings J, Appleton P, Smith M, Lane E, Nash S. Evaluation of two treatments for children with severe behaviour problems: Child behaviour and maternal mental health outcomes. *Behavioural and Cognitive Psychotherapy* 2002;30(3):279–295.
- Ingoldsby EM, Shaw DS. Neighborhood contextual factors and early-starting antisocial pathways. *Clinical Child and Family Psychology Review* 2002;5:21–55. [PubMed: 11993544]
- Kazdin, AE. *Conduct Disorders in Childhood and Adolescence*. 2. Thousand Oaks, CA: Sage Publications, Inc; 1995.
- Kazdin AE. Evidence-based treatments and delivery of psychological services: Shifting our emphases to increase impact. *Psychological Services* 2008;5:201–215.
- Kessler RC, Chiu WT, Demler O, Walters EE. Prevalence, severity, and comorbidity of twelve-month DSM-IV disorders in the National Comorbidity Survey Replication (NCS-R). *Archives of General Psychiatry* 2005;62:617–627. [PubMed: 15939839]
- Keiley MK. The development and implementation of an affect regulation and attachment intervention for incarcerated adolescents and their parents. *The Family Journal* 2002;10:177–189.
- Knoche LL, Givens JE, Sheridan SM. Risk and protective factors for children of adolescents: Maternal depression and parental sense of competence. *Journal of Child and Family Studies* 2007;16:684–695.
- Leslie LK, Aarons GA, Haine RA, Hough RL. Caregiver depression and medication use by youths with ADHD who receive services in the public sector. *Psychiatric Services* 2007;58:131–134. [PubMed: 17215424]
- Leventhal T, Brooks-Gunn J. The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin* 2000;126:309–337. [PubMed: 10748645]
- Loeber, R.; Stouthamer-Loeber, M. The prediction of delinquency. In: Quay, HC., editor. *Handbook of juvenile delinquency*. New York: Wiley; 1987. p. 325–416.
- Marchand JF, Hock E, Widaman K. Mutual relations between mothers' depressive symptoms and hostile-controlling behavior and young children's externalizing and internalizing behavior problems. *Parenting Science and Practice* 2002;2:335–353.
- Maynard C, Ehreth J, Cox GB, Peterson PD, McGann ME. Racial differences in the utilization of public mental health services in Washington state. *Administration and Policy in Mental Health* 1997;24:411–424. [PubMed: 9239945]
- McCue Horwitz S, Briggs-Gowan MJ, Storfer-Isser A, Carter AS. Prevalence, correlates, and persistence of maternal depression. *Journal of Women's Health* 2007;16:678–691.
- McKay MM, Harrison ME, Gonzales J, Kim L, Quintana E. Multiple-family groups for urban children with conduct difficulties and their families. *Psychiatric Services* 2002;53:1467–1468. [PubMed: 12407277]
- Miranda J, Azocar F, Organista KC, Muñoz RF, Lieberman A. Recruiting and retaining low-income Latinos in psychotherapy research. *Journal of Consulting and Clinical Psychology* 1996;64:868–874. [PubMed: 8916613]
- Miranda J, Chung JY, Green BL, Krupnick J, Siddique J, Revicki DA, Berling T. Treating depression in predominantly low-income young minority women: A randomized controlled trial. *Journal of the American Medical Association* 2003;290:57–65. [PubMed: 12837712]
- Moss E, Rousseau D, Parent S, St-Laurent D, Saintonge J. Correlates of attachment at school age: Maternal reported stress, mother-child interaction, and behavior problems. *Child Development* 1998;69:1390–1405. [PubMed: 9839423]
- Pelham WE, Evans SW, Gnagy EM, Greenslade KE. Teacher ratings of DSM-III—R symptoms for the disruptive behavior disorders: Prevalence, factor analyses, and conditional probabilities in a special education sample. *School Psychology Review* 1992;21:285–299.

- Pelham WE, Gnagy EM, Greenslade KE, Milich R. Teacher ratings of DSM-III—R symptoms for the disruptive behavior disorders. *Journal of the American Academy of Child & Adolescent Psychiatry* 1992;31:210–218. [PubMed: 1564021]
- Perez Foster RM. Treating depression in vulnerable urban women: A feasibility study of clinical outcomes in community service settings. *American Journal of Orthopsychiatry* 2007;77:443–453. [PubMed: 17696673]
- Radloff LS. The CES-D scale: a self-report depression scale for research in the general population. *Applied Psychological Measurement* 1977;1:385–401.
- Rishel CW, Greeno CG, Marcus SC, Anderson C. Effect of maternal mental health problems on child treatment response in community-based services. *Psychiatric Services* 2006;57:716–719. [PubMed: 16675770]
- Sanders MR, McFarland M. Treatment of depressed mothers with disruptive children: A controlled evaluation of cognitive behavioral family intervention. *Behavior Therapy* 2000;31:89–112.
- Sayetta RB, Johnson DP. Basic data on depressive symptomatology. *Vital Health and Statistics* 1980;11(216)
- Scholle SH, Haskett RF, Hanusa BH, Pincus HA, Kupfer DJ. Addressing depression in obstetrics/gynecology practice. *General Hospital Psychiatry* 2003;25(2):83–90. [PubMed: 12676420]
- Siefert K, Bowman PJ, Heflin CM, Danziger S, Williams DR. Social and environmental predictors of maternal depression in current and recent welfare recipients. *American Journal of Orthopsychiatry* 2000;70:510–522. [PubMed: 11086529]
- Siefert K, Finlayson TL, Williams DR, Delva J, Ismail AI. Modifiable risk and protective factors for depressive symptoms in low-income African American mothers. *American Journal of Orthopsychiatry* 2007;77:113–123. [PubMed: 17352592]
- Spieker SJ, Larson NC, Lewis SM, Keller TE, Gilchrist L. Developmental trajectories of disruptive behavior problems in preschool children of adolescent mothers. *Child Development* 1999;70:443–458. [PubMed: 10218265]
- SPSS for Windows, 17.0.1. Chicago, IL: SPSS Inc; 2008.
- Steinberg, L.; Steinberg, W. *Crossing paths: How your child's adolescence triggers your own crisis*. New York: Simon & Schuster; 1994.
- Susman EJ, Trickett PK, Iannotti RJ, Hollenbeck BE, Zahn-Waxler C. Child-rearing patterns in depressed, abusive, and normal mothers. *American Journal of Orthopsychiatry* 1985;55:237–251. [PubMed: 3993753]
- Swartz HA, Shear MK, Wren FJ, Greeno CG, Sales E, Sullivan BK, Ludewig DP. Depression and anxiety among mothers who bring their children to a pediatric mental health clinic. *Psychiatric Services* 2005;56:1077–1083. [PubMed: 16148320]
- Swartz HA, Zuckoff A, Grote NK, Spielvogel HN, Bledsoe SE, Shear MK, Frank E. Engaging depressed patients in psychotherapy: Integrating techniques from motivational interviewing and ethnographic interviewing to improve treatment participation. *Professional Psychology: Research and Practice* 2007;38:430–439.
- Swartz HA, Frank E, Zuckoff A, Cyranowski JM, Houck PR, Cheng Y, Dana Fleming MA, Grote NK, Brent DA, Shear MK. Brief interpersonal psychotherapy for depressed mothers whose children are receiving psychiatric treatment. *The American Journal of Psychiatry* 2008;165:1155–1162. [PubMed: 18558645]
- Thompson R, Lindsey MA, English DJ, Hawley KM, Lambert S, Browne DC. The influence of family environment on mental health need and service use among vulnerable children. *Child Welfare* 2007;86(5):57–74. [PubMed: 18422048]
- Tolan PH, Henry D. Patterns of psychopathology among urban poor children: Comorbidity and aggression effects. *Journal of Consulting and Clinical Psychology* 1996;64:1094–1099. [PubMed: 8916642]
- Verdeli H, Ferro T, Wickramaratne P, Greenwald S, Blanco C, Weissman MM. Treatment of depressed mothers of depressed children: Pilot study of feasibility. *Depression and Anxiety* 2004;19:51–58. [PubMed: 14978786]
- Weissman MM, Pilowsky DJ, Wickramaratne PJ, Talati A, Wisniewski SR, Fava M, Hughes CW, Garber J, Malloy E, King CA, Cerda G, Sood AB, Alpert JE, Trivedi MH, Rush AJ. Remissions in

maternal depression and child psychopathology: A STAR\*D child report. *Journal of the American Medical Association* 2006;295:1389–1398. [PubMed: 16551710]

Table 1

Demographic Characteristics of Caregivers (n = 212)

Characteristic	Total		Normal Range ( $\leq 15$ on CES-D)		Clinical Range for Depressive Symptoms ( $\geq 16$ on CES-D)	
	n	%	n	%	n	%
Ethnicity <sup>a</sup> :						
White/Caucasian	18	8.6	9	50.0	9	50.0
Black/African American	64	30.5	33	51.6	31	48.4
Hispanic/Latino	118	56.2	47	39.8	71	60.2
Native American	1	.5	1	100	0	0
Other	9	4.3	1	11.1	8	88.9
Primary Caregiver:						
Mother	171	81.8	65	38.0	106	62.0
Father	4	1.9	1	25.0	3	75.0
Mother and Father	17	8.1	11	64.7	6	35.3
Grandparent	6	2.9	4	66.7	2	33.3
Other	11	5.3	10	90.9	1	9.1
Age (mean $\pm$ SD)	35.8 $\pm$ 8.3		36.4 $\pm$ 9.6		35.4 $\pm$ 7.2	
Caregiver Marital Status:						
Single	97	46.2	40	41.2	57	58.8
Married or Cohabiting	70	33.3	32	45.7	38	54.3
Divorced	11	5.2	5	45.5	6	54.5
Separated	23	11.0	8	34.8	15	65.2
Widowed	5	2.4	3	60.0	2	40.0
Other	4	1.9	3	75.0	1	25.0
Income:						
Less than \$9,999	88	44.2	29	33.0	59	67.0
\$10,000 to \$19,999	52	26.1	27	51.9	25	48.1
\$20,000 to \$29,999	27	13.6	11	40.7	16	59.3
\$30,000 to \$39,999	15	7.5	12	80.0	3	20.0
\$40,000 to \$49,999	4	2.0	2	50.0	2	50.0
Over \$50,000	13	6.5	6	46.2	7	53.8

Characteristic	Total		Normal Range ( $\leq 15$ on CES-D)		Clinical Range for Depressive Symptoms ( $\geq 16$ on CES-D)	
	n	%	n	%	n	%
Education Status:						
8th Grade or Less	28	13.5	9	32.1	19	67.9
Some High School	56	26.0	20	35.7	36	64.3
Completed H.S./G.E.D.	51	24.5	24	47.1	27	52.9
Some College	49	23.6	23	46.9	26	53.1
Completed College	13	6.3	9	69.2	4	30.8
Some Grad/Prof. School	3	1.4	0	0	3	100
Completed Grad/Prof. School	8	3.8	5	62.5	3	37.5
Employment Status:						
Employed Full-Time	56	26.5	32	57.1	24	42.9
Employed Part-Time	37	17.5	16	43.2	21	56.8
Student	9	4.3	5	55.6	4	44.4
Retired	4	1.9	4	100	0	0
Disabled	23	10.9	6	26.1	17	73.9
Unemployed	72	34.1	21	29.2	51	70.8
Other	10	4.7	7	70.0	3	30.0
<b>Total</b>	<b>212</b>		<b>92</b>	<b>43.4</b>	<b>120</b>	<b>56.6</b>

Note: Numbers may not add up to n=212 due to missing data

**Table 2**

Lifetime Service Use for Caregivers (n = 212)

Mental Health Service Use	Normal Range ( $\leq 15$ on CES-D)		Clinically Significant Depressive Symptoms ( $\geq 16$ on CES-D)	
	<i>n</i>	% <sup>+</sup>	<i>n</i>	% <sup>+</sup>
Received Any Mental Health Service	25	11.8	59	27.8
Did Not Receive Any Mental Health Service	66	31.1	61	28.8
<b>Total</b>	<b>92</b>	<b>43.4</b>	<b>120</b>	<b>56.6</b>

Note: Numbers do not add up to n=212 due to missing data

<sup>+</sup> percentages are out of n=212