Multisystemic Therapy in The Netherlands: Implementation and Effectiveness

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This project aims to examine the implementation and effectiveness of MST in The Netherlands.The aim of Implementation study is to determine the degree to which MST is implemented as intended at different sites in The Netherlands. Following questions...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Interventional

Summary

ID

NL-OMON31612

Source
ToetsingOnline

Brief title
MST in the Netherlands

Condition

- Other condition

Synonym
antisocial behavior, delinquency

Health condition

antisociaal/delinquent gedrag

Research involving
Human

Sponsors and support

Primary sponsor: Universiteit Utrecht
Source(s) of monetary or material Support: Zon-MW programma Kennisprogramma Jeugd

Intervention

Keyword: Antisocial youth, Effectiveness, Multisystemic therapy, Treatment integrity

Outcome measures

Primary outcome

Recidivism

Antisocial behavior

Agressive behavior

Costs treatment

Secondary outcome

Family functioning (parental competence, acceptance, attachment, social isolation, perception of influence, responsivity, reinforcement, harsh discipline, inductive discipline, punishment, consistency, behavioral control, monitoring, negativity, communication and cohesion)

Characteristics client (psychopathy, personality, anxiety, depression, withdrawn, psychosomatic complaints, drug use, school competence, relation with peers)

Characteristics treatment (expectations, treatment integrity, treatment satisfaction, relation with therapist, cooperation, organization structure and

climate, efficiency, effectivity, case discharge)

Study description

Background summary

Multisystemic Therapy (MST) is an intensive home- and community-based treatment for youth who show
serious, violent and chronic antisocial behavior. Since 2004, MST has been implemented on a small-scale basis in The Netherlands. From 2006, in order to ensure availability of a (potentially) successful treatment all over The Netherlands, a
large-scale implementation of MST will be conducted. The reasons for the choice of this treatment are
first, its strong theoretical foundation and second, empirical support for its effectiveness from controlled
clinical trials in the USA. Notwithstanding these positive indications, there are also reasons for caution. A recently published review by Littell (2005) has questioned the conclusion that MST is effective by pointing out that inconsistent and incomplete reports have been published. Also, with few exceptions, most of the empirical support comes from studies conducted by the same group of researchers who also developed and implemented MST. There is a clear need for confirmation of these results by an independent team of researchers. Even more importantly, due to the differences between the two countries in social and political climate, organization of mental health services, availability of
different treatments, type and ethnic background of clients, etc., it is not known whether the same
positive results will be obtained here. Many of the treatments available for adolescents who show serious and persistent antisocial behavior have never been properly evaluated in The Netherlands. Moreover, the poor quality of most evaluation studies does not allow reliable and valid conclusions. This fact has been repeatedly emphasized as an important obstacle in development and refinement of evidence-based interventions. This concerns an evaluation study in which a new, promising treatment for juvenile delinquents, Multisystemic Therapy, is compared to Treatment as Usual in The Netherlands.

Study objective

This project aims to examine the implementation and effectiveness of MST in The Netherlands.

The aim of Implementation study is to determine the degree to which MST is implemented as intended at different sites in The Netherlands. Following

questions are asked:
1a. What is the degree of treatment integrity, as perceived by clients (adolescent and parents), MST
therapist and MST supervisor?
1b. Are all components of multilevel quality assurance system (training, supervision and consultations by
MST supervisor on the site and by MST consultant) included?
1c. Is the targeted population of MST recruited and retained? What are the referral paths? What are the
reasons for case discharge/drop-out?
1d. Is treatment integrity affected by organizational and service system characteristics, client- and
therapist characteristics?

The aim of Effectiveness study is to determine short and long term effects of MST.
Following questions are asked:
2a. Does MST yield to better outcomes (decrease in recidivism and in rate and seriousness of antisocial
behavior, increase in adolescent competence, improvement in family relations and relations with peers)
in chronic juvenile offenders than *treatment as usual* (TAU)?
2b. To what degree is effectiveness of MST affected by treatment integrity, characteristics of MST
therapists and characteristics of clients?

The aim of the cost-effectiveness study is to gain insight into the balance of costs and benefits of MST compared to CAU.

Study design

The design of Implementation study is a multi-site, non experimental, one-group-only design. Data will be gathered immediately prior to the beginning of treatment (T1, pre test assessment), immediately after treatment (T2, post test assessment) and 6 months after the end of treatment (T3, follow up). The participants include all (new) MST teams and their clients. These twelve teams include each 3 to 5 therapists, with a caseload of 4-5 clients per therapist and an average length of treatment around 5 months. Even when allowing for a slow start at some of the locations, this means that it will be possible to obtain data on at least 300 to 350 MST treatments in the course of the present study (two years of data collection). This sample is large enough to answer our research question. The information will be collected by the National Monitoring System to be developed together with researchers involved in the Development and Implementation Trajectory and researchers evaluating Functional Family Therapy (FFT).

In order to determine whether MST yields effects superior to the treatment as

usual, a randomized clinical trial will be conducted. Clients will be randomly assigned into either treatment group (MST group) or control group (*treatment as usual* group - TAU). Randomisation will take place on the level of the clients, rather than on team level. Clients will be randomised at referral. Only those who are randomized to the MST condition will be treated by MST therapists. Families in the control group (TAU) will not be treated by MST therapists, but by other therapists (in the same or in the other institutions). This is consistent with the requirements of MST: the MST therapists focus exclusively on MST and conduct no other form of therapy. Following the time schedule of Implementation study, pretest assessment (T1) will take place before random assignment into groups, posttest assessment (T2) will take place immediately after treatment (5 months), and follow up (T3) will be conducted 6 months after treatment. In this study only teams who are experienced in the MST (i.e. who have been involved in MST for longer than a year) will participate, in order to control for the starting difficulties in using the new treatment model. This includes about 7 teams of De Viersprong, Jeugdzorg Drenthe, and De Waag. Most analyses will be carried out on client level. A sample size of 64 per group is sufficient to test differences in outcomes between MST and TAU groups, assuming .80 power, an alpha of .05 and a medium effect size (Cohen, 1992). In the present study N=100 per group can be easily reached (5 teams, 3-5 therapists per team, case load 3-5 clients, length of treatment around 5 months, two years of data collection).

Intervention

Multisystemic Therapy (MST)
The MST is based on social ecological and family systems theories, and on research on the causes and correlates of serious antisocial behavior. It addresses several key systems in which adolescent is embedded: family, school, peer group, neighborhood. Intervention strategies include strategic family therapy, structural family therapy, behavioral parent training, and cognitive therapies. Treatment is typically delivered for 4 to 6 months and it is individualized to address specific needs of clients. Therapists are available 24 hrs/day and, 7 days/week. MST uses a home-based model of service delivery which model helps to overcome barriers to services access and increases family retention in treatment. In consultation with family members, the therapist identifies a well-defined set of treatment goals, assigns the tasks required to accomplish these goals, and monitors the progress in regular family sessions at least once a week.
Treatment as Usual (TAU)
The adolescents in the control group will receive *treatment as usual*, a selection of the treatments that are already available for the treatment of antisocial behaviour, including juvenile justice services, child welfare services, individual adolescent counseling and home-based social services (parental counseling). The counseling focuses on personal, family and school-related issues, which were found to be related to the development and persistence of antisocial behavior. The exact content of TAU will be decided

upon together with the local referrers.

Study burden and risks

Filling in questionnaires about parenting and behavior of the child (and participating in interviews by telephone and for a selected small group participating in short observations) and about costs related to the treatment by parents and adolescents is limited in time and costs, and the associated risk is small. The contribution of therapists (short questionnaires) also is limited in time and costs, and the associated risk is small. The only risk is that filling in questionnaires about parenting and the child and about costs related to the treatment will lead to additional requests for assistance. Since families receive treatment, we expect minimal adverse effects. Benefit of the study is being able to provide information that may help improve implementation of evidence-based treatments in community setting. Second, it will provide the answer whether a promising approach works on Dutch clients. Finally, by examining differential effects of MST (for whom and under which circumstances the MST has best effects) we can provide guidelines for matching clients to the treatment. We can also determine the cost effectiveness of MST.

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adolescents (12-15 years)
Adolescents (16-17 years)
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

- Youth (and their families) who show serious, violent, and chronic antisocial behavior between 12 and 18 years
- There is enough family commitment to apply MST

Exclusion criteria

- IQ below 70
- acute psychiatric problems that places adolescent and his or her family at risk
- dominant sexual problems

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Single blinded (masking used)
Control:	Active
Primary purpose:	Health services research

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-11-2008
Enrollment:	900

Type:	Actual

Ethics review

Approved WMO Date:	27-05-2008
Application type:	First submission
Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)
Approved WMO Date:	09-09-2008
Application type:	Amendment
Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL19257.041.07