The role of Multisystemic Therapy in addressing antisocial behaviour in adolescence

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Overview

- What is Multisystemic Therapy (MST)?
- What is the evidence-base? NICE guidelines
- How is it implemented?
- Adaptations: MST-CAN, MST-PSYCH
- Where is it used?
- MST Fife outcomes
What is “MST”? 

- Community-based, time-limited intervention for antisocial behavior in young people
- Focus is on “Empowering” parents to solve current and future problems
- MST “client” is the entire ecology of the youth - family, peers, school, neighborhood
- Highly structured clinical supervision and quality assurance processes
Families as the Solution

- MST focuses on families as the solution
- Families are full collaborators in treatment planning and delivery with a focus on family members as the long-term change agents
- Giving up on families, or labeling them as “resistant” or “unmotivated” is not an option
NICE guideline March 2013 for the treatment of antisocial behaviour/ conduct disorder for ages 11-17 years:

- Offer multimodal interventions, for example, multisystemic therapy
- Multimodal interventions should involve the child or young person and their parents and carers and should:
  - be provided by specially trained case managers
  - typically consist of 3 to 4 meetings per week over a 3- to 5-month period
  - adhere to a developer's manual and employ all of the necessary materials to ensure consistent implementation of the programme
MST: 30+ years of research = a strong body of evidence


2. **Long term RCT follow up** e.g. Sawyer & Borduin, 2011, 22 yrs post MST 75% fewer violent arrests

3. **Independent RCT’s in the US** e.g. Timmons-Mitchell et al 2006


5. **UK RCT** (Butler, Baruch, Hickey, & Fonagy, 2011) Compared MST directly with the use of Youth Offending Service statutory interventions. In the last 6 months of the study only 8% in the MST group against 34% in the YOS group had one or more further non-violent convictions
START trial UK

- Led by UCL in collaboration with Cambridge and Leeds Universities
- 9 sites across England \( n=684 \) families
- Funded by DfE and backed by DoH
- Compares MST to management as usual in the UK and focuses on the use of MST in routine practice
- Due to report in 2014
Core Elements of MST

Key Points:

• **MST Quality Assurance System***
• **MST Treatment Principles**
• **MST Analytic Process**

* Gives additional weight to evidence base
Quality Assurance and Continuous Quality Improvement in MST

Goal of MST Implementation:
- Obtain positive outcomes for MST youth and their families

QA/QI Process:
- Training and ongoing support (orientation training, boosters, weekly expert consultation, weekly supervision)
- Organizational support for MST programs
- Implementation monitoring (measure adherence and outcomes, work sample reviews)
- Improve MST implementation as needed, using feedback from training, ongoing support, and measurement
MST QA/QI Overview

Input/feedback via internet-based data collection
Training/support, including MST manuals/materials

Organizational Context

- MST Coach
- MST Expert/Consultant
- MST Supervisor
- MST Therapist
- Youth/Family

CAM Consultant Adherence Measure
SAM Supervisor Adherence Measure
TAM Therapist Adherence Measure

Output to – MST Coach
Output to – MST Expert
Output to – MST Supervisor and MST Expert

Output to – Organization, Program Stakeholders and MST Coach

PIR Program Implementation Review and other reports
• High Therapist and Supervisor adherence to the model predicts greater reduction in offending (Schoenwald, 2008).

• Where RCT’s have shown no significant difference between MST and treatment as usual, fidelity to MST was lower than other studies (e.g. Sweden - Sundell et al., 2008).

• A strong quality assurance system greatly increases the value of an effective programme for routine practice.
Antisocial behaviour is determined by multiple interlinked risk factors

- Common findings of 50+ years of research: offending and drug use are determined by multiple risk factors:
  - Family (low monitoring, high conflict, etc.)
  - Peer group (law-breaking peers, etc.)
  - School (dropout, low achievement, etc.)
  - Community (↓ supports, ↑ mobility, etc.)
  - Individual (low verbal and social skills, etc.)
The research on youth offending suggests that, to be most effective, services should be:

- Comprehensive and have the capacity to address all of the relevant risk factors present for each youth and family
- Individualized to the strengths and needs of each youth and family
- Delivered in the naturally occurring systems and be implemented in “ecologically valid” ways
MST Theoretical Assumptions

Based on Bronfenbrenner, Haley and Minuchin

- Children and adolescents live in a social ecology of interconnected systems that impact their behaviors in direct and indirect ways
- These influences act in both directions (they are reciprocal)
Social Ecological Model

- Community
- Provider Agency
- School
- Neighborhood
- Peers
- Extended Family
- Caregiver
- Family Members
- CHILD
- Siblings
- Peers
How is MST Implemented?

Intervention strategies: MST draws from research-based treatment techniques

- Behavior therapy
- Parent management training
- Cognitive behavior therapy
- Pragmatic family therapies
  - Structural Family Therapy
  - Strategic Family Therapy
- Alongside Pharmacological interventions when indicated e.g. co-existing ADHD
How is MST implemented? (cont)

MST context for the use of these evidence-based intervention strategies

• MST program philosophy emphasizes that service providers are accountable for outcomes

• Program structure removes barriers to service access
How is MST Implemented?
(cont)

• Single therapist working intensively with 4 to 6 families at a time
• “Team” of 3 to 4 therapists plus a supervisor
• 24 hr/ 7 day/ week team availability
• 3 to 5 months is the typical treatment time (4 months on average across cases)
• Work is done in the community: home, school, neighborhood, etc.
9 MST Principles *

1. Finding the Fit
2. Positive & Strength Focused
3. Increasing Responsibility
4. Present-focused, Action-oriented & Well-defined
5. Targeting Sequences
6. Developmentally Appropriate
7. Continuous Effort
8. Evaluation and Accountability
9. Generalization

* Fidelity measure by therapist and supervisor adherence to these principles
MST Analytical Process

- Referral Behavior
- Desired Outcomes of Family and Other Key Participants
- Overarching Goals
- Environment of Alignment and Engagement of Family and Key Participants
- MST Conceptualization of “Fit”
- Re-evaluate
- Prioritize
- Assessment of Advances & Barriers to Intervention Effectiveness
- Measure
- Intervention Implementation
- Do
- Intervention Development
- Intermediary Goals
Where is MST Being Used?
500+ teams

- Over 34 states in the U.S. including some statewide infrastructures
- International nationwide infrastructures in Norway and Netherlands, also teams in Australia, Belgium, Canada, Denmark, Iceland, New Zealand, Sweden and Switzerland
- UK Network Partnership - around 38 MST “standard” teams and 8 additional teams delivering one of the MST adaptations.
MST adaptations (13 in total – see www.mstservices.com)

- MST-PSB (Problem Sexual Behaviour)
- Psychiatric Problems (MST-Psychiatric)
- MST-Contingency Management for Substance Misuse (CM)
- MST-CAN (Child Abuse and Neglect)
Fife MST Offending outcome data
n=159

- 44.4% decrease in the average monthly rate of offending when comparing pre MST to post MST.
- Total offences committed in the 6 months prior MST referral = 329,
- Total offences committed in the 6 months after case closure = 161
- This includes all cases worked with during MST, whether they stayed at home or went into care and represents a 51% reduction in the total number of offences.
Fife outcomes
6 months follow up (n=159)

• 86% living at home
• 73% attending education or employment more than 75% of the time

* only 91% were originally at home at referral to MST, the remaining 9% were returned home from care with MST support
For full list of references on MST research see:

**Multisystemic Therapy (MST): Research at a Glance**

At: [www.mstservices.com](http://www.mstservices.com)

For more info re delivery of MST in the UK see [www.mstuk.org](http://www.mstuk.org)