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Parent Depression and Anger in Peer-Delivered Parent Support Services

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Abstract

Knowledge about parents who seek peer-delivered parent support services in children's mental health is limited. In this prospective study, characteristics of 124 parents who sought peer parent advocate services related to their children's behavioral difficulties are described. This urban sample consisted primarily of low-income mothers of color, 80% of whom were caring for children with clinically significant behavioral problems. Of these parents, 64% endorsed clinically significant levels of depressive symptoms at baseline. Linear mixed effects models were used to examine associations between parent depression and anger expression with working alliances with peer advocates. No independent or combined effects of parent depression or anger expression on working alliance were found. However, adjusting for family demographic factors, caregiver strain and child symptoms, parent depression interacted with anger expression to influence working alliances, primarily around agreement and mutual engagement on goals. Among parents who endorsed clinically significant depressive symptoms, anger expression did not influence working alliance but among non-depressed parents, anger expression *was* negatively associated with working alliance. Implications for training peer parent advocates to more effectively engage low income parents are discussed.

Keywords

Peer Parent Services; Depression; Anger Expression; Child Mental Health; Working Alliance

Introduction

The gap between child mental health need and service utilization has been well-documented (e.g., U.S. Department of Health and Human Services, 2000; U.S. Office of the Surgeon General, 1999, 2001). Many factors influence the use of mental health services among children and adolescents with psychiatric needs, but they do not include child demographic and clinical status alone. Various theories and models have been proposed and tested to explain how children receive services (see Stiffman, Pescosolido, & Cabassa, 2004 for summary). These models range from “individualistic and static” factors focused on client need and services (Andersen’s Behavioral Model, Andersen, 1995) to “community-based and process-oriented” explanations of service utilization (e.g., Costello, Pescosolido, Angold & Burns, 1998 adaption of the Network Episode Model for youth).

In this paper, we are particularly interested in the role of the parent or caregiver (here after called parent) in service access and utilization. Because children do not typically present themselves for treatment and require parental consent for treatment, parent recognition of mental health problems, perception of need, and knowledge of service systems are important factors in service utilization (Bickman, Lambert, Andrade, Salzer & Foster, 1998). Factors that influence parent engagement (i.e., care access and service utilization) in mental health for their children can be divided into three categories: family level barriers (e.g., low income, poor social support, parent preferences, beliefs about need and value of services, parent mental health issues, stress, etc); service level or structural barriers (e.g., costs, service availability, transportation, etc); and relational or interpersonal barriers (e.g., insensitive attitudes and beliefs, lack of cultural sensitivity on the part of providers, mistrust of providers, misconceptions about services, fear of child protective services) (Centre for Community Health, 2010; Gopalan et al., 2010).

Research provides limited guidance on how best to engage and treat such families, in part because the existing evidence based treatments have primarily been tested with families who actually engage in treatments (Centre for Community Health, 2010). Few studies have examined families who drop out of treatments or do not engage in them at all, although it is acknowledged that these issues are particularly difficult among low income populations. Consequently, the research base on effectively addressing these barriers (particularly around malleable factors) is very limited.

More recent research literature on barriers to service utilization has focused on parents’ experiences, rather than more traditional and well-established parent and child factors. In particular, such research highlights the critical role of therapeutic alliance between parents and providers in outpatient mental health settings. A series of studies by Kazdin and his colleagues (Kazdin, Holland & Crowley, 1997) showed that parent perceptions (e.g., therapeutic alliance, perceived relevance of treatment) played a more significant role than logistical or concrete barriers. Parental perceptions of the therapeutic alliance, specifically

the degree to which they are involved in service planning, and problems with the therapeutic relationship have been found to distinguish premature treatment dropouts from completers in different populations (Garcia & Weisz, 2002; Kazdin et al., 1997; Koren et al., 1997; McCabe, 2002). Importantly, parents' prior experiences of mental health services colored future perceptions about the utility of treatments for their children (Kerkorian, McKay, & Bannon, 2006). Parents who felt disrespected by prior mental health providers were six times more likely to express doubts about how helpful future treatments are likely to be and hence more likely to report more structural barriers to service engagement (Gopalan et al., 2010). The importance of relational barriers have also been documented among parents of children in out of home placements (residential treatment, psychiatry inpatient units or group homes); parents highlighted barriers to participation, including lack of communication and negative attitudes by staff (Kruzich, Jivanjee, Robinson & Friesen 2003).

Grassroots movements in children's mental health have had a longer history of recognizing the importance of familial barriers (especially experiential ones) to service utilization. Significant efforts have been made to promote family participation in the development of child services systems that can better meet the needs of families (Stroul, 1996). Since the mid-1980s when the federal government funded the Child and Adolescent Service System Program (CASSP), family participation has been viewed as an essential element in service quality (Stroul, 1996). At the same time, CASSP and system of care initiatives have raised awareness of the divergent views of family members and professionals regarding the genesis of child emotional and behavioral problems and their treatment (Donner, 2003; Stroul, 1996). For decades, providers have historically viewed parents as obstacles to treatment, irrelevant to the treatment process, or causes of problems (Peer Technical Assistance Network, 2000). Parents may thus be offered treatments or services that do not align with their views of the problem and are reluctant or uncomfortable with provider recommendations. Such parents may in turn be viewed by providers as "resistant", "non-compliant", or "hard to engage" and run real and at times tragic risks (e.g., losing child custody) for seeming negligence or non-compliance with treatment. Parental mistrust of providers and lack of confidence in provider ability to understand their needs are very real. These relational tensions create challenges for the development of meaningful parent-provider collaborations. Various technical assistance organizations involved in developing comprehensive community systems for children report significant challenges and frustrations with respect to family and professional relationships (Peer Technical Assistance Network, 2000). Despite efforts by many states to be responsive to family and youth needs, significant challenges persist (Cooper et al., 2008), and service engagement and retention in the children's public mental health system continues to be poor especially among low-income, urban, minority children (Brandenburg, Friedman & Silver, 1990; Knitzer, 1982; McCabe et. al, 1999; Tuma, 1989; U.S. Department of Health and Human Services, 2000)—even as States expend significant resources to provide evidence-based treatments to children (Bruns, et al., 2008; Ganju, 2003).

One novel service model that has the potential to address such intractable engagement issues is peer-delivered family support services (Davis, Scheer, Gavazzi, & Uppal, 2010; Hoagwood et al., 2010). Parent involvement in family support services is not new. It has been a cornerstone of the systems of care movement (Stroul & Friedman, 1986). New

models of family support are emerging, including models delivered in a peer-format, by parents who have “lived experience” of parenting a child with mental health needs and are able to “give back” to other parents (Hoagwood, 2005; Koroloff, Elliott, Koren, & Friesen 1994; Koroloff, Elliott, Koren, & Friesen, 1996; Osher, Penn, & Spencer, 2008). Peer parent advocates (also known by a variety of other names including family partners, family support workers, family support specialists, parent partners, parent mentors, veteran parents) provide a range of supportive services and their primary function is usually to model, coach, and empower parents in their journey to cope with, advocate and negotiate the fragmented children’s service systems. Peer parent advocates are important linkages to other families and to other children’s services and can decrease family isolation, increase a parent’s support network, and enable advocacy at the individual, systems, and policy levels (Davis et al., 2010, Davis et al. 2011, Davis, Gavazzi, Scheer, & Uppal, 2010; Hoagwood et al., 2010).

The use of peer parent advocates to assist other parents originated in the field of child health, with studies of parent peer support for children with asthma, diabetes, sickle cell anemia, and cystic fibrosis showing decreases in parent strain (Ainbinder et al., 1998; Ireys, Chernoff, DeVet, & Kim, 2001; Ireys, Chernoff, Stein, DeVet, & Silver, 2001; Ireys, Sills, Kolodner, & Walsh, 1996; Sullivan-Bolyai et al., 2004; Sullivan-Bolyai et al., 2010). Social support appears to directly affect parents’ own mental health and functioning and improves access to resources to ultimately influence child adjustment (Ireys, Chernoff, DeVet, et al., 2001; Ireys, Chernoff, Stein, et al., 2001).

A recent national study on parents who accessed family education and support services in mental health reported that compared to parents who did not access such services, these parents had higher levels of strain related to caring for their child’s problems, lower levels of family functioning, and had children with significantly higher levels of both internalizing and externalizing symptoms and fewer strengths (Gyamfi et al., 2010). In this national study, families who used family education and support services were significantly more likely to have youth who been involved in a variety of mental health services, especially school-based services and psychiatric hospitalization in the prior 12 months. In this sample of relatively experienced consumers of mental health services, 65% reported satisfaction with these family support services. However, the study did not examine parent working alliance with their provider or how such alliances might influence satisfaction ratings or participation in family education and support or other services. Neither were parent psychological characteristics (e.g., depression) available.

The focus on service satisfaction in peer-delivered services is quite common. The majority of studies that do report on parent outcomes among parents seeking peer-delivered family support services focus on parent satisfaction (Hoagwood et al., 2010). A recent study on peer-delivered services found positive associations with overall satisfaction, including service access, appropriateness of services, service participation, and parental perceptions of child functioning and social connectedness (Radigan, Wang, Chen, & Xiang, 2014). The reliance on satisfaction as an outcome has constrained understanding about the range of responses that parents experience and how best to strengthen family support services. In light of the limited knowledge about how best to engage such families, many of whom likely have had experiences with the mental health service system, this paper attempts to expand

the knowledge base on parents who are accessing informal supports as a way to cope with their children's mental health difficulties.

While not considered an intervention in and of itself, working alliance is considered a common factor in therapeutic interventions that is predictive of change (Horvath & Symonds, 1991; Martin, Garske, & Davies et al., 2000; Marziali & Alexander, 1991). While less commonly examined outside the psychotherapy context, this concept can readily be applied to other helping processes, such as between a parent and a peer parent advocate, because working alliance is considered a key to the change process, and hence an instrument through which gains may be fostered (Horvath & Luborsky, 1993). The quality of therapeutic working alliance has been found to predict success of therapeutic interventions, irrespective of theoretical orientation, and across clients with different disorders (Hubble, Duncan & Miller, 1999). The importance of such working alliance has more recently been demonstrated within the field of substance abuse, where working alliance has been consistently linked to treatment engagement and retention, though less consistently with outcomes (e.g., Barber et al., 1999; Broome, Simpson, & Joe, 1999; Joe, Simpson, Dansereau & Rowan-Szal, 2001; Meier, Barrowclough & Donmall, 2005; Petry & Bickel, 1999). In addition to the series of studies demonstrating the link between parental perceptions, therapeutic alliance and service use in child mental health (described above), the need to examine working alliance in the context of the parent and peer parent advocate relationship is clear.

The role of client factors in influencing working alliance has long been recognized in psychotherapy (Moltu, Binder & Stige, 2012). In this paper, we specifically examined two parent psychological characteristics that have commonly been reported among those who seek advocacy or peer-delivered family support services: depression and anger expression (Rodriguez et al., 2010; Roussos, Berger, & Harrison, 2008). High rates of depression have been reported in mothers seeking care for their children in primary care (Swartz et al., 2005) and in child welfare populations (Burns et al., 2004). Yet, as is common in the general population, the majority of these adults with depression do not access or receive treatment for their own depression (Swartz et al., 2007; Swartz et al., 2005; Verdelli et al., 2004). In the child mental health system, the failure to address parent depression has important consequences, as successful treatment of these parents is associated not only with improvements in their own psychological functioning, but also with improved mental health outcomes of their children (Weissman et al., 2006). Further, children of parents who reported more parenting stress and depressive symptoms are less engaged in treatment and more likely to drop out of treatment prematurely (Pellerin, Costa, Weems & Dalton, 2010), which has negative consequences for these children's treatment outcomes. Parent depression likely influences parent ability to establish working alliances and hence engage in their child's treatment. In adult populations, the interpersonal deficits characterizing depressed patients are theorized to negatively influence therapeutic alliance (Constantino et al., 2008). Few studies have examined the temporal relationship between alliance and outcome in depressed patients and findings are inconsistent (Arnow et al., 2013). Irrespective of the temporality of the relationship between depression and working alliance, the interpersonal deficits associated with depression can influence working alliance and are considered an important factor in service engagement.

While caregiver anger and frustration associated with caring for their children has been examined as part of the caregiver strain literature in children's mental health (e.g., Brannan & Heflinger, 2001; Kutash, Duchnowski, Green & Ferron, 2010; Sales, Greeno, Shear & Anderson, 2004), the role of anger expression as factor in establishing working alliance with providers has received almost no research attention in this population. Anger expression has been linked to variety of physical and psychological difficulties (Olatunji, Sawchuk, Lohr, & de Jong, 2004), is related to difficulties in relationship development (Spielberger, Sydeman, Owen, & Marsh, 1999), and likely to interfere with the development of good working alliances and hence engagement in services. Although clinicians have long recognized the significant impact of anger on therapeutic alliance in treatment, empirical work examining this relationship is limited (DiGiuseppe, Linscott, & Jilton, 1996; DiGiuseppe & Tafrate, 2001; DiGiuseppe & Tafrate, 2007; DiGiuseppe, Tafrate & Eckhardt, 1994). Consequently understanding the relationship among depression, anger and alliance may help to address relational barriers that can interfere with parent engagement and thus with the potential for services to lead to improved outcomes.

This paper thus seeks to (1) characterize a sample of parents of children with mental health issues who sought and received family support services delivered by peer parents in a large urban setting; and (2) examine associations between specific parent psychological characteristics (depression and anger expression) and working alliance with peer parents, with the goal of developing more targeted and effective strategies for peer-delivered services.

Method

Participants

Parent subjects were identified as part of a study of peer parent advocates who were in a pilot study examining the impact of a Parent Empowerment Training (PEP) curriculum (Rodriguez et al., 2011). Peer parent advocates who worked in a variety of settings, including schools, parent resource centers, hospital-based programs, and outpatient clinics, were asked to provide parents new to their family support program or services with a general flier consisting of a one-paragraph description of the study. The flyer asked whether a member of the research team could contact them to describe the study in greater detail. They were assured that their consent to be contacted would have no bearing on the services they would receive. The study was approved by the New York State Psychiatric Institute's Institutional Review Board; all participants provided informed consent.

Advocates were not asked to track the number of parents they approached about the study since this was a convenience sample. However, of the 144 parents who agreed to be contacted by the research team, 129 (or 89.5%) consented to be part of the study. Five parents dropped out prior to baseline data collection, yielding a total of 124 parents.

Parents reported on the types of services they received from their peer parent advocate using a service activity report form. Of the types of family support services received, parents most frequently reported getting information, education and referrals from their advocates (81%). The second most commonly reported type of services involved liaison with other

professionals, especially school and mental health professionals (69%). Support groups were the third most commonly reported services (58%); other services endorsed by fewer than half the sample included respite care, recreation services, peer counseling, and equal opportunity services (e.g., flexible funding, translation services). These activities are consistent with what peer parent advocates reported on a semi-structured service activity form that was used to generally assess advocates' responsibilities and the types of services they provided within their work setting. Almost all (97%) of the advocates reported providing informational, educational or referral supports to parents, 94% provided direct advocacy on behalf of parents; 88% led support groups; 81% provided liaison services with other professionals. Other commonly reported services included outreach (61%), crisis intervention (61%), and case management (52%). Peer parent advocates also indicated providing a variety of services that were not formally part of their job descriptions. These services included transportation services, childcare, being on call to support parents outside of normal working hours, Institutional Review Board issues, and program administration/coordination. Consistent with findings from other surveys of a similar workforce (Salzer, Schwenk & Brusilovskiy, 2010), these advocates reported engaging in a wide range of functions, which varied across different settings.

Procedure

Three community-based research staff interviewers who had substantial experience in field-based interviews were trained to administer research instruments for this study; they were supervised by the study Co-Project Directors (a licensed social worker (JR) and a peer parent advocate (GB)). Interviews with parents were conducted primarily in their homes and occasionally, in a setting of the parent's choice. Interviews and assessments lasted approximately 2 hours; each participant was paid \$25 per assessment visit. Except for demographic data, all data were collected through two interviews, one at baseline upon initiation of family support services, and one at six-month follow-up.

Measures

Family Demographics

Basic demographic information collected included ethnicity, parent education, household income, index child age, and child and parent involvement in mental health services.

Primary parent outcome measures

The Working Alliance Inventory-Short Form (WAI-S; Tracey & Kokotovic, 1989), a 12-item scale completed by the peer parent advocate, was used to assess the working alliance between the parent and peer parent advocate. The WAI-S is a self-report questionnaire consisting of three subscales designed to assess three primary components of the working alliance: (1) how closely the parent and the advocate agree on and are mutually engaged in the goals of treatment (goal subscale reliability coefficient in this study: $\alpha = .79$), (2) how closely the parent and the advocate agree on how to reach the treatment goals (task subscale reliability coefficient in this study: $\alpha = .70$), and (3) the degree of mutual trust, acceptance, and confidence between the parent and the advocate (bond subscale reliability coefficient in this study: $\alpha = .75$). The composite score (reliability coefficient in this study: $\alpha = .83$) is

used as a global measure of working alliance. Respondents were asked to rate each statement on a 7-point Likert scale ranging from 1 (never) to 7 (always).

Parent Psychological Characteristics

i. Center Epidemiological Studies-Depression Scale—(CES-D; Radloff, 1977), a 20-item questionnaire, was used to measure depressive symptomatology. The scale has a possible range of 0–60 points. A cutoff of 16 has been traditionally considered as indicative of a need for further evaluation and assessment for depression. A more stringent cut-off score of 27 has been recommended for optimal sensitivity and specificity for depression (Schulberg et al., 1985; Zich, Attkisson, & Greenfield, 1990).

ii. The Anger Expression Index (AX-I) from the State-Trait Anger Expression Inventory-2—(Spielberger, 1999) was used as a general index of anger expression. The 36-item scale has a possible range of 0 to 96; higher AX-I scores are indicative of more intense feelings of anger, which may be suppressed or expressed in aggressive behavior or both. Individuals with high AX-I scores are likely to have difficulty with relationships and are at increased risk for developing health conditions (Spielberger, 1999).

Covariates

i. The Caregiver Strain Questionnaire—(CGSQ; Brannan, Heflinger, & Bickman, 1997), a 21-item scale that assesses the degree to which the caregiver experiences adverse effects as the result of caring for a child with emotional or behavioral problems. Items are scored on a five-point scale from 1 (not at all a problem) to 5 (very much a problem). Subscale scores are derived by averaging responses to items on each of three subscales: (1) objective emotional strain which taps negative occurrences associated with care taking, such as social isolation, disruption in family routines, missed work; (2) subjective externalizing strain which taps negative feelings related to the child's problems, such as anger and embarrassment; and (3) subjective internalizing strain, which taps feelings related to the child's problems that are internalized by the caregiver such as feeling sad, worried about family's future, guilty, tired. For these analyses, the CGSQ Global Strain Index was used, by summing the 3 subscale scores, yielding a potential range from 3 to 15. Higher scores are indicative of greater strain.

ii. The Strengths and Difficulties Questionnaire—(SDQ; Goodman, 1997) was used to assess parent-reported youth psychiatric symptoms. The SDQ contains 25 items assessing emotional symptoms, conduct problems, hyperactivity/inattention, peer relationships, pro-social behavior, and functional impairment. Each of the five domain scores is based on five items rated on a 3-point scale (0 = not true; 1 = somewhat true; 2 = certainly true). Total difficulties scores, derived by summing all domains except pro-social behavior, were used in these analyses. A score of 17 and above is considered within the abnormal range.

Data Analyses

The percentages or means of the demographic characteristics of the sample at baseline were calculated. For each of the measure, mean and standard deviation were estimated at baseline and 6-month follow-up. Differences in scores across these two time points were examined

using the linear mix-effects modeling method described below. Linear mixed-effects models (implemented with the repeated statement in PROC MIXED in SAS) were used to examine the effect of parent psychological characteristics associated with working alliance with peer parent advocate over the 6-month period. This repeated measures model accounts for within-subject co-variability across time, and it uses all available data in the analysis instead of ignoring subjects with missing outcome data. Four regression models were performed for each outcome (3 WAI subscale scores and WAI global score). In the first two models, we examined the independent effects of Anger Expression and Depression, respectively. In the third model, we entered both Anger Expression and Depression in the same model and tested their combined effects. In the fourth model, the interactional effects of Anger Expression and Depression were tested by entering the interaction term. In each model, we included time (0 = baseline, 1 = 6-month) as fixed effect and used an unstructured covariance in the repeated statement to account for within-subject correlation over time. Key demographic variables including parent ethnicity, parent education, current parent mental health service use, and child age were entered into the model to control for the effects of these variables on outcomes. In both these models, Caregiver Strain (CGSQ) and child symptoms (SDQ) were adjusted. In the case that significant interaction between Anger Expression and Depression was seen, stratified analysis based on parent depression risk status was carried out for the traditional cutoff point of 16 and repeated for the more stringent cutoff point of 27 on the CESD.

Rather than excluding subjects with missing values, missing data indicator method was applied to demographic variables, main predictors and covariates. For each continuous variable, the missing value was replaced by any arbitrary constant that was out of the value range of that variable. A missing indicator of the variable (a dummy variable coded 1 if the original variable was missing; 0 otherwise) was created and was also entered in the analysis. For categorical variable, a new category was set up and the missing value was imputed by the new category. Missing values for which corrective measures were taken ranged from 2.4% to 8.1% for the various variables.

All analyses were implemented in SAS and significance tests were set at .05 level, using two-sided tests.

Results

Table 1 summarizes the demographic characteristics of the sample. The majority of parents accessing family support services were mothers of color, with 52.3% representing African-American and 30.8% Latino parents. Of these parents, 38.3% had less than high school education; 29.2% held a high school diploma, 20.8% had some college, 9.2% held a Bachelor's degree and 2.5% percent had completed some graduate coursework. These parents were primarily low-income families, with 57.0% reporting a household income under \$15,000 per year; 30.0% had incomes from \$15,000–\$44,999; only 9% had incomes above \$45,000. In terms of the index child (i.e., child for whom the parent was seeking services), the mean age was 11.0 (SD = 3.26) years. Within this sample, 85.7% of the index children were receiving some type of child-focused mental health service at the time of study enrollment; 59.9% of parents were involved in mental health services of their own or

their children's. Overall, 92.9% of these families were receiving some child and/or parent focused mental health services (i.e., formal treatment services). The most commonly reported child service use included: child medication monitoring (85.7%), school services (66.7%), child medication (52.6%), and child counseling (40.2%). The most commonly reported service use involving the parents was parent counseling (40.0%); only 18.6% of these parents were receiving medication for their own mental health issues.

Table 2 presents the unadjusted means and standard deviations for measures of parent working alliance with their peer parent advocate, their psychological characteristics (depression symptoms and anger expression), caregiver strain, and child symptoms at baseline and 6 months. Over time, the working alliance of these parents with their advocate improved significantly ($p < .05$ on all subscales and global scores of the WAI-S). In terms of psychological status, parents showed improvement in both depressive symptoms as well as anger expression across 6 months. Despite such improvements, it is important to note that approximately two-thirds (64.5%) of these parents showed clinically significant levels of depressive symptoms at baseline. Table 2 shows the distribution of parents at both the traditional CESD cutoff score of 16 and the more stringent cutoff score of 27 at baseline and 6-month follow up. At baseline, 23.97% of the parents scored above the CESD clinical cutoff for depressive symptoms and 40.5% had severe depressive symptoms; at 6-month follow-up, 19.8% and 33.1% were above the clinical cutoff scores of 16 and 27 respectively. No clinically meaningful cutoff is available for anger expression; anger expression among parents in this sample significantly decreased over the 6 months ($p = .0002$).

Caregiver strain in this sample decreased significantly over 6 months ($p = 0.03$). At baseline, 99 (or 80%) of these parents rated total difficulties score on the Strength and Difficulties Questionnaire in the abnormal range ($SDQ > 17$), suggesting clinically significant emotional and behavior difficulties in the index youth. Mean Total Difficulties Score at baseline (22.67) did not change significantly over 6 months (mean Total Difficulties Score = 21.85) ($p = 0.08$).

Variables were screened for outliers to ensure that distributions did not violate assumptions of normality. Tests of collinearity among predictors and homoscedasticity of residual variances were performed and found not to unduly affect regression procedures. Table 3 presents the four regression models. Regression results showed that parents' depression and anger expression did not have any impact on working alliance with their peer parent advocate independently (see models 1–3). However, significant interaction effects were found between depression and anger expression (model 4, $p=0.01$). Figure 1 depicts the unadjusted combined effect of depression and anger expression. In stratified analysis based on parent's depression status (<16 vs. 16 and above; i.e., not at risk for depression vs. at high risk), negative association between anger expression and working alliance (primarily driven by the goal subscale) was non-significant in the non-depressed group ($\beta=-0.16$, $p=0.09$). This association became significant when parent demographics, caregiver strain and child symptoms were adjusted ($\beta=-0.25$, $p=0.01$). Among those non-depressed parents, the more anger they expressed, the less working alliance they had with their peer parent advocate. However, this negative relationship was not seen in parents who had clinically significant depressive symptoms based on the traditional cut off score of 16 (unadjusted $\beta=0.13$,

$p=0.17$; adjusted $\beta=0.04$, $p=0.68$). This same pattern of results were found when the sample was stratified using the more stringent cutoff score of 27 on the CESD for parent depression status.

Discussion

This study prospectively followed and systematically collected data from parents who received peer-delivered parent support services related to their children's emotional and behavioral problems. Within this urban sample, parents who sought peer parent advocate services were largely low-income, minority women, two-thirds of whom reported clinically significant levels of depressive symptoms (40% in the severe range). Almost 80% of parents in this sample reported caring for a child with clinically significant behavior difficulties. Thus, one-fifth of parents who sought peer delivered parent support services in this sample did not report significant behavior or emotional difficulties in their index child, which is not surprising because access to peer parent services within the community is generally not contingent on a child having a diagnosis or a child's problem severity. However, on average, these parents were caring for children with clinically significant behavior and emotional difficulties. Of these families, 93% were already receiving some type of formal child and/or parent mental health services. Yet, these parents sought advocacy/parent support services, suggesting that parent support services may be an important adjunctive service for this population. A recent Cochrane review focusing on peer-delivered services within the adult literature supports this contention that peer-delivered adjunctive services may be an important part of the array of available mental health services (Pitt et al., 2013); such non-traditional support services may be particularly important for low-income parents of color for whom formal mental health services may not adequately meet their needs and preferences.

The rates and severity of depressive symptoms among these parents were very high. While the levels of depressive symptoms were statistically reduced over 6 months, the severity of these symptoms remained clinically significant at both time points. Almost 64% of the parents at baseline and 53% at 6 months reported clinically significant levels of depressive symptoms; over 40% at baseline and 33% at 6 months reported depressive symptoms in the severe range. While parent depressive symptoms and anger expression by themselves or in combination did not significantly impact parent ability to develop working alliances with their peer parent advocates, parent depression status was found to significantly interact with anger expression to influence working alliance. Specifically, among parents who reported clinically significant depressive symptomatology, anger expression did not have a significant effect on working alliance. Among those who did *not* report significant depressive symptoms, however, working alliances, especially on agreement of goals, *was* negatively impacted by parent anger expression. Depression is often discussed in the psychotherapy literature as anger turned inward. Amongst the non-depressed parents, we speculate that the negative association between anger expression and working alliance may reflect an earlier stage in which these parents are seeking services: they feel less hopeless and more likely to maintain their resolve in setting goals with the peer parent. This suggests that acknowledging and addressing parental anger among non-depressed parents may be an important step in creating the conditions for engagement and working alliance to emerge.

Strategies for dealing with parental anger have received very little attention in the literature. Approaches for handling parental depression, on the other hand, have a long history. For parents with both anger and depression, it appears that advocates are able to overcome the negativity associated with parental anger and constructively develop positive alliances. Thus attention to levels of depression, anger, or their combination and to their effects on the development of working alliances is very likely to be important in improving engagement in services.

These findings suggest the need to better prepare and train peer parents as gateway providers so they can directly address parent depression and parent anger expression by focusing on working alliances, especially around mutual agreement and engagement of goals.

While much of parent depression and anger may be connected to caring for their child, the sources of the anger and depression are likely to be quite complex (ranging from personal, interpersonal to systemic). An awareness, acknowledgement and exploration of how these factors (and their potential sources) can influence working alliance can be helpful to peer parents as they discover constructive ways to relate to parents who are likely to be viewed as “resistant” or “difficult.”

Importantly, over 90% of these parents reported having engaged in formal mental health services; and these services were primarily for their children; only 18% reported receiving medication treatment for themselves, much lower than the high rates of depression in this population. Based on the findings in this study and other studies, these depressed parents are more likely to be stressed, less likely to seek services for themselves (Swartz et al., 2005; Swartz et al., 2007, Gopalan et al., 2011), more likely to prematurely drop out of treatment for their children (Pellerin et al., 2010). Given the relationship between maternal depression and strain (e.g., Horwitz, Briggs-Gowan, Storfer-Isser, & Carter, 2007), and the role of caregiver strain in service utilization, it is likely that such depressed parents are more likely to utilize more intensive and more restrictive levels of care for their children when they do seek care (Bickman, Foster, & Lambert, 1996; Foster, Saunders, & Summerfelt, 1996; Hodges & Wong, 1997; Lambert, Brannan, Heflinger, Breda & Bickman, 1998). Peer parents are thus important vehicles for identifying depression risks and helping such parents recognize, engage, or re-engage in appropriate and timely services, especially for themselves.

Study Limitations and Future Directions

Several limitations should be considered in the interpretation of findings from this study. First, the sample is a convenience sample, representing largely a low-income, minority population who sought services in a variety of community-based setting in a large urban city; these findings may not be readily generalized and needs to be replicated. However, they do resonate with our clinical experience with such populations. Second, the lack of a comparison group precludes any conclusion about the effectiveness of peer parent services. Third, no detailed information on the quality, dose and type of family support services and/or other services received by these families were collected. Such data would be helpful to better understand the relationship between family support services vs. other services, particularly in this population where the majority of parents reported receiving some form of

services, either as part of their child's treatment or their own. Finally, the lack of data on service use over time is another significant limitation. Thus, while working alliances with peer parents improved over time, how this translates to sustained and meaningful service utilization over time is unknown.

As mental health service systems are increasingly under pressure to reduce cost, peer delivered family support services are seen as an attractive, lower cost option to offset demands on an increasingly strapped service system. Future studies about the impact of improving parent working alliance on service engagement and retention are needed to assess potential cost savings associated with this adjunctive peer support service. The role of parent peer advocates as gateway providers make targeted training imperative if parent mental health needs are to be adequately addressed. The failure of professionally trained gateway providers such as pediatricians, general practitioners and primary health care providers to recognize and treat mental health issues has been well documented (see Stiffman et al., 2000). Providers who have training in and knowledge about mental health resources are more likely to identify mental health problems and provide resources to facilitate access (Stiffman et al., 2000). The question of whether or not non-professionally trained peer parents can be successfully trained to recognize and link parents with mental health needs remains to be tested. A training curriculum developed for peer parents to do this currently is being tested (Acree et al., 2013).

Identifying strategies to improve engagement of parents in services via peer parents is a promising approach, but attention to the psychological strains and stressors that parents bring to this interaction have not received adequate attention. Depression and anger are two relatively common experiences that parents of children with significant mental health needs have. Helping peer parents identify, acknowledge, and address these issues is likely to strengthen working alliances and optimize parental use of services. Of course, it is only insofar that these services are effective that such a connection will be ultimately meaningful.

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Figure 1.

Table 1

Characteristics of Parents Receiving Peer Parent Support Services (N=124)

Ethnicity	N	%
African American	57	52.29
Latino	33	30.28
All Others	19	17.43
Maternal Education	N	%
Less than 8th grade	9	7.50
Some high school	37	30.83
High school diploma	35	29.17
One year or more of college	25	20.83
College degree	11	9.17
Graduate education	3	2.50
Household Income	N	%
Less than \$7,000	40	2.00
Between \$7,500 and \$14,999	31	25.00
Between \$15,000 and \$29,999	26	21.00
Between \$30,000 and \$44,999	11	9.00
Between \$45,000 and \$59,999	7	6.00
More than \$60,000	4	3.00
Service Use	N	%
Any Child Services	84	85.71
Any Parent Services	58	59.18
Any Parent or Child Services	91	92.86
Both Parent and Child Services	51	52.04
	M	SD
Target Child Age	11	3.26

Table 2

Mean and Standard Deviations of Measures at Baseline and 6 Months

Measure	Baseline			6 Month			Time Effect		
	N	M/%	SD	N	M/%	SD	F*	p	
<i>Outcome</i>									
WAI-Goal	120	5.20	0.96	109	5.38	0.90	3.88	0.05	
WAI-Task	119	5.01	1.18	109	5.33	1.05	6.66	0.01	
WAI-Bond	119	5.27	1.07	110	5.50	0.94	3.89	0.05	
WAI-Global	120	5.16	0.98	110	5.40	0.88	6.03	0.02	
<i>Predictor</i>									
ANG	124	32.27	13.88	124	27.78	13.60	15.15	0.0002	
CESD	121	22.59	13.16	116	19.89	13.92	6.49	0.01	
<16 (%)	43	35.54		52	44.83		1.45	0.23	
16-26 (%)	29	23.97		24	20.69		0.6	0.44	
>=27 (%)	49	40.50		40	34.48		1.58	0.21	
<i>Covariate</i>									
SDQ-Total	121	22.67	5.98	114	21.85	5.05	3.18	0.08	
CGSQ-Global	121	8.28	2.23	116	7.86	2.70	4.91	0.03	

Note.

* DF=1,123

Table 3

Multivariate Predictor Models for Working Alliance

	WAI_TOTAL		WAI_GOAL		WAI_TASK		WAI_BOND	
	Adjusted β	p	Adjusted β	p	Adjusted β	p	Adjusted β	p
All Subjects								
Model 1								
Time	0.25	0.02	0.19	0.06	0.27	0.02	0.22	0.07
ANG	-0.06	0.41	-0.06	0.37	-0.12	0.1	-0.02	0.82
Model 2								
Time	0.26	0.02	0.18	0.07	0.25	0.03	0.22	0.06
CESD	-0.09	0.26	-0.09	0.24	-0.09	0.3	-0.1	0.24
Model 3								
Time	0.25	0.02	0.18	0.08	0.24	0.03	0.22	0.07
ANG	-0.03	0.7	-0.03	0.65	-0.11	0.18	-0.02	0.77
CESD	-0.08	0.39	-0.08	0.38	-0.04	0.66	-0.11	0.23
Model 4								
Time	0.24	0.02	0.18	0.07	0.24	0.03	0.22	0.07
ANG	-0.06	0.44	-0.07	0.37	-0.12	0.14	0.01	0.93
CESD	-0.09	0.31	-0.08	0.32	-0.04	0.64	-0.11	0.21
CESD*ANG	0.16	0.01	0.18	0.002	0.12	0.07	0.09	0.18