CECW Information 2008 | #69E

Multisystemic therapy[1]

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This information sheet describes Multisystemic Therapy (MST) and examines what the research says about its effectiveness as an intervention for serious behavioural problems in youths.

What is Multisystematic Therapy?

MST is an intensive, short-term, home- and community-based intervention for troubled youths and their families. It was originally implemented to reduce criminal and antisocial behaviour among youths in conflict with the law but its use has been extended to young people who exhibit a range of serious behavioural problems who are at risk of out-of-home placement. The goals of MST interventions include:

- enhancing family functioning (e.g., improving communication, conflict resolution, marital relations and parent-child relationships);
- reducing anti-social affiliations and cultivating pro-social peer relationships;
- promoting academic and social competence in school; and
- addressing barriers to change (e.g., untreated caregiver mental health problems, high stress, ineffective parenting skills).

The central premise of MST is that problem behaviour in young people is the product of many interacting factors in multiple life domains.[2] This premise is supported by research that found that a variety of factors in a youth's social environment influence whether he or she will engage in anti-social or delinquent behaviours. MST focuses on changing the determinants of youth anti-social behaviour and targets multiple spheres of influence including family, peer, school, neighbourhood and community. It was developed to address limitations in youth justice services.[3] For example, studies found that interventions offered in office or residential settings (e.g., in-patient treatment centres or incarceration) had limited impact on behaviour once the youths returned home.[4]

An important principle in MST is the central role of the family in the youth's care, development and behavioural change. The family plays an active role in developing and monitoring treatment goals. MST is designed to enable families to effectively manage the situation if their young person is facing a crisis, and to provide youths and their families with techniques and supports to reduce the likelihood that subsequent crises will occur. In other words, MST aims to modify the conditions that put youths at risk while they reside with their families, rather than removing them to alternate settings in order to address risk factors.

MST does not use a set of unique intervention techniques. Rather, it incorporates a range of intervention strategies drawn from cognitive, behavioural and family therapies. Interventions are tailored to address the particular areas of influence for each youth and additional strategies from other problem-focused treatment models may be integrated as needed. School personnel, medical specialists and other community resources may become involved to support the youth and his or her family in making and maintaining positive changes.

How does MST differ from other interventions?

Individual therapy focuses on treating problems within youths themselves. In contrast, MST addresses aspects of the home and community that contribute to, trigger, and maintain problematic behaviour patterns. MST and wraparound models of intervention

are similar in that they emphasize community-based, individualized, and family-centred approaches to address problems among youth. Both strive to enhance and increase the use of supportive resources within the youth's natural environment. However, these models have important differences. MST is intensive and time-limited. MST counsellors have small caseloads and are available to families seven days a week, 24 hours a day. They may have daily contact with families, depending upon each family's circumstances and needs. Intervention is provided in the family home and typically lasts for four to six months, with families receiving 40 to 60 hours of service during that time.[5] In contrast, wraparound models coordinate and mobilize community services and informal supports to create a system of care that will be in place as long as it is needed. In other words, wraparound models focus on linking families to available resources rather than delivering a specific set of clinical interventions, requiring specially trained counselors, as does MST.

Is MST effective?

Reviews of MST research indicate that youths who receive MST show greater improvements than youths who receive individual therapy or "services as usual" (i.e., the treatment services typically provided in community, justice, child welfare or hospital-based programs).[6,7,8,9] For example, studies have found that youths in trouble with the law who completed MST had lower rates of re-arrest and substance use, fewer offences, and fewer delinquent peer affiliations than youths receiving other interventions. Some studies indicate that youths who complete MST are less likely to be incarcerated than youths who had other forms of treatment. Among youths who engage in subsequent criminal behaviour, the offences committed by those who completed MST have been found to be less severe, with shorter periods of incarceration. MST has also been found to improve family relations and family cohesion. Although fewer studies have examined the use of MST among youths with serious emotional and behavioural problems, some positive findings have been reported. Research suggests that youths experiencing psychiatric emergencies who receive MST may experience less psychological distress, show fewer behaviour problems and have fewer hospital admissions for subsequent crises than youths who receive in-patient psychiatric treatment.

Research on the long term benefits of MST is mixed. Some studies have found that youth outcomes continue to be better in the year or years following MST, compared to youths who received other interventions. Other studies have found that the benefits of MST are greatest immediately after treatment, and that there are few differences between MST and other interventions in the months and years after treatment has ceased.

Several reviews identify MST as a "promising intervention" for child maltreatment, based upon the findings of one study of 33 abusive or neglectful families published in 1987.[10] This study showed that immediately following treatment, maltreating families who received MST showed greater improvement in parent-child relations than families that received parenting training. However, no follow-up assessment was conducted to determine whether these differences were maintained over the longer-term. The rate of out-of-home placement was not examined. Another study in Norway[11] compared the outcomes for "seriously anti-social" youths who received MST to those who received child welfare services (in Norway, youths under the age of 18 who commit criminal offences are dealt with through child welfare services rather than through the justice sector). By the end of treatment, the youths who had received MST showed greater behavioural improvements and spent less time in out-of-home placements than the youths who had received child welfare services. These studies suggest that MST may have some beneficial effects in families being served by child welfare. In general, however, the amount of research available is insufficient at this time to indicate that MST is effective for these families.

Most reviews have concluded that MST is an effective or "probably effective" treatment model for youths with serious behavioural problems.[12] However, a systematic review[13] found little evidence to support the conclusion that MST is superior to other forms of intervention for youths with serious behavioural problems. A systematic review combines the results of numerous well-designed studies to assess the extent to which a body of research indicates that an intervention is effective. The systematic review on MST, which can be accessed here, focused on randomized, controlled studies that included follow-up assessments of youths and their families at least one year after treatment completion. Seven of the eight studies included in the systematic review were based on youths with anti-social behaviour or youths in conflict with the law. One study examined the use of MST for youths experiencing psychiatric crises.

When the findings of these studies were considered together, the researchers found no differences in the treatment outcomes for youths who completed MST and youths who completed other types of treatment.

For example, there was no difference in the proportion of youth offenders who were incarcerated, or in the length of incarceration, within the year following intervention. The average number of arrests and convictions, substance use, self-reported delinquent behaviours, and youth behaviour problems reported by caregivers and teachers were similar. Families who completed MST were similar to families receiving other treatments on measures of family functioning (e.g., family cohesion and adaptability). The study of youths with psychiatric emergencies found fewer hospitalizations immediately following MST compared to youth who were hospitalized. However, the proportion of youths who were hospitalized and their length of stay were comparable in the year following treatment. In short, when results were combined across studies, MST was found to be as effective, but not significantly better, than the other treatments provided.

Summary

MST provides short-term, intensive and individualized clinical intervention to troubled youths and their families. It has been applied and studied most extensively among youths referred by the justice sector, particularly those at risk for placement in juvenile facilities. The primary goals of MST are to enhance family functioning and enable families to facilitate and support positive behavioural changes in their children. In order to address features of the youth's social environment that contribute to and maintain problematic behaviour, services are delivered in the family home and home community. A number of reviews suggest that youths with serious behavioural problems achieve better outcomes with MST than with other interventions. These reviews have led to the endorsement of MST as a particularly effective treatment model. However, a systematic review of MST studies did not support this conclusion. Although the systematic review showed that some studies found positive effects, it indicated that better outcomes were not found consistently. Additional research was recommended before concluding that MST is superior to other interventions for serious behavioural problems in youths.

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1 This information sheet was peer reviewed by experts in the field of child welfare.

2 Potter, D., & Mulkern, V. (2004). *Multisystemic Therapy: Issue Brief*. Prepared for Rutgers Center for State Health Policy. Retrieved November 6, 2008 from: http://www.cshp.rutgers.edu/TACCMSconfPapers/SEDBriefVI.pdf

3 Weiss, B., Catron, T., Han, S., Harris, V., Caron, A., & Ngo, V. (2004). *An Independent Evaluation of Multisystemic Therapy (MST)*. Center for Psychotherapy Research & Policy, Vanderbilt University.

4 Burns, B. J., Schoenwald, S. K., Burchard, J., Faw, L., & Santos, A. B. (2000). Comprehensive community-based interventions for youth with severe emotional disorders: Multisystemic Therapy and the wraparound process. *Journal of Child and Family Studies*, 9(3), 283–314.

5 Ibid.

6 Borduin, C. M., Schaeffer, C. M., & Ronis, S. T. (2003). Multisystemic treatment of serious antisocial behavior in adolescents. In C. A. Essau (Ed.), *Conduct and oppositional disorders in children and adolescents: Epidemiology, risk factors, and treatment* (pp. 299–318). Mahwah, NJ: Erlbaum.

7 Burns, B. J., Schoenwald, S. K., Burchard, J., Faw, L., & Santos, A. B. (2000). Comprehensive community-based interventions for youth with severe emotional disorders: Multisystemic Therapy and the wraparound process. *Journal of Child and Family Studies*, 9(3), 283–314.

8 Curtis, N. M., Ronan, K. R., & Borduin, C. M. (2004). Multisystemic treatment: A meta-analysis of outcome studies. *Journal of Family Psychology*, 18, 411–419.

9 Potter, D., & Mulkern, V. (2004). *Multisystemic Therapy: Issue Brief*. Prepared for Rutgers Center for State Health Policy. Retrieved November 6, 2008 from: http://www.cshp.rutgers.edu/TACCMSconfPapers/SEDBriefVI.pdf

10 Brunk, M., Henggeler, S. W., & Whelan, J. P. (1987). A comparison of multisystemic therapy and parent training in the brief treatment of child abuse and neglect. *Journal of Consulting and Clinical Psychology*, 55, 311–318.

11 Ogden, T., & Halliday-Boykins, C, A. (2004). Multisystemic treatment of antisocial adolescents in Norway: Replication of clinical outcomes outside of the US. *Child and Adolescent Mental Health*, 9 (2), 77–83.

12 Littell, J.H. (2005). Lessons from a systematic review of effects of multisystemic therapy. *Children and Youth Services Review*, 27,445–63.

13 Littell, J. H., Popa, M., & Forsythe, B. (2005). *Multisystemic Therapy for social, emotional, and behavioral problems in youth aged 10–17*. Cochrane Database of Systematic Reviews 2005, Issue 4. Retrieved November 6, 2008 from: http://db.c2admin.org/doc-pdf/Mst_Littell_Review.pdf

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Suggested citation: Knoke, D. (2008). *Multisystematic therapy*. CECW Information Sheet #69E. Toronto, ON, Canada: University of Toronto Factor-Inwentash Faculty of Social Work.

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The Centre of Excellence for Child Welfare (CECW) is one of the Centres of Excellence for Children's Well-Being funded by the Public Health Agency of Canada. The views expressed herein do not necessarily represent the official policy of the CECW's funders.

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