

The Effects of Multidimensional Treatment Foster Care for Maltreated Children and Adolescents: A Systematic Review and Meta-Analysis

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INTRODUCTION

Multidimensional Treatment Foster Care (MTFC) is a multicomponent intervention that aims to improve resiliency and emotional and behavioural wellbeing, of youth in foster care exposed to child maltreatment (CM).

Yet, prior findings about MTFC are limited in their generalizability:

- Reviews did not differentiate whether MTFC's positive impact on both children and adolescents holds among those who are exposed to CM compared to those who are not.
- Diverse outcomes have made it difficult to communicate MTFC's impact.
- Recent randomized controlled trials (RCTs) have not been included in a review and their certainty of the evidence has not been assessed.

Purpose: To synthesize evidence comparing MTFC to usual treatment for improving the well-being in maltreated children and adolescents.

METHODS

Eligibility: RCTs comparing MTFC's impact on the well-being of foster care youth aged 3-17 years old who experienced CM to a control group (usual care, group care, or waitlisted services).

Meta-Analysis: Data was statistically pooled using a random effects model with a generic variance method.

- Outcomes:
 - Internalizing Symptoms
 - Externalizing Symptoms
 - Suicide Attempt and Ideation
 - Involvement with Authority
 - Parent Positive Interaction
- Data Analysis: Effect size of outcomes were reported by using Cohen's d thresholds based on standardized mean differences, and by estimating minimally important differences.

Risk of Bias: Cochrane Risk of Bias

Certainty of Evidence: Grading of Recommendations, Assessment, Development and Evaluations (GRADE)

RESULTS

Prisma Results:

Screening	Title and Abstracts (n = 467), Full-Text (n = 75)
Data Extraction	Database Search (n = 8), Other Methods (n = 8) Total Included (n = 13, n = 8 unique studies)
Meta-Analysis	Internalizing Symptoms (n = 2) Externalizing Symptoms (n = 6)

Summary of Findings:

Outcomes	№ of participants (studies)	Difference with MTFC (based on typical baseline risks)	Certainty of the evidence (GRADE)	Conclusion
Internalizing Symptoms 5-6 months post-baseline	408 (2 RCTs)	0.04 SDs lower (0.23 lower to 0.15 higher)	LOW a,b	May be little to no difference
Externalizing symptoms 3- 12 months post- baseline	1447 (6 RCTs)	0.24 SDs lower (0.49 lower to 0.00 lower)	MODERATE a	Likely a small difference
Suicide Attempt Assessed with Brief Symptom Inventory 1-year post-baseline	152 (1 RCT)	2 more youth (from 3 fewer to 11 more) RR 1.17 (0.62,2.23)	VERY LOW	Effect is uncertain
Suicide Ideation Assessed with Brief Symptom Inventory 9-years post-baseline	152 (1 RCT)	1 more youth (from 18 fewer to 287 more) RR 1.03 (0.07, 16.12)	VERY LOW	Effect is uncertain
Involvement with Authority Assessed with offenses. reported I-year post-baseline	29 (1 RCT)	46 more youth (from 31 fewer to 696 more) RR 2.12 (0.25, 17.98)	VERY LOW	Effect is uncertain
Involvement with Authority Assessed with official court records of criminal referrals. 1-year post-baseline	155 (2 RCTs)	0.54 fewer referrals (1.16 fewer to 0.08 more)	VERY LOW	Effect is uncertain
Positive Parent Interactions Assessed with Parent Daily Report Checklist (PDR) 5-months post-baseline	700 (1 RCT)	0.08 higher proportion (0.04 to 0.12 higher)	LOW a,b	May be little to no difference

- CI: Confidence interval; SD: standard deviations
- Studies have some concerns in risk of bias. There are few participants in the analysis.
- There are very few participants in the analysis

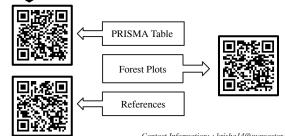
DISCUSSION

- MTFC may not improve internalizing and externalizing symptoms, more than usual care among maltreated adolescents in foster care.
 - MTFC may have little to no greater effect on internalizing symptoms at 5-6 months.
 - MTFC may slightly reduce externalizing symptoms at 3-12 months compared to usual
 - The long-term effects of MTFC on these outcomes are still uncertain.
- There is very little and uncertain evidence regarding the difference in effects of MTFC compared to usual care interventions on:
 - Suicide Attempts and Suicide Ideation,
 - Involvement with Authority
 - Positive Parent-Child Interactions.

CONCLUSION

- MTFC may have no additional benefits.
- Decision makers must balance these findings with the additional costs, resources, and training required to provide MTFC to this population relative to those required to provide usual care services.
- Quality RCTs that measure long-term outcomes are needed.

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