
This article is based on the Campbell Review:

Littell, Julia; Popa, Melania and Forsythe, Burnée: *Multisystemic Therapy for social, emotional and behavioural problems in youth*. The Campbell Collaboration 2005. The review is also published in Cochrane Library.

This article is written by the Nordic Campbell Centre. The article has been approved by the authors of the review. Published August 2005.

Multisystematic therapy: Doubts about the effects

Multisystemic Therapy (MST) has met with sympathy in the Nordic countries. Yet, the method is neither better nor poorer than other treatments addressed at adolescents with emotional, social, or behavioural problems. This is the conclusion of a new systematic Campbell/Cochrane review supported by the Nordic Campbell Centre.

The goal of the Campbell Review:

To evaluate the effect of MST on adolescents with social, emotional, and behavioural problems based on the best available evidence. The effect is measured by a range of behavioural and psychosocial outcomes, including the number of institutional placements and arrests, the incidence of drug abuse, and personal relationships, social skills, absence from school, etc.

The Campbell/Cochrane Review Outcome

The Campbell/Cochrane review concludes that MST does not have consistently better effects than other types of interventions – for example, restrictive institutional placement. On the other hand, nothing indicates that MST has any negative overall effects. All in all, MST does not seem to be any better or any poorer than other treatments. The Campbell/Cochrane review concludes that there are no consistent differences in outcome between the adolescents subject to MST and those subject to alternative treatment. This conclusion is based on the best available evidence on the effectiveness of MST.

What is Multisystemic Therapy?

Originally, MST was designed for the treatment of anti-social adolescents (often delinquents). MST functions as an alternative to placement outside the home and other similar treatments. MST is carried out by a team consisting of an advisor and 3-5 therapists. One therapist takes care of 3-5 families at a time, and the therapist is available round the clock during the course of the treatment (normal duration: 3-5 months). At the beginning of the treatment, the factors that reinforce the anti-social behaviour of the adolescent are identified, and the therapist aims to remove the cause of the behaviour or reduce its effect on the adolescent.

American Inspiration

MST was developed by Dr. Scott Henggeler at the *Family Services Research Center (FSRC)* at the Medical University of Charleston, South Carolina. The method has met with sympathy both within and outside the USA – especially in the Nordic countries. This is probably due to the repeated evaluation of MST by the group attached to Henggeler and FSRC – evaluations displaying positive effects on the adolescents and their families.

The Documentation of Effect is Weak

The systematic Campbell/Cochrane review developed by Julia Littell, who is an associate professor at Bryn Mawr College, Pennsylvania, USA, reveals that the positive conclusions reached by previous, more traditional reviews on the effectiveness of MST are based on a weaker review methodology and effect studies of low quality. Only eight high-quality studies of the effect of MST have been completed and only one of these is completely independent of the developers of MST. All of the eight studies have methodological problems that weaken the documentation of effect when they are viewed individually. However, these eight studies constitute the best available evidence on the effect of MST. This Campbell/Cochrane review is the first joint analysis of all these eight studies.

It is not possible to explain *why* MST does not work the way it was expected to on the basis of this Campbell/Cochrane review. With a mere eight high-quality effect studies, a statistical analysis of the single elements in the model and its implementation that have led to the absence of effects is impossible.

On which studies is the Campbell/Cochrane review based?

The review is exclusively based on randomised controlled trials in which random allocation between MST and usual treatment has taken place. 266 reports were selected on the basis of title and abstract. Of these 35 were found actually to be effect studies. And finally, eight of the 35 effect studies met the pre-set quality criteria laid down in the original Campbell/Cochrane review. Throughout this process, the decision to exclude studies on the basis of pre-set criteria was made independently by two researchers. These decisions are documented in the systematic review. The eight studies included are from the USA, Canada and Norway.

Target Group – who are the adolescents?

The target group for the studies included in the Campbell/Cochrane review comprises adolescents (10-17 years of age) with social, emotional and behavioural problems, and their family members. The group includes adolescents who:

- are ill-treated and neglected, and risk placement outside the home in foster care or other types of placement under the child welfare services;
- have mental problems that might lead to hospitalisation;
- are at risk of being arrested or institutionalised.

Outcome – what are the criteria for success?

The Campbell/Cochrane review has examined a wide range of outcomes in order to evaluate the effect of MST. This was done by comparing adolescents receiving MST with adolescents receiving usual treatment

- How many adolescents in each of the two groups are sent to prison during the first year or so after the termination of the treatment?
- Is there any difference in the average term of imprisonment?
- To what extent are the adolescents in the two groups registered for new crimes – either by being arrested or by court ruling?
- Is there any difference in the average number of arrests or court rulings?
- To what degree do the friendships of the adolescents in the two groups differ?
- Is there any difference in their social abilities?

- To what degree do the adolescents in the two groups have behavioural problems according to the therapists?
- To what degree are the adolescents in the two groups mentally troubled?
- To what degree do the adolescents in the two groups have externalised or internalised problems?
- To what degree do the parents of the adolescents in the two groups suffer from psychiatric symptoms?
- What is the quality of the adolescents' family interaction or their function in the family?

The Campbell/Cochrane review also deals with other outcomes than those listed here. However, in these cases the outcomes in question are only mentioned in one out of the eight studies, or the outcome has been measured differently in different studies (for example, substance abuse among adolescents can be measured by urine samples or by the adolescents reporting their abuse themselves).

MST *does* have advantages compared to other treatments

Until further independent high-quality studies are available that can either confirm or refute the effectiveness of MST, the authors of this Campbell/Cochrane review recommend that the decision to offer MST be based on something other than effectiveness. It is pointed out that MST has a range of other advantages compared to other known types of intervention.

In the first place, MST is an extensive intervention based on current theory about adolescents with behavioural problems and their families. Also, the implementation of MST has been documented and studied to a higher degree than other programmes offered to the adolescents and their families (e.g. no adverse effects of MST were found). And it is impossible to point to other interventions aimed at this particular group of adolescents that are more effective than MST.

Nonetheless, we lack knowledge about how MST is implemented, about the long-term effects of the method, and about how the method works in general.

Furthermore, MST is a relatively expensive intervention in the Nordic countries, even though the method is less expensive than interventions such as placements outside the home. If MST does not reduce the costs of confinement, hospitalisation, relapse, and other behaviour that imposes costs on society, then it might not be an economically defensible solution compared to other, less resource-intensive solutions.

Is it possible to treat one's way out of juvenile crime?

Julia Littell and her co-authors point out that there may be limitations to the long-term effectiveness of short-term, individual, and family-oriented treatments aimed at a group of adolescents with considerable anti-social problems, no matter how well thought out and well-implemented the treatments may be.

The question is whether more fundamental interventions are needed with the aim of reducing poverty, educational deficits, marginalisation etc. if there is to be any hope of substantially reducing social problems of this type.