



# Executive Summary

An evaluation of a brief assessment led intervention for young non-injecting drug users

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Final Report to the Department of Health

# AN EVALUATION OF A BRIEF ASSESSMENT LED INTERVENTION FOR YOUNG NON-INJECTING DRUG USERS

## EXECUTIVE SUMMARY

### PURPOSE AND AIMS

This report describes the implementation and results from a random controlled trial of a brief, assessment led, intervention for use with young users of stimulants and cannabis. The main secondary aim of the study was to research the impact of assessment to confound outcome results and to bring about positive behavioural change (i.e. assessment reactivity).

### POLICY RELEVANCE

In the UK cannabis, cocaine, crack and ecstasy are regularly used by a substantial minority of young people (Murphy & Roe 2007). There is longstanding concern regarding the use of drugs by adolescents and young adults both in terms of concomitant individual and community harms and the potential move into severe problematic drug use. Policy documents in recent years have emphasised the need to develop more effective ways of working with young people who are experiencing negative effects from substance use and who are at risk of developing severe long-term drug-related and alcohol related problems (Home Office 2004; Cabinet Office, 2004).

### BACKGROUND

Cannabis, cocaine, and ecstasy, and alcohol are the most commonly used substances among 16-24 year olds in the UK (ONS 2006; Murphy & Roe 2007). All of these substances either separately or in combination have been repeatedly shown to be associated with physical, psychological, and social harms. Crack is used by relatively few young people but is strongly associated with negative consequences (Drugs Strategy Directorate, 2002b). Brief adapted motivating interventions (AMIs) have been found to be effective at reducing harm with diverse groups of substance users (Dunn et al. 2001; Burke, Arkowitz & Dunn, 2002; Hematt, Steele & Miller 2005) but there have been few controlled trials of AMIs with young drug users in the community. In 2004 we reported on a two group trial of an AMI which targeted young stimulant users compared to a control group (Marsden et al. 2004; 2006). The intervention was well received, and substantial across time reductions in primary outcome (stimulant use) occurred but no between group effects were identified (Marsden 2006). However, there were indications in the findings that assessments alone (i.e. assessment reactivity) had produced positive behaviour change and consequently confounded the outcome results.

### TRIAL CONDITIONS

In the present study there were three trial conditions: experimental (Group A- assessment, feedback interview), control 1 (Group B - assessment only), control 2 (Group C - no assessment). As part of quality assurance procedures, each feedback interview was tape-recorded and a random selection was monitored by the research team. Participants were asked at both baseline and follow up to take a saliva test (oral mucosal transudate) to confirm self-report of substance use in the previous 48 hours: cocaine, opiates, MDMA, and cannabis.

### TRIAL OUTCOMES

The primary outcome was composite frequency of cocaine, crack, ecstasy/MDMA powder and cannabis use and there were eight secondary outcomes: drug use intensity, drug dependency (DSM-IV), alcohol use frequency and intensity, Hazardous drinking (AUDIT); General Health (EQ-5D) Psychological Health (GHQ12); Engagement with health and social services.

### TRIAL PARTICIPANTS

Following power calculations the planned sample was 225 participants. Participants were required to be 16-28 years old and having used cannabis, cocaine, crack or ecstasy on at least 4 days in the previous month. Exclusion criteria were: (i) treatment episode in the previous 12 months, (ii) injected more than once in previous 12 months or 10 times ever, (ii) history of regular or dependent opiate use or any opiate use in 48 hours prior to baseline, (iv) receiving treatment for a serious mental health condition. Participants were block randomised on two factors; frequency of cocaine use, crack use, ecstasy use or cannabis use and intensity of alcohol use.

### PROCEDURE

Trial participants were recruited to three sites in Greater London using referral from known drug users, specific advertising campaigns and participant-driven snow-ball recruitment methods. All participants were required to provide both personal contact details, and contact details of three other friends or family to facilitate follow-up. At baseline nearly all data collected were from a worker-administered intervention assessment tool (the Drugs & Lifestyle Questionnaire). At follow-up all participants received a worker-administered questionnaire, a worker administered short semi-structured interview and a Timeline Follow Back schedule for both drug and alcohol use.

## RESULTS

### A. IMPLEMENTATION

The participant recruitment and retention methodology was successful. There were 318 first contacts and 234 were randomised into the trial with five participants excluded post randomisation: 4 opiate use identified and 1 excessive injecting history. The final baseline sample of 229 was distributed successfully across the three trial conditions: Group A 73/31.9%; Group B 77/33.65%; Group C 79/34.5%. In total 196 (86%) participants were followed up: mean follow-up period was 15 weeks (range 11 to 26 weeks). Crucial drivers for the success of recruitment and retention were multiple research sites, peer referral, extensive flyering, and multiple back-up contacts for each participant, and extensive use of mobile phones. Recruitment via news media was notably unsuccessful.

### B. THE SAMPLE

Mean age for the sample was 19.9 years. The majority of participants were white (72.9%) and male (68.6%). Most participants were either unemployed and/or in education and were living in their parents home (54%); with another quarter (51/26%) living in their own rented or owned home. For the most part the patterning of the drug use and alcohol use among the sample was as would be expected with poly-substance use the norm. Nearly all baseline drug use data were collected via the DLAQ from the 150 participants in Groups A & B. Mean frequency of drug use in the previous 90 days was cannabis 59.4 days, cocaine 10.4 days, crack 14.25 days, and ecstasy [pill] 8.6 days. In addition 14 (9.3%) participants reported MDMA powder use and 15 (11.3%) reported Ketamine use. A quarter of participants (26.5%) were only using cannabis. Median frequency of alcohol use was 29.5 days and median weekly intensity 190 grams. 74% of the 150 participants scored > 7 on the AUDIT indicating hazardous drinking. A majority of the participants reported experiencing a health related or other substance use related problem 90 days prior to interview.

### C. EFFICACY RESULTS

For nearly all drug use measures there were significant reductions across time among the whole sample. The reduction of ecstasy use among participants randomized on ecstasy use was particularly large 22.1 days to 9.8 days. However, neither alcohol frequency or intensity nor the AUDIT score changed significantly for the sample across time. Efficacy was tested by comparing outcomes between Group A and Group C. For nearly all the outcome measures the differences were in the expected direction with Group A participants having better outcomes than Group C participants. Difference for composite frequency of cannabis, cocaine, crack, and ecstasy/MDMA use being among the largest: 41.9 days vs 47.9 days. There was only one statistically significant effect between Group A and C: attending counselling for a non drug issue which involved very few participants. These results are similar to other trials reported in the literature of interventions young people in the community or with stimulant using client groups (Marsden et al. 2006; Donovan et al. 2001; Miller, Yahne, & Tonigan 2003; Peterson et al. 2006).

### D. ASSESSMENT REACTIVITY

Assessment reactivity refers to the capability of research assessments alone to influence behaviour change (Bien et al. 1993; Clifford et al. 2000). The main secondary aim of the study was to evaluate whether assessment reactivity was occurring with the DLAQ. There was no difference between Group B and C for the primary outcome and overall the lack of difference between Group B and Group C on all measures indicates that assessment reactivity if existing at all did not have any meaningful impact on behaviour change and consequently that completing DLAQ does not confer any therapeutic benefit. This finding corresponds with other evaluations of assessment reactivity (Simpson et al 2005; Kypri et al. 2007).

## CONCLUSIONS AND RECOMMENDATIONS

Brief intervention models of the type evaluated are very acceptable to young drug users. Overall the efficacy of AMI type interventions is well founded and there is an urgent need for more effective intervention with young drug users in the community. However, while there are indicators that the intervention evaluated may result in behaviour change the lack of almost any difference between trial conditions means the intervention model does not warrant dissemination. Further development of the model would require greater clarity to be established through exploratory research into which particular strategies are effective in brief interventions among young non-treatment populations, where stimulant use is common (O' Leary, Tevyew & Monti 2004) .

## REFERENCES

Bien T. H, Millar, W. R & Scott Tonigin, J. (1993) Brief interventions for alcohol problems: a review. *Addiction*, 88, 315-336.

Burke B., L., Arkowitz, H., Dunn, M. (2002) *The efficacy of motivational interviewing and its adaptations: What We Know So Far In Motivational Interviewing (2nd Edition)* Miller W. R., Rollnick, S. 2002 Guildford press. New York.

Cabinet Office (2004) *Alcohol Harm Reduction Strategy for England* Accessed January 12, 2008 at [HYPERLINK "http://www.cabinetoffice.gov.uk/strategy/caboffice%20alcoholhar.pdf"](http://www.cabinetoffice.gov.uk/strategy/caboffice%20alcoholhar.pdf) www.cabinetoffice.gov.uk/strategy/caboffice%20alcoholhar.pdf. Donovan, D.M., Rosengren, D.B., Downey, L., Cox, G.C. & Sloan, K.L. (2001)

Attrition prevention with individuals awaiting publicly funded drug treatment. *Addiction*, 96, 1149-1160. Drugs Strategy Directorate (2002b) *Tackling Crack: A National Plan*. Home Office. London.

Dunn, C., Deroo, L., Rivara, F.P. (2001) The use of brief interventions adapted from motivational interviewing across behavioural domains: a systematic review. *Addiction* 96: 1725-1742. Home Office (2004) *Tackling Drugs. Changing Lives*. London: Home Office.

Kypri, K., Langley, J., D., Saunders, J., B., Cashell-Smith, M. L. (2007) Assessment may conceal therapeutic benefit: findings from a randomized controlled trial for hazardous drinking. *Addiction*, 102, 62-70

Marsden, J.; Stillwell, G.; Barlow, H.; Boys, A.; Taylor, C.; Hunt, N.; Farrell, M. (2006) An evaluation of a brief motivational intervention among young ecstasy and cocaine users: no effect on substance and alcohol use outcomes. *Addiction*, 101 (7) 1014-1026.

Miller, W.R., Yahne, C.E. & Tonigan, J.S. (2003) Motivational interviewing in drug abuse services: A randomized trial. *Journal of Consulting and Clinical Psychology*, 71, 754-763.

Murphy, R., Roe, S. (2007) *Drug Misuse Declared: Findings from the 2006/07 British Crime Survey England and Wales* Home Office. October 2007 18/07

O' Leary T, Tevyew A, Monti, P., M. (2004) Motivational enhancement and other brief interventions for adolescent substance abuse: foundations, applications and evaluations *Addiction*, 99 (Suppl. 2), 63-75

ONS (2006) *Statistics Alcohol 2006* accessed on 12/01/2008 at [http://www.ic.nhs.uk/webfiles/publications/alcoholeng2006/StatisticsOnAlcohol300606\\_PDF.pdf](http://www.ic.nhs.uk/webfiles/publications/alcoholeng2006/StatisticsOnAlcohol300606_PDF.pdf)

Peterson PL, Baer JS, Wells EA, Ginzler JA, Garrett SB. (2006). Short-term effects of a brief motivational intervention to reduce alcohol and drug risk among homeless adolescents. *Psychology of Addictive Behavior*, 20, 254-64.

Simpson, T., L., Kivlahan, D., R., Bush, K., R., McFall, M., E. (2005) Telephone self-monitoring among alcohol use disorder patients in early recovery: a randomized study of feasibility and measurement reactivity. *Drug and Alcohol Dependence* (79) 241-250

Simpson, T., L., Kivlahan, D., R., Bush, K., R., McFall, M., E. (2005) Telephone self-monitoring among alcohol use disorder patients in early recovery: a randomized study of feasibility and measurement reactivity. *Drug and Alcohol Dependence* (79) 241-250

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