Reducing Child Abuse Potential in Families Identified by Social Services: Implications for Assessment and Treatment

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Improving the functioning of families at high risk of child maltreatment poses considerable challenges. One issue is the dilemma of how and when it is appropriate to provide an intervention designed to improve family functioning when the level of risk of the family to the child has not been fully established. A recently reported proposal is to assess the family’s capacity to change by assessing the family’s response to a brief intervention. This proposed model for assessing capacity to change rests on the assumption that brief interventions can achieve meaningful short-term change in high risk families. The current study evaluated the effectiveness of a home-based intensive treatment program in families referred by child protection services. The program, Parents Under Pressure, was designed for multiproblem families and addresses problems across ecological domains, including problem child behavior, parental stress, family relationships, social isolation, and coping with life demands. Ten families completed the program. Statistically significant improvement was found between the pre- and postassessment measures on measures of parent functioning, child functioning, parent–child relationships, and social contextual measures. The majority of families showed clinically significant improvement, although a small proportion of the families showed no change or deteriorated. The presenting problems and pattern of change varied between families. The study adds to the increasing body of evidence that intensive, ecologically informed interventions can achieve short-term change in some but not all multiproblem families. Implications of the results for assessing parental capacity to change are discussed. [Brief Treatment and Crisis Intervention 8:226–235 (2008)]

KEY WORDS: child protection, child maltreatment, parenting, child development, program evaluation.

Parental maltreatment of children is a significant problem. In 2003, 3,353,000 children in the United States were subject to investigations or assessments in response to reports of suspected child maltreatment. Approximately one third of the children were confirmed victims of abuse. The number of children subject to an investigation or assessment has increased by 27.1% between 1990 and 2003 (U.S. Department of Health and Human Services Administration on Children Youth and Families, 2005). Practitioners working in the
child protection field are asked to conduct assessments and make decisions of critical importance to families including whether children should be removed from or reunified with their natural parents. In a recent paper, Harnett (2007) argued that cross-sectional assessment of families can be of limited usefulness when the results are equivocal, that is, where risk factors in the family do not clearly outweigh protective factors. Harnett described a procedure for assessing a parent’s capacity to change that aims to provide more certainty on the functioning of the family through the assessment of the family’s response to a brief intervention. The capacity to change assessment provides important information about the parent’s motivation to engage in treatment and their capacity to acquire parenting skills and information on the additional services and treatment that would be needed in the longer term to support the family (Budd, 2001).

Clearly, any conclusion about a parent’s capacity to change in response to an intervention would rest on the assumption that the intervention offered was sufficiently powerful to achieve a positive short-term benefit. The aim of the present study was to evaluate the short-term response of parents with known child protection issues to an intensive, home-based parenting intervention, the Parents Under Pressure (PUP) program. The PUP program is an intervention developed specifically to address the needs of multiproblem families. To date, the PUP program has been found to be effective in improving the functioning of substance misusing parents (Dawe & Harnett, 2007; Dawe, Harnett, Rendalls, & Staiger, 2003). In the recent randomized controlled trial, parents who received the intervention showed clinically and statistically significant decreases in child abuse potential. However, the present paper is the first attempt to assess the program in families referred from child protection services.

The PUP program itself begins with a comprehensive assessment of the family that is used therapeutically to help parents consider the multiple influences across ecological domains that are affecting their ability to parent. This sets the scene for interventions that are individually tailored to the specific needs of the family. The order and dose of the modules that make up the program are determined by the goals identified in the assessment. Traditional behavioral parent training techniques (Forehand & McMahon, 1981; Patterson, 1982; Webster-Stratton & Reid, 2003) are used to address problematic child functioning. Emotional regulation skills, including mindfulness-based therapy techniques, are taught to reduce parental psychological distress and as a means of developing cognitive control in disciplinary situations to reduce impulsive, emotion-driven punishment. Child-centered play techniques (Forehand & McMahon; Urquiza & McNeil, 1996; Woolgar & Scott, 2005) aim to improve the parent–child relationship. Any crisis in the family that emerges over the course of the intervention is treated as a therapeutic opportunity to employ newly acquired parenting skills to maintain the stability of the family in the face of adversity, in particular problem solving and engagement of social supports. Mindful acceptance is encouraged for problems that cannot be easily resolved through problem solving (see Hayes, Follette, & Linehan, 2004).

The theoretical base of the PUP program is consistent with ecological models of child development that emphasize the wide range of influences on parents and their effect on family functioning (Belsky, 1988; Bronfenbrenner, 1979; Cicchetti & Carlson, 1991; Sidebotham, 2001). An assumption of the PUP program is that an intervention aimed at developing a parent’s repertoire of parenting skills will have a greater impact on family functioning if the intervention also provides parents with skills to regulate their emotional state, deal more effectively with competing demands,
and engage social support (see Gershoff, 2002). This assumption is well supported by research. For example, Lorber and O’Leary (2005) found that parents who had depressed and anxious mood were more likely to negatively appraise their child’s behavior and, in turn, use emotionally driven and overly harsh discipline. Ateah and Durrant (2005) found that a parent’s use of physical punishment was better predicted by the parent’s propensity for anger and a negative interpretation of their child’s behavior that the parent’s repertoire of nonphysical punishment strategies. It is well documented that the emotional functioning of parents is influenced by life stress, daily hassles, and the availability of social support (Belsky, Crnic, & Woodworth, 1995; Suchman & Luthar, 2001).

Ecological models of child maltreatment emphasize that the multiple determinants of parenting interact to create complex dynamic family systems (Cicchetti & Toth, 2005). This leads to a large variation in the combination of problems observed across families presenting for treatment. However, little research has investigated how specific patterns of family problems respond to specific interventions. In order to address this issue in the present study, a secondary aim was to examine the profile of presenting problems and pattern of change across multiple ecological domains for each family.

Methods

Participants

Parents of 10 families were referred for treatment by a nongovernment agency that provides services for parents and children of families involved in the child protection system. Seven of the 10 families were single-parent families, 6 with the mother as primary carer and 1 with the father as primary carer. Two families consisted of a mother and stepfather and one family consisted of a father and stepmother. Nine of the families had children other than the target child. Three had one other child, two had two other children, and one had three other children. The three blended families each had four other children. The mean age of the primary parent was 32 years ($SD = 5.2$). The mean age of the target children was 4.4 years ($SD = 2.2$), of whom nine were male and one female. Eight of the children attended child care for an average of 24 hr per week ($SD = 9.9$). Only two children were the subjects of a current court order. Seven of the parents were on a sole parenting allowance, two on disability pensions, and one in paid employment. None of the parents were currently engaged with treatment programs for drugs and alcohol, although two had previously been involved in detoxification programs for drugs or alcohol. Two of the families identified as Indigenous Australians.

Treatment Intervention: PUP Program

The PUP program consists of 10 modules that are delivered over 12 sessions of approximately 1.5 hr in duration. A treatment manual provides a theoretical overview and instructions for implementing each module. An accompanying parent’s workbook is used to facilitate sessions with parents. The exact number of sessions varies slightly from family to family. Of the 10 families that participated in the current study, the mean number of sessions attended was 11.5 (range 9–13 sessions). Families were given the choice whether the treatment should take place in the clinic or in the home. For seven families, all sessions were held in the families’ home. For the remaining three families, the initial information and assessment sessions were carried out in a clinic setting. Four therapists provided treatment, all of whom were registered psychologists and had undergone training in the PUP program and received weekly supervision from the primary author.
**Procedure**

Parents who met criteria for inclusion in the study were informed of the study and invited to participate by staff of the agency. Families were eligible for inclusion in the study if the state welfare agency expressed child protection concerns in relation to the family and had an allocated caseworker monitoring the family. The inclusion criteria also specified that the target child was between 2 and 8 years of age and did not suffer from a serious disability. Families were referred to a PUP therapist by staff of the community agency. PUP therapists met with each family to provide further information about the study and obtain informed consent to participate in the research study prior to the first assessment session.

**Measures**

A semistructured interview obtained basic demographic information and relevant history from the parents. Self-report questionnaires measuring functioning across the following ecological domains were completed during the initial assessment session: (a) parental psychological functioning; (b) child behavioral, emotional, and social functioning; (c) parent–child relationship; and (d) the social context of the family.

The 21-item Depression, Anxiety and Stress Scale (DASS; Lovibond & Lovibond, 1995) was used as a self-report measure of psychological distress. The 21-item version of the DASS has three subscales measuring dysphoric mood including sadness and worthlessness (Depression); symptoms of physical arousal, panic, and fear (Anxiety); and symptoms of generalized tension, agitation, and irritability (Stress). Validity studies have shown the subscales to be moderately to highly correlated with other measures of anxiety and depression (Beck & Steer, 1988; Beck, Steer, & Garbin, 1988; Bieling, Antony, & Swinson, 1998). The internal reliabilities (Cronbach’s alphas) of the Depression, Anxiety, and Stress subscales for the 21-item version have been reported as .94, .87, and .91, respectively (Antony, Bieling, Cox, Enns, & Swinson, 1998). As the internal reliability of the total scale score was not reported, a conservative value of .90 was used to calculate the Reliable Change Index (RCI) reported below. Based on norms presented in the DASS manual (Lovibond & Lovibond, 1995), a clinical cutoff of 60 was used to classify each parent’s level of change (described below).

The Strengths and Difficulties Questionnaire (SDQ; Goodman, 2001) is a measure of a child’s emotional, social, and behavioral problems. The SDQ consists of five scales: emotional symptoms, hyperactivity–inattention, conduct problems, peer problems, and prosocial behavior. The first four are summed to derive a total problem score, the score reported in the current study. Construct validity has been demonstrated across a number of studies with the SDQ significantly correlated with scores on the Achenbach’s (1991) Child Behaviour Checklist. The internal reliability of the SDQ has been reported to be .82 (Goodman, 2001; Hawes & Dadds, 2004), the value used to calculate the RCI reported below. Based on Australian norms presented on the SDQ Web site (http://www.sdqinfo.com/ba3.html) and a recent Australian study (Hawes & Dadds), a clinical cutoff of 16 was used to classify level of change (described below).

The Parenting Stress Index—Short Form (Abidin, 1995) is a self-report measure consisting of three subscales measuring different aspects of parental stress. The Parental Distress (PD) subscale is a measure of distress a parent is experiencing in his or her role, for example, an impaired sense of parental competence, stress associated with restrictions on other life roles, and the presence of depression. The Difficult Child (DC) subscale is a measure of the behavioral characteristics that make a child easy or
difficult to manage, including a difficult temperament and learned behaviors such as defiant, non-compliant demanding behavior. The Parent-Child Dysfunctional Interaction (PCDI) subscale measures the parent’s perception that his or her child does not meet expectations and that interactions with the child are not rewarding (Abidin). The internal validity of the PD, DC, and PCDI subscales have been reported as .87, .80, and .85, respectively (Abidin). The clinical cutoff scores used to classify each parent’s level of change (described below) were 36 for the PD and DC subscales and 27 for the PCDI subscale.

The Child Abuse Potential Inventory (Milner, 1994) is a self-report questionnaire found to discriminate physically abusive parents from non-abusive parents. The instrument is widely used in studies of parents at risk of child abuse or neglect. For the purposes of the present study, an overall abuse measure (Abuse subscale) is reported. The internal reliability of the Abuse subscale is reported to be in the range of .92 to .96 across a number of studies (Milner, 1986). A conservative value of .90 was used to calculate the RCI reported below. When using the abuse score as an outcome measure, the cutoff score that minimizes false positives is 215. This value was used in the current study to classify each parent’s level of change (described below).

The Parenting Daily Hassles Scale (PDH; Crnic & Greenberg, 1990) is a measure of parental perceptions of the frustrating, annoying, and distressing demands on parents. The PDH includes a rating of the frequency and intensity of a number of daily hassles. The intensity scores are reported in this study. Research has found that parental reports of minor stresses and daily hassles is associated with increased irritability with their children (Patterson, 1983) that can lead to decreased parental satisfaction and negative family relationships (Crnic & Booth, 1991; Crnic & Greenberg). The internal validity of the Intensity subscale has been reported to be .9 (Crnic & Greenberg), the value used to calculate the RCI reported below. As no clinical cutoff scores were reported, the mean (4.8) and standard deviation (12.2) reported by Crnic and Greenberg were used to calculate a cutoff score 1.5 SD above the mean (60.1) to classify each parent’s level of change (described below).

The Support Scale, based on the Significant Other Scale (Power, Champion, & Aris, 1988), was adapted for the current study as a measure of perceived social support. The scale consisted of four items reflecting the perceived level of practical and emotional support available to parents. Participants rated the emotional and practical support they perceive is available to them in general day-to-day life, and the level of support available to them in the parenting role specifically. Each rating was made on a 7-point Likert scale. Scores ranged from 4 (little or no perceived support) to 28 (high level of perceived support).

**Results**

Pre- and postintervention assessments were carried out on all 10 families that participated in the study. The results of the assessment scores are presented in Table 1. A series of *t* tests were carried out to determine the statistical significance of the changes on each measure. There was a statistically significant improvement in all measures except the DASS and the problems with Child and Self subscale of the CAPI (see Table 1).

Clinical significance was examined by first calculating the RCI. The RCI is a measure of the likelihood that the change between pre- and post scores for an individual participant was due to chance, taking into account the reliability and initial standard deviation of the measure (Jacobson & Traux, 1991). Change in an individual score is considered to be clinically
significant if the RCI is greater than 1.96. Second, families were classified according to the direction and extent of change observed, based on the RCI and clinical cutoff scores for each measure (see Bauer, Lambert, & Nielsen, 2004). Change was defined as Recovered if scores on a measure dropped from above to below the clinical cutoff between pre- and post-intervention, and the RCI was greater than 1.96. A change was defined as Improved if the RCI was greater than 1.96. As we were primarily interested in scores that were above the clinical cutoff at preintervention (I), these scores were distinguished from scores that significantly improved but were below the clinical cutoff at preintervention (NC). No change was defined as scores that varied less than the RCI of 1.96. Again, as we were primarily interested in the scores that were initially in the clinical range at preintervention (NC), these were distinguished from scores below the clinical cutoff at preintervention (NC). Deterioration (D) was defined as scores that exceeded the RCI of 1.96 and moved into the clinical range at postintervention.

Table 2 shows that eight of the families showed recovery on at least one measure that was above the clinical cutoff at preintervention, indicating the majority of families showed clinically important change in some area of family functioning. Two families showed clinically significant change on three of the four domains of functioning, three families showed clinically significant change on two domains of functioning, three families showed clinically significant change on one domain of functioning, and two families showed no clinically meaningful change on any domain. Looking at the domains in which clinically significant change occurred, it can be seen from Table 2 that six families showed recovery on the child domain, five families on the parent domain and four on the parent–child domain and one family showed change on the social context domain.

As shown in Table 2, the overall abuse potential of three families decreased significantly,

<table>
<thead>
<tr>
<th>TABLE 1. Means, Standard Deviations and t Test Statistics of Key Outcomes Measures at Pre- and Postintervention</th>
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<tbody>
<tr>
<td><strong>Preintervention, M (SD)</strong></td>
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<tr>
<td>-----------------------------</td>
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<tr>
<td>CAPI—abuse</td>
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<tr>
<td>Parent</td>
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<td>DASS</td>
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<tr>
<td>CAPI—distress</td>
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<td>PSI—parent domain</td>
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<tr>
<td>Child</td>
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<td>SDQ—total</td>
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<td>PSI—child domain</td>
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<tr>
<td>Parent–child</td>
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<tr>
<td>PSI—parent–child domain</td>
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<tr>
<td>CAPI—problems child-self</td>
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<tr>
<td>Social context</td>
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<tr>
<td>PDH—intensity rating of daily hassles</td>
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<tr>
<td>CAPI—problems with others</td>
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<td>Support scale</td>
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</tbody>
</table>

Note. CAPI = Child Abuse Potential Inventory; DASS = Depression, Anxiety and Stress Scale; PSI = Parenting Stress Index; PDH = Parenting Daily Hassles Scale; SDQ = Strengths and Difficulties Questionnaire; SOS = Significant Other Scale; NS, not significant.

*a*$_{n}$ = 8.
moving from above to below the clinical cutoff on the CAPI. One family that exceeded the clinical cutoff improved, that is, showed clinically significant change but remained above the clinical cutoff at postintervention. An additional family showed clinically significant change but was below the clinical cutoff at preintervention. Overall, the results indicate that the majority of families (eight) showed clinically significant change on at least one domain and that for half of the families this change occurred on multiple domains. Two families did not benefit from the intervention. For the remaining families, the intervention was successful in facilitating change across different domains of functioning, the pattern of change observed varying between families. The results add to the growing body of evidence that ecologically based interventions can improve the functioning of high-risk families (Brunk, Henggeler, & Whelan, 1987; Luthar & Suchman, 2000).

An important result was the finding that clinically significant improvement was possible over a 3-month period for the majority of families. This indicates that interventions such as the PUP program may have utility in assessing parent’s short-term capacity for change when doubts exist over their capacity to parent their

### Discussion

The aim of the present study was to evaluate the short-term impact of the PUP program on families with known child protection concerns. The results found evidence of improvement in the functioning of the majority of the families that was both statistically and clinically significant. Families varied in their profile of presenting problems, with the majority reporting problems in the clinical range on multiple domains. Two families did not benefit from the intervention. For the remaining families, the intervention was successful in facilitating change across different domains of functioning, the pattern of change observed varying between families. The results add to the growing body of evidence that ecologically based interventions can improve the functioning of high-risk families (Brunk, Henggeler, & Whelan, 1987; Luthar & Suchman, 2000).

### TABLE 2. Summary of Changes on Abuse Potential and Key Measures Across Ecological Domains for Individual Families

<table>
<thead>
<tr>
<th>Measure</th>
<th>Family</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
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<tbody>
<tr>
<td>Abuse potential</td>
<td>CAPI—abuse</td>
<td>R</td>
<td>NC</td>
<td>R</td>
<td>NC</td>
<td>I</td>
<td>NC</td>
<td>NC</td>
<td>R</td>
<td>NC</td>
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<tr>
<td>Clinical domains</td>
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<tr>
<td>Parent</td>
<td>DASS</td>
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<td>NC</td>
<td>R</td>
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<td>R</td>
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<tr>
<td></td>
<td>PSI—parent domain</td>
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<td>R</td>
<td>R</td>
<td>I</td>
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<td>NC</td>
<td>I</td>
<td>R</td>
<td>NC</td>
<td>R</td>
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<tr>
<td>Child</td>
<td>SDQ—total</td>
<td>NC</td>
<td>NC</td>
<td>R</td>
<td>NC</td>
<td>I</td>
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<td></td>
<td>PSI—child domain</td>
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<td>R</td>
<td>NC</td>
<td>NC</td>
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<tr>
<td>Parent–child</td>
<td>PSI—parent–child domain</td>
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<td>NC</td>
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<td>R</td>
<td>R</td>
<td>NC</td>
<td>R</td>
</tr>
<tr>
<td>Social context</td>
<td>DHS—intensity score</td>
<td>NC</td>
<td>NC</td>
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<td>—</td>
<td>I</td>
<td>NC</td>
<td>I</td>
<td>NC</td>
<td>NC</td>
<td>R</td>
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Note. For D, I, NC, NC, and R, see text. CAPI = Child Abuse Potential Inventory; DASS = Depression, Anxiety and Stress Scale; PSI = Parenting Stress Index; SDQ = Strengths and Difficulties Questionnaire.
children. The lack of a longer term follow-up prevents any conclusions on the maintenance of the gains for these families and no claims are made that the improvements resulted in individual families reaching a minimal level of parenting. In fact, additional ongoing support was recommended for the majority of families.

That the profile of presenting problems and pattern of change across domains of functioning varied between families supports the view that interventions are needed that address multiple domains of functioning and can be tailored to the individual needs of families. Further research, however, is needed on the precise mechanisms responsible for change in response to interventions targeting multiproblem families (Kazdin & Nock, 2003). For example, several families showed change on both the child domain and the parent domain of functioning. It is unclear whether targeting just one domain of functioning would have resulted in similar gains across domains. It is equally plausible to speculate that addressing the parent’s ability to regulate emotions leads to more effective child management as it is to speculate that teaching child management skills leads to improvement of emotional functioning of the parents. Whether addressing both results in increased benefits cannot be established in the present study, but it is an important aim for future research. The mechanisms of change responsible for positive outcomes might also include process issues. For example, the PUP program sets clear targets for change, negotiated with the family. This emphasis on identifying and working collaboratively to solve family problems appears to result in a strong therapist alliance as indicated by low attrition rates. These factors common to other psychotherapies may, in part, be responsible for observed changes (Beutler, Machado, & Neufeld, 1994).

A methodological limitation of the current study is the lack of a control group. Although it cannot be ruled out that changes observed at the group level were not due to extraneous factors, the RCI has been found to be a robust measure of clinically significant change at the individual level. A further methodological problem was the reliance on parental self-report measures. Although the measures used have been found to be valid and reliable, future research would benefit from using observational measures and multiple informants.

Although the present study was successful in demonstrating short-term change in families offered the PUP program, not all families showed this improvement, and of the families that did show clinically significant improvement, four of the families continued to display problems in the clinical range on other domains of functioning. Although these families benefited from the intervention, the evidence is that they would require ongoing intervention and support to address the other issues. There are at least two important implications of this result. First, this finding has implications for how clinical trials of interventions targeting multiproblem families are reported. Clearly, there is a need to report on the proportion of families that benefit from an intervention, information that is hidden in analyses of statistical significance at the group level. However, in addition, reporting on the pattern of change across multiple domains of functioning provides important information on the impact of interventions to the overall family ecology of abusive and neglectful families. It may be that important changes occur in certain domains of functioning, whereas serious problems remain in other aspects of the family functioning. Routinely documenting the pattern of change in clinical trials involving multiproblem families would provide important information of areas of family life that may be more or less amenable to change. The finding that interventions produce variable patterns of change across families also has implications for the assessment and
treatment of families in clinical settings. Attending a parenting intervention, as may be mandated by a family court, does not guarantee that changes occur in all problematic areas of family life. A short-term parenting intervention can, however, provide important information on the capacity of the family to change and identify the longer term needs of the family. This is an important contribution in the management of abusive and neglectful families.

Acknowledgments

Conflict of interest: None declared.

References


