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## Title registration for a review proposal: Multidimensional Family Therapy (MDFT) for young people in treatment for illicit non-opioid drug use

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Submitted to the Coordinating Group of:

- Crime and Justice
- Education
- Social Welfare
- Other

Plans to co-register:

- No
- Yes  Cochrane [Note the use of revman 5 will be required if the review is co-registered with a Cochrane review group]
- Maybe

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### TITLE OF THE REVIEW

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Multidimensional Family Therapy (MDFT) for young people in treatment for illicit non-opioid drug use.

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### BACKGROUND

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**Briefly describe and define *the problem***

Illicit non-opioid drugs such as cannabis, amphetamine or cocaine are strongly associated with delinquency, poor scholastic attainment, automobile accidents, suicide and other individual and public calamities (Deas & Thomas, 2001; Essau, 2006; Rowe & Liddle, 2006). The European Monitoring Centre for Drugs and Drug Addiction estimates that drug-induced deaths account for approximately 4% of all deaths of Europeans aged 15-39 (EMCDDA, 2010).

More than 20 million of the 12 to 25 year-olds in the US, and more than 11 million of the 12 to 34 year-olds in Europe have used illicit drugs during the month prior to survey interviews in 2009 (SAMSHA, 2010; EMCDDA, 2010). Not all young drug users progress to severe dependence, however many do need treatment and research calls attention to the significant gap between young people classified in need of treatment and young people actually receiving treatment (SAMSHA, 2010; NSDUH, 2007; EMCDDA, 2010). For example, 8.4 per cent of 18 to 25 year-olds in the US are classified as needing illicit drug use treatment, but less than one tenth of these young people actually receive treatment (NSDUH, 2007). Likewise among youth aged 12 to 17, 4.5 per cent were estimated to be in need of treatment for an illicit drug use problem, but only one tenth in this group actually received treatment (SAMSHA, 2010). The EMCDDA estimates that more than 1 million people annually receive some form of treatment for drug problems in the European Union (EU). The total amount of people having used illicit drugs during the last year is approximately 30 million in the EU (EMCDDA, 2010).

This 'treatment gap' can be linked with a public concern regarding the effectiveness and value of available treatments for young people, and by high rates of treatment dropout and post-treatment relapse to substance use (Austin et.al. 2005). However, at the same time researchers point to the fact that many research projects have empirically validated different kinds of treatment approaches for young drug users as effective (e.g. Rowe & Liddle, 2006; Waldron et.al., 2006; Williams et al., 2000; Austin et.al., 2005; Waldron, 1997). This indicates that something can and should be done to help young drug users in need of treatment, and also that the treatment should be as targeted as possible, in order to avoid dropouts and relapse.

Family based therapies represent promising approaches to the treatment of young substance users (Waldron & Turner, 2008; Austin et al., 2005; Rowe & Liddle, 2006; Waldron et al., 2006; Williams et al., 2000). While a number of studies show more or less positive results with family based therapy, there is a need to aggregate evidence to determine whether different family based therapy interventions work for young drug users (Williams et al., 2000; Austin et al., 2005).

Studies of Multidimensional Family Therapy (MDFT) find that MDFT is a well established treatment for young substance abuse disorders (Waldron & Turner, 2008; Hogue & Liddle, 2009; Liddle et al., 2001). Williams (et al., 2000) and Austin (et al., 2005) in their review of Family-Based interventions list a number of program key components consistent with most guidelines for an effective treatment of youth with substance use problems. MDFT incorporates a number of these components including providing comprehensive intervention services, being easily accessible due to delivery in home- or community based setting, using empirically validated techniques<sup>1</sup>, offering parents and peers support regarding the non-use of substances, including peers in the therapeutic process and focusing on the individual needs of the young substance abuser and his or her family (Austin et al., 2005; Hogue & Liddle, 2009).

### **Briefly describe and define *the population***

The population to be included in this review is young people age 11-21 years enrolled in manual based Multidimensional Family Therapy drug treatment for illicit non-opioid drug use (e.g. cannabis, amphetamine, ecstasy or cocaine).

Exclusion criteria are:

Mental retardation or organic dysfunction

Imprisonment or treatment in other restricted facility

Engagement in other unspecified types of drug treatment, other than pharmaceutical interventions

Opiate addiction (either natural or synthetic opioids, legal or illegal; e.g. morphine, heroin, methadone)

Exclusive alcohol use

### **Briefly describe and define *the intervention***

Multidimensional Family Therapy (MDFT) is an outpatient family based drug abuse treatment for young people. MDFT is inspired by both structural and strategic family therapy (Liddle et al., 2001; Doherty & McDaniel, 2010). In MDFT young people's drug use is understood in terms of a network of influences, e.g. individual, family, peers, community (Liddle, 2002). The approach suggests that reducing the young people's drug abuse must occur via multiple pathways, in different contexts and through different mechanisms (Liddle, 2002). It is a relatively recent method

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<sup>1</sup> E.g. cognitive behavioural strategies, social skills training, contingency management, reframing (Austin et al. 2005)

that seeks to reduce young people's drug use, and improve general functioning as well as parent-young-relationship (Liddle et al., 2001; Rowe & Liddle, 2003).

MDFT consists of three phases:

- forming therapeutic alliances
- practice stress and communication handling
- family planning

Treatment addresses the individual characteristics of the young people, the parents, and other relevant family members, as well as the interactional patterns that link to the development and continuation of drug use and related problems (Liddle et al., 2001). Treatment also includes the extra familial domain where the young people are influenced in all social systems in which he or she participates, e.g. school, recreational (Liddle et al., 2008). Parenting practices and family interactions are part of prime intervention.

The format of MDFT is flexible. A full course of MDFT ranges between 16 and 25 sessions over four to six months (Liddle, 2002; Liddle, 1999). The program includes individual sessions with the young person as well as parent and family sessions, and extra familial sessions, e.g. with peers (Lipsey et al., 2010; Liddle, 2002). Sessions are held in clinics, in homes, or with family members at office facilities, schools or other relevant community locations (Liddle, 2002).

Comparison conditions will be no intervention, waitlist control, treatment as usual or alternative interventions, e.g. individual based interventions.

## **Outcomes: What are the intended effects of the intervention?**

### **Primary outcomes**

Abstinence or reduction of drug use and improvement of psychosocial functioning are primary outcomes of interest.

Reduction of drug abuse measured by e.g.,

- biochemically test (e.g. urine screen measures for drug use)
- self-reported estimates on drug use
- psychometric scales (e.g. Addiction Severity Index (McLellan et al. 1980))

Psycho-social functioning measured by

- psychometric scales or quality of life measures (Kind & Gudex, 1994)

- involvement in education, e.g. grade point average, attendance (self-reported or reported by authorities, files, registers)
- family functioning (e.g. the Beavers Interactional Competence Scales (Beavers & Hampson, 2000))

### **Secondary outcomes**

- retention (e.g. measured by days in treatment, completion rates and/or attrition rates)
- crime rates (self-reported or reported by authorities, files, registers)
- frequency of risk behaviour, e.g. injecting drugs, prostitution (self-reported or reported by authorities, files, registers)
- adverse effects (e.g. measured by rates of suicide and over-doses)
- costs

Outcomes will be considered in the following intervals:

- Short term effects, end of treatment to less than 6 months after end of treatment
- Medium term effects, 6 to 12 months after end of treatment
- Long term effects, more than 12 months after end of treatment

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## **OBJECTIVES**

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The aim of this review is to evaluate current evidence on Multidimensional Family Therapy for young people in treatment for illicit non-opioid drug use and to explore factors that might moderate positive outcomes.

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## **METHODOLOGY**

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### **What types of study designs are to be included and excluded?**

The study designs included in the review are:

- Controlled trials:
  - RCT - randomized controlled trials
  - QRCT - quasi-randomized controlled trials (i.e. participants are allocated by means such as alternate allocation, person's birth date, the date of the week or month, case number or alphabetical order)
  - NRCT - non-randomized controlled trials (i.e. participants are allocated by other actions controlled by the researcher)

Comparison conditions are no intervention, waitlist control, treatment as usual or alternative interventions, e.g. other interventions that are not BSFT, individual therapy.

The rationale for including non-randomized study designs in this review is to seek international evidence and include studies from countries and research disciplines, which do not have a tradition for doing RCTs in the area of substance abuse, and to increase the number of studies for moderator analysis, while attending to the issues related to methodological differences between studies.

### **Your method of synthesis:**

We will use meta-analysis if appropriate due to study design and quality.

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## **REFERENCES**

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Austin A. M., Macgowan M. J., Wagner E. F. (2005): "Effective Family-Based Intervention for Adolescents With Substance Use Problems: A Systematic Review" in *Research on Social Work Practice*, Vol. 15 No. 2, March 2005 p. 67-83. Sage Publications

Beavers, R. & Hampson, R.B. (2000): "The Beavers Systems Model of Family Functioning". *Journal of family Therapy* 22: 128-143.

Deas, D. & Thomas, S. (2001): "An Overview of Controlled Studies of Adolescent Substance Abuse Treatment", in *The American Journal on Addictions*, 10:178-189, American Academy of Addiction Psychiatry

Doherty, W.J. & McDaniel S.H. (2010): "Family Therapy". American Psychological Association. Washington, DC.

Essau, C. A. (2006): "Epidemiological trends and clinical implications of adolescent substance abuse in Europe" in H.A. Liddle & C.L. Rowe (eds.): *Adolescent Substance Abuse – Research and Clinical Advances*. New York: Cambridge University Press.

EMCDDA European Monitoring Centre for Drugs and Drug Addiction (2010): "2010 Annual Report. The State of the Drugs Problem in Europe". Office for Official Publication of the European Communities, Luxembourg.

Hogue, A. & Liddle H. A. (2009): "Family-based treatment for adolescent substance abuse: Controlled trials and new horizons in services research" in *Journal of Family Therapy* (2009) 31: 126-154

- Kind, P. & Gudex, C. M. (1994). Measuring health status in the community: A comparison of methods. *Journal of Epidemiology and Community Health*, 48, 86-91.
- Liddle, H. A. (2002). Advances in family-based therapy for adolescent substance abuse: Findings from the Multidimensional Family Therapy research program. In L. S. Harris (Ed.), *Problems of Drug Dependence 2001: Proceedings of the 63rd Annual Scientific Meeting* (NIDA Research Monograph No. 182, NIH Publication No. 02-5097, pp. 113-115). Bethesda, MD: National Institute on Drug Abuse.
- Liddle H. A. (1999): "Theory development in a family-based therapy for adolescent drug abuse" in *Journal of Clinical Child Psychology*, 28: 521-532
- Liddle, H.A., Dakof, G. A., Turner, R.M., Henderson, C.E. & Greenbaum, P.E. (2008): "Treating adolescent drug abuse: a randomized trial comparing multidimensional family therapy and cognitive behavior therapy". In *Addiction*, 103: 1660-1670.
- Liddle, H. A., Dakof, G. A., Parker, K., Diamond, G. S., Barrett, K. & Tejada, M. (2001): "Multidimensional Family Therapy for adolescent drug abuse: Results of a randomized clinical trial" in *AM. J. drug alcohol abuse*, 27 (4), 651-688 (2001)
- Lipsey, M.W., Tanner-Smith, E.E. & Wilson, S.J. (2010): "Comparative Effectiveness of Adolescent Substance Abuse Treatment. Three Meta-Analyses with Implications for Practice". Vanderbilt University.
- McLellan A. T., Luborsky L., Woody G. E., O'Brien C. P. (1980). "An improved diagnostic evaluation instrument for substance abuse patients. The Addiction Severity Index." in *Journal of Nervous and Mental Disorders*, 168, 1:26-33.
- NSDUH National Survey on Drug Use and Health, The Report (2007): "Young Adult's Need for and Receipt of Alcohol and Illicit Drug Use Treatment: 2007". Office of Applied Studies, Substance Abuse and Mental Health Service Administration. Retrieved November 2, 2009, from <http://www.oas.samhsa.gov/2k9/157/YoungAdultsDrugTxt.htm> )
- Rowe, C. L. & Liddle, H. A. (2006): "Treating adolescent substance abuse: state of the science" in H.A. Liddle & C.L. Rowe (eds.): *Adolescent Substance Abuse – Research and Clinical Advances*. New York: Cambridge University Press, 1-21
- Rowe, C. L. & Liddle, H. A. (2003): "Substance Abuse". In *Journal of Marital and Family Therapy*; Jan 2003; 29, 97-120.
- SAMHSA Substance Abuse and Mental Health Services Administration. (2010). Results from the 2009 National Survey on Drug Use and Health: Volume I. Summary of National Findings (Office of Applied Studies, NSDUH Series H-38A, HHS Publication No. SMA 10-4586Findings).

Waldron, H. B (1997): “Adolescent substance and family therapy outcome: A review of randomized trials” in T.H. Ollendick & R.J. Prinz (Eds), *Advances in clinical child psychology* (Vol. 4, pp. 199-234). New York: Plenum

Waldron, H. B., Turner, C. W. & Ozechowski, T. J. (2006): ”Profiles of change in behavioural and family interventions for adolescent substance abuse and dependence” in H.A. Liddle & C.L. Rowe (eds.): Adolescent Substance Abuse – Research and Clinical Advances. New York: Cambridge University Press.

Waldron, H. B., & Turner, C. W. (2008): “Evidence-based Psychosocial Treatments for Adolescent Substance Abuse” in *Journal of Clinical Child And Adolescent Psychology*, 37, 1, 238-261

Williams, R. J, Chang, S. Y., & Addiction Centre Adolescent Research Group (2000): “A comprehensive and comparative review of adolescent substance abuse treatment outcome” in *Clinical Psychology, Science, and Practice*, 7(2), 138-166

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## SOURCES OF SUPPORT

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### Internal funding:

SFI Campbell

### External funding:

None

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## DECLARATIONS OF INTEREST

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None known

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## REQUEST SUPPORT

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Do you need support in any of these areas (methodology, statistics, systematic searches, field expertise, review manager etc.?)

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## AUTHOR(S) REVIEW TEAM

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**Include the complete name and address of reviewer(s)** (can be changed later). This is the review team -- list the full names, affiliation and contact details of author's to be cited on the final publication.

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The lead author is the person who develops and co-ordinates the review team, discusses and assigns roles for individual members of the review team, liaises with the editorial base and takes responsibility for the on-going updates of the review

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## **ROLES AND RESPONSIBILITIES**

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Please give brief description of content and methodological expertise within the review team. The recommended optimal review team composition includes at least one person on the review team who has content expertise, at least one person who has methodological expertise and at least one person who has statistical expertise. It is also recommended to have one person with information retrieval expertise. Who is responsible for the below areas? Please list their names:

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- Statistical analysis: Trine Filges
- Information retrieval: Anne-Marie Klint Jørgensen

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## **PRELIMINARY TIMEFRAME**

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Approximate date for submission of Draft Protocol (please note this should be no longer than six months after title approval. If the protocol is not submitted by then, the review area may be opened up for other reviewers):

**Title registration approval date: 20.06.2011**

**Draft protocol submission date: 29.06.2011**