Multisystemic Therapy: Treatment for Adolescents With Delinquent Sexual Behavior

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Multisystemic therapy (MST) (Henggeler & Borduin, 1990; Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998) is an evidence-based treatment model for severely delinquent youth that has been adapted for use with adolescents with illegal sexual behavior. This adaptation was completed for two main reasons. First, research shows that these adolescents have more in common with other delinquents than is generally assumed (Butler & Seto, 2002; Ronis & Borduin, 2007; van Wijk et al., 2005). Such findings suggest that effective treatments for delinquency hold promise for adolescents who sexually offend. With 10 published randomized trials with delinquents and their families (for review see Henggeler, Sheidow, & Lee, 2007), MST has relatively well-established effectiveness with the delinquent clinical population (National Institutes of Health, 2006). Second, and as described in greater detail in this article, results from three MST randomized studies suggest that MST holds considerable promise for adolescents with illegal sexual behavior (Borduin, Henggeler, Blaske, & Stein, 1990; Borduin & Schaeffer, 2001; Henggeler et al., 2008; Letourneau et al., 2008). The following paragraphs provide a brief overview of MST in general, the adaptation of MST for youth with illegal sexual behavior, and the results of these studies.

Overview of MST

The theoretical foundation of MST draws upon the identified correlates/causes of serious antisocial behavior and Bronfenbrenner's (1979) social-ecological theory of behavior. Social-ecological theory views the youth and family's school, work, peers, and community as interconnected systems with dynamic and reciprocal influences on the behavior of family members. Problem behavior can be maintained by problematic transactions within and/or between any one or any combination of these systems. Thus, consistent with both the empirically established correlates/causes of youth delinquent behavior and with social-ecological theory, MST interventions target identified youth and family problems within and between the multiple systems in which family members are embedded. The provision of MST in youths' homes is consistent with the family preservation model of service delivery (Nelson & Landsman, 1992), based on the philosophy that the most effective and ethical route to helping youth is through helping their families. Interventions delivered in the family's natural environment (home, school, neighborhood) optimize ecological validity and decrease barriers to service access. In our experience, working with families on their own "turf" sends a message of therapist commitment and respect that can greatly facilitate family engagement and the development of a therapeutic alliance—prerequisites for achieving desired outcomes.

The overriding goals of MST are to empower parents with the skills and resources needed to independently address difficulties that arise in raising adolescents and to empower adolescents to cope with familial and extrafamilial problems. MST therapists are trained to identify the primary drivers of a given youth's problem behavior and address the most proximal drivers with evidenced-based interventions. Because different contributing factors are relevant for different youths and families, MST interventions are individualized and highly flexible. Thus, MST does not follow a rigid protocol in which therapists conduct sets of predetermined tasks in an invariant sequence. Rather, treatment principles guide therapists' case conceptualizations, prioritization of interventions, and implementation of intervention strategies in MST. Detailed descriptions of these principles, and examples that illustrate the translation of these principles into specific intervention strategies, are provided in a clinical volume (Henggeler & Borduin, 1990) and a treatment manual (Henggeler et al., 1998).

Treatment fidelity in MST is maintained by weekly group supervision meetings involving three to four therapists per team (with caseloads of six families per therapist) and a master's- or doctoral-level clinical supervisor responsible for 1–2 MST teams. During supervision meetings, the treatment team reviews the goals and progress of each case to ensure the multisystemic focus of therapists' intervention strategies and to identify obstacles to success. It is important that the treatment team accepts responsibility for engaging families in treatment and for effecting therapeutic change. Fidelity is measured as part of a built-in rigorous quality assurance system in which caregivers are contacted monthly to complete a standardized measure of therapist adherence to the MST model. Several research studies have supported the link between therapist adherence and youth outcomes (e.g., Schoenwald, Sheidow, & Letourneau, 2004). Although on-site clinical supervisors provide immediate oversight, support, and problem-solving help to the MST team, MST consultants also (a) review weekly case summaries, (b) hold a 1-hour phone meeting with the team each week, and (c) conduct quarterly in-person booster sessions to ensure that the assessment, intervention, and problem-solving strategies are developed and executed by the team in a manner consistent with MST principles and processes.

Adaptation of MST for Youth With Problem Sexual Behaviors

As noted, MST interventions for adolescent antisocial behavior are specified in a clinical volume (Henggeler & Borduin, 1990) and a treatment manual (Henggeler et al., 1998) that describe the empirical, conceptual, and philosophical bases of MST and delineate the process by which youth and family problems are prioritized and targeted for change. To more fully account for clinical issues relevant to youth who have sexually offended, investigators have adapted MST for use with this population, specified the adaptation in a supplemental therapists' training manual (Borduin, Schaeffer, & Heiblum, 2007), and developed a training program for therapists and supervisors. Most important, MST for adolescents with illegal sexual behavior maintains a broad focus on the many correlates associated with juvenile delinquency generally, but it goes beyond standard MST by specifically focusing on aspects of the youth's ecology that are functionally related to the youth's sexual delinquency. For example, the adaptations to MST include creating a safety plan to minimize the youth's access to potential victims, addressing youth and caregiver denial about the offense (and/or offense severity), and improving youth's peer relations so that more age-appropriate and normative experiences can occur.

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MST teams working with adolescents with illegal sexual behavior have varied somewhat from more traditional MST teams. For the three randomized clinical trials (RCT) in which MST was examined for this population (Borduin et al., 1990; Borduin & Schaeffer, 2001; Letourneau et al., 2008), MST therapists were almost uniformly master's-level clinicians, and the supervisors were doctoral-level clinicians (with Dr. Borduin serving as supervisor for the two previous RCTs). In the most recent trial, the expert consultants were Drs. Borduin and Letourneau, both of whom collaborated on the adaptation of MST for adolescents with delinquent sexual behavior.

Another aspect on which the traditional and the adapted MST interventions differ is the level of community stakeholder support that is required for implementing the intervention. Treatment for these adolescents is, in many states, regulated by state oversight bodies or Sex Offender Management Boards (SOMBs), and the procedures specified by such bodies are often at odds with the systemic focus of MST (e.g., requiring group-based interventions and/or interventions that focus primarily on individual youth-level factors). Obtaining approval from SOMBs might be a necessary precondition to providing MST to these adolescents in a given locale. Strong support from juvenile justice stakeholders also is required to support referrals to a "nontraditional" intervention (albeit one with more empirically rigorous evidence than any other intervention for this population) and (in the context of the three RCTs) to support randomization to treatment conditions. Such stakeholders will likely include judges, state's attorneys, and key personnel in juvenile justice and juvenile probation departments. In our experience, the process of obtaining and maintaining the goodwill of this large group of stakeholders has not been as daunting as might be assumed, even during changes in leadership. Most stakeholders voiced a desire for additional treatment strategies for this population and supported efforts toward this goal.

Evidence Supporting MST With Juveniles Who Sexually Offend

Across the entire research base examining treatment outcomes for adolescents with illegal sexual behaviors, just four randomized clinical trials (RCT) have been identified. Three compared MST with usual services provided to youth at the time of each study. Although modest in scope and size (N = 16), Borduin and colleagues (Borduin et al., 1990) published the first randomized trial with these adolescents. Youth and their families were randomly assigned to treatment conditions: home-based MST delivered by clinical psychology doctoral students versus outpatient individual therapy (i.e., an eclectic blend of psychodynamic, humanistic, and behavioral approaches) delivered by community-based mental health professionals. Recidivism results at 3-year follow-up were encouraging. Significantly fewer youths in the MST condition were rearrested for sexual crimes (12.5% vs. 75.0%), and the mean frequency of sexual rearrests was considerably lower in the MST versus the usual services condition (0.12 vs. 1.62). Furthermore, the mean frequency of rearrests for nonsexual crimes was significantly lower for the youths who received MST (.62) than for counterparts who received outpatient therapy (2.25). These favorable effects supported the viability of conducting a second evaluation of MST with this clinical population.

In a recently completed clinical trial, 48 youths who had been arrested for delinquent sexual behaviors (i.e., rape/sexual assault or molestation of younger children) were randomly assigned to MST (n = 24) or usual services (n = 24) (Borduin & Schaeffer, 2001; Borduin et al., 2007). In this study, MST was delivered by graduate students in clinical psychology who averaged 1.5 years of direct clinical experience with children or adolescents. The usual services condition included a combination of cognitive-behavioral group and individual treatment administered in a juvenile court setting, and treatment was delivered by master's-level therapists who averaged approximately 6 years of experience working with adolescents. Compared with those who received usual services, adolescents who received MST showed improvements on a range of instrumental outcomes immediately following treatment, including fewer behavioral problems, less delinquent behavior, improved peer relations, improved family relations, and better grades in school. An 8.9-year posttreatment follow-up of ultimate outcomes (Borduin et al., 2007) revealed that MST participants were significantly less likely than their usual-services counterparts to be rearrested

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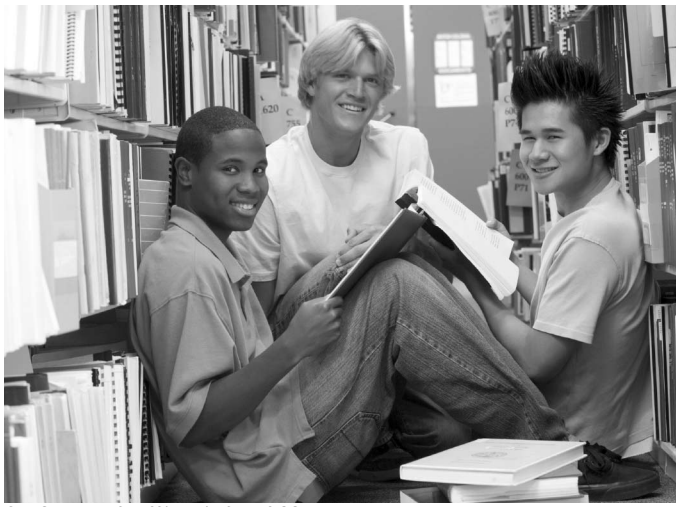
for sexual (8.3 vs. 45.8%) and nonsexual (29.2% vs. 58.3%) offenses. MST participants had 83% fewer rearrests for sexual crimes (average 0.13 vs. 0.79 arrests) and 70% fewer rearrests for other crimes (average 1.46 vs. 4.88 arrests) than did those receiving usual services. MST youth also spent on average 75% fewer days (22.50 vs. 97.50 days) in youth detention facilities and 80% fewer days (365.00 vs. 1842.50 days) in adult detention facilities.

The results from these two relatively small-scale efficacy studies supported the potential of MST as an effective community-based treatment for adolescents with illegal sexual behavior. Thus, a third study (S. W. Henggeler, PI) was designed to provide a rigorous *effectiveness* trial of MST with this population. The two aforementioned trials conducted by Borduin and his colleagues were primarily efficacy studies. Although participants with a wide variety of co-occurring problems were included, the therapists were university-based doctoral students in clinical psychology, and the principle investigator provided the clinical training and supervision. In contrast, in the most recent RCT, community-based MST services were provided by an existing local provider agency and were funded by local justice resources. Thus, the present study represents an important step in bridging the gap between science and practice (National Institute of Mental Health, 1999) for this clinical population. Additionally, in this effectiveness trial (Letourneau et al., 2008), care was taken to include a comparison condition that is typical of the community-based services provided to these U.S. adolescents (see Letourneau & Borduin, in press). Significantly for the present purposes, the individual focus of treatment and the group-oriented delivery of the control condition contrasted well with the family-based and ecological emphases of MST.

The primary aim of this third RCT was to conduct a rigorous community-based effectiveness trial in which MST adapted for this group of adolescents was compared with the type of group-based services that are typically provided to these youth in the United States. The implementation of the study was successful, with strong and consistent collaboration from juvenile justice authorities, sustained clinical efforts from the private agency providing the adapted MST treatment, and high rates of participant clinical and research retention. RCTs are complex and require strong buy-in from multiple stakeholders. In the present study, the support of numerous stakeholders from the county State's Attorneys Office (e.g., Chief of Juvenile Justice, Chief of Delinquency, Supervising Attorney for the Delinquency Divisions), the circuit court (i.e., presiding judge), and the Probation Department (i.e., Director of Juvenile Probation as well as the Chief Probation Officer and Probation Supervisor) was critical to the successful implementation of this trial.



In this RCT, 127 youth and families (74% recruitment rate) were treated by five therapists (one doctoral level, three master's level, and one bachelor's level therapist, who also was bilingual). The average treatment length was 7 months, significantly longer than the typical 4-month duration of MST delivery but consistent with Borduin and colleagues' previous trials with this population. Whether the extended treatment duration is due to treatment needs of these youth and families or idiosyncratic aspects of the three studies has yet to be examined.

Intent-to-treat analyses supported the ability of MST to achieve desired outcomes through 1-year postrecruitment. These results are described in detail in two recent manuscripts (Henggeler et al., 2008; Letourneau et al., 2008). Briefly, MST was more effective than the treatment-as-usual control condition in decreasing deviant sexual interest and risk behaviors, delinquent and substance use behaviors, externalizing problems, and costly out-of-home placements. Although sexual recidivism was not examined in the present study due to low rates of short-term reoffending (as noted previously), the favorable 1-year findings for MST are consistent with the long-term reductions in sexual reoffending observed in Borduin and colleagues' two prior MST efficacy studies (Borduin et al., 1990; Borduin et al., 2007).

Clinical and Policy Implications

In combination, the findings from these three RCTs have important clinical and policy implications. The generally favorable outcomes for the MST conditions across studies support the viability of community-based and family-focused interventions that address the known risk factors of serious antisocial behavior across multiple ecological systems in which youth are embedded. The evidence-based practices that have emerged in the treatment of other types of serious antisocial behavior in adolescents have usually been family-based and comprehensive in nature. As such, the present findings are congruent with the growing consensus that family-focused interventions targeting multiple ecological systems are among the most supported interventions for serious behavior problems, including child sexual behavior problems (St. Amand, Bard, & Silovsky, in press), serious juvenile delinquency (Elliott, 1998), and adolescent substance abuse and dependence (Waldron & Turner, in press). However, current results supporting MST appear to run counter to the spirit of using increasingly severe legal consequences (e.g., lifetime public registration, prolonged residential treatment) for many adolescents with delinquent sexual behavior (Chaffin, in press). Clinical findings such as those presented here, in conjunction with emerging findings that deterrent-oriented sexual offender registries for adolescents do not influence sexual recidivism rates (Letourneau & Armstrong, 2008), can be used to promote a more strength-focused and rehabilitative approach to addressing the needs of adolescents with delinquent sexual behavior.

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