NHS

National Treatment Agency for Substance Misuse

The effectiveness of psychological therapies on drug misusing clients

Shamil Wanigaratne, Paul Davis, Kate Pryce and Janet Brotchie

June 2005 >> Research briefing: 11

Key findings

There is now a body of evidence supporting the effectiveness of a range of psychological interventions, which target a client's drug using behaviour. Some form of psychological treatment appears to lead to improved outcomes compared to none, but it cannot be said that one form of psychological intervention is better for all clients than any other.

However, some interventions, such as motivational interviewing (MI) and relapse prevention (RP), appear to be effective across a range of substances used. Contingency management approaches appear to lead to improved outcomes for a number of subsets of clients, although they are not yet widely available in the UK. Involving significant others has been shown to be important in engaging and retaining younger drug users in treatment.

Variables associated with the client, the therapist and the psychological process also make a significant contribution to the effectiveness of psychological treatments.

Introduction

This document briefly reviews the effectiveness of psychological therapies in the treatment of substance misuse. Clients who misuse substances generally receive psychological therapy, which is used to assist the individual in:

- changing their substance using behaviour
- addressing co-existing disorders such as depression, anxiety, personality disorder, or post traumatic stress disorder (PTSD), linked to their substance use.

This paper does not address the use of psychological therapies in relation to co-existing problems. The National Institute of Health and Clinical Excellence (NICE) and the Department of Health are continuing to address the evidence base for psychological therapies that target specific mental health problems.

What are psychological therapies?

Psychological therapies are interventions based on one or more theories of human behaviour. They involve a relationship between therapist and client, within which issues relating to development, experience, relationships, cognition (the mental act or process by which knowledge is acquired, including perception, intuition and reasoning), emotion or behaviour are considered. The goal of psychological therapy varies with the model used, but is usually to increase the client's self-understanding and/or make changes in their cognition, emotion or behaviour.

Psychological treatments with clients who misuse substances have two different and distinct aims. Firstly, they aim to assist individuals in making changes in their substance using behaviour, and secondly to assist individuals in addressing co-existing mental health disorders. Interventions that fall into the first category would include cognitive-behavioural therapy (CBT) and MI treatments that are evidence-based, directive, and driven by a clear set of underlying principles or protocols. The term "psychosocial interventions" is often applied to this category of psychological therapy. These approaches are the focus of this review.

A second type of psychological therapy aims to address the client's underlying or additional mental health problems, such as anxiety or depression, post traumatic stress disorder, or a history of childhood sexual abuse, which may predate their substance misuse. Resolution of these underlying problems is critical in assisting clients in changing their substance using behaviour. The role of the psychologist or specialist therapist (who has received specialist training in therapeutic interventions) is to help the client tackle their underlying mental health problems, as well as to promote changes in substance use (although in practice they are often addressed simultaneously). Interventions falling into this category would include the evidence-based psychological therapies used in adult mental health settings, such as CBT for depression and anxiety.

Effectiveness and outcome

Research has shown that psychological therapies can have a significant effect on clients' substance misuse. The main criterion of effectiveness is that a psychological therapy leads to either a reduction in, or abstinence from, that substance. However, it is also generally acknowledged that, as substance misuse has an impact on many areas of an individual's life, most outcome studies seek improvements across a broad range of areas of functioning as evidence of a treatment's efficacy. The main domains of functioning where change is sought include physical health, psychological health, HIV and hepatitis risk behaviours, interpersonal relationships, employment and criminal behaviour (see Sperlinger, Davis and Wanigaratne, 2003 for a review of outcome instruments).

Reviewing data and drawing conclusions

A range of psychological therapies have been shown to be effective in the treatment of various substances (notably alcohol, opiates, tranquilisers, stimulants, cannabis and polydrug use), but the type of evidence and strength of conclusions that can be reached based on the evidence is variable, and there are limitations on the clinical conclusions outlined below. It is also important to note that there are very few UK-based studies at present, most of those reviewed here are from the US. This is of particular importance, as certain common effective US interventions – such as community reinforcement and contingency management approaches – are rarely used in the UK at present.

The evidence on effectiveness of psychological therapies in the treatment of substance misuse is limited, but the available data can be summarised as follows (for more detailed references, see Appendix 2):

1. There is a good evidence base for the effectiveness of psychological treatments for substance misuse.
2. A combination of substitute prescribing and psychological treatment is frequently more effective than medication or psychological treatment alone, particularly for opiate, tranquilliser and alcohol users
3. Where no substitute prescribing treatments are available with substances such as cannabis and cocaine, there is evidence that psychological treatment alone can be effective in changing clients' substance using behaviour
4. Some interventions, such as motivational interviewing and relapse prevention, appear to be effective across a range of substances

5. For substance misusing clients, any form of psychological treatment leads to better treatment outcomes compared to no psychological treatment, but there is no general consensus that one form of psychological treatment is better for all clients than another
6. However, where evidence does suggest that psychological treatments vary in their effectiveness with different subsets or groups of substance misusers, the picture appears to suggest the following:
    - For opiate users, any psychological treatment is better than no psychological treatment
    - For tranquilliser users, the evidence is largely limited to CBT approaches, which appear to be effective in reducing drug use
    - For stimulant users, any psychological treatment is better than no psychological treatment (although evidence is strongest for CBT approaches including MI, relapse prevention and community reinforcement approach/contingency management, and perhaps suggests a combination of therapy approaches might be most helpful in long run, e.g. MI followed by CBT)
    - For cannabis users, MI, CBT and family therapies appear to be most effective
    - For alcohol users, CBT (including motivational enhancement therapy), 12-step and family therapy approaches appear to be most effective.
7. Family therapy approaches are effective treatments for problem drinking, but their impact may be mediated by at least three additional factors – the gender of the drinker, investment in the relationship and support for abstinence from the family
8. Family therapy for drug use has been found to be more effective than other treatments in engaging and retaining adolescents in treatment and reducing their drug use, but the data is less clear-cut with adults. Family therapy remains a "promising" intervention
9. With polydrug users, family interventions, community reinforcement and contingency management approaches have been shown to be superior to drugs counselling (where the worker supports the client's efforts to change and may use skills or techniques drawn from one or more models of psychological therapy) and 12-step approaches.

Core elements of each psychological therapy approach

A brief description of each of the main effective treatment approaches.

Cognitive behaviour therapy/coping skills

These approaches are didactic (intended to instruct), structured treatments that focus on the identification of cognitive and environmental factors controlling problem behaviour, and the development or rehearsal of skills required to achieve changes in that behaviour (e.g. substance use). Cognitive techniques (e.g. challenging negative thinking) and behavioural work (e.g. behavioural experiments and increasing mastery and level of pleasant activity) are used to achieve changes. Specific behavioural changes, such as rehearsal of new skills, are a critical component of effective treatment.

Motivational interviewing

This is a brief (2–6 sessions) CBT approach, where the therapist takes the position of a collaborative partner, rather than an expert, in discussions with the client about their drug use. Therapists are directive in that they use specific skills, such as asking open questions, listening, and summarising the ideas the client has expressed, and reflecting these back to them and providing affirmation. This encourages the client to identify their own problems with substance use, define these problems, express concern, feel competent to make changes and develop a positive outcome expectancy about change. Underlying this approach is the principle that clients persuade themselves and the therapist that change is desirable, achievable and will bring benefit. There is a substantial evidence base for the efficacy of MI, particularly with problem and risky drinking, cannabis use and heroin dependence. It is also important in encouraging engagement in, and adherence to, treatment.

Relapse prevention

This is one of the main CBT approaches used in the UK. The minimum content of an individual or group-based RP programme should include the following (Wanigaratne, 2003):

- Identifying high-risk situations and triggers for craving
- Developing strategies to limit exposure to high-risk situations
- Developing skills to manage cravings and other painful emotions without using substances
- Learning to cope with lapses

- Learning how to recognise, challenge and manage unhelpful or dysfunctional thoughts about substance use
- Developing an emergency plan for coping with high-risk situations when other skills are not working
- Learning to recognise how one is "setting oneself up" to use substances
- Generating pleasurable sober activities and relationships, building a life worth living and attaining a lifestyle balance.

Community reinforcement

A CBT approach originally developed for alcohol dependence. It involves specific types of counselling and skills training, tailored to the treatment goals of the client, and is based on the principle that individuals will have their own positive reinforcers in the community, which maintain their behaviour (both substance using and non-substance using behaviours). The outcome of altering these reinforcement contingencies (and involving the client's social network in this process) is that the individual will make changes in their lifestyle that will support the client's goal of abstinence from substance use.

Contingency management

Also known as voucher-based therapy, this is a treatment approach aimed at encouraging positive behaviour by providing reinforcing consequences when a client meets treatment goals (e.g. no illicit drug use) and by withholding these positive consequences – or providing punitive measures – when the client engages in undesirable behaviour (e.g. illicit drug use). Often, the positive reinforcement for behaviour change is a voucher that can be exchanged for consumer goods of the client's choice.

Counselling/supportive-expressive psychotherapy

Counselling is a humanistic, client centred, non-directive approach to the problems presented by an individual. It is a systematic process, which gives individuals an opportunity to explore, discover and clarify ways of living more resourcefully, with a greater sense of wellbeing. Counselling may be concerned with addressing and resolving specific problems, making decisions, coping with crises, working through conflict or improving relationships with others. Supportive-expressive psychotherapy is a form of psychotherapy adapted for drug misuse treatment. Supportive techniques assist clients to feel comfortable in discussing personal experiences and expressive techniques help the identification and working through of personal relationship issues.

Family therapy

A term used to describe a number of different versions of family intervention that have proved effective in engaging and retaining substance users and their families or network. The preponderance of family therapy (FT) outcome research with this population has involved some version or expansion of structural (Minuchin, 1974), strategic (Haley, 1980) or structural-strategic (Stanton, 1981) family therapy. Structural FT works towards altering family structure through in-session interactions between family members. Strategic FT attends more to family interactions outside the session, as well as the assignment of therapeutic tasks designed to alter these interactions. Key features are the importance of a non-blaming, non-judgmental approach in dealing with families and an emphasis on behavioural tasks and behaviour change.

The term family therapy has also been used to describe "family-involved treatment", which encompasses work done with family members to engage the client in treatment (e.g. unilateral family therapy) and a range of family involved behavioural treatments (e.g. a community reinforcement approach).

Social behaviour network therapy

This brings the client and significant others in their social environment into between four and eight 50-minute treatment sessions. It is based on CRA, marital therapy, relapse prevention and social skills training approaches, and aims to develop positive social support for change in substance use and diminish support for continuing use.

12-step approaches

These are the basis of the self-help philosophy of Narcotics Anonymous and Alcoholics Anonymous. This approach regards addiction as a relapsing illness with complete abstinence as the only treatment goal. As part of the process towards recovery, individuals must acknowledge to themselves (and another people) the harm substance use has caused to themselves and others and where possible make amends.

Non-specific factors

While not the primary focus of this review, it is important to acknowledge that there is a growing body of research suggesting that non-specific factors make a significant contribution to the effectiveness of psychological treatments. Client, therapist and process variables may all contribute to the outcome of psychological treatments – who attends treatment, who delivers psychological treatment and how it is delivered may be as important as the model and content of the psychological therapy.

Factors associated with the therapist

Research on empathy, warmth and genuineness – the core conditions for psychological therapy – is voluminous and has

been part of the psychotherapy literature since Truax and Carkhoff's (1967) review. More recently, researchers have examined therapist effectiveness in the treatment of substance using clients and identified the following therapist factors which appear to contribute to good outcomes for clients. An effective therapist will:

- Be empathic and authoritative (Truax and Carkhoff, 1967)
- Be willing to participate in supervision (Luborsky et al, 1985)
- Take a non-blaming, non-judgmental stance (Stanton and Shadish (1997))
- Use motivational dialogue (Raistrick and Tober, 2004)
- Be a good listener
- Be in good psychological health
- Develop a helping alliance: a collaborative relationship between client and therapist.

Other factors influencing psychological treatment outcomes

The outcome literature suggests other guiding principles that underpin effective treatment (Raistrick and Tober, 2004):

- Speed of entry into treatment.
- Duration rather than intensity. Shorter and longer treatment work equally to improve abstinence from substance use, but significant reductions in dependence may be influenced more by longer duration of treatment.
- People with complex needs or co-existing mental illness, social breakdown or instability and physical health problems benefit from greater intensity and broader-spectrum treatments.

Conclusion

This review suggests there is a significant evidence base for the effectiveness of psychological interventions with substance misusing clients. Some interventions, particularly MI and RP, appear to be effective across a range of substances. Other approaches with strong support in the literature, such as community reinforcement and contingency management, are rarely used in the UK, suggesting that this is an area for rapid development. Family interventions also appear to be promising treatments for a range of clients using a range of substances.

It is important to acknowledge that research indicating the effectiveness of psychological treatments has frequently been conducted with trained, experienced and supervised therapists. Positive treatment outcomes are only likely to be obtained in routine clinical practice if treatment is delivered by an adequately trained and supervised workforce. These psychological therapies are also delivered in a research context as specific, coherent treatments not entwined with generic keyworking or case management approaches. Service commissioners and providers need to be aware of issues of training, supervision and treatment coherence in developing effective psychological treatments services for substance misusing clients. *Models of care* has emphasised that psychological treatment has a role as important as substitute prescribing in treating opiate-dependent clients, and with stimulant and cannabis users, psychological interventions are currently the only effective treatment option for clients. It is hoped that this review will assist commissioners and providers in developing psychological treatment services that have a clear evidence base and are seen as central to the treatment process, delivered by an appropriately trained and supervised workforce.

Appendix

Summary of evidence on the effectiveness of psychological interventions by substance treated, type of intervention and level/ strength of evidence

The tables below provide the following information:

- The types of psychological therapies that have been shown to be effective by substance treated
- A comment on the context in which effectiveness was shown, where relevant
- The type of evidence (methods used) and "strength" of the conclusions and recommendations that can be made. These are as follows:
  - Type I evidence: Evidence from meta-analysis of randomised control trials (RCTs) or at least one RCT
  - Type II evidence: Evidence from at least one controlled trial without randomisation
  - Type III evidence: Evidence from descriptive studies, such as comparative studies, correlation studies and case control studies
  - Type IV evidence: At least one well designed observational study
  - Type V evidence: Expert opinion, including the opinion of service users and carers.
- A short reference for each study (a full reference can be found at the end of the briefing).

Evidence of effectiveness: opiates			
Type of intervention	**Comments**	**Category of evidence**	**Reference**
CBT			
CBT	No difference between twice weekly CBT and a more intensive 5-day a week day programme, but CBT significantly more cost-effective	Type I	Avants et al. (1999)
	A CBT approach that targeted sensitivity to interoceptive cues associated with drug craving, led to significantly greater reduction in drug use for women, but not men, compared to supportive counselling	Type I	Pollack et al (2002)
Motivational interviewing	Adjunct to methadone treatment	Type I	Saunders et al (1995)
Relapse prevention	RP combined with Community Reinforcement Approach (CRA) more effective then CRA alone	Type I	Abbot et al (1998)
Contingency management (voucher-based therapy)	Meta-analysis	Type I	Griffith et al (2000)
	Positive outcomes (reduction in cocaine and opiate use) in methadone maintenance programmes	Type I Type II	Silverman et al (1996a); (1996b)
Community reinforcement approach (CRA)	CRA more effective than standard treatment	Type I	Abbot et al (1998)
	CRA more effective than standard treatment	Type I	Gruber et al. (2000)
Counselling			
Individualised drug counselling	Counselling together with methadone produced significantly greater improvements in reducing illicit opiate use compared to methadone only. The addition of other psychosocial services further improved outcome	Type I	McLellan et al (1993)
	Comparison study with methadone only	Type III	Woody et al (1983)

Family therapy			
Family-Couples interventions	Meta-analysis of 1571 cases showed family-couples interventions superior to individual counselling, peer group therapy and family psychoeducation	Type I	Stanton & Shadish (1997)
Family therapy	More drug free days at follow-up than supportive psychotherapy, but equivalent outcome with 'low contact' intervention.	Type I	Yandoli et al (2002)
	Family therapy more effective than nonfamily in preventing early dropout	Type II	Stanton, Todd et al (1982)
Behavioural family counselling (BFC)	On several outcome measures BFC with individual treatment and naltrexone was more effective than individual-based counselling with naltrexone	Type I	Fals-Stewart & O'Farrell (2003)
Behavioural couples therapy (BCT)	BCT patients had higher proportion of days abstinent from drugs. BCT markedly increased savings in social costs (including health care and crime) during 1-year follow-up.	Type I	Fals-Stewart et al (1996)
Structural – strategic family therapy	Showed better outcomes than standard treatment	Type II	Stanton, Steier, Cook & Todd (1984)
Multiple family therapy	More effective than standard care.	Type III	Kosten, Jalali, Hogan, Kuber (1983)
Psychodynamic			
Supportive-expressive psycho-therapy	In methadone maintenance clients, those receiving expressive psychotherapy required less methadone, used less cocaine and maintained gains, in comparison to those who received drug counselling	Comparison study with drug counselling	Woody et al (1995)
Evidence of effectiveness: benzodiazepines			
Type of intervention	Comments	Category of evidence	Reference index
CBT			
CBT	CBT has good short term outcomes	Type II	Vorma et al (2002)
Group CBT	In patients with panic disorder, slow reduction in dose with CBT resulted in significantly more completed reductions than slow dose reduction without CBT	Type I	Otto et al (1993)
	CBT better than comparison group	Type III	Higgit et al (1987)
		Type III	Tyrer et al (1985)
Gradual tapering (reduction) with psychological interventions.			
Brief psychological interventions including CBT & counselling	16% of 3,234 patients managed to discontinue use after 8 months (Audit of 15 general practices)	Type III	Holden et al (1994)

Evidence of effectiveness: stimulants			
Type of intervention	**Comments**	**Category of evidence**	**Reference index**
CBT			
CBT	Qualitative review of RCTs of CBT with cocaine users	Type I Type III	Carroll (1998) Rosenblum et al (1999)
Relapse prevention	Positive outcomes maintained at one year follow-up for cocaine addicts, compared to pharmacotherapy	Type II Type I	McKay et al (2002) Carroll et al (1994)
Motivational Interviewing (MI)	RCT of 105 cocaine users. Those who received MI increased use of coping strategies and had fewer cocaine-positive urines samples on beginning detox.	Type I	Stotts et al (2001)
Behavioural programme (contingency management with positive incentives)	Successive approximations to clean urine effective with an escalating-value voucher scheme Five times more likely to be retained in treatment compared to 12 Step counselling group Behavioural programme with vouchers for non-drug use had significantly better outcomes than behavioural programme alone	Type I Type II Type I	Preston et al. (2001) Kirby et al (1998 Higgins et al (1994)
Community reinforcement approach	Significantly more effective than drug counselling	Type I	Higgins et al (1993)
Counselling			
	Cocaine use reduced during court-enforced counselling	Type III	Kletter (2003)
Matrix model			
A combination of a number of approaches including; relapse prevention, family & group therapies, drug education and self-help participation, with strong therapist relationship		Comparative study	Rawson et al (1995)
12 Step			
12 step-approach	In a comparison of 4 treatments: all treatments were effective, clients receiving 12 step individual counselling were more likely to achieve and maintain abstinence	Type I	Crits-Christoph et al (1999)
Family therapy			
Behavioural couples therapy (BCT)	BCT patients had higher proportion of days abstinent from drugs than standard-treatment controls. BCT markedly increased savings in social costs during 1-year follow-up.	Type I	Fals-Stewart et al (1996)
Bower family therapy cocaine	Better outcomes than standard treatment	Type I	McLellan et al (1993)

Evidence of effectiveness: cannabis			
Type of intervention	**Comments**	**Level of evidence**	**Reference index**
CBT			
Motivational interviewing (MI)	At 16 month follow-up, MT as effective as relapse prevention, compared to delayed treatment control group.	Type I	Stephens et al (2000)
Motivational enhancement therapy		Type III	Budney et al (1997)
Relapse prevention	Group intervention as effective as social support group in significantly reducing use at 12 month follow-up.	Type I	Stephens et al (1994)
	As effective as motivational interviewing.	Type I	Stephens et al (2000)
Integrated brief intervention			
	Intervention was assessment and self-help literature	Type IV	Lang et al (2000)
Family therapy			
Multisystemic family therapy	4-year follow-up showed individual counselling patients four to five times more likely to be arrested for a substance abuse related offence than those in family therapy	Type II	Henggeler et al (1991)
Conjoint family therapy (CFT) + one-person family therapy (OPFT)	CFT & OPFT shown to be effective	Type II	Szapocznik, Kurtines, Foote, Perez-Vidal & Hervis (1983)
Evidence of effectiveness: alcohol			
Type of intervention	**Comments**	**Level of evidence**	**Reference index**
CBT			
Motivational interviewing	Meta-analysis	Type I	Burke et al (2003)
	Meta-analysis. Brief Interventions using MI superior to all other interventions	Type I	Miller & Wilbourne (2002)
	Pregnant women	Type I	Handmaker et al (1999)
	Better outcomes in residential alcohol treatment	Type I	Brown & Williams (1993)
	Outpatient treatment	Type I	Bien et al (1993)
Cognitive behavioural therapy	Meta-analysis. 6 of the top ten treatments (from a total of 46 treatment modalities) were CBT interventions	Type I	Miller & Wilbourne 2002)
	Project MATCH found CBT, MET & 12 step treatment equally effective	Type I	Project MATCH Study Group (1997)
	Qualitative review of RCTs showing efficacy of CBT		Kadden, R., Carroll, K., Donovan,D. et al (1999)
Motivational enhancement Therapy (MET)	Project MATCH found CBT, MET & 12 step treatment equally effective	Type I - RCT	Project MATCH Study Group (1997)
		Type I	Miller (1996)

Relapse prevention	Composite intervention based on Marlatt & Gordon (1985) model. Particularly effective for alcohol problems combined with adjunctive medication	Type I	Irvin et al (1999)
Community reinforcement approach		Type I	Azrin et al (1982)
Behavioural marital therapy		Type I	O'Farrell et al (1993); Finney & Monahan (1986)
Social skills training	Less effective with neuropsychologically impaired patients.	Type I	Smith & McCrady (1991)
Counselling			
General alcohol counselling	Combination of psycho-education & humanistic approaches. Effective compared to those with no treatment/ waiting list; Less effective that CBT & 12 Step approaches	Type I Comparative studies & RCTs	Finney & Monahan (1996); Holder et al (1991)
Family therapy			
Family-involved therapies	More effective in motivating patients to enter alcohol treatment and marginally more effective in alcohol outcomes than individual treatment	Type I Type IV	Edwards and Steinglass (1995) Chan (2003)
Multisystemic family therapy	More effective than usual probation services and individual counselling	Type II	Henggeler et al (1991)
The intervention method		Type III	Liepman, Silvia & Nirenburg (1989)
Unilateral family therapy (UFT)		Type III	Thomas, Santa, Bronson & Oyerman (1987)
Community reinforcement training (CRT)		Type II	Sisson & Azrin (1986)
12-step approaches			
Interventions based on the 12 Step approach	Project MATCH found CBT, MET & 12 step facilitation therapy equally effective. However 12 Step Facilitation Therapy patients functioned better with respect to secondary outcome variables	Type III Type I	Gossop et al (2003) Project MATCH Study Group (1997)
Evidence for effectiveness: polydrug use			
A large number of studies that have looked at the effectiveness of psychological interventions with poly-drug users. Community reinforcement approaches and contingency management have been shown to be superior to drugs counselling and 12 Step-based counselling approaches		(Higgins et al. (1993), Kirby et al. (1999), Higgins et al. (2000), Rawson et al. (2002), Epstein et al. (2003), Bickel et al. (1997), Gruber et al. (2000).	
A range of family interventions have also been shown to be effective for poly-drug using individuals		Henggeler et al 1991, Liddle et al 1993, Benir et al 1993, McLellan et al 1993).	

References

1. Abbott PJ, Weller SB, Delaney HD and Moore BA (1998). Community reinforcement approach in the treatment of opiate addicts. *American Journal of Drug and Alcohol Abuse,* 24(1), 17-30
2. Avants SK, Margolin A, Sindelar JL, Rounsaville BJ, Schottenfield R, Stine S, Cooney NL, Rosenheck RA, Shou-Hua L and Kosten TR (1999) Day treatment versus enhanced standard methadone services for opioid dependent patients: A comparison of clinical efficacy and cost. *American Journal of Psychiatry* 156, 27-33
3. Azrin NH, Sisson RW, Meyers R and Godley M (1982). Alcoholism Treatment by Disulfiarum and Community Reinforcement Therapy. *Journal of Behavior Therapy and Experimental Psychiatry,* 13, 105-112
4. Ball SA (1998). Manualised treatment for substance abusers with personality disorders: dual focus schema therapy. *Addictive Behaviors*, 23 (6), 883-891
5. Barrowclough C, Haddock G, Tarrier N, Lewis S, Moring J, O'Brien R, Schofield N and McGovern J (In Press). Randomised Controlled Trial of Motivational Interviewing and Cognitive Behavioural Intervention for Schizophrenia Patients with Associated Drug and Alcohol Misuse. *American Journal of Psychiatry*
6. Bien TH, Miller WR and Boroughs JM (1993). Motivational Interviewing with Alcohol Outpatients. *Behavioural and Cognitive Psychotherapy,* 21 (4), 347-356
7. Brown JM, Miller WR (1993). Impact of Motivational Interviewing on Participation and Outcome in Residential Alcoholism Treatment. *Psychology of Addictive Behaviors*, 7 (4), 211-218
8. Budney AJ, Kandel DB, Cherek DR, Martin BR, Stephens RS and Roffman R (1997). Marijuana Use and Dependence. *Drug and Alcohol Dependence,* 45, 1-11
9. Burke BL, Arkowitz H and Menchola M (2003). The efficacy of motivational interviewing: a meta-analysis of controlled clinical trials. *Journal of Consulting and Clinical Psychology*, 71(5), 843-861
10. Carroll KM (1998) *A Cognitive Behavioral Approach to Treating Cocaine Addiction.* Washington, DC: National Institute on Drug Abuse. Publication Number 98-4308, USA
11. Carroll K, Rounsaville B, Nich C, Gordon L, Wirtz P and Gawin F (1994). One year follow-up of psychotherapy and pharmacotherapy for cocaine dependence: delayed emergence of psychotherapy effects. *Archives of General Psychiatry*, 51, 989-997
12. Chan JG. An examination of family-involved approaches to alcoholism treatment. Family Journal: Counseling and Therapy for Couples and Families. Vol 11(2) Apr
13. Crits-Christoph P, Siqueland L, Blaine J, Arlene F, Luborsky L, Onken SL, Muenz RL, Thase ME, Weiss RD, Gastfriend RD, Woody EG, Barber BJ, Butler FS, Dasley D, Salloum I, Bishop S, Najavits ML, Lis J, Mercer D, Griffin LM, Moras K and Beck AT (1999). Psychosocial Treatments for Cocaine Dependence. National Institute for Drug Abuse Collaborative Cocaine Treatment Study. Archives of General Psychiatry, 56, 493-502
14. Drake RE, Mercer-McFadden C, Mueser KT, McHugo GJ, Bond GR (1998). *Review of Integrated Mental Health and Substance Abuse Treatment for Patients with Dual Disorders. Schizophrenia Bulletin*, 24, 589-608
15. Ershoff DH, Quinn VP, Boyd NR, Stern J, Gregory M and Wirtschafter D (1999). Kaiser Permanente Pre-natal Smoking-cessation Trial: When more isn't better, what is enough? *American Journal of Preventive Medicine*, 17 (3), 161-168
16. Fals-Stewart W, Birchler GR and O'Farrell TJ (1996). Behavioral couples therapy for male substance-abusing patients: Effects on relationship adjustment and drug-using behavior. *Journal of Consulting and Clinical Psychology*
17. Fals-Stewart W and O'Farrell TJ (2003). Behavioural family counselling and naltrexone for opioid-dependent patients. *Journal of Consulting and Clinical Psychology*, 71(3), 432-442
18. Finney JW and Monahan SC (1986). The Cost Effectiveness of Treatment for Alcoholism: A second approximation. *Journal of Studies on Alcohol,* 47, 122-134
19. Fiore MC, Kenford SL, Jorenby DE, Wetter DW, Smith SS and Baker TB (1994). Two Studies of the Clinical Effectiveness of the Nicotine Patch with Different Counselling Treatments. Chest, 105, 524-533
20. Gossop M, Harkins J, Best D, Man L-H, Manning V, Marshall J and Strang J (2003). Is attendance at Alcoholics Anonymous meetings after inpatient treatment related to improved outcomes? A 6-month follow-up study. *Alcohol and Alcoholism,* 38(5), 421-426
21. Gruber K, Chutuape MA, Stitzer ML (2000). Reinforcement-based intensive outpatient treatment for inner city opiate abusers: A short-term evaluation. *Drug and Alcohol Dependence,* 57(3), 211-223

22. Griffith JD, Rowan-Szal GA, Roark RR, and Simpson DD (2000). Contingency management in outpatient methadone treatment: a meta-analysis. *Drug and Alcohol Dependence*, 58(1-2), 55-66

23. Hajek P (1994). Appraising the Efficacy of Psychological Treatment for Smokers. *Journal of Smoking Related Disorders*, 5, 101-107

24. Handmaker NS, Miller WR and Manicke M (1999). Findings of a Pilot Study of Motivational Interviewing with Pregnant Drinkers. *Journal of Studies on Alcohol,* 60 (2), 285-287

25. Higgins ST, Budney AJ, Bickel WK, Foerg FE, Donham R and Badger GL (1994). Incentives Improve Outcome in Outpatient Behavioral Treatment of Cocaine Dependence. *Archives of General Psychiatry*, 51, 568-576

26. Higgins ST, Budney AJ, Bickel WK, Hughes JR, Foerg F and Badger G (1993). Achieving cocaine abstinence with a behavioral approach. American *Journal of Psychhiatry*, 150, 763-769

27. Higgit A, Golombok S, Fonagy P and Lader M (1987). Group Treatment of Benzodiazepine Dependence. *British Journal of Addiction*, 1987, 82, 517-532

28. Holden JD, Hughes IM and Tree A (1994). Benzodiazepine Prescribing and Withdrawal for 3234 Patients in 15 General Practices. *Family Practice*, 11 (4), 358-62

29. Holder H, Longabaugh R, Miller WR and Rubonis AV (1991). The Cost Effectiveness of Treatment for Alcoholism: A first approximation. *Journal of Studies on Alcohol,* 52, 517-540

30. Hughes JR (1991). Combined Psychosocial and Nicotine Gum Treatment for Smoking: A critical review. *Journal of Substance Abuse*, 3, 337-350

31. Irvin JE, Bowers CA, Dunn ME and Wang MC (1999). Efficacy of Relapse Prevention: A Meta-Analytic Review. *Journal of Consulting and Clinical Psychology*, 67 (4), 563-570

32. Kadden R, Carroll K, Donovan D *et al* (1999). Cognitive-Behavioural Coping Skills Therapy Manual. A Clinical Research Guide for Therapists Treating Individuals With Alcohol Abuse and Dependence. National Institute on Alcohol Abuse and Alcoholism. Project MATCH Monograph series Vol 3

33. Kirby KC, Marlowe DB, Festinger DS, Lamb RJ and Platt JJ (1998). Schedule of voucher delivery influences initiation of cocaine abstinence. *Journal of Consulting and Clinical Psychology,* 66(5), 761-767

34. Kletter E (2003). Counseling as an intervention for cocaine-abusing methadone maintenance patients. *Journal of Psychoactive Drugs*, 35(2), 271-277

35. Kosten TR, Jalali B, Hogan I and Klebber HD (1983). Family denial as a prognostic factor in opiate addict treatment outcome. *Journal of Nervous and Mental Disease*, 171, 611-616

36. Lancaster T and Stead LF (2000). Individual Behavioural Counselling for Smoking Cessation. The Cochrane Library, Issue 4, Oxford

37. Lang E, Engelander M and Brooke T (2000). Report of an integrated brief intervention with self-defined problem cannabis users. Journal of Substance Abuse Treatment, 19(2), 111-116

38. Lehman C, Brown T and Barlow D. (1998). Effects of Cognitive-Behavioural Treatment for Panic Disorder with Agoraphobia on Concurrent Alcohol Abuse. *Behavioral Therapy*, 29, 423-433

39. Ley A, Jeffrey DP, McLaren S, Seigfried N (1999). Treatment Programmes for People with both Severe Mental Illness and Substance Misuse. Cochrane Review, The Cochrane Library, Issue 2, Updated Software, Oxford

40. Linehan MM, Schmidt HI, Dimeff LA, Craft JC, Kanter J and Comtois KA (In Press) Dialectical Behaviour Therapy for patients with borderline personality disorder and drug dependence. *American Journal of Addiction*

41. Luborsky L, McLellan AT, Woody GE *et al* (1985). Therapist success and its determinants. Arch Gen Psychiatry 42(6):602-611.

42. Martino S, Carroll KM, O'Malley SS and Rounsaville BJ (2000). Motivational Interviewing with Psychiatrically Ill Substance Abusing Patients. *American Journal on Addictions,* 9, (1), 88-91

43. McKay JR, Pettinati HM, Morrison R, Feeley M, Mulvaney FD and Gallop R (2002). Relation of depression diagnoses to 2-year outcomes in cocaine-dependent patients in a randomized continuing care study. *Psychology of Addictive Behaviors*, 16(3), 225-235

44. McLellan AT, Arndt I, Metzger DS, Woody GE and O'Brien CP (1993). The Effects of Psychosocial Services in Substance Abuse Treatment. *Journal of the American Medical Association*, 269 (15), 1953-1959

45. Miller WR and Wilbourne PL (2002). Mesa Grande: A methodological analysis of clinical trials of treatment for alcohol use disorders. *Addiction*, 97(3), 265-277

46. Miller WR (1996). Motivational Interviwing: Research, practice and puzzles. *Addictive Behaviors*, 61 (6), 835-842

47. National Institute on Drug Abuse (2000). Principles of Drug Abuse Treatment: A research-based guide. National Institute of Health, USA

48. O'Farrell TJ, Choquette KA, Cutter HSG, Brown ED and McCourt WF (1993). Behavioral Marital Therapy with and without Additional Couples Relapse Prevention Sessions for Alcoholics and their Wives. *Journal of Studies on Alcohol,* 54, 652-666

49. Otto MW, Pollack MH, Sachs GS, Reiter SR, Meltzer-Brody S and Rosenbaum JF (1993). Discontinuation of Benzodiazepine Treatment: Efficacy of cognitive-behavioral therapy. *American Journal of Psychiatry*, 150 (10), 1485-1490

50. Pollack MH, Penava SA, Bolton E, Worthington JJ, Allen GL, Farach FJ, Otto MW (2002). A novel cognitive-behavioural approach for treatment-resistant drug dependence. *Journal of Substance Abuse Treatment*, 23(4), 335-342

51. Preston KL, Umbricht A, Wong CJ and Epstein DH (2001). Shaping cocaine abstinence by successive approximation. *Journal of Consulting and Clinical Psychology,* 69, 643-654

52. Project MATCH Research Group (1997). Matching alcoholism treatments to clients heterogeneity: Project MATCH post-treatment drinking outcomes. *Journal of Studies in Alcohol,* 58, 7-29

53. Raistrick D and Tober, G (2004) Psychosocial Interventions, *Psychiatry,* 3, 36-39

54. Raw M, McNeill A and West R (1998). Smoking Cessation Guidelines for Health Professionals: A guide to effective smoking cessation interventions for the health care system. Thorax, 53 (5), 1-38

55. Raw M, McNeill A and West R (1999). Smoking Cessation: Evidence based recommendations for the health care system. *British Medical Journal*, 318, 182-185

56. Rawson R, Shoptaw S, Obert JL, McCann M, Hasson A, Marinelli-Case P, Brethen P and Ling W (1995). An Intensive Outpatient Approach for Cocaine Abuse: The Matrix Model. *Journal of Substance Abuse Treatment*, 12 (2), 117-127

57. Rosenblum A, Magura S, Palij M, Foote J, Handelsman L and Stimmel B (1999). Enhanced treatment outcomes for cocaine-using methadone patients. *Drug and Alcohol Dependence*, 54(3), 207-218

58. Saunders B, Wilkinson C and Phillips M (1995). The Impact of Brief Motivational Intervention with Opiate Users Attending a Methadone Programme. *Addiction,* 90 (3), 415-424

59. Szapocznik J, Kurtines WM, Foote FH *et al* (1983). Conjoint versus one-person family therapy: Some evidence for the effectiveness of conducting family therapy through one person. *Journal of Consulting and Clinical Psychology*, 51(6), 889-899

60. Silverman K, Higgins S, Brooner R, Montoya I, Cone E and Preston K (1996a). Sustained Cocaine Abstinence in Methadone Maintenance Patients through Voucher-Based Reinforcement Therapy. *Archives of General Psychiatry*, 53, 409-415

61. Silverman K, Wong C, Higgins S, Brooner R, Montoya I, Contoreggi C, Umbricht-Schneiter A, Schuster C and Preston K (1996). Increased Opiate Abstinence through Voucher-Based Reinforcement Therapy. *Drug and Alcohol Dependence*, 41, 157-165

62. Smith DE and McCrady BS (1991). Cognitive Impairment among Alcoholics: Impact on drink refusal skills acquisition and treatment outcome. *Addictive Behaviors*, 16, 265-274

63. Stanton MD and Shadish WR (1997). Outcome, attrition and family-couples treatment for drug abuse: a meta-analysis and review of the controlled, comparartive studies. *Psychological Bulletin*, 122, 170-191

64. Stanton MD and Shadish WR (1997). Outcome, attrition, and family/couples treatment for drug abuse: A meta-analysis and review of the controlled, comparative studies. *Psychological Bulletin*, 122, 170-191

65. Stanton MD, Todd TC and Associates (1982). The family therapy of drug abuse and addiction. New York, Guilford Press

66. Stanton MD, Steier F, Cook L and Todd TC (1984). Narcotic detoxification in a family and home context: Final report 1980-1983. Rockville. MD: National Institute on Drug Abuse. Treatment Research Branch

67. Stephens RS, Roffman RA and Simpson EE (1994). Treating Adult Marijuana Dependence: A test of the relapse prevention model. *Journal of Consulting and Clinical Psychology*, 62, 92-99

68. Stephens RS, Roffman RA and Cutin L (2000). Comparison of Extended Versus Brief Treatments for Marijuana Use. *Journal of Consulting and Clinical Psychology*, 68 (5), 898-908

69. Stotts AL, Schmitz JM, Rhoades HM and Grabowski J (2001). Motivational interviewing with cocaine-dependent patients: a pilot study. *Journal of Consulting and Clinical Psychology*, 69, 858-862

70. Swanson AJ, Pantalon MV and Cohen KR (1999). Motivational Interviwing and Treatment Adherence among Psychiatric and Dually Diagnosed Patients. *Journal of Nervous and Mental Disease*, 187 (10), 630-635

71. Thevos AK, Roberts SJ, Thomas SE, and Randall CL (2000). CBT delays relapse in female socially phobic alcoholics. *Addictive Behaviors*, 25 (3) pp333-345

72. Truax DB and Carkhuff RR (1967). *Toward effective counseling and psychotherapy*. Chicago: Aldine Publishing Company

73. Tyrer P, Murphy S, Oates G and Kingdon D (1986). Psychological Treatment for Benzodiazepine Dependence. *Lancet*, 1, 1042-1043

74. United States Department of Health and Human Services (2000). Treating Tobacco Use and Dependence (2000). Rockville, MD: Agency for Health Care Research Quality

75. Vorma H, Naukkarinen H, Sarna S and Kuoppasalmi K (2002). Treatment of out-patients with complicated benzodiazepine dependence: comparison of two approaches. *Addiction,* 97(7), 851-859

76. Wanigaratne S (2003). Relapse Prevention in Practice. The Drug and Alcohol Professional, 3 (3), 11-18

77. West R, McNeill A and Raw M (2000). Smoking Cessation Guidelines for Health Professionals: An update. Thorax, 55, 987-999

78. Woody GE, Luborsky L, McLellan AT, O'Brien CP, Beck AT, Blaine J, Herman I and Hole A (1983). Psychotherapy for Opiate Addicts: Does it help? Archives of General Psychiatry, 40, 639-645

79. Woody GE, McLellan AT, Luborsky L and O'Brien CP (1995). Psychotherapy in Community Methadone Programs: A validation study. *American Journal of Psychiatry*, 152 (9), 1302-1308

80. Yandoli D, Eisler I, Robbins C, Mulleady G and Dare C (2002). A comparative study of family therapy in the treatment of opiate users in a London drug clinic. *Journal of Family Therapy*, 24(4), 402-422

Reader information

Document purpose To provide managers and commissioners of drug treatment with a review of psychological interventions aimed at drug users and their effectiveness across different client groups.

Title The effectiveness of psychological therapies on drug misusing clients

Authors Shamil Wanigaratne,[1, 2] Paul Davis,[2, 3] Kate Pryce[4] and Janet Brotchie.[5]

[1] National Addiction Centre, Institute of Psychiatry, Kings College, University of London

[2] British Psychological Society Faculty of Addictions

[3] Camden and Islington Mental Health and Social Care Trust

[4] South London and Maudsley NHS Trust

[5] National Treatment Agency

Publication date June 2005

Target audience Primarily providers and commissioners of drug treatment services in England, and service users and carers

Circulation list Managers and commissioners of treatment services
Co-ordinators and chairs of local partnership (e.g. drug action teams and crime and disorder reduction partnerships)
Regional government department leads on drugs
Central government department leads on drugs
Royal Colleges

Description A range of psychological interventions, which target a client's drug using behaviour, have been shown to be effective on drug misusing clients

Contact details National Treatment Agency for Substance Misuse
Until 16 July 2005: 5th floor, Hannibal House, Elephant and Castle, London SE1 6TE.
Tel 020 7972 2214. Fax 020 7972 2248.
From 18 July 2005: 8th floor, Hercules House, Hercules Road, London SE1 7DU.
Tel 020 7261 8801 Fax 020 7261 8883
Email nta.enquiries@nta-nhs.org.uk
www.nta.nhs.uk

Gateway/ROCR approval The NTA is a self-regulating agency in relation to the Department of Health Gateway

Research briefings
These briefings commissioned by the NTA are summaries of the research evidence on a particular topic to help inform providers and commissioners of services. They are not NTA guidance but are aimed at helping providers and commissioners reflect on local service provision.

Publications
All NTA publications can be downloaded from www.nta.nhs.uk. To order additional copies of this report, complete the online order form at www.nta.nhs.uk or email NTA@prolog.uk.com or telephone 08701 555 455 and quote product code: RB11

Product code: RB11