# Q1: Are brief psychosocial interventions for people using cannabis or psychostimulants effective in reducing drug use, dependence and harm from drug use?

# **Background**

Brief interventions have a variety of potential advantages in the treatment of substance use disorders, considering the ease of delivery and less difficulty associated with retaining people who use drugs in treatment. The evidence base for such interventions is better developed in the treatment and management of alcohol use disorders. Brief interventions can be conducted in a variety of settings, including non-medical settings, and can be given opportunistically to people not in formal drug treatment or as an adjunct to formal structured drug treatment. Brief interventions are defined here as interventions with a maximum duration of two sessions. The main aim of the intervention is to enhance the possibility of change in terms of abstinence or the reduction of harmful behaviours associated with drug misuse. The principles of brief interventions include expressing empathy with the service user, not opposing resistance and offering feedback, with a focus on reducing ambivalence about drug misuse and possible treatment, often drawn from principles of motivational interviewing.

#### Population/Intervention/ Comparison/Outcome (PICO)

- **Population:** adults and young people
- Interventions: brief interventions for drug use
- Comparisons: placebo or treatment as usual
- Outcomes:
  - drug consumption
  - harm from drug use

o abstinence

# List of the systematic reviews identified by the search process

#### INCLUDED IN GRADE TABLES OR FOOTNOTES

NICE (2008). Drug Misuse: Psychosocial Interventions. National Clinical Practice Guideline 51.

# PICO table

Serial	Intervention/Comparison	Outcomes	Systematic reviews used for	Explanation
no.			GRADE	
1	Brief intervention	Abstinence	NICE (2008)	The NICE guideline provides a
	Programmes for			recent review of brief
	cannabis and stimulant			intervention programmes.
	use			

# Narrative description of the studies that went into the analysis

From the NICE review on Drug Misuse (2008), seven studies were suitable for analysis with a total of 2901 participants. Three of the studies looked at adaptive motivational interviewing (AMI), one at cognitive-behavioural therapy (CBT), and three had two intervention arms – one CBT and one AMI. The quality of the studies ranged from VERY LOW to LOW. None of the studies had a drop out rate of more than 20%. Two of the seven studies graded included participants who had been formally diagnosed with substance misuse using DSM-IV criteria, three by self-report and the rest gave no indication of how participants were diagnosed.

# **GRADE tables**

#### Table 1

Author(s): Jessica Mears, Nicolas Clark Date: 2009-09-15 Question: Should brief intervention programmes be used for cannabis use, dependence and harm? (3-4 month) short-term follow-up Settings: low risk health care settings Bibliography: NICE (2008). Drug Misuse: Psychosocial Interventions. National Clinical Practice Guideline 51.

			Quality assess	ment					Summary of fin	dings		
							No of patient	ts		Effect		Importance
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	brief intervention programmes	control	Relative (95% Cl)	Absolute	Quality	
Consumpt	ion - not report	ed										
0	-	-	-	-	-	none	0	0	-	-		CRITICAL
Harm - no	t reported											
0	-	-	-	-	-	none	0/0 (0%)	0/0 (0%)	-	-		IMPORTANT
Abstinenc	e (follow-up 3-4	1 months; Ris	sk ratio)									
31	randomized trials	very serious <sup>2</sup>	no serious inconsistency <sup>3</sup>		no serious imprecision	None	56/305 (18.4%)	17/308 (5.5%)	RR 3.33 (1.99 to 5.56)	129 more per 1000 (from 55 more to 252 more)	2222 VERY LOW	IMPORTANT

<sup>1</sup> McCambridge & Strang2004; Stephens et al, 2000; Stephens et al, 2002.

<sup>2</sup> One of the 3 studies gave no information on randomization (Stephens et al, 2000) and two did not mask outcome assessment (Stephens et al, 2000 and 2002).

 $^{3}$  I-squared = 0.

<sup>4</sup> Based in high-resource settings and participants mostly dependent or unknown diagnosis of substance use.

#### Table 2

Author(s): Jessica Mears, Nicolas Clark

Date: 2009-09-15

Question: Should brief interventions programmes be used for cannabis use, dependence and harm? (8-12 months) long-term follow up

Settings: low risk health care settings

Bibliography: NICE (2008). Drug Misuse: Psychosocial Interventions. National Clinical Practice Guideline 51.

			Quality assess	ment				5	summary of findi	ngs		
							No of patients	S		Effect		Importance
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	brief interventions programmes	control	Relative (95% Cl)	Absolute	Quality	
Consumpti	ion - not report	ed										
0	-	-	-	-	-	None	0/0 (0%)	0/0 (0%)	-	-		CRITICAL
Harm - not	reported											
0	-	-	-	-	-	None	0/0 (0%)	0/0 (0%)	-	-		IMPORTANT
Abstinence	e (follow-up 8-1	2 months; R	isk ratio)									
2 <sup>1</sup>	randomized trials	serious <sup>2</sup>	no serious inconsistency <sup>3</sup>		no serious imprecision	None	17/184 (9.2%)	6/161 (3.7%)	RR 2.41 (1.01 to 5.73)	53 more per 1000 (from 0 more to 176 more)	???? LOW	IMPORTANT

# Brief psychosocial interventions

<sup>1</sup> Copeland 2001, McCambridge 2004.

<sup>2</sup> Non Masking of outcome assessment.

 $^{3}$  I-squared = 0.

<sup>4</sup> studies from high resource settings and mostly diagnosed as dependent .

# Table 3

Author(s): Jessica Mears, Clark Date: 2009-09-15 Question: Should brief interventions programmes be used for stimulant use? Settings: low risk health care settings Bibliography: NICE (2008). Drug Misuse: Psychosocial Interventions. National Clinical Practice Guideline 51.

			Quality assess	ment				Sı	ımmary of findiı	ngs		
							No of patien	ts		Effect		Importance
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	brief interventions programmes	control	Relative (95% CI)	Absolute	Quality	
Consumpti	ion - not report	ed										
0	-	-	-	-	-	none	0/0 (0%)	0/0 (0%)	-	-		CRITICAL
Harm - not	reported											
0	-	-	-	-	-	none	0/0 (0%)	0/0 (0%)	-	-		IMPORTANT
Abstinence	e (follow-up me	an 6 month	s; Risk ratio)									
3 <sup>1</sup>	randomized trials		no serious inconsistency <sup>3</sup>		no serious imprecision	none	201/643 (31.3%)	154/625 (24.6%)	RR 1.3 (1.09 to 1.55)	74 more per 1000 (from 22 more to 136 more)	???? LOW	IMPORTANT

# Brief psychosocial interventions

<sup>1</sup> Baker et al, 2005; Bernstein et al, 2005; Marsden et al, 2006.

<sup>2</sup> One of the 3 studies did not have masking of outcome assessment (Marsden et al, 2006).

<sup>3</sup> I-squared = 23.6% (<50%).

<sup>4</sup> studies from high resource setting and participants mostly dependent.

#### Table 4

Author(s): Jessica Mears, Nicolas Clark Date: 2009-09-15 Question: Should brief intervention programmes be used for heroin use? Settings: low risk health care setting Bibliography: NICE (2008). Drug Misuse: Psychosocial Interventions. National Clinical Practice Guideline 51.

			Quality assessme	ent				S	ummary of find	ings		
							No of patien	its		Effect		Importance
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	brief intervention programmes	control	Relative (95% Cl)	Absolute	Quality	
Consumptio	on - not reporte	ed										
0	-	-	-	-	-	none	0/0 (0%)	0/0 (0%)	-	-		CRITICAL
Harm - not	reported											
0	-	-	-	-	-	none	0/0 (0%)	0/0 (0%)	-	-		IMPORTANT
Abstinence	(follow-up mea		-									
	randomized trials		no serious inconsistency <sup>3</sup>		very serious⁵	none	151/403 (37.5%)	115/375 (30.7%)	RR 1.22 (1 to 1.49)	67 more per 1000 (from 0 more to 150 more)	PPPP VERY	IMPORTANT

					LOW	
					LOW	

<sup>1</sup> Berstein et al, 2005.

<sup>2</sup> No information on dropouts.

<sup>3</sup> single study.

<sup>4</sup> studies from high resource settings.

<sup>5</sup> single study, 95% CI includes 1.

### Table 5

Author(s): Jessica Mears, Nicolas Clark

Date: 2009-09-15

Question: Should brief intervention programmes be used for cocaine and heroin use?

Settings: low risk health care settings and participants had self-reported substance misuse

Bibliography: NICE (2008). Drug Misuse: Psychosocial Interventions. National Clinical Practice Guideline 51.

			Quality assessme	ent					Summary of find	lings		
							No of patien	ts		Effect		Importance
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	brief intervention programmes	control	Relative (95% CI)	Absolute	Quality	
Consumpti	on - not reporte	ed				•				-		
0	-	-	-	-	-	none	0/0 (0%)	0/0 (0%)	-	-		CRITICAL
Harm - not	reported											
0	-	-	-	-	-	none	0/0 (0%)	0/0 (0%)	-	-		IMPORTANT
Abstinence	e (follow-up mea	an 6 months	; Risk ratio)									

11	randomized trials	serious <sup>2</sup>	no serious inconsistency <sup>3</sup>	 very serious⁵	none	70/704 (9.9%)	48/375 (12.8%)	RR 1.36 (0.97 to 1.91)	46 more per 1000 (from 4 fewer to 116 more)	???? VERY LOW	IMPORTANT

<sup>1</sup> Bernstein et al, 2005.

<sup>2</sup> No information on dropouts.

<sup>3</sup> single study.

<sup>4</sup> studies from high resource settings and participants had self-reported substance misuse.

<sup>5</sup> single study, 95% Cl includes 1, p=0.08.

# **Reference List**

Baker A et al (2005). Brief cognitive behavioural interventions for regular amphetamine users: a step in the right direction. Addiction, 100:367–378.

Bernstein J et al (2005). Brief motivational intervention at a clinic visit reduces cocaine and heroin use. Drug and Alcohol Dependence, 77, 49–59.

Marsden J et al (2006). An evaluation of a brief motivational intervention among young ecstasy and cocaine users: no effect on substance and alcohol use outcomes. *Addiction*, 101:1014–26.

McCambridge J, Strang J (2004). The efficacy of single-session motivational interviewing in reducing drug consumption and perceptions of drug-related risk and harm among young people: results from a multi-site cluster randomized trial. *Addiction*, 99:39–52.

NICE (2008). Drug Misuse: Psychosocial Interventions. National Clinical Practice Guideline 51.

Stephens RS, Roffman RA, Curtin L (2000). Comparison of extended versus brief treatments for marijuana use. *Journal of Consulting and Clinical Psychology*, 68:898–908.

Stephens RS et al (2002). The Marijuana Treatment Project: rationale, design and participant characteristics. Addiction, 97 (Suppl. 1):109–124.

WHO (2010). The WHO ASSIST package: Manuals for the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) and the ASSIST-linked brief interventions. Geneva, World Health Organization.

# From evidence to recommendations

Factor	Explanation
Narrative summary of the	Brief intervention programmes (mainly adaptive motivational interviewing) were found to be
evidence base	significantly effective for abstinence from cannabis and stimulant use compared to treatment as
	usual. There was no data available in the review for drug consumption and harm outcomes. Two of
	the seven studies graded included participants who had been formally diagnosed with substance
	misuse using DSM-IV criteria, three by self-report and the rest gave no indication of how
	participants were diagnosed.
	Abstinence from cannabis use the effect of brief intervention programmes remained at both short
	term and long term follow up. The quality of evidence in the short term was VERY LOW compared
	to LOW in the long term, and the effect was slightly less significant in the long term (at 3-4 months
	RR = 3.33 (1.99 to 5.56), and at 8-12 month follow up RR = 2.41 (1.01 to 5.73)).
	There is LOW quality evidence for the significant effectiveness of brief intervention programmes for
	abstinence from stimulant use (RR 1.3 (1.09 to 1.55)).
	There is weak evidence of a small effectiveness of brief intervention programmes for heroin use (RR
	1.22 (1 to 1.49)) and heroin and cocaine use (RR 1.36 (0.97 to 1.91)). However, this is based on just
	one VERY LOW quality study.
	More recent to this meta-analysis the WHO ASSIST brief intervention study (2010) demonstrated a
	modest but statistically significant reduction in cannabis, and stimulant use following screening and
	brief intervention in high prevalent settings, in non dependent patients.

Summary of the quality of	The quality of evidence ranged from VERY LOW to LOW quality. The drop out rate, however, was
evidence	low in all studies.
	The evidence is indirect as it is mainly concerned with formally diagnosed or self-reported
	substance misuse.
Balance of benefits versus	The benefits of brief psychological intervention programmes need to be balanced against the
harms	possibility that patients are not followed up or managed in the long term, leading to relapse.
Define the values and	Screening for illicit drug use disorders will increase detection of substance use disorders but has a
preferences including any	number of human rights implications. In some countries, health practitioners can be pressured to
variability and human rights	forward this information to the police. Confidential records can usually be accessed by the courts,
issues.	on request. Confidentiality is also not perfectly kept by clinical staff.
Define the costs and	Brief intervention programmes are of low intensity with respect to human resources and training,
resource use and any other	making them suitable for low resource settings. In addition, they can be conducted in a variety of
relevant feasibility issues.	settings, including non-medical settings, and can be given opportunistically to people not in formal drug treatment.
	Brief intervention programmes are suitable for low income countries where access to medicines may be too costly or inconsistent.
	One issue in providing brief interventions is the opportunity cost, of not offering a more substantial
	intervention what the opportunity may have been there.
Recommendation(s)	l

Individuals using cannabis and psychostimulants should be offered brief intervention, when they are detected in non-specialized health care settings. Brief intervention should comprise a single session of 5-30 minutes duration, incorporating individualised feedback and advice on reducing or stopping cannabis / psychostimulant consumption, and the offer of follow-up. Strength of recommendation: STRONG

People with ongoing problems related to their cannabis or psychostimulant drug use who does not respond to brief interventions should be considered for referral for specialist assessment. Strength of recommendation: STANDARD

#### Update of the literature search – June 2012

In June 2012 the literature search for this scoping question was updated. The following systematic reviews were found to be relevant without changing the recommendation:

Faggiano F, Vigna-Taglianti F, Versino E, Zambon A, Borraccino A, Lemma P. School-based prevention for illicit drugs' use. Cochrane Database of Systematic Reviews 2005, Issue 2. Art. No.: CD003020. DOI: 10.1002/14651858.CD003020.pub2. (Edited (no change to conclusions), published in Issue 3, 2008.)

Gates S, McCambridge J, Smith LA, Foxcroft D. Interventions for prevention of drug use by young people delivered in non-school settings. Cochrane Database of Systematic Reviews 2006, Issue 1. Art. No.: CD005030. DOI: 10.1002/14651858.CD005030.pub2. (Edited (no change to conclusions),

# published in Issue 1, 2009.)

Newton AS, Gokiert R, Mabood N, Ata N, Dong K, Ali S. Vandermeer B, Tjosvold L, Hartling L, Wild TC. Instruments to Detect Alcohol and Other Drug Misuse in the Emergency Department: A Systematic Review. Pediatrics 2011;128;e180; originally published online June 6, 2011; DOI: 10.1542/peds.2010-3727

Smedslund G, Berg RC, Hammerstrøm KT, Steiro A, Leiknes KA, Dahl HM, Karlsen K.Motivational interviewing for substance abuse. CochraneDatabase of Systematic Reviews 2011, Issue 5. Art.No.:CD008063. DOI: 10.1002/14651858.CD008063.pub2. (Edited (no change to conclusions), comment added to review, published in Issue 11, 2011.)