Ecological Treatment for Parent-to-Child Violence

Cynthia Cupit Swenson, PhD
Lisa Saldana, PhD
Cathy Dodds Joyner, MEd
Scott W. Henggeler, PhD

Introduction

Parental violence towards a child increases the child's risk of developing serious mental health problems and, in the long run, engaging in violent crime and other antisocial behaviors. Maltreated children who experience severe emotional problems often require costly therapy and services, such as residential care and/or hospitalization, and eventually exact a heavy toll on themselves, their families and society, in general. Despite the multiple and often grave consequences that result from violence towards children, little is known about effective ways of preventing the violence, reducing its mental health impact and improving the functioning of abusive and/or at-risk families. To design effective interventions, clinicians should use as their guide existing child development literature and emerging findings on the links between children's physical factors and the multiple factors within the different systems with which the child interacts — parents, the family and the child's and family's social networks.

In this chapter, we outline an ecological conceptualization of and a treatment for parent-to-child violence. First, we present an empirical background of the mental health correlates of parent-to-child violence. Then we review the risk factors for child physical abuse in order to illustrate the need for an ecological treatment model. We describe recent work on applying an ecological treatment model and Multisystemic Therapy (MST) to parent-to-child violence.

The Effects of Child Physical Abuse: Serious Short- and Long-Term Mental Health Problems
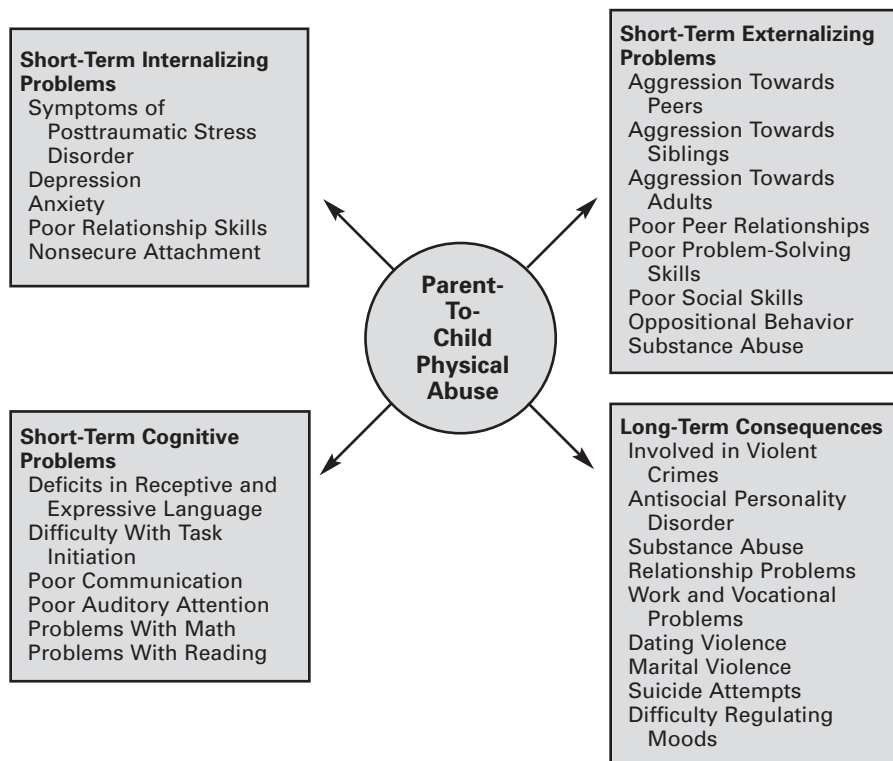
There is no single consistent profile of symptoms for all children who experience physical abuse. Rather, the impact of physical abuse on mental health varies among children and among families, and occurs in multiple domains of functioning. Findings from multiple studies that examined the impact of child physical abuse across the developmental continuum have identified the potential for impaired short-term social and emotional functioning in 3 broad areas — externalizing,[1-22] internalizing[22-38] and cognitive problems.[16,38-49] These studies also identified the potential for impaired long-term functioning across a host of areas of maladaptation — from engaging in violent crime and antisocial behavior to substance abuse and suicide attempts (see Fig 1).[50]

Short-term Functional Deficits Related to Child Physical Abuse

Externalizing problems

One of the most consistent findings in the literature is that physically abused children exhibit externalizing and aggressive behavior problems.[1-3] The aggression may be directed toward peers,[4-6] siblings[7] and/or adults[4,6,8] in both home and social/academic settings. Longitudinal data indicate that negative behaviors and negative affect can start as early as the toddler years and continue through preschool and early grade school years.[9,10]

Fig 1. Potential short- and long-term consequences of child physical abuse.[50]

Short-Term Internalizing Problems
 Symptoms of
  Posttraumatic Stress
  Disorder
 Depression
 Anxiety
 Poor Relationship Skills
 Nonsecure Attachment

Short-Term Externalizing Problems
 Aggression Towards
  Peers
 Aggression Towards
  Siblings
 Aggression Towards
  Adults
 Poor Peer Relationships
 Poor Problem-Solving
  Skills
 Poor Social Skills
 Oppositional Behavior
 Substance Abuse

Parent-To-Child Physical Abuse

Short-Term Cognitive Problems
 Deficits in Receptive and
  Expressive Language
 Difficulty With Task
  Initiation
 Poor Communication
 Poor Auditory Attention
 Problems With Math
 Problems With Reading

Long-Term Consequences
 Involved in Violent
  Crimes
 Antisocial Personality
  Disorder
 Substance Abuse
 Relationship Problems
 Work and Vocational
  Problems
 Dating Violence
 Marital Violence
 Suicide Attempts
 Difficulty Regulating
  Moods

Physically abused children may manifest externalizing behavior problems in their difficult relationships with peers. Empirical evidence shows that physically abused children are less socially competent than are their nonabused peers: For example, physically abused preschoolers often avoid peer interactions,[4] initiate fewer positive interactions with both peers and adults,[11] engage in less prosocial behaviors[6] and participate less frequently in parallel or group play[12] than do nonabused children. These problems with peers persist at least through early childhood.[9,10] Older physically abused children also engage less frequently in positive social interactions with both peers and adults.[7,13] Similarly, parents of physically abused children perceive their youngsters as being less socially involved, less socially skilled and less socially mature than their children's nonabused counterparts.[6,14-17] Beyond overt aggression and difficulty interacting with peers, other externalizing behavior problems include an increased propensity for violating rules,[18] oppositional behavior,[18] delinquency,[19] property offenses and arrests,[20] substance abuse[20-22] and cigarette smoking.[20-22]

Internalizing problems

Researchers who have assessed posttraumatic symptoms among physically abused children have found rates ranging from 0% to 50%[23-26] — and these symptoms may endure. Famularo and colleagues found a prevalence rate for posttraumatic stress disorder (PTSD) of 36% among physically abused children[27]; 33% still had symptoms of PTSD at the 2-year follow-up.[28] Across these studies, the majority of physically abused children were not diagnosed with PTSD, but rather reported a variety of symptoms of PTSD.[23-28] In addition, several studies indicated that child physical abuse is often associated with psychiatric diagnoses, such as depression,[29,30] agoraphobia[29] and anxiety disorders.[31,32] Child physical abuse has also been shown to contribute to lifetime disorders, such as dysthymia, when compounded by other risk factors.[22]

Internalizing problems are also evident in affected children's developmental deficits in their relationship skills. A significant body of research suggests that the maltreatment of infants and toddlers is associated with insecure attachment.[33,34] Among maltreated children, secure attachments may become insecure as the child matures.[35] Attachment problems affect an abused child in both the social and behavioral arenas. Nonsecure attachments with parents and/or caregivers in infancy are associated with poor social competence and increased aggression during the school years,[36,37] decreased readiness to learn in school[38] and an increased need for approval and/or attention seeking.[38]

Deficits in cognitive skills

Although early research documented intellectual deficits among physically abused children,[39,40] later studies did not find differences in the overall intellectual functioning of physically abused children compared with their nonabused peers.[42] Other studies reveal deficits in specific cognitive skills — including receptive language,[43] reading ability and expressive language skills,[44] initiation of tasks,[38,45] comprehension and abstraction abilities,[46] communication,[16] comprehension of social roles[47] and auditory attention and verbal fluency[46,48] — rather than in global cognitive functioning. Burke and colleagues[44] suggested that the physical aggression observed in physically abused children may, in part, result from an overreliance on physical forms of expression in the absence of adequate language skills. Academically, physically abused children perform lower on math and reading tests, and are more than twice as likely to repeat a grade as are their nonabused peers.[49] Physically abused children are also more likely to receive some type of discipline at school, including suspensions.[49]

The Long-Term Consequences of Child Physical Abuse

Moving beyond the childhood years, physical abuse as a youngster is a risk factor for mental health problems in adulthood. McCord,[51] for example, who followed 253 males from their early childhood over a 30-year period, found that the men who had been physically abused, rejected or neglected were more likely than the nonabused men to become juvenile delinquents and had higher rates of criminal convictions, mental illness and substance abuse in adulthood. In 2 other studies, Luntz and Widom[52] and Perez and Widom[53] followed 699 young adults and found that, compared with nonabused peers, individuals who were maltreated as children had higher rates of criminal offenses and antisocial personality disorders, and lower IQs and reading abilities. Retrospective data from clinical[54] and community samples[55,56] corroborate these findings: They indicate that, as adults, victims of child abuse are more likely than adults who do not have a history of abuse to have higher rates of substance abuse and psychiatric, interpersonal, vocational and antisocial behavior problems. A study by Malinosky-Rummell and Hansen showed that such victims are more likely to engage in dating violence, marital violence and suicidal attempts.[57]
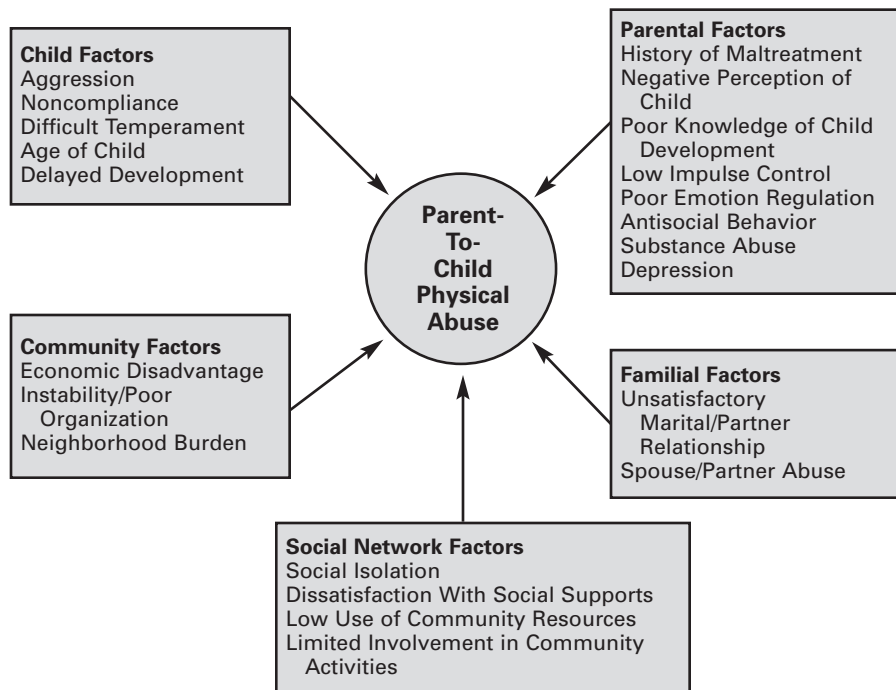
Emerging research on the consequences of child abuse indicates that attachment problems may persist beyond infancy: For example, among adolescents, secure attachment is related positively to psychosocial adjustment.[58] In late adolescence and early adulthood, insecure attachment is associated with difficulties in managing conflicts with attachment figures and low confidence in regulating negative moods.[59]

As summarized, overwhelmingly, more than 2 decades of research on the impact of child physical abuse indicate that physically abused children often experience multiple mental health problems, which may place them at risk for *additional* abuse. Furthermore, child physical abuse increases the risk of serious mental health disorders in adulthood. To design effective interventions, clinicians must consider the potential for problems in multiple domains. Those researchers and clinicians designing interventions must also take into account risk factors other than those intrinsic to the child. These risk factors are discussed in the text that follows.

Risk Factors for Child Physical Abuse

Risk factors are those factors within the child and his/her ecology that correlate positively with the occurrence or recurrence of abuse. Based on descriptive reports and comparison studies, this section describes the child, parental, familial, social network and community characteristics that are associated with child physical abuse. Fig 2[50] presents a summary of the risk factors for child physical abuse across multiple systems.

Fig 2. Child, parental, familial, social network and community risk factors associated with parent-to-child physical abuse.[50]

Child Factors
Aggression
Noncompliance
Difficult Temperament
Age of Child
Delayed Development

Parental Factors
History of Maltreatment
Negative Perception of
    Child
Poor Knowledge of Child
    Development
Low Impulse Control
Poor Emotion Regulation
Antisocial Behavior
Substance Abuse
Depression

Parent-To-Child Physical Abuse

Community Factors
Economic Disadvantage
Instability/Poor
    Organization
Neighborhood Burden

Familial Factors
Unsatisfactory
    Marital/Partner
    Relationship
Spouse/Partner Abuse

Social Network Factors
Social Isolation
Dissatisfaction With Social Supports
Low Use of Community Resources
Limited Involvement in Community
    Activities

Child Risk Factors

Although children are not responsible for adults' abusive behavior, several child-based factors increase their risk of physical abuse. Primarily, noncompliant and aggressive behaviors increase a child's risk of being abused physically.[60] For infants, a difficult temperament, often manifested by prolonged crying, has been associated with physical abuse.[61] Younger and developmentally delayed children are victims of physical abuse more often than are older or nondelayed children.[62,63]

Parental Risk Factors

The characteristics of parents that correlate positively with child physical abuse are varied and cover multiple domains, and they may relate to historical events in the parents' lives that affect their current functioning.

- **History of childhood abuse.** A review by Kaufman and Zigler, published in 1987, estimated that approximately 30% of abusive parents were abused as children.[64] Therefore, while a history of child abuse may increase the risk of individuals abusing their own child, most abused children do not grow up to be abusers themselves. The specific mechanism(s) by which exposure to abuse and/or harsh punishment in childhood influences the later expression of abusive behavior is still unknown.[65,66]

- **Cognitive problems.** Empirical studies have described several cognitive problems in parents who abuse their children physically. These problems relate primarily to the parents' view of the child. One of these cognitive problems is parental attributional biases: Abusive parents tend to perceive their children in a more negative light than do nonabusive parents.[67,68] Studies with high-risk parents suggest the presence of cognitive rigidity, more critical evaluation and attributions of child noncompliance that implicate the child's negative intentions.[69-71] Parents may also report distortions in their beliefs about their children's motives. An abusive parent may see malicious intent where there is none: For example, if a child is injured, abusive parents may perceive the injury as an attempt to make them feel bad or manipulated. They may also perceive the child as responsible for certain events, the parents' welfare or other personal circumstances.[72,73] Abusers may also take responsibility for their own successes, but attribute the responsibility for their failures to the child.[74,75] Parents' negative perceptions of their children may lead the parents to be less accepting of and less empathic towards their children.[76] The biased perceptions and abuse become a vicious cycle: Blaming the child for the parents' behavior increases the risk of the parent abusing the child again and again.[74]

    In addition to attributional biases, abusive parents tend to harbor unrealistically high expectations of their children's behavior,[77] which may result in frustration with and eventually aggression toward the child. Some abusive parents consider physical discipline an appropriate form of parenting, which may contribute to their use of harsh discipline strategies[78] and a greater acceptance of physical punishment than do nonabusive parents.[79]

- **Emotion regulation problems.** Harsh parenting is associated with a variety of negative affective states, including irritability, sadness and anxiety,[78] as well as explosiveness, hostility, anger and the use of threats.[80,81] Abusive parents often engage in heightened emotion-focused coping, reflecting their reactivity to stressful circumstances.[82]

    Laboratory data support the view that some abusive parents show more adverse physiological and psychological reactions to various stressful stimuli[83] — real and/or perceived. However, the relationship between stress-induced parental emotional states and parental aggression is unclear. The heightened emotional states may be catalysts for aggression towards the child or they may result from the abusive activity itself.

- **Behavioral problems.** Several behavioral patterns are common among physically abusive parents. Impulse control problems may result in inappropriate actions, such as frequent negative or critical comments,[68] physical coercion or threats,[18] power assertion[84] or direct aggressive management practices.[70] On the other hand, behavioral deficits may take the form of more positive behaviors, such as attunement to the child,[85] positive affect and social behavior,[85] and physical affection[85] and problem-solving,[77,86] as well as prosocial control techniques.[87] Parents may also have deficits in basic parental management skills, such as a lack of monitoring or responding inappropriately to their children's behaviors.[88] Poor parenting skills or a limited knowledge of disciplinary alternatives can contribute to the use of harsh physical punishment.[88]

- **Psychiatric disorders.** The psychiatric disorders identified most frequently among physically abusive parents are depression,[68] substance abuse[68,89-92] and PTSD.[68,89-92] Clearly, such disorders may be barriers to effective parental functioning. Parental substance abuse, in particular, may decrease a parent's involvement in family activities and increase their intolerance for improper behavior by their child.[90,92,93] In addition, when a parent has a psychiatric disorder or a substance abuse problem, there is a greater likelihood that his/her child will be placed in foster care.[90,92,93]

- **Biological factors.** Research suggests that abusive parents exhibit hyperarousal to stressful child-related and non–child-related stimuli.[94,95] What is not clear is whether this hyperarousal appears in affected adults prior to any exposure to child stressors and whether it is associated with cognitive, affective or behavioral reactions to abusive behavior.

Familial Risk Factors

Although less is known about the familial risk factors that contribute to parental child abuse, several common characteristics have emerged in published studies.

- **Volatile home environment.** Observational studies have documented heightened aggressive and/or coercive behaviors among physically abusive families: Interactions among family members may be characterized by critical, hostile and/or verbally abusive behaviors.[96] In addition, hostile interactions are common between abusive parents and between abusive partners.[97,98]

- **Limited psychosocial resources.** In physically abusive families, there is often limited family cohesion and a low level of psychosocial support.[99] Limited family cohesion is associated with the potential for parental physical abuse.[100] In part, the low level of cohesion may relate to the lack of positive interactions among family members.[101]

- **General family stressors.** Employment disruptions, geographical moves, changes in financial status and other forms of instability are common among families that exhibit abuse.[102] The presence of numerous child and parent stressors correlates highly with parent-to-child violence.[103] This is especially true when family violence is present.[104,105] At a basic level, limited financial resources (ie, limited income, unemployment, inadequate housing, large family size, single parenthood) correlate positively with physical abuse.[68,106] Poverty alone is a salient correlate and predictor of child physical abuse.[68,106]

Social Network Risk Factors

Physically abusive families are often described as "isolated" and/or "lonely."[83] Affected parents and children alike may have limited contact with friends and/or family, or may be alienated completely from both. Published reports state that physically abusive families express general dissatisfaction with their social supports,[107,108] which likely contributes to the sense of isolation. Compounding the problem, abusive families tend not to use the resources available to them in their communities.[109] Parents who have limited social supports may be more susceptible to the negative effects of stress and family problems, and less bolstered by the positive influences of those within their social network.

Community Risk Factors

Studies that encompass many different regions of the United States have found the following consistent community risk factors for child maltreatment:

- **Limited finances and economic disadvantage.** Economically disadvantaged communities tend to exhibit higher rates of child maltreatment.[110-112] As noted by Emery and Laumann-Billings,[102] disadvantaged communities may have limited or nonexistent social services.

- **Instability, isolation and disorganization.** Communities with high rates of child maltreatment tend to be unstable, isolated and poorly organized.[111] In some of these neighborhoods, the instability is due to the high turnover of residents.[113] When neighborhood turnover is high, the likelihood of implementing an organizational framework and internal controls is reduced.[113]

- **Neighborhood burden.** Coulton, Korbin and Su[114] examined the relationship between child abuse and neighborhood structural variables — including poverty, child-care burden and instability. Both poverty and the burden of child care increased the potential for child maltreatment significantly.

Summary of Risk Factors

At present, there is no known single factor — or group of factors — that causes child abuse. Instead, an increased risk of child abuse is the result of a complex interaction among multiple factors within the child, parent, family, social network and community. The set of factors that determines whether a particular child in a particular family will be physically abused varies according to the characteristics of the family and the family's ecology. Therefore, *all* of the risk factors in *each* of the systems discussed previously must be considered when intervening to prevent or eliminate parent-to-child violence.

Implications for Treatment: Multiple Consequences and Correlates

The multiple, potential mental health consequences of child physical abuse (Fig 1)[50] and the risk factors in the multiple systems that make up the child's and family's ecology (Fig 2)[50] pose the following implications for the design and delivery of effective interventions:

- Given that mental health problems may occur across or within multiple domains, a thorough assessment of the youth's behavioral and cognitive functioning will help determine a baseline for key problem areas.

- The effects of physical abuse on the child may differ across various developmental periods. Therefore, therapists must be prepared to understand the various manifestations of behavioral and psychological problems and intervene in ways that are developmentally appropriate for the child and family.

- The clinician will likely find child, parental and familial problems in various domains. To address all of the key problems that increase the risk of child abuse, treatment should be comprehensive and include the child, parent(s) and family.

- Risk factors vary by family. Therefore, treatment must be individualized to match the needs of the youth and family. Treatment cannot be "one size fits all."

Summary of Treatment Implications

In sum, the multifaceted etiology of child physical abuse demands an equally multifaceted and comprehensive treatment that focuses on multiple domains of functioning: MST is such an intervention. MST is an ecologically based treatment model that addresses the youth's entire ecology. It was developed originally to treat deeply entrenched antisocial behavior in youth.[115] Recent research is continuing to examine the use of MST for the treatment of physically abused children and their families.[116] Its use in the arena of child physical abuse is warranted for the following reasons:

- Like delinquency, child physical abuse is related to numerous factors within multiple systems.

- Families who must be supervised by Child Protective Services (CPS) typically have multiple, serious needs and are overburdened by interacting with several different treatment providers.

- The majority of families in which child abuse is present either fail to engage in treatment or drop out before its completion.

The MST Model

The Theoretical Foundation

Theoretically, MST is rooted in systems theory and social ecological models of behavior. Both theories view behavior as "multidetermined" and driven largely by the relationships that the child has with others in his or her natural environment. Based primarily on the work of Bronfenbrenner,[117] Haley[118] and Minuchin,[119] the theoretical framework of MST assumes that children and adolescents are embedded in multiple systems that have direct and indirect influences on their behavior, and these influences are reciprocal and bidirectional.

Scientific Support for MST With Antisocial Youth and Their Families

Across 3 randomized, controlled trials of violent and chronic juvenile offenders, MST produced decreases of 25% to 70% in long-term rates of rearrest, and decreases of 47% to 64% in long-term rates of days in out-of-home placements.[120-122] These outcomes have resulted in considerable cost savings, bolstering the use of MST. The Washington State Institute for Public Policy concluded that MST saved $31,661 in placement and juvenile justice costs per participant.[123] Further savings from the costs to potential victims of these offenders increased this figure to $131,918 per participant. The capacity of MST to reduce adolescent conduct problems has been demonstrated in several other populations of youth who have serious clinical problems.[124,125]

Clinical Features of Standard MST

To facilitate replication studies and the implementation of MST programs in community settings, researchers and clinicians have developed, and described extensively, the following standardized components of MST:

- **A set of principles that guide the formulation of clinical interventions.** The clinical practice of MST follows 9 principles[126] (Table 1). Several studies have shown that positive outcomes for youth are associated significantly with therapists' adherence to these 9 principles (see upcoming text).

- **Family-friendly engagement process.** The MST therapist and clinical team are responsible for engaging families and achieving desired outcomes.[127] As the first step in treatment, the therapist must discover how to engage the family and others in treatment to achieve the targeted outcome(s). Families may be reluctant initially to collaborate with the therapist, especially when they are under the supervision of CPS: They may cancel appointments or may not return phone calls. There are, however, many perfectly valid reasons why a family may not be willing to engage in treatment: For example, family members may not trust the system providing the therapy or they may be concerned that the therapist is "collaborating" with CPS to remove the child/children from the family. One of the therapist's first tasks is to address these issues with the family.

  Several aspects of MST are designed specifically to promote family engagement in treatment:

  – MST therapists focus on the family's strengths rather than their deficits. Therefore, attribution of blame to parents or other family members for the child's behavior is not part of the process.

  – The home-based model of service delivery used in MST facilitates engagement by overcoming common barriers to getting services to clients, including lack of transportation or fear of accessing care in an unfamiliar setting. Families are often more comfortable on their own "turf" than they are in a clinic setting, and they may be more open to having a therapist come to their home instead of having to navigate through traffic or new places.

Table 1. The 9 Treatment Principles of Multisystemic Therapy (MST)[126]

Principle 1:   The primary purpose of assessment is to understand the fit between the identified problems and their broader systemic context.

Principle 2:   Therapeutic contacts emphasize the positive and use systemic strengths as levers for change.

Principle 3:   Interventions are designed to promote responsible behavior and decrease irresponsible behavior among family members.

Principle 4:   Interventions are present-focused and action-oriented, targeting specific and well-defined problems.

Principle 5:   Interventions target sequences of behavior within and between multiple systems that maintain the identified problems.

Principle 6:   Interventions are developmentally appropriate and fit the developmental needs of the youth.

Principle 7:   Interventions are designed to require daily or weekly effort by family members.

Principle 8:   Intervention effectiveness is evaluated continuously from multiple perspectives with providers assuming accountability for overcoming barriers to successful outcomes.

Principle 9:   Interventions are designed to promote treatment generalization and long-term maintenance of therapeutic change by empowering caregivers to address family members' needs across multiple systemic contexts.

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- Treatment is a collaborative process that focuses on the problems that families have identified as important to them.

- Most therapists do not "give up" on a family that is making limited progress. Rather, they assess the situation and seek to understand the family's barriers to engagement or progress. Then they implement new strategies to overcome these barriers.

- Engagement is viewed as an ongoing process that continues throughout the course of treatment, rather than as a perfunctory task that can be completed quickly. The therapist monitors the family's level of engagement continuously and takes corrective actions when engagement is low or waning. Engagement is a necessary, but not sufficient, condition for achieving positive clinical outcomes.

- **Structured analytical process used to prioritize interventions.** The MST analytical process provides a structured guide for treatment[128] (Fig 3). After identifying the problem behaviors based on information received from individuals in various systems (ie, caregivers, youth, teachers, CPS workers and other vested parties), the therapist consolidates the targets for change and obtains a baseline measure of these behaviors. Next, the therapist recruits the key individuals in the child's natural ecology and they become the treatment team. Through in-depth interviews, each team member provides his/her perspectives on the targeted problem behaviors, the strengths of the family and each system, and the changes that will be necessary to achieve success. The therapist uses this information to develop the overarching goals of treatment in a way that promotes ownership by all key participants.

Fig 3. The MST analytical process.[128]
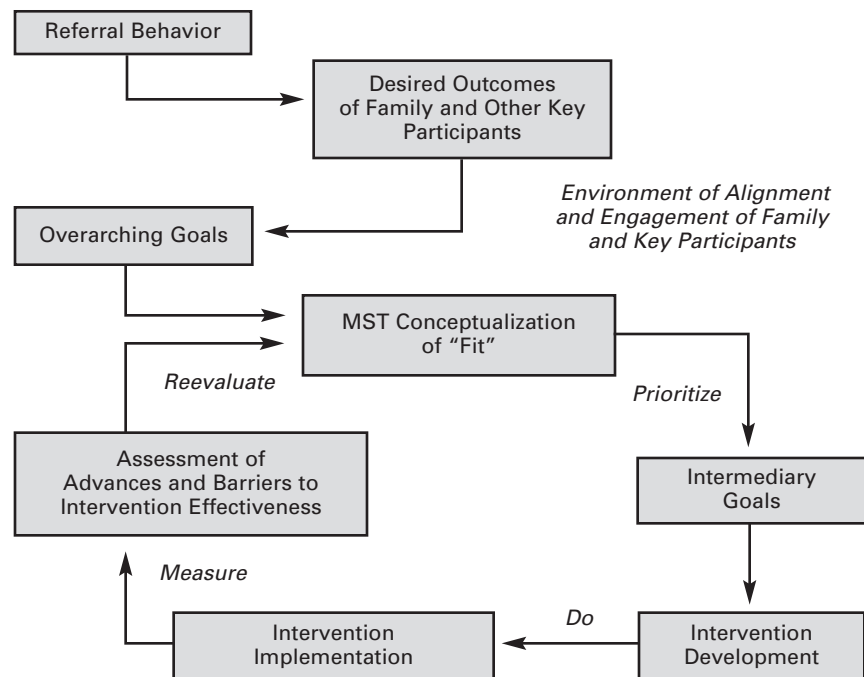
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The overarching goals define the scope and end point of treatment with MST. These goals must be concrete, measurable and realistic for the treatment's time frame. All interventions must relate to at least one of the overarching goals. When these goals are reached, treatment is complete.

After identifying the goals of treatment, the therapist prioritizes the necessary interactions and relationship changes by examining how the problem behaviors *fit* within the context of the youth's natural ecology: For example, if the child is not following the parents' rules, the therapist uses the input from each of the systems to record on a "fit circle" the possible factors driving the problem behavior (eg, the flouting of a rule). The therapist may then determine that the child's noncompliance is associated with, for example, one or more of the following "fit factors":

– The parent has limited parenting skills.

– Interactions between the parent and child often escalate.

– The parent is depressed and, as a result, rarely monitors the child's behavior.

After the therapist has identified the fit factors, the entire clinical team determines those factors that appear to be the primary drivers of the behavior problems. Initially, the treatment targets these factors for change, and these changes are defined as "intermediary goals": For example, the clinical team may determine that the lack of parental rules or of specific consequences for inappropriate behaviors is the primary factor driving the problem. Therefore, therapeutic attention would focus on working with the family to establish rules and consequences for not adhering to the rules. This type of change in parental management of the child's

noncompliance is viewed as one of the intermediary goals — a change that will lead ultimately to the overarching treatment goal. If the child becomes compliant through more effective parental management of the behavior, it may not be necessary to attend to the other fit factors.

Throughout the intervention, the therapist and team members compare the intended outcomes with the actual outcomes and measure the successes achieved. If sufficient success is not achieved within a given time frame, the clinical team and the family will seek to identify the barriers to reaching the treatment goals. This newly arrived at information is then compared with or added to the current understanding of how the behaviors *"fit"* within the natural ecology, and the iterative process of identifying fit factors, prioritizing needed changes and intervening and evaluating begins anew. This structured analytic process continues until the overarching goals of therapy are achieved. Throughout treatment, the therapist helps the family to address any problems as independently as possible and to build a support system to help maintain the changes that have been achieved.

- **Evidence-based treatment techniques that are integrated into the MST conceptual framework.** MST incorporates interventions that have empirical support, such as the cognitive–behavioral therapies, behavioral therapies, pragmatic family therapies and certain pharmacological interventions (eg, for attention deficit-hyperactivity disorder). However, there are several differences between using these techniques within MST and using them alone. First, within MST, the child's ecology — *not* the individual child or the family — is the client. The evidence-based treatments to be used in MST have focused historically on a limited aspect of the youth's social ecology — for example, individual cognitive behavioral therapy for the treatment of anger management. In contrast, MST integrates these treatments into a broad-based ecological framework that addresses a range of pertinent factors across the family, peer group, school and community contexts. Second, because MST views caregivers as playing a critical role in achieving favorable long-term outcomes, interventions are delivered primarily by the caregivers whenever possible: For example, cognitive–behavior therapy used for improving a youth's management of his anger might be taught to the father by the therapist, and the father would then teach these skills to his son. Third, in stark contrast to how the vast majority of evidence-based interventions are delivered in the field, interventions using MST are supported by a strong, outcome-oriented quality assurance system that aims to enhance intervention fidelity and facilitate the attainment of desired clinical outcomes.

- **Home-based delivery of services that enables the provision of intensive therapy.** In all of the MST research studies and among all of the dissemination sites of MST in the United States and abroad, services are delivered in the home or in locations that are convenient to the affected families. The home-based model removes barriers to service access and increases the capacity of interventions to alter the youth's ecology. The key characteristics of the service delivery of MST include the following:

  – Low caseloads of 3 to 6 families allow clinicians to provide very personalized, intensive services to each family (2 hours to 15 hours per week, titrated to need).

  – Therapists work within a team of 3 to 4 practitioners; however, each clinician has his/her own caseload.

  – Treatment sessions may occur daily or several times per week; sessions decrease in frequency as the family progresses.

  – Treatment is time-limited and generally lasts for 4 months to 6 months, depending on the seriousness of the problems and the effectiveness of the interventions.

  – Treatment is delivered in the family's natural environment: in their home, in their community or in other places convenient to them.

  – Treatment is delivered at times convenient to the family; therefore, therapists work a flexible schedule.

  – Therapists are available to clients 24 hours per day, 7 days per week, generally through an on-call system.

Through this home-based, service-delivery system, MST provides very intensive clinical services that are designed to keep children with the family unit, thereby preventing out-of-home placements. Such intensive, expensive services can be cost-effective when targeted to youth who are at high risk of out-of-home placement.[123]

- **Highly supportive supervision process.** MST clinical supervisors interact face-to-face with therapists, on average, 2 hours to 4 hours each week and are available 24 hours per day, 7 days per week on an on-call basis. In addition, the clinical supervisor consults with therapists, as needed, and even attends therapy sessions if there are safety concerns or if clinical skill building is required.

The sole purpose of MST clinical supervision is to help therapists achieve the desired clinical outcomes with their client families. MST clinical supervision accomplishes the following:

– provides therapists with an understanding of the MST model

– facilitates therapists' adherence to the 9 treatment principles

– helps therapists determine how to engage families and key individuals from other systems

– helps therapists implement evidence-based techniques

– helps therapists identify barriers to the success of interventions

As specified in *The MST Supervisory Manual*,[129] the clinical supervisor is responsible for building the therapist's capacity to be effective. This is accomplished by determining the barriers to low adherence to the treatment principles of MST, when evident, and developing strategies to overcome those barriers, including providing additional learning experiences, reviewing and offering feedback on therapy sessions and/or accompanying the therapist during family sessions.

Weekly supervisory sessions are structured and goal oriented. Supervision is provided in a group format, which assures that each therapist is familiar with every case. This case familiarity is important since the therapists must develop an on-call schedule that requires that each periodically assumes responsibility for crisis response during nights, weekends and therapist vacations. Likewise, therapists have usually met each others' client families, which increases the families' and therapists' comfort levels in handling crises at a time when the primary therapist is unavailable.

- **Stringent quality assurance process to promote treatment fidelity.** Several published studies[122,130-132] have demonstrated a significant association between therapist fidelity to the treatment principles of MST and outcomes for affected youth and families. In light of these findings, the field has devoted considerable attention to quality assurance mechanisms aimed at enhancing treatment fidelity. The quality assurance system includes the following: an orientation training week; weekly on-site MST supervision; weekly telephone consultation with an expert in MST; quarterly "booster" training on needed skills, as identified by the team; feedback on adherence ratings from parents and fellow therapists; and, during MST clinical trials, feedback via expert ratings of audiotaped therapy sessions.

With the exception of MST treatment that is provided within the context of research programs in clinical trials, all components of the quality assurance system are provided by MST Services (http://www.mstservices.com), which owns the exclusive license for MST technology and intellectual property through the Medical University of South Carolina.

Applying MST to the Problem of Parent-to-Child Physical Abuse

In an ongoing randomized clinical trial,[50] researchers at the Medical University of South Carolina are applying MST in cases of child physical abuse to address the following gaps in the scientific literature:

- Only a few recent studies have included comparison groups.

- The majority of recent studies did not use random assignment.

- Only a few studies have measured recidivism or the reincidence of abuse.

- Only a few studies have collected follow-up data.

- Little is known about the efficacy of treatments for physically abused adolescents.

- Virtually nothing is known about the effectiveness of treatments for physically abused adolescents.

This study, known as PEACE, Betta Fuh Fambly — the Project Empowering Adults, Children and their Ecology, for the Family (in the Gullah language; an English-based creole language spoken by African Americans inhabiting the sea islands and coastal areas of South Carolina, Georgia and northeastern Florida) — is a 5-year clinical trial funded by the National Institute of Mental Health. Participants include adolescents ages 10 years to 17 years who are referred by CPS because of physical abuse by a parent or caregiver. The study is being conducted in "the real world" of a community mental health center — the Charleston/Dorchester Community Mental Health Center.

PEACE, Betta Fuh Fambly, is following a 2-by-5 design: 2 groups with 5 assessments (at baseline, and at 2 months, 4 months, 10 months and 16 months). Investigators have assigned 86 families randomly to either MST or parent group therapy using Systematic Training for Effective Parenting of Teens (STEP-TEEN)[133] plus current community services. Assessments measure functioning across multiple systems: the child (eg, using the Children's Depression Inventory[134]); the parent(s) (eg, using the Conflict Tactics Scale[135]); the family (eg, using the Family Adaptability and Cohesion Evaluation Scale [3rd edition][136]); reabuse rates based on CPS records; cost; and service utilization.

PEACE: Adaptations to Standard MST

Since MST was developed and validated originally using families and the youth who exhibited antisocial behavior, the PEACE study required adaptations of the model to meet the needs of the participants. The current study standardized the following 9 adaptations:

- family safety planning

- functional analysis of the use of force or physical discipline

- treatment for PTSD

- treatment for anger management

- treatment for substance abuse

- family communication training

- "clarification" of the abuse

- inclusion of a psychiatrist

- involving CPS in treatment

Family safety planning. Although safety is always a critical issue when working with families that have mental health needs, it is of particular importance when counseling abusive families. The foremost goal of treatment is to maintain the physical safety of the youth and other family members. In the PEACE study, therapists conduct safety planning during the initial contact — and in subsequent sessions — with families. The safety plan includes a written "contract" developed by the family with the help of the therapist. The plan draws on the resources of the family, the extended family and friends and neighbors to assist during times of crises.

Functional analysis of the use of force or physical discipline. An integral part of standard MST is the use of the analytical process to determine how multiple factors contribute to symptoms — as well as the appropriate points of intervention. Building on this, functional analyses[50] are used in the PEACE study to evaluate the circumstances leading up to incidents of abuse (sometimes as distally as the day before), what occurred at the time of the abuse and the consequences following the incidents. The MST therapist completes functional analyses throughout the treatment process whenever there are events that threaten the safety of the family members or that constitute conflict.

Treatment for PTSD. One of the many lessons learned during the PEACE study is the critical importance of evaluating and treating the mental and physical health needs of the parents/caregivers of abused youth. In particular, PTSD appears to influence strongly a caregiver's capacity to parent effectively: Across families in which PTSD is identified in caregivers, MST therapists use cognitive–behavioral techniques, including exposure[137, 138] and cognitive restructuring,[139,140] to reduce anxiety and assist in the resolution of traumatic events.

Treatment for anger management. Often, abusive parents *and* children who have been abused physically have difficulties with anger management. Using a cognitive–behavioral approach to treatment,[141,142] therapists in the PEACE study assess caregivers and youth participants for deficits in anger management and provide interventions when necessary. This protocol assumes that anger occurs in response to stress or provocation, and that the options for coping that are available during the time of stress need to be modified.

Treatment for substance abuse. The Community Reinforcement Approach (CRA), an empirically validated method of treating substance abuse that combines cognitive–behavioral techniques and an incentive program, is being used in the PEACE study.[143,144] CRA has been used across several MST programs when substance abuse was identified in either the youth or caregivers.

Family communication training. As part of its overall goal, the PEACE study trains parents and adolescents to communicate more effectively to solve problems.[145] The training protocol, which applies cognitive and behavioral techniques to problematic parent-adolescent interactions, helps the family understand when a situation may become conflictual and how to respond in a proactive manner using problem-solving skills.

"Clarification" of the abuse. Parents who abuse their children physically and blame the child for their actions are likely to repeat the abuse.[74] Conducting a "clarification" is a method for understanding the parent's thinking about an incident, intervening to elucidate for the parent the maladaptive nature of his/her thinking and subsequently helping the parent accept responsibility for the abusive actions and apologize to the child and the family. In the PEACE project, the clarification is conducted by having the abusive parent write a letter to the child and the family. This exercise spans at least a few therapeutic sessions — as the letter goes through several drafts — giving the therapist an opportunity to understand and correct any distortions the parent may have regarding the child and his/her responsibility for the abuse. The process culminates in a family meeting during which the responsibility for the abusive action is clarified verbally.

Inclusion of a psychiatrist. The PEACE study has taught us that maltreated children often have severe emotional problems that require the care of a psychiatrist — in a manner that is supportive of the MST model. In addition, many of the parents/caregivers have been proven to need medication management to stabilize them prior to the implementation of interventions that focus on them. The integration of evidence-based psychiatric interventions is now a *required* adaptation of MST when working with maltreating families.

Involving CPS in treatment. Consistent with the standard MST model, the PEACE study implements interventions within each of the critical systems that surround a child. For maltreated youth, one of the most visible systems is CPS. When a child is referred to the PEACE project, by definition he/she has been assigned to a CPS caseworker. The relationship that a family has with CPS may influence greatly their engagement in treatment and, conversely, their engagement in treatment may influence greatly the family's relationship with CPS. By involving the CPS caseworker in treatment, the MST therapist is in a position to help facilitate the development of a working relationship between the 2 parties that is most beneficial to the family.

Conclusions

Every aspect of parent-to-child violence is a complex problem. When the needs of abusive families are dealt with in standard, 1-hour-per-week, office-based therapy, only the surface issues are scratched. Many families inevitably receive no services whatsoever because they terminate treatment. The long-term consequences of child physical abuse are too long-lasting and too grave not to venture beyond standard therapies to apply intensive treatments in an attempt to prevent adolescent and adulthood PTSD, violent crime, substance abuse, depression and an ongoing cycle of family violence.

PEACE, Betta Fuh Fambly, uses the guidance of existing scientific literature on the impact of abuse, the correlates of abuse and empirically supported treatments, and applies them through a model of MST to address the multiple, serious needs of abusive families. To address the needs of these families as completely as possible, the study made adaptations to the standard model of MST for juvenile delinquency: These adaptations include standardizing empirically supported treatment techniques for problems that are common to physically abusive families.

While this model may not be needed for all families who experience parent-to-child violence, families in which physical abuse is entrenched deeply may benefit from this type of intensive work that focuses on eliminating the violence and enabling the family to live together *in peace*.

Acknowledgment

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