THE CAMPBELL COLLABORATION

Title registration for a review proposal: Family Behavior Therapy (FBT) 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
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___ Other

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

TITLE OF THE REVIEW

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

BACKGROUND

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 9 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). For example, 8.4 percent 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 percent 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 Family Behaviour Therapy (FBT) find that FBT is a promising treatment for young substance users (Waldron & Turner, 2008; Austin et al., 2005). 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. FBT incorporates a number of these components including providing comprehensive intervention services, using empirically validated techniques[1], offering parents support regarding the non-use of substances, include peers in the therapeutic process, has low attrition and dropout rates and focusing on the individual needs of the young substance abuser and his or her family (Austin et al., 2005; Azrin et al., 1994; Azrin et al., 2001).

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 Family Behaviour 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*

Family Behaviour Therapy (FBT) is an outpatient family based intervention addressing young people's drug use and related problems and is inspired by behavioural and family system theory (Azrin et.al., 1994; Donohue & Azrin, 2001). Participants attend therapy sessions with at least one significant other, typically parents. The FBT program encourages involvement of siblings and peers in therapy. FBT is based on a behavioural conceptualization of substance use and substance abuse problems, where drugs are considered a strong primary reinforcer, reinforced by both physiological stimuli and situational stimuli (Austin et al., 2005).

[1] E.g. cognitive behavioural strategies, social skills training, contingency management, reframing (Austin et al. 2005)

The intervention is short, approximately six months, and the intervention is delivered in an office-based setting.

FBT consists of the following components:

- pre-treatment engagement strategies
- assessment with young people and parents
- drug analysis
- dissemination of assessment and drug analysis results to young people and parents
- selection of program interventions by youth and family
- implementation of selected interventions (Austin et al., 2005)

The FBT interventions are:

- Behavioural contracting procedures, e.g. rewards for decreased drug use. Such procedures support the establishment of an environment that facilitates reinforcement for performance of behaviours that are associated with abstinence from drugs.
- Implementation of skills based interventions to assist in spending less time with individuals and situations that involve drug use and other problem behaviours.
- Skills training to assist in decreasing urges to use drugs and other impulsive behaviour problems.
- Communication skills training to assist in establishing social relationships with others who do not use substances and effectively avoiding substance abusers.
- Training for skills that are associated with getting a job and/or attending school (NREPP, 2011).

The young person and his or her family select from a list of intervention strategies those that will best meet their individual needs. FBT is designed to accommodate a diverse population of youth with varying cultural, behavioural and individual preferences, and the selection of interventions provide for a treatment that best meets the needs of the young person and their family (CEBC, 2011; Donohue & Azrin, 2001; NREPP, 2011; Austin et al., 2005).

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

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 use measured by e.g.,

- biochemically tests (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 e.g.,

- 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 (Beavers & Hampson, 2000))

Secondary outcomes

- retention (e.g. measured by days in treatment or completion 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

OBJECTIVES

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

METHODOLOGY

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 FBT, such as 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.

REFERENCES

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

Azrin, N.H., Donohue, B., Besalel, V.A., Kogan, E.S. & Acierno, R. (1994): "Youth Drug Abuse Treatment: A Controlled Outcome Study". *Journal of child and adolescent substance abuse*, 3 (3) 1-16.

Azrin, N.H., Donohue, B., Teichner, G.A., Crum, T., Howell, J. & DeCato, L.A. (2001): "A Controlled Evaluation and Description of Individual-Cognitive Problem Solving and Family-Behavior Therapies in Dually-Diagnosed Conduct-Disordered and Substance-Dependent Youth". *Journal of Child & adolescent Substance Abuse,* Vol. 11(1) 2001.

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

CEBC (2011): "Family Behavior Therapy for Adolescents (FBT)". Downloaded from www.cebc4cw.org/program/family-behavior-therapy-for-adolescents/detailed on April 26, 2011.

Deas, D. & Thomas, S.E. (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

Donohue, B. & Azrin, N. (2001): "Family Behavior Therapy". In *Innovations in Adolescent Substance Abuse Interventions*, 205-227. Elsevier Science.

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.

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.

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.

NREPP (2011): "Family Behavior Therapy". Reviewed 2006. Downloaded from http://nrepp.samhsa.gov/ViewIntervention.aspx?id=113 on April 26, 2011.

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

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 ofApplied 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

SOURCES OF SUPPORT

Internal funding:
SFI Campbell

External funding:
None

DECLARATIONS OF INTEREST

None known

REQUEST SUPPORT

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

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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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ROLES AND RESPONSIBLIITIES

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.
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- Statistical analysis: Trine Filges
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PRELIMINARY TIMEFRAME

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

Expected draft protocol submission date: 29.06.2011